INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PRE-PROJECT PROPOSAL

TITLE

FORESTRY INVENTORY FOR THE SUSTAINABLE

PRODUCTION OF MAHOGANY TIMBER

SERIAL NUMBER

PPD 7/97 Rev.1 (F)

COMMITTEE

REFORESTATION AND FOREST MANAGEMENT

SUBMITTED BY

GOVERNMENT OF BRAZIL

ORIGINAL LANGUAGE

ENGLISH

SUMMARY

This proposal will provide technical assistance to develop a program to inventory the natural stands of *Swietenia* macrophylla (mahogany) in Brazil. This will assist with the sustainable management and timber production of this species.

EXECUTING

IBAMA

AGENCY

COOPERATING GOVERNMENTS

DURATION

6 MONTHS

APPROXIMATE STARTING DATE

UPON APPROVAL AND FUNDS ALLOCATION

BUDGET AND PROPOSED SOURCES OF FINANCE

Source

Contribution in US\$

Local Currency Equivalent

ITTO IBAMA 147,700 In kind

TOTAL

147,700

PART I: CONTEXT

1 - RELEVANCE TO ITTO

1.2 - COMPLIANCE WITH ITTA OBJECTIVES

This Pre Project Proposal is consistent with most objectives of the International Tropical Timber Agreement 1994, particularly with objectives (c): "To contribute with the process of sustainable development"; (d) " To enhance the capacity of members to implement a strategy for achieving exports of tropical timber and timber products from sustainably managed sources"; (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"; and (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.

1.2 - COMPLIANCE WITH ITTO CRITERIA

This Pre Project Proposal is related to the area of natural forest management, institutional framework and especially to national planning. It is consistent with all ITTO criteria: it is related to the production and use of industrial tropical timber, yields benefits to the tropical timber economy as a whole and is relevant to producing and consuming countries, it is related to maintaining and expanding the international trade in tropical timber, offers reasonable prospects for positive economic returns in relation to costs, maximizes the use of existing institutions and avoids duplication of efforts.

1.3 - RELATIONSHIP TO ITTO ACTION PLAN

This Pre Project activities are compatible and consistent with ITTO Action Plan and priorities. It will support a Member Country in taking national actions towards the adoption of sustainable management, and in achieving Year 2000 Objective. The implementation of this Pre Project will ensure that existing skills, facilities and skills are used, and particularly it will avoid duplication of efforts.

2 - RELEVANCE TO NATIONAL POLICIES

2.1 - RELATIONSHIP TO SECTORAL POLICIES AFFECTING TROPICAL TIMBER

The Pre Project is directly related to the Brazilian Forest Code (1965), and law and regulations related to the utilization of forest resources. It is also related to national policies related to maintaining biodiversity and the erosion of genetic material of important species such as Switenia macrophyla (mahogany), expressed by several measures taken in the last years, including the establishment of export cotas for mahogany sawnwood and recently by the Presidential Decree that determined a strict control over logging operations of this species.

Furthermore is also compatible to the national efforts to increase revenue from exports based on sustainable produced timber.

2.2 - RELATIONSHIP TO SUBSECTORAL AIMS AND PROGRAMMES

This Pre Project is also related at subsectoral level and for regional development programmes. As an example AIMEX-Timber Exports Association- has recently established in Belem a Centre for Technology Development, Seeds and Seedlings. The Centre will be operated in close co-operation with EMBRAPA and the Secretary for the Environment of the Para State. One of their goal is to support implementation of plantations and management plans of valuable species, such as mahogany, and information such as those to be made available by the inventory will be of outstanding importance.

2.3 - INSTITUTIONAL AND LEGAL FRAMEWORK

The Pre Project will be implemented under the co-ordination of the Department of Natural Resources of IBAMA. All IBAMA structure will be made available to support the implementation, including the remote sensing unity located in Brasilia, and regional offices in the states to be covered by the study (basically Para, Mato Grosso, Rondonia, and Acre).

External consultants, with large experience in forest inventory, planning and remote sensing will be involved in the actual implementation of the Pre-Project.

PART II - THE PRE PROJECT

1 - ORIGIN

During the XVI ITTC Session held in Cartagena, Colombia, Brazil presented the results of a study carried out on the production and trade of mahogany. The study was implemented by FUNATURA, and the results pointed out that mahogany is an important species for the regional economy, and that it has been intensively logged in some regions. On the other side the study also showed the urgent need to further investigate the present situation, especially the remaining stocks of the species, in order to take measures to ensure protection and the sustainable timber production.

