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**I T T O**  
**INTERNATIONAL TROPICAL TIMBER ORGANIZATION**

**PRE-PROJECT REPORT**  
**CURRENT SITUATION OF FURNITURE INDUSTRY IN MYANMAR**  
**[PPD 7/96 REV.1 (I)]**

**PREPARED FOR ITTO**  
**BY**  
**MYANMA TIMBER ENTERPRISE**  
**PROJECT CENTRAL COORDINATING COMMITTEE**  
**(SEPTEMBER 1997)**

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## **ABBREVIATIONS AND ACRONYMS**

AAC	Annual Allowable Cut
ARDC	Agricultural and Rural Development Corporation
ASEAN	Association of South-East Asian Nations.
FID	Furniture Industries Department
FIO	Forest Industry Organization.
FOB	Free on Board
FRIM	Forest Research Institute Malaysia
FY	Fiscal Year
ITTC	International Tropical Timber Council
ITTO	International Tropical Timber Organization
KD	Knock Down
Km	Kilometer
Km <sup>2</sup>	Kilometer Square
LKS	Lesser Known Species
MTC	Malaysian Timber Council.
MTE	Myanma Timber Enterprise
MTIB	Malaysian Timber Industry Board.
PTG	Plane Tongue and Groove
RTA	Ready to Assemble
S2S	Two Sides Planed
S4S	Four Sides Planed
STB	State Timber Board
TCT	Tungsten Carbide Tipped
UNCED	United Nations Conference on Environment and Development
YWIL	Yangon Wood Industry Co. Ltd.

## LIST OF ILLUSTRATIONS

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## EXECUTIVE SUMMARY

Myanmar though endowed with natural forest resources, is still relying for export income from the export of raw material mainly logs and rough sawn lumber and is unable to make an impact in the export of finished wood products. Total exports for 1996-97 FY from the forestry sector was roughly US\$ (250) million and from Myanma Timber Enterprise was US\$ (200) million, and export of logs and rough sawn lumber accounted for about ( 80%) of the total export income, while the export of value added items was about ( 5%) and the remainder from other sources. In cognisance of the Objectives of the ITTA 1994 Art.1(i) a pre-project study was executed under the heading " Upgrading Production Efficiency in Furniture Manufacturing". The results of the study would enhance the capacity of Myanmar to promote industrialisation and thereby increasing export earnings and their employment opportunities.

The terms of reference are to analyse existing production and marketing systems and to submit a comprehensive project proposal for upgrading production efficiency in furniture manufacturing, in accordance with market analysis.

Production Consultant Mr A. V. Bassili and Marketing Consultant Mr Ser Cheng Sam were engaged to analyse existing production and marketing systems. A survey group of (8) personnel from the Myanma Timber Enterprise visited Malaysia and Thailand to study their production and marketing systems and made a comparison with Myanmar's existing situation.

A project completion report has been submitted and this technical report will further enlighten ITTO members of the current status of the furniture and wood processing industry in Myanmar.

The current wood processing situation in Myanmar is, compared to neighbouring ASEAN countries, still underdeveloped. This is mainly due to lack of capital and a trained labour force. With the introduction of the market oriented economy in the

country, the investment climate could be improved further to attract more foreign investments. Expatriate investors will bring in capital and technical know-how.

At present two European, one Chinese, and two Thai companies have started to invest in the wood industry. Some are under negotiations or awaiting approval.

A trained labour force with readily available raw material, supported by a large capital investment will certainly push the country into a modern wood processing country by the turn of the next millennium.

To conclude, a project financed by the ITTO to train people in the skills of modern furniture production and wood processing technology, and a brief exposure to foreign market conditions would enable Myanmar to achieve that purpose.



## CURRENT SITUATION OF THE FURNITURE INDUSTRY IN MYANMAR

### Chapter 1

#### 1. INTRODUCTION

##### 1.1. BACKGROUND.

1.1.1. The pre-project Number PPD-7/96 Rev 1(I) entitled "Upgrading Production Efficiency in Furniture Manufacturing" was approved at the 20<sup>th</sup> session of the International Tropical Timber Council" (ITTC) in Manila, Philippines. The development objective of the pre-project is to help in the implementation of upgrading production efficiency 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 management.

1.1.2. The modern approach to the production system will also stress on complete utilisation of wood, i.e. minimisation of waste. Myanmar Timber Enterprise (MTE) as the executing agency, under the guidance of the project steering committee chaired by the Deputy Minister of the Ministry of Forestry, implemented the pre-project. Foreign consultants, Mr. Antoine V. Bassili from Austria for Production and Mr. Ser Cheng Sam from Malaysia for Marketing, were engaged for a three weeks assignment with the concurrence of ITTO. They analysed and prepared reports on the following activities of the Furniture Factories of Myanmar Timber Enterprise .

- (a) Analysis of existing production system.
- (b) Analysis of existing production procedure.
- (c) Analysis of existing production.
- (d) Analysis of existing quality control system and product quality.
- (e) Market analysis of present exporting items.
- (f) To study the raw materials available for production of furniture, floorings and wood moulding.
- (g) To study the type of furniture, flooring and wood mouldings that can be made from each species.



- (h) To access marketability of each category of products for export and local use.
- (i) To study market channels.
- (j) To analyse the potential markets (Target market) for furniture, flooring and wood moulding.
- (k) To recommend type of products, quality and volume to manufacture.

1.1.3. Eight persons from the Myanmar Timber Enterprise had already completed the (19) days of survey tour to Malaysia and Thailand and prepared and submitted their study tour report.

1.1.4. This technical report " The Current Situation of Furniture Industry in Myanmar" is one of the outputs, resulting from the implementation of the Pre-project Number PPD-7/96 Rev 1 (I).

## **1.2. LOCATION OF THE UNION OF MYANMAR AND ITS FOREST AND GENERAL SITUATION.**

1.2.1. Myanmar is situated in the continental South East Asia and lies between Bangladesh and India on the north west and China, Laos and Thailand on the north east, east and south east. The length from north to south is about 1280 miles (2060 Km) roughly between 28 ° and 10 ° north latitudes. The width from east to west is about 575 miles (930 Km) approximately between longitude 92° E and 101° E.

