

# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

## ITTO

### PRE-PROJECT PROPOSAL

TITLE	UPGRADING PRODUCTION EFFICIENCY IN FURNITURE MANUFACTURING
SERIAL NUMBER	PPD 7/96 Rev.1 (I)
PERMANENT COMMITTEE	FOREST INDUSTRY
SUBMITTED BY	GOVERNMENT OF MYANMAR
ORIGINAL LANGUAGE	ENGLISH

#### SPECIFIC OBJECTIVE

This specific objective of the pre-project is to define an overall strategy and an action plan for improving productivity in tropical timber processing.

EXECUTING AGENCY	MYANMA TIMBER ENTERPRISE (M.T.E.)		
COOPERATING GOVERNMENTS	GOVERNMENT OF THE UNION OF MYANMAR		
DURATION	6 MONTHS		
APPROXIMATE STARTING DATE			
BUDGET AND PROPOSED SOURCES OF FINANCE		Contribution in US\$	Local Currency Equivalent (Kyats)
	ITTO	57,497.50	
	Gov't of Myanmar	51,467.00	308,800
	TOTAL	108,964.50	

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## PART I: CONTEXT

### 1. Relevance to ITTO

#### 1.1 Compliance with ITTO Objectives

To formulate an action plan with the view of upgrading the efficiency in furniture production as its principal aim, this pre-project is in tandem with one of ITTO's objectives of encouraging increased and further processing of tropical timber in producing member countries with a view to promoting their industrialisation and thereby increasing their export earnings. It also falls within the ambit of training of technical personnel respectively of Chapter I, Article 1(e) and Chapter VII Article 23 of ITTA 1983. It also complies with the objective to improve marketing and distribution of tropical timber exports from sustainably managed resources of Chapter I, Article 1(K) of ITTA 1994.

#### 1.2 Compliance with ITTO Criteria

The project is also consistent with all the criteria set out in Para-6 of the same Article 23 for projects in the area of further and increased (tropical timber) processing.

#### 1.3 Relationship to ITTO ( Action Plan and Priorities )

The project is related to the priorities of ITTO's Permanent Committee on Forest Industry as defined in the ITTO Action Plan one of the problems highlighted in the ITTO Action Plan in the field of forest industry is that the export of logs remains dominant and that the industry is weak owing, inter alia, to a lack of trained manpower at managerial and technical levels. Improving the efficiency of Wood Processing through the application of a modern production system as proposed in the project would help resolve that problem.

### 2. Relevance to National Policies

Furniture, furniture components, floorings and mouldings are included among the top market segments in timber marketing. They are also valuable in the development of an export-led growth industry relying on local supply of wood for producing value-added finished products and product components.

In the Myanmar scenario, Teak extraction, milling and marketing are being managed by the Myanmar Timber Enterprise (MTE) an agency under the Ministry of Forestry. The annual allowable cut (AAC) of Teak is around 0.34 million hoppus tons (0.6 million cubic metres) whereas the actual cut has been around 0.28 million hoppus tons (0.5 million cubic metres) on the average over 130 years. The following table indicates the volume of teak log extracted from the year 1856 up to 1994.

Period	Tonnage	Ton / Year
(1)	(2)	(3)
1856 to 1939 (83 Years) (before the second World War)	23,381,000	282,000
1946 to 1994 (48 Years) (after the second World War)	13,284,000	277,000
	36,665,000	280,000

This is a vivid proof of the capability and credibility of the Ministry of Forestry in managing its forest resources on a sustainable basis. The Ministry is committed to maintain the rational use and enhancement of this valuable resource and has assured the timber industry a long term supply.

This fact would also erase the lingering doubts any environmentalist might have to determine whether the forests from the source of supply have been managed on a sustainable basis or not.

Furniture made out of Myanmar Teak is world re-known. Teak wood exported from Myanmar, has been processed in-transit at Scandinavia, Japan, Taiwan and recently at Thailand and re-exported world wide as quality furniture.

The Myanma Timber Enterprise is currently operating two old and one new furniture factories. There are also one new finger jointing factory, one flooring factory and two new moulding factories. All the factories adhere strictly to Myanmar Government and international standard regulations on the environmental aspects such as the utilization and reduction of waste.