In fact mahogany has been focused in several international fora, and there is a strong need to have, as soon as possible, precise information to allow Brazil and other Governments to take adequate policies in relation to protection and trade of this species. Information provided by a forestry inventory is therefore of high priority.

2 - PRE- PROJECT OBJECTIVES

2.1 - DEVELOPMENT OBJECTIVE

To provide information required for the national planning and adoption of strategies to support the achievement of sustainability of tropical forests and the sustainable development of the tropical regions.

2.2 - Specific Objective

To develop a program on the inventory of Switenia macrophyla natural stands in Brazil in order to corroborate with the sustainable management and ensure sustainable timber production of this species.

3 - PRE- PROJECT JUSTIFICATION

3.1 - Problem to be addressed

Forest inventory and monitoring at a national level is an important indicator on the achievement of sustainability. It provides valuable information on the forest cover, forest types, and allows among other things the development of policies for the conservation of natural resources and also long term development planing. Mahogany is one of most valuable timber species of the Amazon forests. It grows in a large area, covering in Brazil parts of the States of Para, Amazonas, Rondonia. Mato Grosso and Acre.

Due the high quality of this wood, the species have been intensively logged in some areas, and discussions have been held in several fora in relation to precautions needed to avoid drastic reduction in the tree populations, that could eventually lead to a future genetic erosion of the species.

The species has good reputation in the international market, and export prices are, for the best grades well over US\$1,000.00 per cubic meter. Brazil and Bolivia are the main exporters of this Switenia macrophyla timber, and USA and UK are the main importers.

Due to concerns expressed by several people, and on going discussions in several fora, Brazil has limited exports to 100,000 m3 per year of this species. Other precautions include the limitations on logging operation created through the recent Presidential Decree.

In fact discussions lack of solid information on remaining stocks of the species, among other things, have limited government in adoption of consistent policies necessary to ensure protection and sustainable production.

Restrictions to international trade of this species will not solve the problem. In fact in case restrictions are imposed to the international trade this species will lose value, and domestic consumption will take over the volumes previously exported. No positive impact is foreseen in relation to preservation and conservation.

3.2 - CHARACTERISTICS OF REGION WHERE IT WILL BE LOCATED

This Pre Project covers a large part of the Brazilian Amazon region, where Switenia macrophyla occurs naturally. The region includes parts of the States of Para, Mato Grosso, Rondonia, Acre and Amazonas. It is estimated that the total area is around 2 million square kilometers, or about 50% of the Brazilian Amazon.

All this region was originally covered by rain forests, but due to human activity parts have been converted to other uses, such as agriculture and cattle raising.

As a result of development programs implemented during the 70's, and also due to the extension of the area covered by this pre-project, the region is not uniform in terms of infrastructure, social and economic development. For instance south of Para and Rondonia States have a better infrastructure than Acre and Amazonas. Most of the area of these two last states remain covered by forests, while parts of Para and Rondonia have been converted to agriculture.

3.3 - Other relevant aspects of "pre-project situation"

The lack of information on mahogany reserves has created several difficulties, both at national and at international level. If for some is difficult to accept that the species are endangered considering the large area covered, others are sure that intensive logging is leading to a genetic erosion of the species.

As a result Government find to be difficult to take effective actions and define clear policies in relation to the protection and conservation, as well as in relation to the industrial development involving this species.

A national inventory of the species will not fully solve the problem, but will provide basic information and general guidance needed at this moment.

3.4 - Intended situation after project completion

This Pre Project will define the best approach for the implementation of a national inventory of one of the most important tropical timber species in Brazil-Switenia macrophyla (mahogany). This species is also the most important commercial timber included in CITIES discussions at the present moment.

3.5 - TARGET BENEFICIARIES

The direct beneficiary of this Pre Project will be IBAMA. The organization will have in hands detailed information and a plan for the implementation of the national forest inventory on mahogany, an important species for the socio economic development of the Amazon region.

Other beneficiaries will be the private sector and the society in general that, in having the forest inventory implemented, will have in hands better information in relation to this important resource and its sustainability.

3.6 - PRE PROJECT STRATEGY

3.6.1 - Reasons for selection

The development of a Pre Project for a forest inventory of the selected species was necessary due to the complexity of the matter and also the extension of the area to be covered. This Pre Project will ensure that most of the relevant factors are taken into consideration in designing the project to implement the inventory.

3.6.2 - Lessons drawn from past evaluation

The ITTO project on production and trade of mahogany implemented by FUNATURA, and discussions based on the document produced are important lessons learned, an will help in the implementation of this preproject.