1.2.2. Total land area is about 676,577 square kilometres and its distribution of land use are as follows:

<u>Land use</u>	<u>km<sup>2</sup></u>	<u>% of total</u>
Net Area Sown	87,663	12.96
Fallow Land	13,747	2.03
Cultivable Wasteland	81,290	12.01
Reserved Forest	103,090	15.24
Other Forest Area	240,677	35.57
Other Land	<u>150,110</u>	<u>22.19</u>
Total	676,577	100.00%

1.2.3. Forest cover (category-wise) are as follows:

<u>Category</u>	<u>Area (km<sup>2</sup>)</u>	<u>% of total</u>
(a) Closed forest	293,034	43.31
(b) Degraded Forest	50,733	7.50
(c) Forest effected by Shifting cultivation	154,389	22.82
(d) Water bodies	13,327	1.97
(e) Non-forest	165,094	24.40
Total-	676,577	100.00%

1.2.4. Annual Allowable Cut (AAC) of Teak and other hardwoods are as follows:

	<u>Nos. of tree</u>	<u>Cubic meter</u>
Teak	124,213	409,062
Other Hardwoods	1795,424	3236,071

(1996 estimates)

1.2.5. Population is as follows:-

<u>Total Population (1995/96)</u>	<u>44.74 Million</u>
Male	22.22 Million
Female	22.52 Million
Population density	65 persons / Km <sup>2</sup>
Population growth rate	1.87%

<u>Population Distribution</u>	<u>Million</u>	<u>%</u>
Urban	(11.00)	24.6%
Rural	(33.74)	75.4%
	<hr/>	<hr/>
Total	<u>(44.74)</u>	<u>100.00%</u>

### 1.3. THE MYANMAR FOREST POLICY (1995)

1.3.1. It was formulated keeping in view the forestry principles adopted at the UNCED which suggest a holistic and balanced approach to conservation and development.

1.3.2. The policy focuses on the raising of awareness of the decision-makers and politicians in national socio-economic development, biodiversity, soil and water conservation and environmental stability essential for sustained life on earth. The Forest Policy aims at a balanced and complimentary land use, gazetting 30% of the total land area as reserved forests and 5% protected areas.

1.3.3. Forest law (1992) which was promulgated by the State Law and Order Restoration Council in November 1992, in line with the Myanmar Forest Policy, focuses on the balanced approach towards conservation and development issues implicit in the concept of sustainable forestry.

### 1.4. THE FURNITURE INDUSTRY IN MYANMAR.

1.4.1. By virtue of the gift of nature, Myanmar with its richness of natural forest resources in combination with an abundant labour force, paves the way for good investment opportunities for the development of wood based industry.

1.4.2. There are opportunities for development in the furniture industry, as one of the downstream processing industries.

1.4.3. In its initial stages of development in ancient days, the furniture industry in Myanmar, like other countries, used hand tools to make furniture. It was merely at a handicraft level rather than industry.

1.4.4. Individual carpenters made furniture by using hand tools like hand saw, hand planer, hammer, chisel to make beautiful pieces of furniture. In the palaces of Myanmar kings, there were not too many pieces of furniture. But the royal throne used in the coronation and in royal assembly, and royal bed or couch were among some of the rare pieces of furniture that the royal family furnished in their palaces.

1.4.5. These pieces of furniture were made in their best design, quality and workmanship. Such classic furniture was the accomplishment of the individual carpenters using hand tools. These works are treasured as our natural heritage in the National Museum.

1.4.6. In most western countries, furniture making was industrialised from making furniture with hand tools to producing them with machines by the end of the 18<sup>th</sup> century. But even at that time, Myanmar furniture industry was still in its infancy. Most of the Myanmar people were not in the habit of using furniture at that time. Some simple designs of bedsteads and low circular dining tables, just to name a few, were among those furniture, common people used at their homes in the olden days.

1.4.7. Only after the annexation of the entire country in 1885 by the British, the habit of furnishing homes with western style furniture was introduced by the new rulers and it spread all over the country. Tables,

beds, chairs, desks, settee etc. became the pieces of furniture widely used by the upper strata of that time. But the making of furniture then was still at handicraft level using hand tools.

## Chapter 2

### **2. FURNITURE PRODUCTION IN MYANMAR**

#### **2.1. GOVERNMENT SECTOR**

2.1.1. It was in the year 1920 that the mechanised craft level of making furniture was introduced by the Forest Department. The aim was just to explore and extend the utility of teak and other hardwoods species to make furniture as a research and development activity. The Research and Training Circle under the Forest Department established a workshop and dry kiln, the first of its kind in Myanmar. Kiln-dried timber was made into furniture components, processed by woodworking machines and final products were assembled by hand.

2.1.2. Furniture was first produced on a commercial scale by that factory of the Forest Department in 1948. The factory was transferred to Agricultural and Rural Department Corporation (ARDC) in 1954, and then in 1962, to the then State Timber Board (STB) forerunner of the Myanmar Timber Enterprise. The factory was formerly known as the Forest Industries Departments and then changed to Furniture Industries Department (FID), true to its nature of work. Mechanised craft level of furniture production was thus introduced in Myanmar by government participation.

2.1.3. Since the policy of the Ministry of Forestry is to promote value-added products like furniture, flooring, moulding etc. FID needed further extension for downstream procession. So, in 1980, a flooring factory was

annexed to the old Furniture Factory and started producing lamparquet flooring which was and is still very popular in the world market. Messrs. Taratip Pte. Ltd. of Singapore, delivered a complete set of lamparquet machines to MTE and bought back all the finished products. This is called a buy-back scheme where the value of the finished products was set-off against the cost of machinery. This was completed within 6 months from the date of production.

2.1.4. In 1981, a bunk-bed factory, was opened with the assistance of Messrs. Phos Enterprises Ltd. of Hong Kong, under a similar scheme and the cost of machinery supplied was set-off within (11) months.

2.1.5. In 1982, a new export oriented Furniture Factory was established in the same compound and named No. (2) Furniture Factory. The selection of the machines and technical expertise were provided by Messrs. Kosuga Co. Ltd. of Japan. New furniture designs, given by the Messrs. Kosuga Co. Ltd. were produced in that factory and exported for the first time to the international market through Kosuga Co., of Japan.

2.1.6. Another furniture factory, financed by a World Bank loan, was established in 1984. It was also export oriented and named No.(3) Furniture Factory.

2.1.7. No.(4) Furniture Factory was located in Thuwanna Township. In co-operation with the Messrs. Briantea Co. Ltd. of Italy, the factory is producing lamparquet and PTG flooring as its main product. Mini-furniture is also produced and exported from that factory with GYM Enterprise of USA on a buy-back scheme.

2.1.8. No. (5) Furniture Factory , which specialises in producing finger jointed strips and boards on industrial scale, was also export oriented.

MTE and Messrs. Fujimoto Co. Ltd. of Japan co-operated in building the factory, installing the machinery and exporting the products to Japan.

