INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PRE-PROJECT PROPOSAL

TITLE:	DEVELOPMENT OF A LOCAL FOREST INDUSTRY BASED ON SUSTAINBLE FOREST MANAGEMENT IN THE SOUTH-WEST SECTOR OF THE LACANDON HIGHLANDS NATIONAL PARK WITHIN THE MAYAN BIOSPHERE RESERVE, PETEN, GUATEMALA
SERIAL NUMBER:	PPD 117/05 Rev.2 (I,M)
COMMITTEE:	FOREST INDUSTRY
SUBMITTED BY:	GOVERNMENT OF GUATEMALA
ORIGINAL LANGUAGE:	SPANISH

SUMMARY

This pre-project has been conceived as a stage in the process of development of 14 community cooperatives located along the Usumacinta River, in the Buffer Area (BA) of the south-west sector of the Lacandon Highlands National Park (Parque Nacional Sierra del Lacandón – PNSL) within the Mayan Biosphere Reserve in Peten. It is consistent with the sectoral policies of the Government of Guatemala. The main impact of the identified problems is the limited generation of economic resources to satisfy the basic needs of families in the area. Their forests have a wide diversity of timber and non-timber species, but because of the way these resources are harvested and marketed, the incomes derived from them are limited. Thus, there is a high risk that forest protection and sustainable forest management may be discontinued, converting forests to other production activities of lesser economic value such as traditional agricultural practices and extensive cattle-raising, among others. The pre-project will identify current problems in the sustainable forest management process and outline possible solutions to ensure effective integration between sustainable forest management and local industrial development. The potential solutions to be identified in this pre-project will be outlined in a full project proposal, including improvement of the production capacity of natural forests through intensified silvicultural treatments (fire prevention and management), improved utilisation of lesser-used species, promotion of non-timber forest products, assisted natural regeneration, plantations and reforestation activities, and timber processing and marketing. The pre-project will be an appropriate mechanism for the gathering of information to consolidate the problem identification and project formulation processes.

EXECUTING AGENCY:	MAYAN CENTRE ASSOCIATION FOR THE SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES IN PETEN (ACM)
DURATION:	2 MONTHS
APPROXIMATE STARTING DATE:	UPON APPROVAL AND FINANCING

BUDGET AND PROPOSED SOURCES OF FINANCE:

Source	Contribution in US$
ITTO	**54,000**
ACM	10,010
TOTAL	**64,010**

PART I: CONTEXT

1. Origin

This pre-project has been conceived as a stage in the process of development of 14 community cooperatives located along the Usumacinta River, in the Buffer Area (BA) of the south-west sector of the Lacandon Highlands National Park (Parque Nacional Sierra del Lacandón – PNSL) within the Mayan Biosphere Reserve in Peten, Guatemala (see Annex C). A number of community development efforts have been carried out in this area based on the management of natural tropical forests, but they have not focused on the integration of forest management with local industrial development. The objective of these initiatives has been to develop integrated natural resource utilisation and management plans, which comprise forest management plans (FMP) developed by the members of the cooperatives *Unión Maya Itzá, La Técnica Agropecuaria, Bethel, La Lucha, El Retalteco, La Felicidad, Monte Sinai* and *Yanahi.* The *La Bendición, Bonanza, El Arbolito, Flor de la Esperanza, Ixmucané* and *Los Laureles* cooperatives, which are currently members of the Mayan Centre Association, have been added to this proposal. These productive units cover a forest management area of 18,194 hectares, which must generate local income for 939 families through forest management activities. Projected roundwood volumes in the management plans for the next five years are 66,250 cubic metres, with an average annual production rate of 13,250 cubic metres. Thus, sustainable forest management and forest protection considerations should be a high priority in this area to ensure the sustainability of resources and guarantee a source of income for the local communities.

2. Sectoral policies

The Guatemalan forest policy is aimed at increasing socioeconomic benefits derived from forest ecosystem goods and services and contributing to land use management in rural areas by promoting production management and conservation of natural resources, in particular forest, biodiversity, water and soil resources and increasingly incorporating forest activities into the country's economy for the benefit of the Guatemalan society as a whole.

In order to strengthen the conservation of tropical forests and their biodiversity resources both inside and outside the Guatemalan System for Protected Areas (Sistema Guatemalteco de Áreas Protegidas – SIGAP) as well as ensuring an adequate genetic resource base for present and future generations, the forest policy involves the following instruments: ecological instruments (management plans approved by INAB, integrated water resource management plan, national strategy for fire prevention and control and watershed management); regulatory instruments (forest regulations and standardisation of regulations for forest administration); economic instruments (financing sources, valuation of environmental services, forest accounting, incentives for environmental services); technological instruments (research and development, protection and utilisation of genetic and biodiversity resources); social instruments (development of protected areas); and institutional instruments (integration of institutional efforts for the management of tropical areas).

The natural forest production management policy is aimed at revaluing natural forests from an economic viewpoint, incorporating them into the production process and promoting improved living conditions for ecosystem beneficiaries while curbing the expansion of the agricultural frontier and its negative environmental impacts through the following policy instruments: economic instruments (innovative financing mechanisms, incentives for direct bonuses, industrial forest concessions, forest credit facilities, credit guarantee programs for small producers, foreign trade, support to training and cluster development, tax incentives, market intelligence, natural forest management fees); technological instruments (research and development, technical assistance and technology transfer, training and education, and promotion of lesser-known timber species); social instruments (organisation of producers, forest production projects, community forest management and administration of municipal forests). In addition, the policy comprises regulatory instruments such as forest certification, management plans and reforestation commitments.