In the light of the above circumstances, efforts should not only be directed towards capturing export opportunities but also to include upgrading production efficiency in furniture manufacturing. Marketing efforts should also be strengthened for catering to expanded market out-lets with diversified products. It is also necessary to fill the need of the domestic markets for affordable constructional and other timber required by the people from all walks of life, especially for the low income group and the residents at the timber deficit regions.

A successful implementation of the above efforts will bring about the following benefits.-

- (i) Releasing more locally available teak resources for export especially to high value end-use segments.
- (ii) Marketing better use of available resources by introducing a mix of lesser-known and lesser-used species to the markets.
- (iii) Supporting value-added down-stream processing at industrial and cottage levels.

It is highly important to the Myanmar timber sector to have more of its timber processed within the country. The existing sawmills and plywood mills can absorb only 34% of the annual allowable cut of the nation's teak and other hardwoods. As a result much less timber is removed from the forest than what sustainable management permits. This will only encourage exporting of logs which is not in the best interest of a country like Myanmar with high under employment problems. There are only five furniture factories in the country and they provide little impact on the economy of the sector. The Ministry of Forestry's document in attracting investments in Myanmar invites foreign investors to set up joint-ventures with M.T.E in wood processing activities as a means of providing employment and improving the income of the people. Having trained manpower through a project such as this will greatly encourage foreign investments into Myanmar.

Higher outputs of quality furniture will also help enhance the value of the national resource by bringing about increased foreign exchange earnings a policy which the government is pursuing with great interest.

M.T.E is a government agency established with the task of administering the harvesting, transporting, processing and marketing of Myanmar's forest products according to the standards and guidelines set out by the Ministry of Forestry. The development of the timber processing subsector falls within the ambits of M.T.E's responsibilities. In fact M.T.E engages itself in sawmilling, plywood and veneer, manufacturing, and finger jointing down to furniture production, flooring and boat accessories manufacturing. Most of these are located in Yangon with some in Mandalay. A training programme fits in with M.T.E's frame work of major activities. Benefiting from such a training M.T.E will be able to provide the much needed trained manpower and operational systems into its production units.

M.T.E recently has had the benefit of a two-phase Wood Industries Project under the auspices of the International Development Association (World Bank-Finland assistance - programme) which led to the modernisation of some of its primary processing plants. A proposal to increase productivity in furniture manufacturing provides a logical sequence to that project.

IT COULD IDEALLY LEAD TO THE START OF A REGULAR NATIONAL LEVEL TRAINING PROGRAMME IN FURNITURE PRODUCTION.

This pre-project proposal to initiate such a project will provide the successful implementation of upgrading efficiency in furniture manufacturing.

## **PART II : THE PRE-PROJECT**

### **1. Origin**

There has not been a previous ITTO assistance or action in this field of activity in Myanmar.

### **2. Project Objectives**

#### **2.1 Development Objective**

This pre-project will fundamentally help in the implementation of upgrading productivity in furniture manufacturing by introducing a modern production system to the available technology, that will lead to raising the skill of managers and staff, consistent with the principles of quality managements. The modern approach to the production system will also stress on complete utilisation of wood and maximum of environmental pollution.

## 2.2 Specific Objective

This specific objective of the pre-project is to define an overall strategy and an action plan for improving productivity in tropical timber processing.

## 3. Project Justification

Myanmar, with abundant forest resources, is quite able to establish furniture industry. Reinforced with skilled workers and enlightened managers it will have an excellent prospect of producing export quality furniture using teak as well as lesser-known timber species.

Neighboring countries, with abundant forest resources, are promoting their export of flooring and wood moulding up to 300 % to 900 % within recent years. Myanmar also is exporting flooring and wood moulding more and more. Therefore we intend to focuss our export on flooring and wood moulding enforcing with high class teak furniture.

In producing such products we can introduce our lesser-known timber species of assorted attractive colours.

At the Birmingham NEC Furniture Show held during January 1996, most manufactures said there was a distinct trend among buyers towards lighter coloured woods such as American elm, yew, maple and ash. For that case Myanmar has so many similar light coloured wood species e.g. Yamane (*Gmelina arborea* Linn), Sagawa (*Michelia champaca* Linn), Hnaw (*Adina cordifolia* Hook) etc.