2.1.9. There are also (2) moulding factories, one in Yangon and another in Mandalay. These are also export oriented and specialised in producing different shapes and types of mouldings as required by the export market.

2.1.10. At present there are (5) furniture factories and (2) moulding factories under the management of MTE.

2.1.11. Furniture Factory no. (1), (2), and (3) are located in the same compound with an area of 15.67 acres (6.2 ha) in Ahlone Township, Yangon. These (3) furniture factories were reorganised in 1988. At present, the No.(1) Furniture Factory is producing furniture, doors and windows mainly for the domestic market and finger jointed strips for the export market. The No (2) Furniture Factory produces different types of floorings like parquet, lam-parquet, mosaic and PTG flooring. The No. (3) Furniture Factory is producing furniture, doors, windows and flooring both for the domestic and export markets.

2.1.12. Statistical data about the production and sale (export and local) from the government sector are attached as annexe (A).

## **2.2. PRIVATE SECTOR**

2.2.1. Private carpentry shops are scattered all over the country, fulfilling the needs of local requirements. They are owned by the individuals or families. Sometimes the owner himself is the carpenter. They are making furniture of their own design with hand-tools. Their level of production is merely in a state of handicraft.

2.2.2. With the introduction of the market oriented economy, and as a result of the construction boom in Myanmar, far-sighted entrepreneurs came into the wood industry with considerable investment. First they imported four-side moulders or Planed Tongued and Grooved (PTG) machines to make S4S, PTG and floorings for the construction in the domestic market. Then they expanded the scope to the export market. With more foreign market exposure, they injected more investment in woodworking machines and started producing furniture components or KD furniture, different types of flooring, S2S and S4S etc. for export. In that way, furniture industry in private sector started to develop from handicraft level to mechanised craft level.

2.2.3. Foreign investment is also involved in the private sector and spurred the development of the furniture industry. With expatriate technical expertise, dry kilns are being built locally. Woodworking machines were imported and export market was explored, and furniture industry in private sector flourished to a certain extent.

2.2.4. Apart from local private participation in the development of furniture industry, there are also foreign companies making 100% investment in the wood industry.

2.2.5. Scansia Myanmar Co. Ltd., for one instance, is the first foreign (Norwegian) company which invested 100% in the establishment of a furniture factory in Myanmar. This factory is manufacturing teak garden furniture and also building yachts and canoes for the export market. It is at a mechanised level and purely export oriented. Because of the establishment of this factory, job opportunities were created and technical know-how in furniture manufacturing was imparted to local workers.



2.2.6. Yangon Wood Industry Co. Ltd., (YWIL) is another instance of a 100% investment injected by a French company Elyssee in the furniture industry. This factory specialised in producing flooring, furniture components and doors for export market.

2.2.7. Myanmar NC Wood-works, a joint venture company by a foreign company with the Ministry of Industries (1) also specialised in producing decorative panel doors both for domestic and export market.

2.2.8. There are some other factories owned by Myanmar nationals, Hi-Tech Furniture Factory and Pyi Si Bwa in Mandalay and Shwe Kye Woodworks Co. Ltd., Myitmakha Co. Ltd., Win Yadana Co. Ltd., in Yangon, Nifty Co. Ltd., and Myanma Timber Excel in Bago, just to name a few. They are trying to engage in downstream processing industry in their own way, using lesser known species (LKS) and producing doors, floorings, furniture, shrines, photo frames, and mosaic panels with smaller pieces of wood, i.e. off-cuts and left over pieces from their main products. Their attempt of minimising waste is achieved to a considerable extent.

2.2.9. Statistical data about the private sector are attached as annexe (B)

### Chapter 3

## **3. MARKET SITUATION OF FURNITURE IN MYANMAR**

### **3.1. REQUIREMENT OF THE GOVERNMENT DEPARTMENTS**

3.1.1. Annual requirement of furniture by the state sector i.e. the government departments, schools, universities and institutes are to be supplied by the Myanma Timber Enterprise Furniture Factories, a state

economic enterprise under the Ministry of Forestry. Furniture factories under the Myanmar Timber Enterprise standardised their products to suit the need of the users. The standardisation is grouped into three categories viz. office standard, education standard and domestic standard. It can be said that Myanmar Timber Enterprise has the monopoly in the domestic market. The annual supply from the Myanmar Timber Enterprise falls short of the demands from government departments.

3.1.2. The requirements of government departments for the previous three years (FY 1994-95 to 1996-97), by type, quantity and value are attached as annexe (c).

### 3.2 PUBLIC REQUIREMENTS

3.2.1. Normally, public requirements are fulfilled by the private furniture shops. Private individual carpenters produce different types of furniture as ordered by their customers, i.e. the owners of the furniture shops a.k.a. furniture marts. The shop owners generally order unpolished assembled furniture from the carpenters. The furniture marts usually do the finishing or final touching and display the furniture in their showrooms for sale to the public.

3.2.2. Since a reliable data cannot be obtained from the private sector, the annual public requirements of furniture are estimated as follows:-

3.2.3. Assuming that out of total population (45.0) million, urban population includes (11.0) million. Five members in one family will make (2.2) million families in urban areas. Of which 50% or (1.1) million families furnish their homes.

3.2.4. Standards units of furniture for one family is roughly estimated as:-

- Dining Table (Circular, low Myanmar Style) or (Rectangular, high western style)	1 No.
-Dining Chair (Low or high)	6 Nos.
-Double Bed	1 No.
-Single Bed	3 Nos.
-Settee	1 Set
-Meat safe	1 No.

3.2.5. For (1.1) million families, the requirements would be:-

Dining tables	Nos.	1.1 Million
Dining Chairs	Nos.	6.6 Million
Double Beds	Nos.	1.1 Million
Single Beds	Nos.	3.3 Million
Settees	Sets	1.1 Million
Meat safe	Nos.	1.1 Million

3.2.6. If the life span of these furniture is roughly estimated as (10) years,  
annual public requirement would be:-

Dining tables	Nos.	0.11 Million
Dining Chairs	Nos.	0.66 Million
Double Beds	Nos.	0.11 Million
Single Beds	Nos.	0.33 Million
Settees	Sets	0.11 Million
Meat safe	Nos.	0.11 Million

### 3.3 PRODUCTION CAPACITY

3.3.1. Production capacity of the Myanmar Timber Enterprise Furniture Factories for the previous three years (FY 1994/95 to FY 1996/97) is attached as annexe (D)

3.3.2. Data about the production capacity by private sector cannot be obtained but it is assumed that public requirement is partially fulfilled by the private sector.