3. Programmes and operational activities

The General Planning Secretariat (Secretaría General de Planificación – SEGEPLAN), through the Ministry of Agriculture, developed the Sustainable Development Programme for Peten with a loan from the Inter-American Development Bank (IDB). This Programme is currently implementing community forest management actions with the technical assistance of the Mayan Centre Association. In 1999, the National Council for Protected Areas (Consejo Nacional de Areas Protegidas – CONAP) developed the Master Plan for the Lancandon Highlands National Park in compliance with the aforementioned forest policies. This Plan comprises a number of programs such as protection and conservation, including activities such as demarcation and patrolling, threat prevention and control, management of resources and ecological rehabilitation, information and management of public areas, and land issues; research and monitoring; and a sustainable development program, including production, community organisation and environmental education activities. Furthermore, this Master Plan contains an administration program, covering human resources, infrastructure and equipment, and management planning and evaluation. This Plan is being implemented with national funds; however, it has limited coverage and it has made limited progress. The Master Plan is also an output of the Master Plan for the Mayan Biosphere Reserve, which was approved in 1992 and establishes regulations for the use and management of renewable and non-renewable natural resources and zoning in extractive and production areas as well as the conditions for their utilisation. The Mayan Centre Association also provided technical assistance to the communities for the implementation of this component. The aforementioned Master Plan was implemented with bilateral funding from the Governments of Guatemala and the United States through USAID (Agency for International Development). The Mayan Centre Association was responsible for implementing a project within this Plan in the cooperatives area of the Lacandon Highlands National Park. None of these programs and activities have received ITTO support.

PART II: THE PRE-PROJECT

1. Pre-project objectives

1.1 Development objective

Formulate a proposal with a view to developing concrete actions for the institutional strengthening of producers' organisations through the development of local forest production chain processes such as inputs supply, forest production under management (including biophysical and legal protection), timber processing, and marketing of timber and non-timber products to end-consumers.

1.2 Specific objective

Focus and guide industrial development strategies and actions for producers' organisations structured on the basis of business plans so as to develop the local forest production chain, increase their income levels and boost the local economy, by improving the production capacity of forests under management and the processing of forest products, administrative and management capacity, marketing, negotiation and sales.

2. Justification

2.1 Problem to be addressed

The Lancandon Highlands National Park forest owners are characterised by a poorly organised business structure and limited coordination for the management of their natural resources, in particular forest resources, which makes it difficult to ensure the sound and sustainable management of the natural resource base. At the same time, there is very limited coordination among local government and private organisations for the management of forest fires.

Producers have limited business and research vision, and this has been a limiting factor in improving forest management practices and the efficient utilisation of forest products and increasing the efficiency of timber processing and utilisation of tropical timber from their forest estates.

Within this context, the problems encountered include a strong economic under-valuation of tropical forests, limited secondary timber processing activities and ongoing threats to the biological and physical integrity of forests through forest fires, deforestation, erosion, agricultural and silvicultural practices that are incompatible with forest management principles, and a lack of legal protection (encroachments, plundering) resulting from

weak control and monitoring systems to protect natural resources and from the inability to implement appropriate policies for human settlements. From a commercial point of view, the lack of markets for secondary timber products limits the potential income earning capacity of forests. The potential of non-timber forest products has not been assessed to date, and the value of goods and services provided by forests in the region and at the national level is not duly recognised.

The aforementioned problems result in low levels of economic resources to satisfy the basic needs of local families. Despite the fact that the forests have a valuable diversity of timber and non-timber species and resources, the way they are exploited and marketed does not provide for the generation of greater levels of income, and there is a real risk that if sustainable forest management practices are not applied, the forest will be used for other less economically valuable production activities such as traditional agricultural practices and cattle raising activities, among others. ***As a whole, these problems and their related effects reflect a weak institutional capacity in the pre-project area of influence, particularly in relation to the local communities.***

2.2 Reasons for the pre-project

The pre-project identifies current problems in the sustainable forest management process (see Annex D) and proposes possible solutions aimed at establishing a real link between sustainable forest management and local business development. The possible solutions outlined in this pre-project will be developed into a project proposal and will include the following: improving the production capacity of natural forests through intensive silvicultural treatments (forest fire prevention and management), promoting the utilisation of lesser-used forest species, promoting the utilisation of non-timber forest products, assisted natural regeneration, plantations and reforestation, timber processing activities ***and a logical and consistent institutional strengthening plan for the communities involved, so as to guide them towards a sustainable community business development aimed at marketing strategies that are compatible with the current open trade system.***

During the problem identification process that was carried out for the development of this pre-project proposal, it was noted that insufficient efforts have been put into research activities, the development of secondary tropical forests management, degraded tropical forests, the rehabilitation of degraded forest lands and the utilisation of non-timber forest products. Furthermore, no consideration has been given to the development of cooperative forest management and administration systems for the tropical production forests established in the region for the development of the forest industry.

Furthermore, there is very limited promotion of or support for field research on the forest dynamics of different types of forests and different management systems, which must be undertaken so as to improve timber production projections. In addition, and as a result of the limited resources available, the region has not sufficiently strengthened work strategies on economies of scale and the creation of synergies among existing producer organisations in the project area, with a view to increasing the business capacity of the sector. Moreover, there has been no business-oriented promotion of economic and social development strategies for the existing organisations aimed at developing the integrated utilisation and management of their natural resources. ***As was previously stated, in order to facilitate forest industry development, this pre-project seeks to formulate and submit a project proposal aimed at promoting the industrialisation of timber so as to increase employment opportunities and export earnings through the sale of timber products in local and regional markets mainly in the short term, and to encourage the development of the export industry in the medium and long terms through the promotion of better processing practices and quality for the tropical timber harvested from the forests of the region. The pre-project also seeks to formulate a project proposal so as to promote strategies aimed at the incorporation of women into the forest management production processes, particularly in the processing and sustainable utilisation of non-timber forest products.***

2.3 Target beneficiaries

There are more than 25 organizations in the selected project area, including a variety of agricultural associations of small producers, farmers associations and cooperatives, but the current service capacity of the Mayan Centre is for up to 14 organizations. These will be selected through the development of a technical sheet for all the organizations in the proposed project area, which will include criteria such as the number of families, the area of agricultural lands and forest lands, forest management and harvesting background of their respective forests, businesses established on the basis of their forest harvesting and timber and forest product marketing activities, an analysis of successful and unsuccessful projects implemented over the past 5 years, their production potential, the levels of integration and participation within their respective organizations, strengths and

weaknesses of the organizations, and the degree and level of leadership of the main members of the organizations. The organizations with the lowest score will be considered by the project as indirect beneficiaries, and depending on the possibilities of widening the scope of the project or identifying other national support mechanisms, they might eventually be able to join those organizations that show the best success indicators in this exercise.