There may be other obstacles faced by the country in the process of industrialisation but as mentioned above, the project will focus on what is considered to be a critical area of human resources development. Having appropriately trained people is fundamental to the development of a viable downstream industry especially in wood processing which has an excellent potential for contributing substantially to foreign exchange earnings.

Therefore the strategy is to upgrade the efficiency of workers and to update the technical know-how of managers and then maximising the utilisation of the existing machineries available at the M.T.E complex is also expected.

**The immediate beneficiary is M.T.E with a prospect for identifying an action plan of the implementation of a project which is a training programme with emphasis on the training of trainers.**

## 4. Outputs

The project in meeting with the specific objective of formulating a comprehensive project proposal which would define the strategy and the activities to be carried out and identify the workplan for implementation of upgrading productivity in furniture manufacturing in accordance with market analysis.

## 5. Activities and Inputs

### Activities

1. Analysis of existing production system and procedure.
2. Analysis of existing production and its quality.
3. Market analysis of present exporting items i.e. flooring, wood moulding, finger joints, high class teak furniture, LKS wood furniture.
4. Prospect of production and marketing of above products using lesser-known timber species, medium softwood timber species.

### Inputs

1. 1 man-month of production management consultant and 1 man-month of marketing consultant.
2. 2 man-months of national counterparts for marketing and production management
3. National coordinators and local staffs as necessary.

## 6. Terms of Reference of Consultants

1. Production Management Consultant
  - Study the production system
  - Study the productivity and quality
  - Study the maintenance of machineries
  - Survey the needs to train the personnels at different levels: e.g managerial level, operators level
  - Estimate the no. of trainers, length of training period
2. Marketing consultant
  - Study of raw material available which is suitable for production of furniture, flooring and wood moulding
  - Study the types of furniture, flooring and wood moulding that can be made from each wood species
  - Assess marketability of each category of products for Export & Local uses
  - Study the demand of buyers for long-term purpose
  - Study of market channels
  - To recommend types of products, volume and quality to manufacture
7. Institutional arrangements for execution & operation
 

The pre-project will be executed by M.T.E under the guidance of Ministry of Forestry. The pre-project will be implemented under the responsibility of the General Manager of M.T.E. The project manager, Local counterparts and coordinators will be seconded by M.T.E, for the participation.

**8. Prior Officialations & Prerequisites**

**Action to be taken before project start up**

- To achieve government permission from authorities concerned.
- To achieve administrative and financial authorities to cover the expenses of the pre-project
- To collect necessary statistics & data before pre-project start up
- Determination of project office

**9. Follow up**

- Formulating a project proposal for improving the productivity of furniture manufacturing.
- Gathering information on modern furniture manufacturing techniques appropriate for improved production efficiency to boost export production.
- Gathering information on the appropriate timber manufactures of Myanmar suited to different market niches both local and overseas.

**PART III : MONITORING, REPORTING AND EVALUATION**

The pre-project will be monitored by the General Manager of M.T.E under the guidance of Managing Managing Director and Ministry of Forestry. The General Manager will submit a report to ITTO on completion of the pre-project.



PART IV : BUDGETITTOAmount (US\$)1. Project personnel

1. Consultant 2 man-months @ 10000	20000
2. Market & Production Survey Tour @ 10000 x 2	20000

2. Duty Travel

3. Daily subsistence allowance }	5000
4. Transport cost }	

3. Contingencies (10%)	4500
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4. Monitoring and Evaluation	5,000
5. ITTO Program Support	2,997.50

TOTAL US\$ 57,497.50

GOM ContributionAmount (Kyats)1. Project personnel

1. Project manager - 1800 x 2 x 1	3600
2. Counterpart I,II - 1800 x 2 x 2	7200
3. Project coordinator - 1600 x 2 x 2	6400
4. Office staff - 1200 x 2 x 5	12000
5. Drivers & Peons - 800 x 2 x 6	9600

SUB-TOTAL 38800

2. Miscellaneous Items

1. House rent charges	100000
2. Car renting	90000
3. Stationary & Equipments	40000
4. Power & Fuel	40000

SUB-TOTAL 270000

GRAND TOTAL 308800