3.3.3. The most interesting source of supply to Yangon furniture market is a tiny village called THABYAYGONE. It is a furniture village about 15 miles far away from Yangon.

3.3.4. Carpentry and cane weaving is the family business of almost every household. Every member in the family, young or old, has considerable skill and workmanship. Basically they work using hand tools. All types of furniture are produced only at a handicraft level. And they are capable of producing furniture of any design, by looking at a catalogue, not detailed industrial drawings, which they cannot understand. Finishing work is not done in the village, but just send their products, in rough assembled form to well-known furniture marts in Yangon. Finishing is done there and the furniture is displayed for the prospective customer.

3.3.5. It is learnt that over (90) years ago, one of their elders named U Nyein Maung, was a devoted pupil to a Chinese carpenter. He worked as an apprentice and became a very skilful carpenter. Through his remarkable efforts, the whole village community became carpenters and cane weavers, generation after generation. They are well known as the main source of supply to the Yangon furniture market. This village is still producing furniture with only hand-tools, at handicraft level.

### 3.4. Export Market Situation

3.4.1. Myanma Timber Enterprise Furniture Factories put emphasis on the export of furniture but the present situation offers only lamparquet, finger jointed strips boards and tongue and groove flooring shipments to Singapore and Italy. Export of furniture still remains a problem to be tackled very carefully.

3.4.2. Shipping costs or freight charges are to be considered first & foremost where export of furniture is concerned. A piece of fully assembled furniture is usually bulky and takes a lot of space. So, if it is disassembled & flat packed it can save a lot of space and freight charges too. This is where the RTA (Ready to Assemble) furniture come into Asian Furniture Industry where labour is still considered to be cheap.

3.4.3. For instance, a 40' container holds 1600 RTA chairs, but only 400 nos. when these are fully assembled.

3.4.4. There are some manufacturers like Koda Woodcraft and Exten Furniture just to name a few, which specialised in producing RTA furniture.

3.4.5. Koda Woodcraft has five factories, the original one in Singapore, two in Johor Bahru, Malaysia, one in Vietnam and the most recent and largest one in China, all engaged in RTA furniture manufacturing.

3.4.6. Their primary product is kitchen furniture about 2000 dining chairs and 500 dining tables a day.

3.4.7. The main motivation behind the production of RTA furniture is the reduction of transportation costs.

3.4.8. High labour costs and warehouse rentals shape the RTA furniture industry in Europe and America and this type of furniture became part of their culture. In Asia, reduced shipping costs and mass production spurred the development of RTA furniture industry.

3.4.9. But proper utilisation of fittings plays a vital role in manufacturing RTA furniture. Because RTA furniture is an idea made simple by the innovations of furniture and fitting designers.

3.4.10. RTA furniture is to be purchased in flat packed carton box, transported home and assembled by the ordinary person, rather than the professional carpenter.

3.4.11. For the end consumer who purchased RTA furniture, what counts him most is the ultimate simplicity of fitting. It must be easy to attach, be obvious where and how to fix it.

3.4.12. It is desirable for RTA fittings to be quick and easy to install, flushed once installed, removable, strong and durable.

3.4.13. Although there is a large potential in international furniture market, whether it is fully assembled or RTA type, Myanmar furniture and other related products cannot successfully claim its market share due to lack of technical expertise, lack of utilising proper fittings and lack of market information and reliable contacts.

3.4.14. Export of furniture and other related products in value for the past three years (FY 1993-94 to FY 1995-96) are attached as Annexe (E)

## Chapter 4

### 4. RATTAN FURNITURE INDUSTRY

4.1. Rattan Furniture Industry was not developed in Myanmar before 1968. Only handmade rattan furniture, like stools, chairs, baskets and cradles for children were considered the main products of the rattan furniture industry.

4.2. According to the forestry fact sheets of Forest Department, there are (36) species of rattan wildly grown in the forest of Myanmar.

4.3. Annual production of rattan harvested from the forest for export or for consumption in the domestic market are recorded as follows:

<u>Year</u>	<u>Pieces in million</u>
1988-89	56.60
1989-90	74.60
1990-91	75.20
1991-92	91.90
1992-93	81.40
1993-94	81.30
1994-95	73.30

4.4. Being aware of the fact that the potential of that natural resources would be the opportunity for the development of rattan furniture industry, (4) officials of Myanma Timber Enterprise were sent to Singapore in 1968, to study the production and marketing of rattan furniture and other related products. The preservation method and machine processing of rattan were fairly advanced in Singapore by that time.

4.5. In Myanmar at that time, rattan was traditionally treated by drying in the sunshine, soaking in mud, burning and scraping the nodes and veins of rattan.

4.6. After the study trip to Singapore, contemporary preservation and treatment methods were introduced, by boiling pieces of rattan in diesel oil and sulphur fumed, dried in the sunshine. And cleaning and polishing was done by rubbing rattan with saw dust. Rattan thus treated was exported and Myanmar rattan was made known in the international market through Singapore.

4.7. In 1969, a rattan furniture factory was established in Thuwunna Township in the outskirts of Yangon and treated rattan strips for export and rattan furniture for the domestic market was produced.

4.8. Among the species of rattan wildy grown in the forest,  
     Kyeinbaung (*Calamus longisetus* Griff.),  
     Yamahta ( *Calamus latifoliys* Roxb.),  
     Kyet -oo Kyein ( *Calamus platyspathus* Mart.),  
     Ye Kyein ( *Calamus floribundus* Griff.),  
     Kyeinni ( *Calamus guruba* Ham.),  
     Kyein Kha ( *Calamus viminalis* Willd.),  
     Myasein Kyein ( *Calamus nitidus* Mart.), and  
     Kyein Poke (*Calamus myrianthus* Becc.) were mostly utilised for  
     furniture production. ( Kyein is the vernacular word for rattan)

4.9. Since rattan poles are widely grown and scattered all over the country, these are collected from Kachin State, Rakhine State, Bago Yoma and Tanintharyi Division.

4.10. Though rattan is naturally grown in the forest in Myanmar, Malaysia is now establishing rattan plantations mixed with the rubber and oil palm plantations.

4.11. In most of the famous hotels and restaurants in Myanmar, rattan furniture is an indispensable element in creating an exotic tropical atmosphere.



4.12. Apart from the government sector, some prominent cane furniture manufacturers in Myanmar comprise Elephant House, Beautiful Island, Dawn Forest, Eastern Queen and Myo Myanmar in Yangon and Kyaw Kyaw Aung in Mandalay.