The direct beneficiaries of this proposal include 14 forest organisations of the south-western region of the Lancandon Highlands National Park (Parque Nacional Sierra del Lacandón – PNSL), comprising 939 families that as a whole are owners of 18,194 hectares of tropical forests under forest management plans. ***The economic viability of the pre-project can be demonstrated on the basis of the ratio of its total cost (US$ 60,010) and the projected usefulness of sustainable forest harvesting if the full project proposal were to be approved. This usefulness is based on the timber producing potential in the region under two scenarios: a) the sale of the total volume of roundwood = 4 million Doyle feet per year over 20 years, which is the current modality, and b) the sale of the previous total volume of processed timber, e.g. veneer, plywood, sawnwood, representing the same volume. In the first case (Scenario a) the Net Income obtained is Q. 5,482,861 per year (US$ 702,930), which represents a benefit for each participating family of Q. 9,138 per year (US$ 1,171). Under Scenario b), the Net Income obtained is Q. 13,489,210 per year (US$ 1,729,385), which represents a benefit for each participating family of Q. 22,482 (US$ 2,2882), which represents an increase in income of 146%. In terms of the profitability of pre-investments requested by the pre-project, the projected benefits would be from 28 to 1%. If the project to be formulated through this pre-project were to be implemented, it would generate an economic reactivation in the project region of Q. 45,195,376 per year (US$5,794,279) during the estimated utilisation period of approximately 20 years (See Annex D). The risks associated to these activities include forest fires and encroachments. However, this area is run by (private) cooperatives, which minimises the risk of encroachment. Forest fires, however, are latent risks and part of the institutional strengthening activities will deal with this component.***

Existing installed capacity at the community level will be taken into account during the formulation of the project proposal, focusing mainly on the local skills available to develop commercial strategies, production infrastructure, organizational structure and community commitments and interests for the development of other non-production sectors such as health, education, housing, cultural activities, etc.

3. Outputs

3.1 Specific objective

Focus and guide industrial development strategies and actions for producers' organisations structured on the basis of business plans so as to develop the local forest production chain, increase their income levels and boost the local economy, by improving the production capacity of forests under management and the processing of forest products, administrative and management capacity, marketing, negotiation and sales.

Output 1.1
A project proposal developed to enable producers in the project's area of influence to be corporately organised and coordinated to improve the management of tropical forests.

Output 1.2
A proposal aimed at production and industrial development and research to improve forest management and efficient utilisation of timber and non-timber products established and operational.

Output 1.3
Organizational and institutional strengthening process structured and identification strategies proposed for the identification and contact of national and internationa l markets in order to improve the marketing and distribution of tropical timber ***sales*** increasing the value added to marketed products.

4. Activities

4.1 Output 1.1

A project proposal that will enable producers in the project's area of influence to be corporately organised and coordinated to improve the management of tropical forests.

Activity 1.1.1
Reviewing secondary information.

Activity 1.1.2
Conducting a baseline socioeconomic survey of organisations in the project area with the active participation of producers.

Activity 1.1.3
Conducting an industrial diagnosis of proposed organisations with the active participation of producers.

Activity 1.1.4
Disseminating baseline (socioeconomic and industrial) survey results among producers and obtaining feedback.

Activity 1.1.5
Developing the relevant project component.

Output 1.2

A proposal aimed at production and industrial development and research to improve forest management and efficient utilisation of timber and non-timber products established and operational.

Activity 1.2.1
Identifying and reviewing research and development initiatives on timber and non-timber products as well as forest dynamics to strengthen forest diversification for business expansion.

Activity 1.2.2
Reviewing methodologies and projections for the implementation of forest inventories and forest management plans for forest management units, focusing on the sustainable yield capacity and allowable cut volumes for high-value and secondary timber species.

Activity 1.2.3
Identification and quantification of adequate sustainable forest management practices, including reduced impact logging techniques.

Activity 1.2.4
Reviewing monitoring and evaluation systems implemented in the selected area.

Activity 1.2.5
Developing a proposal related to this output.

Output 1.3

Organizational and institutional strengthening process structured and identification strategies proposed for the identification and contact of national and international markets in order to improve the marketing and distribution of tropical timber ***sales*** increasing the value added to marketed products.

Activity 1.3.1
Estimating the institutional capacity of forest organizations as well as their production capacity based on allowable cut volumes for primary and secondary tropical timber species and non-timber resources in the medium and long terms to promote product marketing ***and the organizations' negotiation skills*** (M1.5).

Activity 1.3.2
Identifying the potential of companies and/or investors to promote joint ventures for the processing and marketing of various timber species.

Activity 1.3.3
Developing a proposal for this component.

5. WORK PLAN

OUTPUTS / ACTIVITIES	RESPONSIBLE PARTY	WEEKS							
Recruitment of consultants and experts	Mayan Centre	1	2	3	4	5	6	7	8
		x							
O1. ***A project proposal that will enable producers in the project's area of influence to be*** corporately organised and coordinated to improve the management of tropical forests.									
A1. Gathering secondary information	National team	x	x						
A2. Conducting a baseline socioeconomic survey of organisations in the project area with the active participation of producers	Other labour National team	x	x						
A3. Conducting an industrial diagnosis of proposed organisations with the active participation of producers	National experts	x	x						
A4. Disseminating baseline (socioeconomic and industrial) survey results among producers and obtaining feedback	National team			x					
A.5 Developing the relevant project component.							x		
O2. ***A proposal aimed at production and industrial development and research*** to improve forest management and efficient utilisation of timber and non-timber products established and operational.									
A1. Identifying and reviewing research and development initiatives	National experts	x	x	x					
A2. Reviewing methodologies and projections for the implementation of forest inventories and forest management plans for forest management units	National experts			x	x	x			
A3. Identification and quantification of adequate sustainable forest management practices, including reduced impact logging techniques	National experts					x	x		
A4. Reviewing monitoring and evaluation systems implemented in the selected area	National experts and international consultant					x	x		
O3. ***Organizational and institutional strengthening process structured and identification strategies proposed for the identification and contact of national and international markets*** in order to improve the marketing and distribution of tropical timber ***sales*** increasing the value added to marketed products.									
A1. Estimating the community production capacity based on allowable cut volumes for primary and secondary tropical timber species and non-timber resources in the medium and long terms to promote their marketing	National team and national experts					x	x		
A2. Identifying the potential of companies and/or investors to promote joint ventures for the processing and marketing of various timber species	National experts and international consultant					x	x		
Development of project proposal	National team and international consultant							x	x