In spite of the fact that several recommendations were included in the final report of that project in relation to actions needed to protect the species, information provided was not sufficient to support such recommendations. The main information missing was, in fact, the volume or extension of the remaining resources of mahogany.

This is also true in relation to proposals made by some countries in relation to listening this species in the Annex II of CITIES.

3.6.3 - Technical and scientific aspects

The main technical and scientific aspects in relation to this Pre Project are those in relation to the development of the methodology for the implementation of the national inventory of this important species. The methodology to be developed will take into consideration existing facilities, available expertise, cost involved, information required, forest inventory already implemented and other aspects.

The technical and scientific information to be made available as a result of this Pre Project will be important to design the most efficient methodology to implement a forest inventory that will allow a clear understanding of the present situation and also will help in define actions need to ensure sustainable production of timber of mahogany.

3.6.4 - Economic aspects

This Pre Project is particularly important when considering its economic implications in the implementation of the forest inventory of the selected species. The detailed survey of existing information, facilities, and expertise will be important to ensure better use of the resources, with significant impact in the costs of the inventory, particularly considering the extension to be covered. It will also ensure that the best approach is taken into consideration in relation of precision of information, and so decisions to be taken at government and private sector levels will be based on sound information, reducing economic risks.

3.6.5 - Environmental aspects

The implementation of this Pre Project does not represents risks to the environment. In fact it will help in the formulation of a project that will address relevant issue on the conservation of biodiversity, while at the same time ensuring the sustainable supply of timber.

3.6.6 - Social Aspects

This Pre Project, when defining the strategy for the implementation of the national inventory of mahogany will take due consideration to social aspects. This involves social implication over local communities involved in the timber production of the species, as well as social aspects related to indigenous communities.

3.6.7 - Managerial aspects

The Pre Project will be managed by IBAMA. Management aspects will be defined by the Director of Natural Resources of the organization. IBAMA will also be important in providing information and support for the field work. Actual implementation of the activities will be done by consultant to be hired in the market.

3.7 - REASONS FOR ITTO SUPPORT

3.7.1 - ITTO aspects

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The submission of this Pre Project proposal to ITTO arises from the direct linkages to the objectives of the Organization. Furthermore ITTO have given emphasis on aspects related to the sustainability, production trade of this important species.

ITTO has already financed one project on this subject (Project implemented by FUNATURA). During the last Council Session (XXII) it was also approved and financed another Project Proposal related to mahogany, having SINDIMAD as the implementing agency.

3.7.2 - Relationship to relevant actions supported by other donors

There are other organizations and donors interested in this Pre Project, mainly due to the importance of mahogany to the international trade and also based on the discussions in relation to the conservation and preservation of the species.

3.8 - RISKS

No risks were identified for the implementation of this Pre-Project.

4 - OUTPUTS

4.1 - OUTPUT 1

Available information on silviculture, ecology, management, resources, production and trade and other relevant aspects of Switenia macrophyla collected, analyzed and compiled;

4.2 - OUTPUT 2

Technology, facilities and expertise available for the implementation of a forest inventory in the region of natural occurrence of Switenia macrophylla of the Brazilian Amazon identified;

4.3 - OUTPUT 3

A Project Proposal for the implementation of a forest inventory covering the region of natural occurrence of Switenia macrophylla, in the Brazilian Amazon, prepared and discussed.

5 - ACTIVITIES AND INPUTS

5.1 - OUTPUT 1

Activity 1.1

To prepare detailed Terms of Reference for the consultants to be involved in this Pre Project;

Activity 1.2

To review literature on Switenia macrophyla silviculture, ecology, management, resources, logging and transportation operations, processing technology, trade and other relevant aspects;

Activity 1.3

To contact with foresters and other experts, in the public and private sectors in order to collect their experience in relation to the ecology, management, production and trade of Switenia macrophyla;

Activity 1.4

To analyze and compile the information collected and prepare a report on available information in relation to Switenia macrophyla.

5.2 - OUTPUT 2

Activity 2.1

To visit main research centers, universities, consulting companies and other organizations in order to identify national available technology, facilities, and expertise needed to implement a forest inventory on Switenia macrophyla;

Activity 2.2

To survey regional infrastructure and costs components to be considered in planing the forest inventory;

Activity 2.3

To carry out a critical analysis of the findings and pre-selection / identification of the structure to be used in the implementation of the forest inventory;

Activity 2.4

To prepare a report on the findings and the proposed structure.