4.13. It is noted that Malaysia is earning a good source of income from the export of rattan furniture during the following years.

<u>Year</u>	<u>US\$ (millions)</u>
1988	14.0
1989	18.2
1990	20.8
1991	18.8
1992	32.7
1993	36.2
1994	44.6

4.14. Philippines and Singapore are also major exporters of rattan furniture.

4.15. It is also observed that Philippines exported rattan furniture mainly to the USA during 1995 according to the following statistics.

Country: Philippines

1995 Rattan Furniture Exports/ Destination

(FOB Value in million US\$)

	<u>Country</u>	<u>Value</u>	<u>% Share</u>
1.	USA	57.17	48%
2.	Japan(Including Okinawa)	8.74	7%
3.	Australia	6.50	5%
4.	France	6.80	5%
5.	Britain, N. Ireland	5.61	5%
6.	Netherlands	4.44	4%

	<u>Country</u>	<u>Value</u>	<u>% Share</u>
7.	Germany	4.22	4%
8.	Belgium	3.96	3%
9.	Spain	3.92	3%
10.	Italy	2.74	2%
	Total	119.17	100%

4.16. Philippines' 1995 export value was (US\$ 275.61 million), rattan furniture accounted for 43% (US\$ 119.17 million). The US market absorbed 56% of the total export of furniture from Philippines as the following data indicates.

Country: Philippines  
1995 Furniture Export/ Destination  
(FOB Value in million US\$)

	<u>Country</u>	<u>Value</u>	<u>% Share</u>
1.	USA	154.35	56%
2.	Japan	20.06	7%
3.	Australia	10.65	4%
4.	France	11.95	4%
5.	UK, North Ireland	8.63	3%
6.	Germany	7.52	3%
7.	Netherlands	7.17	3%
8.	Belgium	6.80	2%
9.	Spain	5.61	2%
10.	Singapore	4.61	2%
11.	Others	38.26	14%
	Total	275.61	100%

4.17. There is still a huge market potential in USA and Japan for both rattan furniture and wooden furniture.

4.18. Myanmar, with an abundant supply of various species of rattan and a huge work force, can also enter into that specialised market, if proper technology and market information are available. Joint ventures, 100% foreign investment can also contribute to the development of this sector.

## Chapter 5

### **5. PRESENT SITUATION OF MYANMAR FURNITURE INDUSTRY.**

5.1. Myanmar teak garden furniture are having a good reputation in international markets. Furniture factories from Myanma Timber Enterprise alone cannot promote the furniture exports due to lack of infrastructure, lack of appropriate technology and lack of market information and exposure. Foreign companies are invited to co-operate with Myanma Timber Enterprise in wood processing. The following foreign companies and Myanma Timber Enterprise co-operate on a buy-back system in manufacturing furniture and other related products.

GYM Enterprise of USA for mini-furniture (KD)

Lambir Myanmar Investment Ltd. of Singapore for furniture and floorings.

Briantea Trading Co. Ltd. of Italy for parquet flooring.

Fujimoto Co. Ltd. of Japan for finger jointed wood products.

Edward Hulten of Sweden for mouldings.

Scansia Myanmar Ltd. Of Denmark for garden furniture (100% foreign investment)

Elyssee Co. Ltd. of France for furniture (100% investment)

Santi Forestry Co. Ltd. of Thailand for Furniture (100% investment)

5.2. There are private sawmills and downstream wood processing industries scattered all over the country, but mostly on a small scale cottage industry. Only a few of them are capable of manufacturing export quality product.

- 5.3. In producing furniture, there are four levels of production methods. The first one is the most primitive method of manufacturing furniture by hand throughout the process.
- 5.4. The second one is a bit more advanced, manufacturing furniture components by woodworking machines and assembly is done by hand.
- 5.5. At the third level, all the process is done by industrial woodworking machines, even the assembly is done by pneumatic presses.
- 5.6. Fully automated and computerised machines are used in all stages of production. Even finishing is done by numerical control (NC) spray guns. And assembly is done on conveyors. The fourth level of this production method is the most sophisticated and minimises manual labour.
- 5.7. In Myanmar, apart from the production of flooring, mouldings and finger jointed strips and boards that involves almost 100 % mechanical processing, furniture production is usually done mostly using the second production method i.e. partly mechanised and partly craft. The third and the fourth level of production methods have never been achieved yet.
- 5.8. In general, it is still in a state of mechanised craft level.
- 5.9. There is no proper training centres for furniture industry. Both the workers and the supervisory staff engaged in this industry are doing their jobs by "look and learn" method.
- 5.10. Range of products is very much diversified, causing too much problem for production planning and management.

5.11. Most of the woodworking machines, already installed, in the furniture factories of the Myanmar Timber Enterprise are capable of manufacturing export quality products. But timely replacement of common stores and spares such as tungsten carbide tipped (TCT) knives, cutters, router bits, wide belt sand paper, etc. is still a major problem that has to be solved for the development of the industry.

5.12. The finishing and the staining techniques and the materials used at present are obsolete. French polish, a mixture of shellac and spirit, is the only finishing material and is not up to the export quality standard.

5.13. Wood, even teak, alone cannot create exquisite furniture. Modern hardware, fittings and accessories such as hinges, handles, knobs and drawer slides etc. are considered indispensable for the creation of a piece of exportable furniture. Myanmar still has a gap in the development of supporting industries, producing such accessories.

5.14. Ambiguous pricing policy, inaccessible market information and erratic shipments are the main causes of not getting a reliable export market.

5.15. Annual total export of furniture and related products are not more than US\$ (15) million in value from this industry, while Malaysia's annual export earnings for furniture in 1996 was US\$ (900) million and Thailand US\$ (600) million.

5.16. The forest cover of Myanmar is almost the land area of Malaysia and Thailand is importing raw materials. Labour costs in Myanmar are comparatively cheaper than in Malaysia and Thailand.

5.17. It is also estimated that Myanmar Furniture Industry is lagging behind its neighbours, Thailand and Malaysia, by more than a decade. Myanmar with vast

forest resources, and with a population of over (45) million, is struggling to get a mere US\$ (15) million from its furniture and other related products. Malaysia with its total population of (20) million and with a furniture industry that is importing considerable quantities of raw material from other countries earns over US\$ (900) million annually from furniture exports.

5.18. It clearly shows that tremendous efforts should be made for the development of furniture industry in Myanmar.

5.19. To address the shortcomings of the Myanmar furniture industry, a pre-project was proposed to the ITTO under the title of "Pre-project Proposal for upgrading efficiency in furniture manufacturing" in April 1996. It was proposed for US\$ 52,500 as ITTO contribution and Myanmar Kyats 308,800/- as GOM contribution.