6. BUDGET

CONSOLIDATED YEARLY PRE-PROJECT BUDGET

	Budget Components		ACM	
10	**Pre-Project Personnel**	**ITTO**	**US$**	**Q.**
	National Experts (3)	***24,500***	5,790	45,110
	National Consultants (2)	5,000	-	-
	Other labour (5)	1,200	-	-
	International Consultant (1)	7,500		-
	Component Total	***38,200***	**5,790**	**45,110**
20	**Subcontracts**	-	-	-
30	**Duty Travel**	-	-	-
	DSA	***3,040***	1,160	9,000
	International travel	700		-
	Transport costs	2,160		-
	Component Total	***5,900***	**1,160**	**9,048**
40	**Capital Items**	-	-	-
	Premises	-	-	-
	Vehicles	-	2,160	16,848
	Equipment	-	300	2,340
	Component Total	-	**2,460**	**19,188**
50	**Consumable Items**	-	-	-
	Fuel /Utilities	500	500	3,900
	Office supplies	300	100	780
	Component Total	**800**	**600**	**4,680**
60	**Miscellaneous**	-	-	-
	Sundry	1,100	-	-
	Contingencies (5% of total cost)	2,500	-	-
	Component Total	**3,600**	-	-
70	**Executing Agency Management Costs (3% of total cost)**	**1,500**	-	-
80	**ITTO Administration, Monitoring and Evaluation**	**4,000**	-	-
100	**GRAND TOTAL**	***54,000***	**10,010**	**78,026**

PART III: THE TROPICAL TIMBER FRAMEWORK

1. Compliance with ITTA 1994 objectives

Pre-project objectives are consistent with ITTO objectives, in particular the following: **Objective c)** To contribute to the process of sustainable development; **Objective f)** To promote and support research and development with a view to improving forest management and efficiency of wood utilization as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests; **Objective i)** To promote increased and further processing of tropical timber from sustainable sources in producing member countries with a view to promoting their industrialization and thereby increasing their employment opportunities and export earnings; **Objective k)** To improve marketing and distribution of tropical timber exports from sustainably managed sources.

2. Compliance with ITTO Action Plan

The pre-project has the potential to find solutions to the problems identified in the project area and therefore complies with the principles established in the ITTO Yokohama Action Plan 2002-2006 and is related to the following areas, goals and actions as set out in the Plan: **I. Economic Information and Market Intelligence, GOAL 2:** Promote tropical timber from sustainably managed sources, **Action 7** including **7.1** Encourage members to develop awareness of progress made in implementing sustainable forest management and in the increased availability of tropical timber from sustainably managed sources; **7.2** Prepare and implement research and development projects covering marketing trials, marketing methods and opportunities, particularly for lesser-used species. **II. Reforestation and Forest Management, GOAL 1:** Support activities to secure the tropical timber resource base; **Action 1:** Support the effective enforcement of forest laws and regulations that ensure sustainable forest management and secure the production base; **Action 5:** Assess opportunities for, and promote development of, non-timber forest products and forest services which can improve the economic attractiveness of maintaining the forest resource base; **Action 7: 7.1** Assess the current and potential productivity of major tropical forest types, taking into account the need to promote future growth and effective regeneration; **7.2** Land use planning which defines forests appropriate for production; **7.3** Identify and prevent irregular forestry activities. **GOAL 2:** Promote sustainable management of tropical forest resources; **Action 2:** Promote the implementation of sustainable forest harvesting, including reduced impact logging; **Action 4:** Establish and promote the implementation of an auditing system for ITTO's Criteria and Indicators for Sustainable Management of Natural Tropical Forests; **Action 6:** Monitor and assess the social, economic and environmental costs and benefits of sustainable management of natural forests; **Action 10 – 10.1** Implement forest inventories and determine the sustainable yield capacity of each forest management unit; **10.2** Improve the formulation and implementation of plans for sustainable forest management, with particular emphasis on harvesting limits; **10.3** Improve the productive capacity of natural forests, where appropriate, through intensified silvicultural practices and better utilization of lesser-used species; **10.4** Implement research and development activities in the management of secondary tropical forests; **10.5** Promote and support research in forest dynamics in different forest types and under various management schemes; **10.6** Undertake measures for the prevention and management of fire relating to tropical timber-producing forests.

ANNEXES

A. PROFILE OF THE EXECUTING AGENCY

EXPERTISE OF THE MAYAN CENTRE ASSOCIATION:

The Mayan Centre Association is a private non-profit organisation established in 1999. Its mission is to improve the socioeconomic standards of local communities through the sustainable management of natural resources, validating and transferring technologies in the areas of forestry and agriculture for production and self-management purposes. Since 1999, and within the framework of the protection and sustainable management of forest resources, the Mayan Centre Association has implemented significant projects through its Forestry Programme. These projects are based on integrated natural resource utilisation and management plans and are particularly focused on the management of tropical forests in the Mayan Biosphere Reserve in Petén, Guatemala. Through this experience the Mayan Centre Association has covered 12 management units within the Multiple-Use Area, over a total tropical forest area of 380,682 hectares. In addition, technical assistance has been provided to 12 private organisations for the management of 18,863 hectares of tropical forest in the Buffer Area of the Reserve. Furthermore, the Sustainable Development Programme for Peten of the Ministry of Agriculture, Livestock and Food has hired the Mayan Centre Association to provide technical assistance in the management of tropical forests belonging to cooperatives located outside the Reserve over an area of 3,705 hectares. The Mayan Centre Association also implements community organisation activities aimed at production and marketing, incorporation of women into the production process, industrial development, and environmental impact assessment in areas of intervention.