5.3 - OUTPUT 3

Activity 3.1

To analyze the reports prepared on Switenia macrophyla information and on proposed forest inventory structure;

Activity 3.2

To prepare a Draft Project Proposal taking into consideration information and recommendations of reports prepared;

Activity 3.3

To organize and implement a workshop, with the participation of government organizations, private sectors, forest professional and NGO's, in order to:

- Discuss the consultants findings;
- Discuss the Draft Project Document including methodology to be considered in the forest inventory, organizations to be involved and facilities to be allocated by each organization;
- Involved private sectors and government organizations in the process;
- Identify other aspects that could be a constraint in the implementation of the project.

Activity 3.4

To revise the Draft Project Proposal taking into consideration recommendations made by the workshop participants.

6 - LOGICAL FRAMEWORK

The logical framework for this Pre Project is presented in Annex 1.

7 - WORK PLAN

The workplan of this Pre Project is presented in table 1.

TABLE 1- WORKPLAN

	1	2	3	4	5	6
1.1 Prepare TOR	xxxx					
1.2 Review literature	XXXX	XXXXXXX	XXXX			
1.3 Contact with foresters and experts		XXX	XXXXXXX			
1.4 Analyze/compile information/report			XXXXXXX	xxxxxx		
2.1 Visit research centers, etc.	xxxx	XXXXXXX	xxxxx			
2.2 Survey, regional infrastructure		xxxxxx	XXXXXXX			
2.3 Critical analyses			xxxxxx			
2.4 Report			xxxxxx	xxxx		
3.1 Analyze reports/				xxxxxx	xxxx	

information				
3.2 Prepare Draft Project Proposal			XXXXXXX	
3.3 Organize/implement Workshop			XXXXX	xxx
3.4 Revise draft Project proposal				xxxx

8 - Institutional Arrangements for Execution and Operation

8.1 - Management structure

IBAMA will be responsible for the implementation of this pre-project. Project will be managed using the already existing structure the Department of Natural Resources

8.2 - FUTURE OPERATION AND MAINTENANCE

This Pre Project Proposal will be developed a technical-administrative proposal that will point out the most adequate alternative to implement the national strategy for the forest inventory and sustainable production of important timber resources of outstanding interest to IBAMA and to the Country as a whole.

8.3 - KEY STAFF

To ensure its success this Pre-Project will be directly and daily monitored by the Head of the Department of Natural Resources of IBAMA. To implement the activities it will be required the appointment of suitably qualified consultants, which will include a team leader and short term experts on forest inventory, monitoring and remote sensing.

9 - PRIOR OBLIGATIONS AND PREREQUISITES

IBAMA will take care of all prior obligations and prerequisites to facilitate the implementation of this Pre-Project., including budgetary conditions, release of staff, provision of maps on the remote sensing and other information available at the organization. IBAMA will also make available remote sensing facilities, and will make all necessary efforts to release information available at other organisations, both at federal as well as at state levels.

10 - Possible future actions

Future actions are related to the implementation of the forest inventory, following recommendation to be made based on the findings of this Pre- Project. IBAMA will take the necessary actions in order to efficiently implement the recommendations of this Pre Project.

PART III: MONITORING, REPORTING AND EVALUATION

1 - ARRANGEMENTS FOR REPORTING

A work plan will be initially prepared. During the implementation at least one progress report will be prepared and submitted by the Pre Project team leader. At the completion a final reported will be submitted.

2 - ARRANGEMENTS FOR ITTO MONITORING AND REVIEW

ITTO shall monitor this Pre Project in accordance with its rules and regulations. ABC will also monitor the implementation on behalf of Brazilian Government.

3 - EVALUATION

Evaluation will be carried out in accordance with ITTO rules and regulations.

PART IV: PRE PROJECT BUDGET

1 - PRE PROJECT BUDGET BY COMPONENT

Budget by Component

Com	US\$	
10 P	roject Personnel	
11	Team Leader and Consultant on Forest Inventory (6pm x 8,000)	48,000
12	Consultant for collection inf. SM (4pm x 6,000)	24,000
13	Consultant on Project Formulation (2pm x 6,000)	12,000
19	Component total	84,000
20 S	ubcontracts	
21	Workshop implementation *	25,000
29	Component total	25,000

30 D	outy Travel	
31	DSA	8,000
32	ATK	7,000
39	Component total	15,000
60 N	liscellaneous	
61	Sundry	6,000
69	Component total	6,000
Tota	il	130,000
	TTO Administration, Monitoring and Evaluation	130,000
		130,000
70 I	ΓΤΟ Administration, Monitoring and Evaluation	<u> </u>
70 I	ΓΤΟ Administration, Monitoring and Evaluation Monitoring and Evaluation	10,000

^{* -} includes: Traveling and accommodation for participants, facilities for the workshop, reproduction of materials, and other expenses.