5.20. This pre-project was approved at the 20<sup>th</sup> session of the ITTO council meeting held on 2<sup>nd</sup> July 1996, as Pre-project PPD-7/96 Rev 1(I), with the title of "Upgrading Production Efficiency in Furniture Manufacturing". For the Pre-project, ITTO made available to GOM a sum not exceeding US\$ 57,497.50 with GOM contributing in cash for pre-project personnel and expenditure for miscellaneous items, equivalent to Kyats 308,800/- .

## Chapter 6

### **6. CONCLUSIONS AND RECOMMENDATIONS**

6.1. It was concluded from this pre-project that Myanmar, though considerably rich in forest resources, is still far behind in technology and expertise in the fields of sawmilling, plywood manufacturing, furniture production and in downstream production. It is the intention of the Myanmar Timber Enterprise to reduce the export of logs and increase the export of higher value added products.

6.2. This would not be possible without capital, and expertise. As large foreign capital inputs can be expected only from expatriate investors, it is conceived that an upraise of the skills of workers and supervisory staff is mandatory. A country rich in raw materials assisted by a skilled work force could be an attractive investment atmosphere. This could be done with the assistance of a project from the ITTO.

6.3. A training centre should be established to produce skilled workers and managers for downstream production. Experts and consultants would have to be hired to train the local people, and conducting of the training of trainers, and also giving the personnel overseas exposure. This would also create more employment opportunities in sectors where skilled labour is most essential.

6.4. Being aware of the fact that concerted efforts should be made in the development of Myanmar Furniture Industry, the executing agency for PPD7/96 Rev.1(I) makes the following recommendations.

6.4.1. A training centre at national level should be established for wood processing and furniture manufacturing.

6.4.2. Research and development should be done in Myanmar to introduce lesser known species other than teak in international furniture markets.

6.4.3. Attempts to explore furniture markets should be jointly made with reliable, experienced foreign partners or firms.

6.4.4. Small and medium scale industries should be encouraged.

6.4.5. Furniture components and KD furniture should be introduced as a first step in the export market, only then the export of fully assembled furniture should be attempted.

- 6.4.6. A furniture testing centre should be established and set standard norms and issue certificates for export standard furniture.
- 6.5. A quasi-government organisation or board at a national level should be formed with the following functions:
- 6.5.1. To monitor, co-ordinate and regulate the trade of forest products and provide necessary market information.
  - 6.5.2. To provide assurance for raw material supply.
  - 6.5.3. To provide technical expertise, product quality control.
  - 6.5.4. To organise furniture exhibitions in Myanmar and encourage producers to participate in international furniture fairs and exhibitions.
  - 6.5.5. To provide mutual assistance within the industry.
- 6.6. Fast growing tree plantations (like rubber) should be established for the assurance of a sustained raw material supply.
- 6.7. Exchange of information and regular contacts should be made with well established timber organisations in neighbouring ASEAN countries, like MTIB, MTC, FRIM of Malaysia; and FIO, and Thai Furniture Industry Club of Thailand to name a few.
- 6.8. Supporting industries (like industries making leather, fabrics, hinges, handles, drawer slides and other hardware and fittings should also be encouraged to develop side by side with the furniture industry.



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## ANNEXE (A)

PRODUCTION AND SALES OF FURNITUREAND OTHER RELATED PRODUCTSFY (1994-95) TO FY (1996-97)(GOVERNMENT SECTOR)(KYATS IN MILLION)

SR NO	FURNITURE FACTORY (FF) AND MOULDING FACTORY (MF)	1994-95			1995-96			1996-97		
		PRODUCT- ION	SALE		PRODUCT- ION	SALE		PRODUCT- ION	SALE	
			EXP	LOCAL		EXP	LOCAL		EXP	LOCAL
1	2	3	4	5	6	7	8	9	10	11
1	NO.(1)FF	20.25	-	20.25	25.00	1.48	23.52	29.39	1.01	28.38
2	NO.(2)FF	19.92	2.31	17.61	11.35	0.82	10.53	16.63	1.04	15.59
3	NO.(3)FF	22.84	1.28	21.56	23.48	1.49	21.99	27.70	2.00	25.70
4	NO.(4)FF	11.39	3.78	7.61	13.04	5.98	7.06	11.11	4.61	6.50
5	NO.(5)FF	12.31	3.10	9.21	13.18	4.75	8.43	17.45	9.32	8.13
6	NO.(1)MF	1.64	1.64	-	2.94	2.94	-	2.85	2.85	-
7	NO.(2)MF	2.16	0.08	2.08	4.18	0.50	3.68	4.16	-	4.16
	TOTAL	90.51	12.19	78.32	93.17	17.96	75.21	109.29	20.83	88.46

## ANNEXE(B)

**SOME IMPORTANT WOOD BASED INDUSTRIES FROM THE PRIVATE SECTOR**

<u>Sr</u>	<u>Company</u>	<u>Estd.</u>	<u>Workers</u>	<u>Annual Production (K. Million)</u>	<u>Products</u>	<u>Location</u>
1	Oriental Central Furniture Factory	1995	65	10.00	Furniture	Yangon
2	Lin Win Co.	1996	45	2.50	Furniture & Floorings	Yangon
3	Win Yadana Enterprises Ltd.	1993	95	10.00	Furniture & Floorings	Yangon
4	Aung Sein Lin Co.	1997	75	0.70	Furniture	Yangon
5	International Co.	1985	25	7.00	Furniture Components	Yangon
6	Scansia Myanmar Ltd.	1993	269	7.50	Furniture & Boats	Yangon
7	Pioneer Venture	1996	76	16.20	Furniture Components	Yangon
8	Shwe Kye Wood Products Co. Ltd.	1994	45	10.70	Furniture Components	Yangon
9	Novel Furniture	1995	30	0.20	Furniture Components	Yangon
10	Yangon Wood Ind. Ltd.	1994	400	2.00	Furniture	Yangon
11	Hi-Tech Ind. Ltd.	1995	124	6.50	Furniture	Mandalay
12	Pyi Si Bwa	1994	32	6.00	Furniture	Mandalay

N.B. Annual production is shown in Kyat Millions  
Kyat is Myanmar currency unit.