Major projects developed by the Mayan Centre Association over the last 3 years include Forest Stewardship Projects in Management Units within the Mayan Biosphere Reserve, financed by the Chemonics International /USAID BIOFOR Project; Tropical Forest Management Projects in Units outside Protected Areas in Peten, financed by the Sustainable Development Programme (PDS/IDB); Forest Management Project in private farms within the Mayan Biosphere Reserve, financed by Institutional Strengthening for Environmental Policies (FIPA/USAID); Forest Stewardship Projects in the cooperatives of the South-West of the Lacandon Highlands National Park and Units in the Multiple-Use Area, financed by beneficiary communities; Integrated Development Project for the Nuevo Horizonte Cooperative, Santa Ana, Peten, financed by the Inter-American Development Bank (IDB), Conflict Settlement Project for the Guatemala /Belize Border Area, financed by the Japanese Cooperation Agency.

INFRASTRUCTURE OF THE MAYAN CENTRE ASSOCIATION:

The Mayan Centre Association has facilities for project implementation, including headquarters in Santa Elena, Peten, where it has extensive infrastructure for the smooth running of its operations. In addition, the Centre owns a farm of approximately 90 ha which is used as an experimental area. Furthermore, the Centre has offices in various areas of action so as to efficiently provide technical assistance to the forest management units concerned.

The Centre's facilities cover approximately 500 m^2, including offices, meeting rooms and training rooms, as well as offices in the areas of action.

BUDGET:

The overall budget of the Mayan Centre Association over the last 3 years has been US$2,789,413.00 or Q.21,757,422 (in national currency).

PERSONNEL:

The Mayan Centre Association has the following professional, technical and administrative staff to carry out its various forest projects:

- Post-graduate experts: 2
- Graduate experts: 2
- Mid-level professionals: 5
- Administrative staff: 4

TOTAL: 14 people employed

ANNEX B: CURRICULA VITAE OF THE KEY STAFF

NAME: **ROBERTO DELEON VILLAGRAN**

DATE OF BIRTH: **03 February 1944**

PLACE OF BIRTH: **El Asintal, Retalhuleu, Guatemala, C.A.**

NATIONALITY: **Guatemalan**

EDUCATION:

1. Vocational studies: **Agricultural Technician**
   National School of Agriculture, Barcena
   1966-68

2. University studies: **Agricultural Engineer**. Specialisation: Phytotechnics
   University of San Carlos of Guatemala
   1972-76 – Graduate #268

3. Post-graduate studies: **Master's Degree in Rural Development**
   Post-graduate School, Chapingo, Mexico.
   1979-80

RELEVANT WORK UNDERTAKEN OVER THE LAST 3 YEARS:

1. Institution: **Tropical Agricultural Centre for Research and Training – CATIE**
   Dates: 1 March – 15 December 2003
   Duties: Development of Engineering Programme: "Improving the competitiveness of cacao crops as an alternative for rural development"
   Reason for leaving: completion of study according to contract and specific terms of reference.

2. Institution: **National Fund for Peace**
   Dates: 1 September 2001 – 15 April 2003
   Duties: Head of Promotion Department specialised in production projects
   Reason for leaving: Resigned to focus on the development of Cacao Programme.

3. Consultant for the formulation of forest inventory and forest management plan for the Carmen Cuba Farm, San Vicente Pacaya, Escuintla (2002) and San Jorge Farm in Chisec, A. V (in progress, February – March 2004)

4. Consultant for the formulation of project on agricultural diversification of the Association of Farmers of the South -West Region of Guatemala (APICOSUROGUA), El Asintal, Retalhuleu, December 2003

5. General Coordinator, Technical Assistance Team for Nuevo Horizonte Cooperative in Santa Ana, Peten, providing support to an integrated production and marketing plan. June 2004 to date.

6. "Erratic government strategies to combat poverty in Guatemala... over the last 10 years" – A study for the Latin American Faculty of Social Science – FLACSO, Guatemala, April 2005

NAME: **CARLOS ADOLFO COLLADO MARTINEZ**

DATE OF BIRTH: **25 June 1958**

PLACE OF BIRTH: **Guatemala, Guatemala, C.A.**

NATIONALITY: **Guatemalan**

EDUCATION:

1. University studies: **Agricultural Engineer**. Specialisation: Agriculture

2. Post-graduate studies: **Master's Degree in Soil and Water Management**
Iowa State University, USA
1989-91

RELEVANT WORK UNDERTAKEN OVER THE LAST 3 YEARS:

IICA. Validation of agricultural technology under agroforestry systems in 19 communities of the municipalities of Sayaxé and Poptún, Petén, 2002.

Profuta-CARE-SEGEPLAN. Soil-climate characterisation of lands over 11,000 km^2 in the Mediterranean fruit fly free area in Peten for the implementation of a fruit production program for export in the area, 2002

CONECATSA. Definition and bio-climatic and cartographic characterisation of milk producing areas in Peten, 2003

Mayan Centre Association. Technological and commercial development of non-timber forest products in the Buffer Area of the Lacandon Highlands National Park, La Libertad, Peten, 2002-2003

Mayan Centre Association: Nursery production and marketing of 800,000 *Chamaedorea* seedlings 2003-2004

AGROCYT-MAGA. Commercial production of non-timber broadleaved forest products with special emphasis on *Chamaedoreas* and *Aechmea magdalenae*. 2003-2004

Commercial Nursery "Siempre Verde". Planning of nursery production and marketing of conifer and broadleaved forest species (3.5 million seedlings), 2004

Mayan Centre Association: Technical Coordinator, Integrated Development Project for the Nuevo Horizonte Cooperative, Santa Ana, Peten, 2004-2005

NAME: **MYNOR ADELBI MENDEZ LOPEZ**

DATE OF BIRTH: **23 January 1971**

PLACE OF BIRTH: **Huehuetenango, Guatemala, C.A.**

NATIONALITY: **Guatemalan**

EDUCATION:

1. Vocational studies: **Primary Education Teacher**
   Instituto Normal Mixto Alejandro Córdova
   1989 - 1991

2. University studies: **Forest Engineer**
   North-West University Centre (CUNOROC)
   University of San Carlos of Guatemala
   1996 - 1998

2. Other: **Environmental Impact Assessment Diploma** (2003)

RELEVANT WORK UNDERTAKEN OVER THE LAST 3 YEARS:

Coordinator, forest management projects developed in conjunction with beneficiary producers of the Sustainable Development Programme for Peten – PDS in the Department of Peten, Guatemala. Development of technical tools such as forest management plans, environmental impact assessments, planning and implementation of forest harvesting operations, and development of training programs in the forestry field (2003-2005).