IBAMA IN KIND CONTRIBUTION INCLUDES:

- Personnel for support to consultants
- Administrative support, office facilities and supply, office equipment, communication
- Reproduction of Documents, aerial photos, satellite images- and other material
- Field support based on IBAMA regional offices.

ANNEXES

- 1 LOGICAL FRAMEWORK MATRIX
- 2 PRELIMINARY TERMS OF REFERENCE

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ANNEX 2

TERMS OF REFERENCE (PRELIMINARY)

Position: Team Leader and Consultant on Forest Inventory

PROFESSIONAL QUALIFICATIONS:

- At least 10 years experience in forest inventory in tropical regions;
- Good knowledge of tropical forests;
- Good command of Portuguese language.

DUTIES:

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- To act as the team leader of this Pre- Project
- To discuss with the Director of the Department of Natural Resources of IBAMA relevant aspects to this Pre Project
- To visit research organizations, universities, consulting companies and other organizations with relevant experience on forest inventory;
- To identify existing facilities and expertise on forest inventory;
- To survey regional infrastructure, costs components and other aspects needed to plan a forest inventory in the area of occurrence of Switenia macrophyla;
- To define the structure, costs, operation and other aspects related to the implementation of a forest inventory covering the area occurrence of Switenia macrophyla;
- To participate in the workshop of discussion of the Draft Project Proposal for the implementation of the forest inventory.
- To participate of the project formulation process, being the ultimate responsible for the project proposal document, especially the budget

Position: Consultant for Collection of Information on Switenia macrophyla

PROFESSIONAL QUALIFICATIONS:

- At least 10 years experience in forest project implementation, planing, resource management and social-economic development;
- Good knowledge of tropical forests;
- Good command of Portuguese language.

DUTIES:

- To discuss with the team leader the scope, objectives and other aspects related to the implementation of this Pre Project;
- To revise literature related to silviculture, ecology, management, resources, logging and transportation, processing and trade of Switenia macrophyla;
- To contact private and government organizations to collect relevant information and experience in relation to above subjects;

- To prepare a report on the findings;
- To submit the report to the team leader;
- To participate on the workshop to discuss the Draft Project Proposal on forest inventory of Switenia macrophyla

POSITION: CONSULTANT ON PROJECT FORMULATION

PROFESSIONAL QUALIFICATIONS:

- At least 10 years experience in project formulation
- Knowledge on ITTO related activities;
- Good command of Portuguese and English languages.

DUTIES:

- To discuss with the team leader the scope, objectives and other aspects related to the implementation of this Pre Project;
- To critically analyze reports prepared by the other consultants involved in this Pre Project;
- To prepare a Draft Project Proposal to implement a forest inventory in the area of occurrence of Switenia macrophyla;
- To present the Draft Project Proposal in a workshop for discussion;
- To revise the Draft Project Proposal taking into consideration the recommendations of participants of the workshop.

ANNEX 1

LOGICAL FRAMEWORK

	VERIFIABLE	MEANS OF	ASSUMPTIONS
	INDICATORS	VERIFICATION	ASSOMI TIONS
DEVELOPMENT OBJECTIVE	Document to support future	Project Proposal submitted	
To make available information to support national planing/policies related to sustainable development	planing and policy actions prepared	by Government for financing	
SPECIFIC OBJECTIVE			
To develop/ design a program on forest inventory of mahogany to ensure sustainability of the species			
OUTPUT 1- Information on mahogany collected, analyzed and compiled	Literature and relevant information collected and compiled.	List of literature and contacts made, and report	Literature available, government and private organizations willing to cooperate
OUTPUT 2- Information on available technology, facilities and expertise identified and structure for the implementation defined	Existing facilities, technology and expertise visited, and identified and a structure for the implementation of the forest inventory defined	List of organizations visited, experts contacted and report	Facilities, technology and expertise adequate for the implementation of the forest inventory
OUTPUT 3- A project proposal for forestry inventory prepared and discussed.	Draft Project Proposal elaborated, discussed in a workshop and ready to be submitted for financing	Workshop minutes, project document	Facilities and technology available and experts willing to cooperate