ANNUAL REQUIREMENT  
OF FURNITURE BY GOVERNMENT DEPARTMENTS  
VALUE (KYATS MILLION)

SR NO	DESCRIPTION	1994-95		1995-96		1996-97	
		PCS	VALUE	PCS	VALUE	PCS	VALUE
1	2	3	4	5	6	7	8
1	Table	3647	8.52	5982	15.96	7001	19.94
2	Chair	8472	4.85	12719	9.75	12932	9.82
3	Almirah & Wardrobe	597	2.24	1532	6.90	1191	5.73
4	Rack	480	0.60	840	1.35	593	1.00
5	Dining Table	483	0.68	798	1.67	234	0.94
6	Dining Chair	2127	1.42	59	0.05	4525	4.77
7	Settee Chair	2503	2.46	3750	0.60	2207	2.62
8	Centre Table	402	1	518	1.30	349	0.83
9	Peg Table	233	0.09	310	0.26	208	0.18
10	Bed Stead	977	3.77	843	7.86	690	2.30
11	Door/Window	138	0.60	220	0.09	250	0.10
12	Others	353	0.79	478	1.40	199	0.52
	Total	-	26.57	-	47.19	-	48.75

PRODUCTION OF FURNITURE AND OTHER RELATED PRODUCTS(CATEGORY WISE)FY (1994-95) TO (1996-97)(VALUE IN KYATS)

SR	DESCRIPTION	1994-95		1995-96		1996-97	
		QTY NOS	VALUE	QTY NOS	VALUE	QTY NOS	VALUE
1	TABLE	3,208	11,782,984	3,610	9,739,780	4,551	11,277,378
2	CHAIR	10,630	6,696,600	11,600	20,068,000	12,500	10,375,000
3	ALMIRAH	956	3,414,832	1,354	7,338,680	1,513	10,227,880
4	WOOD BASE	220	808,060	260	924,040	320	12,652,800
5	RACK	1,054	938,060	1,266	1,500,210	1,512	1,864,296
6	DINING TABLE	658	829,080	915	24,386,580	1,043	4,672,640
7	MEETING TABLE	603	898,470	846	2,323,962	978	1,909,056
8	SETTEE CHAIR	3,462	3,389,298	4,020	6,520,440	4,560	6,384,000
9	CENTRE TABLE	560	771,248	876	2,124,300	949	2,277,600
10	DINING CHAIR	2,127	1,420,166	2,598	2,535,648	4,525	4,770,089
11	BED STEAD	805	5,054,714	892	3,340,208	961	6,632,092
12	DOORS & WINDOWS	2,105	992,806	2,950	3,023,750	3,240	3,321,000
13	FLOORING		2,310,000		819,340		1,035,660
14	MOULDING		3,801,360		3,445,526		2,855,400
15	FINGER JOINTED STRIPS BOARDS & OTHERS		47,408,322		5,079,536		29,035,109
	TOTAL		90,516,000		93,170,000		109,290,000

ANNEXE(E)

## EXPORT OF FURNITURE RELATED PRODUCTS OF MTE

(KYATS IN MILLION)

SR	COMMODITY	UNITS	1993-94		1994-95		1995-96	
			UNITS	VALUE	UNITS	VALUE	UNITS	VALUE
1	FURNITURE	KYATS	-	-	-	1.122	-	0.336
2	VENEER	SQ FT	48962	0.165	1164257	0.709	2346939	0.474
3	PLY WOOD	SHEET	77524	1.872	112847	2.421	20925	0.272
4	LAM PARQUET	TON	791	6.514	554	3.978	692	4.841
5	PARQUET FLOORING	TON	212	1.978	263	1.840	149	1.198
6	FINGER JOINTS	TON	583	2.744	2837	7.465	1230	7.608
7	OTHERS EARNING	KYATS	-	62.356	-	83.410	-	124.261
	TOTAL			75.629		100.945		138.990