Coordinator, Technical Assistance and Monitoring Projects for community forest management in the South-West Region of the Lacandon Highlands National Park, Peten, and Management Units in the Multiple-Use Area of the Mayan Biosphere Reserve, Peten, Guatemala (2004-2005).

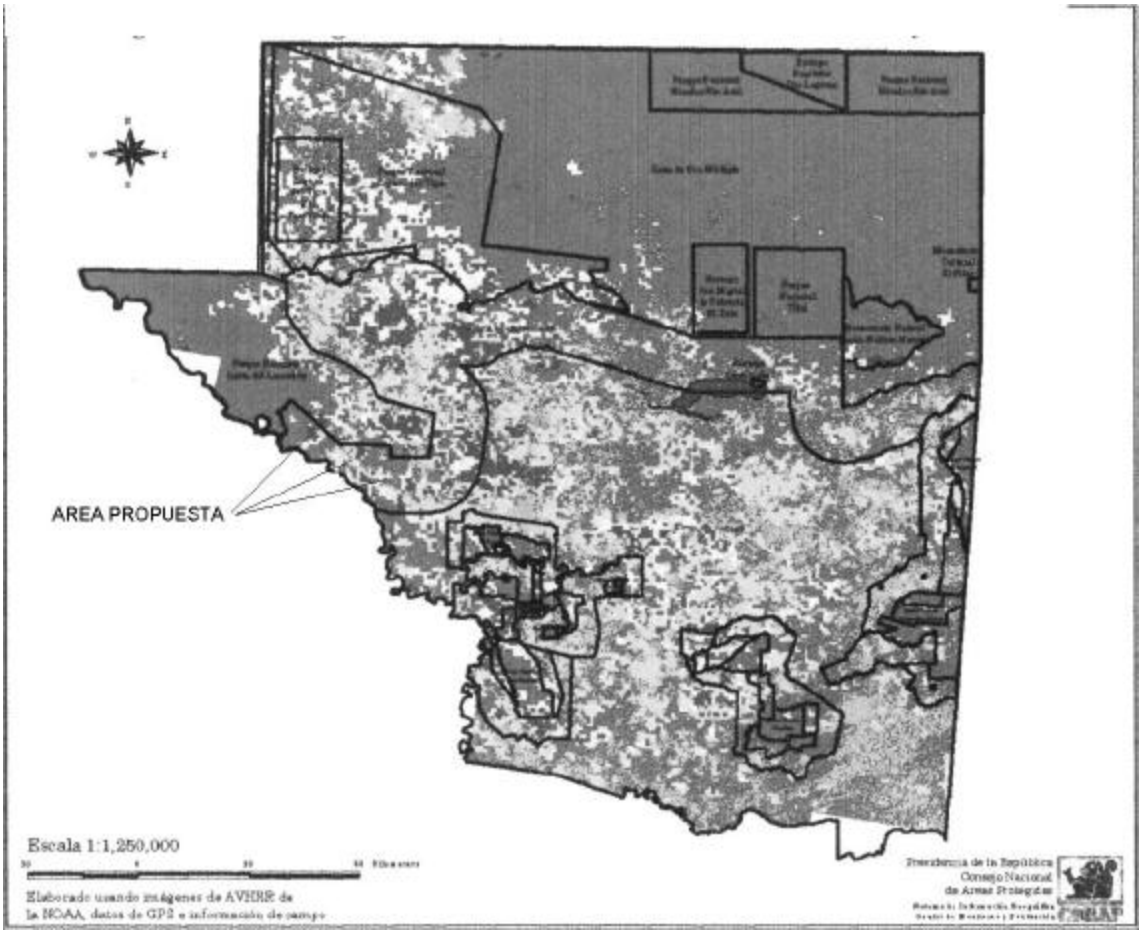
Forest Advisor for the management of natural and planted forests in the Nuevo Horizonte Cooperative area, Santa Ana, Peten, Guatemala (2004).

Senior consultant for studies on land use management, environmental impact assessment and forest harvesting planning in La Bendición Farm, located to the south-west of the Lacandon Highlands National Park, Peten, Guatemala (2004).

Forest Coordinator in the Integrated Development Plan for the Nuevo Horizonte Cooperative, Santa Ana, Peten, 2004-2005.

ANNEX C: GEOGRAPHIC LOCATION OF PROPOSED COMMUNITIES

DEPARTMENT OF PETEN
LACANDON HIGHLANDS NATIONAL PARK



ANNEX D

PROBLEM TREE

Lack of investment plans for the operationalization of the processed timber production chain

Forest activities focused on timber species logging with limited value added processing

LIMITED GENERATION OF INCOME FROM THE SUSTAINABLE MANAGEMENT OF FOREST RESOURCES

Poor institutional strengthening of non forest organisations preventing coordination for natural resource management

Poor entrepreneurial vision and limited research on production and local and regional markets for the integrated management of the forest production chain through to industrialization and marketing

Low value attached to forest benefits from a sustainable utilization perspective

ANNEX D: PROJECTED VOLUMES AND LOCAL INCOME LEVELS TO BE ACHIEVED WITH THE IMPLEMENTATION OF THE PROPOSED PROJECT TO BE DEVELOPED THROUGH THE SUBMITTED PRE-PROJECT

SUMMARY OF VOLUMES IN CUBIC METERS AND DOYLE FEET BY SPECIES AND COMMERCIAL GROUP
ITTO PROJECT COOPERATIVES

		GROUP			
Species	Data	AAACOM	ACTCOM	POTCOM	Grand Total
Amapola	Sum of M3			133.27	133.27
	Sum of DOYLE Ft.			29319.4	29319.4
Balsamo	Sum of M3			182	182
	Sum of DOYLE Ft.			40040	40040
canxan	Sum of M3			298.72	298.72
	Sum of DOYLE Ft.			65718.4	65718.4
Caoba	Sum of M3	807.87			807.87
	Sum of DOYLE Ft.	177731.4			177731.4
Catalox	Sum of M3			93.05	93.05
	Sum of DOYLE Ft.			20471	20471
Cedrillo	Sum of M3			69.07	69.07
	Sum of DOYLE Ft.			15195.4	15195.4
Cedro	Sum of M3	145			145
	Sum of DOYLE Ft.	31900			31900
Ceiba	Sum of M3			2778.02	2778.02
	Sum of DOYLE Ft.			611164.4	611164.4
Chacaj colorado	Sum of M3			556.64	556.64
	Sum of DOYLE Ft.			122460.8	122460.8
Chichipate	Sum of M3			116.8	116.8
	Sum of DOYLE Ft.			25696	25696
Cola de coche	Sum of M3			679.52	679.52
	Sum of DOYLE Ft.			149494.4	149494.4
Colorin	Sum of M3			5.4	5.4
	Sum of DOYLE Ft.			1188	1188
Cortez	Sum of M3			5	5
	Sum of DOYLE Ft.			1100	1100
Danto	Sum of M3			1859.73	1859.73
	Sum of DOYLE Ft.			409140.6	409140.6
Guaciban	Sum of M3			1852.37	1852.37
	Sum of DOYLE Ft.			407521.4	407521.4
Guapinol	Sum of M3			79	79
	Sum of DOYLE Ft.			17380	17380
Jobillo	Sum of M3			87	87
	Sum of DOYLE FT.			19140	19140
Jobo	Sum of M3			45	45
	Sum of DOYLE FT.			9900	9900
Lagarto	Sum of M3			139.09	139.09
	Sum of DOYLE FT.			30599.8	30599.8
Llora sa ngre	Sum of M3			174.79	174.79
	Sum of DOYLE FT.			38453.8	38453.8
Luin hembra	Sum of M3			60	60
	Sum of DOYLE FT.			13200	13200
Malerio colorado	Sum of M3			77.61	77.61
	Sum of DOYLE FT.			17074.2	17074.2
Manchiche	Sum of M3		247		247
	Sum of DOYLE FT.		54340		54340
Pito Rojo	Sum of M3			198	198
	Sum of DOYLE FT.			43560	43560
Plumajillo	Sum of M3			1426.09	1426.09
	Sum of DOYLE FT.			313739.8	313739.8
Pucté	Sum of M3			530	530
	Sum of DOYLE FT.			116600	116600
Ramon colorado	Sum of M3			28	28
	Sum of DOYLE FT.			6160	6160
Ramon blanco	Sum of M3			2158.29	2158.29
	Sum of DOYLE FT.			474823.8	474823.8
San juan	Sum of M3			337	337
	Sum of DOYLE FT.			74140	74140
Santa maria	Sum of M3		2238.81		2238.81
	Sum of DOYLE FT.		492538.2		492538.2
Sunza	Sum of M3			626.45	626.45
	Sum of DOYLE FT.			137819	137819
Total Sum of M3		**952.87**	**2485.81**	**14595.91**	**18034.59**
Total Sum of DOYLE Ft		**209631.4**	**546878.2**	**3211100.2**	**3967609.8**

NOTE: AAACOM = Caoba & Cedro; ACTCOM = Manchiche & Santa María
POTCOM = All secondary species

	Veneer
	Exports
	Exports

ROUNDWOOD SALE SCENARIO (Quetzals)							
DESCRIPTION		**m^3**	**Doyle Feet (DFt)**	**Price/DFt (Q.)**	**Value**	**Subtotal (Q.)**	**Total amount (Q.)**
Timber sales							
Caoba		807	177,540	12.00	2,130,480	2,130,480	2130480
Cedro		145	31,900	6.50	207,350	207,350	207350
Balsamo, Guapinol, Jobillo, Chichipate		465	116,250	2.00	232,500	232,500	232500
Manchiche, Santa maria, Cola de coche		3164	632,800	1.50	949,200	949,200	949200
Pucte, Catalox, Danto, Malerio colorado, Pito rojo		2749	604,780	1.20	725,736	725,736	725736
Guaciban, Amapola, Ceiba, Colorin, Lagarto, Llora sangre, Plumajillo, Ramon bl, San juan		9002	1,980,440	1.00	1,980,440	1,980,440	1980440
Canxan, Cedrillo, Chacaj, Cortez, Jobo, Luin hembra, Sunza		1659	331,800	0.50	165,900	165,900	165900
Total timber sales		**17,991**	**3,875,510**				
Total income derived from timber sales							**6391606**
Yearly Plan of Operation (YPO)							
Recogn. of AAA (labour)						10,500	
Demarcation of logging area						14,000	
Opening of trails						86,800	
Collection of information						63,000	
Transport						35,000	
Materials and supplies						7,700	
DSA (management)						7,000	
Forest Techni cian (2 months)						84,000	
Preparation of YPO document						42,000	**350000**
Implementation of YPO							
Timber checking/tallying						31,500	
Seed tree marking						4,200	
Supervision						63,000	
Timber scaling						21,000	
Forest Technician (2 months)						84,000	
CONAP/INAB Monitoring						21,000	**224700**
Timber marketing							
DSA (management)						3,514	
Timber sales contract						21,000	**24514**
Duties and tariffs							
Waybill fees						18,000	
Forest stumpage fees							
Precious species: Q. 74.30/m3		1155				85816.5	
Semi-precious species: Q. 29.30/m3		2238				65573.4	
Secondary species: Q. 9.60/m3		14598				140140.8	**309531**
TOTAL COSTS							**908745**
GENERAL DATA							
Number of families	**600**						
Logging area (hectares)	**2,330**						
Total log volume	**17,991**						
FINANCIAL INDICATORS							
Gross income	**6,391,606.00**						
Net profits	**5,482,861.30**						
Cost/benefit ratio	**6.03**						
UNIT INDICATORS							
Volume to be harvested (m3/ha)	**7.72**						
Cost/Doyle Ft	**0.23**						
Cost/m^3 (roundwood)	**50.51**						
Gross income/ha	**2,743.18**						
Gross income/family	**10,652.68**						
Net profits/ha	**2,353.16**						
Net profits/family	**9,138.10**						

SCENARIO: TIMBER PROCESSING (IN JOINT VENTURE) WITH THE INDUSTRY									
PARTNERSHIP WITH THE LOCAL INDUSTRY									
	DESCRIPTION		**product**	**m3**	**Board feet (Bft)**	**Price/Dft (Q.)**	**Total price (Q.)**	**Subtotal (Q.)**	**Total amount (Q.)**
1	**Timber sales**								
	Caoba		Sawnwood	807	177,540	15.20	2,698,608	2,698,608	2698608
	Cedro		Sawnwood	145	31,900	11.40	363,660	363,660	363660
	Balsamo, Guapinol, Jobillo, Chichipate		Sawnwood	465	116,250	9.88	1,148,550	1,148,550	1148550
	Manchiche, Santa maria, Cola de coche		Sawnwood	3,164	632,800	9.12	5,771,136	5,771,136	5771136
	Pucte , Catalox, Danto, Malerio colorado		Sawnwood	2,551	561,220	7.60	4,265,272	4,265,272	4265272
	Guaciban, Amapola, Ceiba, Colorin, Llora sangre, Plumajillo, Ramon bl, San juan, Jobo, Chacaj col, Cedrillo, luin hembra, Canxan, Pito rojo, Sunza		Plywood	10,859	412,642	75.00	30,948,150	30,948,150	30948150
	(1 m3 produces 15 Plywood sheets of 1/2" x 4' x +8')				412,642	per sheet			
					4,744,833	board feet			
	Total timber sales			**17,991**					
	Total income derived from timber sales								**45195376**
2	**Yearly Plan of Operation (YPO)**								
	Recogn. of AAA (labour)							10,500	
	Demarcation of logging area							14,000	
	Opening of trails							86,800	
	Collection of information							63,000	
	Transport							35,000	
	Materials and supplies							7,700	
	DSA (management)							7,000	
	Forest Technician (2 months)							84,000	
	Preparation of YPO document							42,000	**350000**
3	**Implementation of YPO**								
	Wages							467,500	
	Administrative costs							112,750	
	Fuel							478,500	
	Lubricants							93,500	
	Materials and supplies							96,250	
	Repairs							24,750	
	Spares							52,800	
	Food supplies							137,500	
	DSA							6,050	
	Equipment/machinery freight							45,000	
	Timber transport							2,375,000	
	Rental of machinery							48,950	**3938550**

4	**Timber processing**								
	Sawnwood (Q.150/board foot)			1,519,710				2,279,565	
	Plywood (cost per sheet Q. 60.00)			412,642				24,758,520	
	Production supervisors							20,000	**27058085**
4	**Timber marketing**								
	DSA (management)							15,000	
	Travel							10,000	
	Timber sales contract							25,000	**50000**
5	**Duties and tariffs**								
	Waybill fees							18,000	
	Forest stumpage fees								
	Precious species: Q. 74.30/m3			1155				85816.5	
	Semi-precious species: Q. 29.30/m3			2238				65573.4	
	Secondary species: Q. 9.60/m3			14598				140140.8	**309531**
		TOTAL COSTS							**31706166**
									4064893
	GENERAL DATA								
	Number of families	**600**							
	Logging area (hectares)	**2330**							
	Total log volume	**17991**							
	FINANCIAL INDICATORS	**Q.**	**US$**						
	Gross income	**45195376**	**5,794,278.97**						
	Net profits	**13489210**	**1,729,385.94**						
	Cost/benefit ratio	**0**							
	UNIT INDICATORS								
	Volume to be harvested (m3/ha)	**8**							
	Cost/Doyle ft	**7**							
	Cost/m³ (roundwood)	**1762**							
	Gross income/ha	**19397**							
	Gross income/family	**75326**							
	Net profits/ha	**5789**							
	Net profits/family	**22482**							

ANNEX E: Modifications made in response to the 31st ITTO Expert Panel's recommendations on the revised pre-project proposal – March 2006

No.	EP Recommendation	Modification made
1.	Describe the objectives more directly and in simpler terms. ***1.1 Development objective*** ***Formulation of a proposal with a view to developing strategies aimed at community institutional strengthening in marketing processes,*** commercial valuation for tropical forests and timber processing and industrialisation, ***and to strengthening bio-physical and legal protection actions*** to contribute to the process of sustainable development as mechanisms to promote sustainable forest management and conservation ***for the generation of economic income for the families of the communities involved.*** ***1.2 Specific objective*** ***Focus and guide a community industrial development proposal in order to increase*** the income levels of ***local forest organisations*** by improving the production capacity of forests through silvicultural treatments, better utilisation of lesser-used species and promotion of non-timber forest products, assisted natural regeneration, enrichment planting and reforestation within a corporate scheme.	**1.1 Development objective** ***Formulate a proposal with a view to developing concrete actions for the institutional strengthening of producers' organisations through the development of local forest production chain processes such as inputs supply, forest production under management (including biophysical and legal protection), timber processing, and marketing of timber and non-timber products to end-consumers.*** **1.2 Specific objective** ***Focus and guide industrial development strategies and actions for producers' organisations structured on the basis of business plans so as to develop the local forest production chain, increase their income levels and boost the local economy, by improving the production capacity of forests under management and the processing of forest products, administrative and management capacity, marketing, negotiation and sales.*** ***(Page 2)***

No.	EP Recommendation	Modification made
2.	Describe how the 14 community cooperatives from the area will be identified.	**There are more than 25 organizations in the selected project area, including a variety of agricultural associations of small producers, farmers associations and cooperatives, but the current service capacity of the Mayan Centre is for up to 14 organizations. These will be selected through the development of a technical sheet for all the organizations in the proposed project area, which will include criteria such as the number of families, the area of agricultural lands and forest lands, forest management and harvesting background of their respective forests, businesses established on the basis of their forest harvesting and timber and forest product marketing activities, an analysis of successful and unsuccessful projects implemented over the past 5 years, their production potential, the levels of integration and participation within their respective organizations, strengths and weaknesses of the organizations, and the degree and level of leadership of the main members of the organizations. The organizations with the lowest score will be considered by the project as indirect beneficiaries, and depending on the possibilities of widening the scope of the project or identifying other national support mechanisms, they might eventually be able to join those organizations that show the best success indicators in this exercise.** **(Page 3)**
3.	Take into account the need for capacity building at the community level during the implementation of the pre-project.	**Existing installed capacity at the community level will be taken into account during the formulation of the project proposal, focusing mainly on the local skills available to develop commercial strategies, production infrastructure, organizational structure and community commitments and interests for the development of other non-production sectors such as health, education, housing, cultural activities, etc.** **(Page 4)**