Kyats- Myanmar Monetary Unit

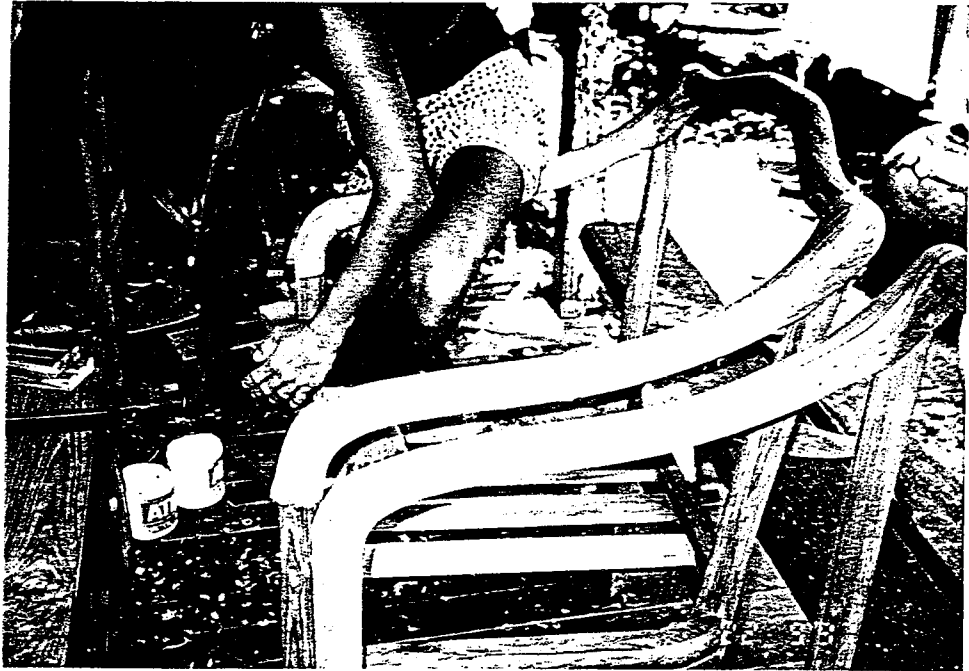
Sq. ft.- Square feet



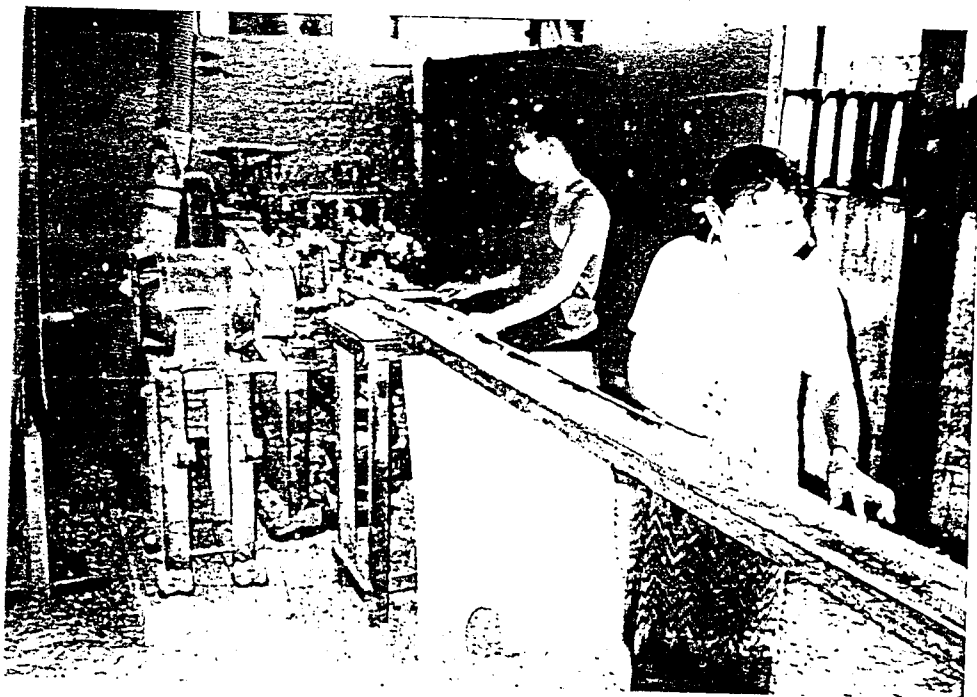
(1) HAND PLANING BY A LOCAL CARPENTER  
(THABYAYGONE VILLAGE)



(2) MORTISING WITH CHISEL AND HAMMER BY A LOCAL  
CARPENTER (THABYAYGONE VILLAGE)

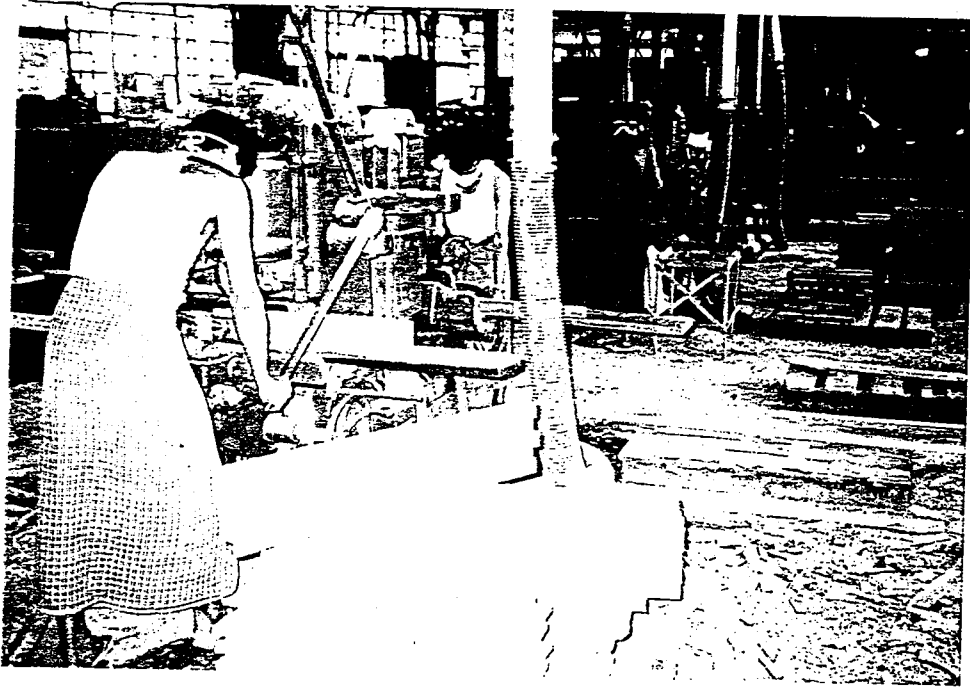


(3) FINISHING TOUCHES FOR CHAIR JOINT WITH A HAND PLANER  
(THABYAYGONE VILLAGE)

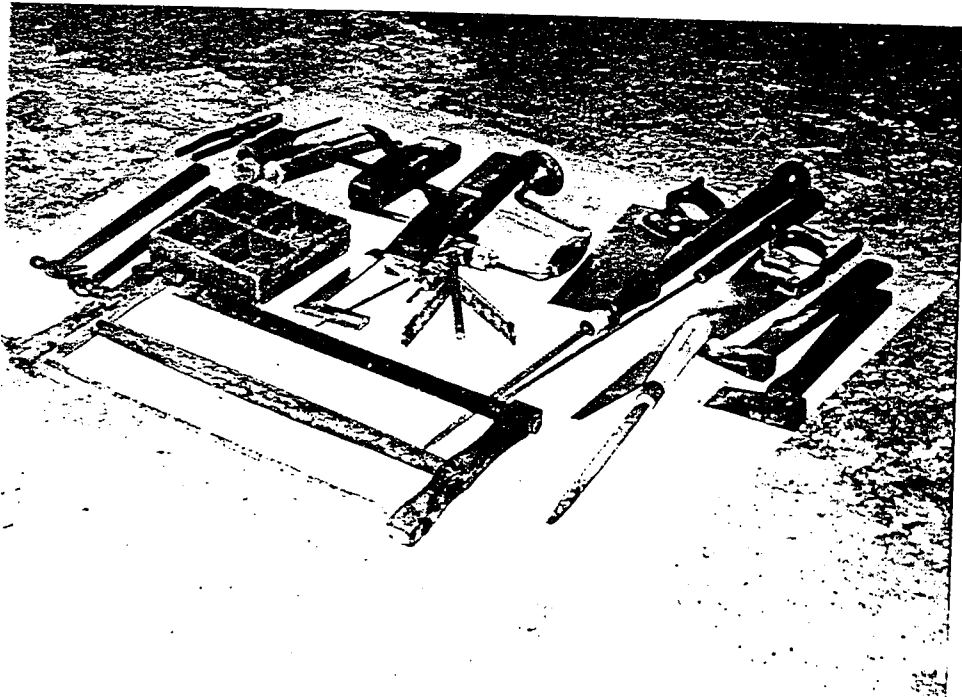


(4) FOUR SIDE PLANING MACHINE INSTALLED SINCE 1920





(5) CHISEL MORTISING MACHINES INSTALLED SINCE 1920



(6) CARPENTRY TOOLS STILL IN USE AT MYANMA TIMBER ENTERPRISE FURNITURE FACTORIES



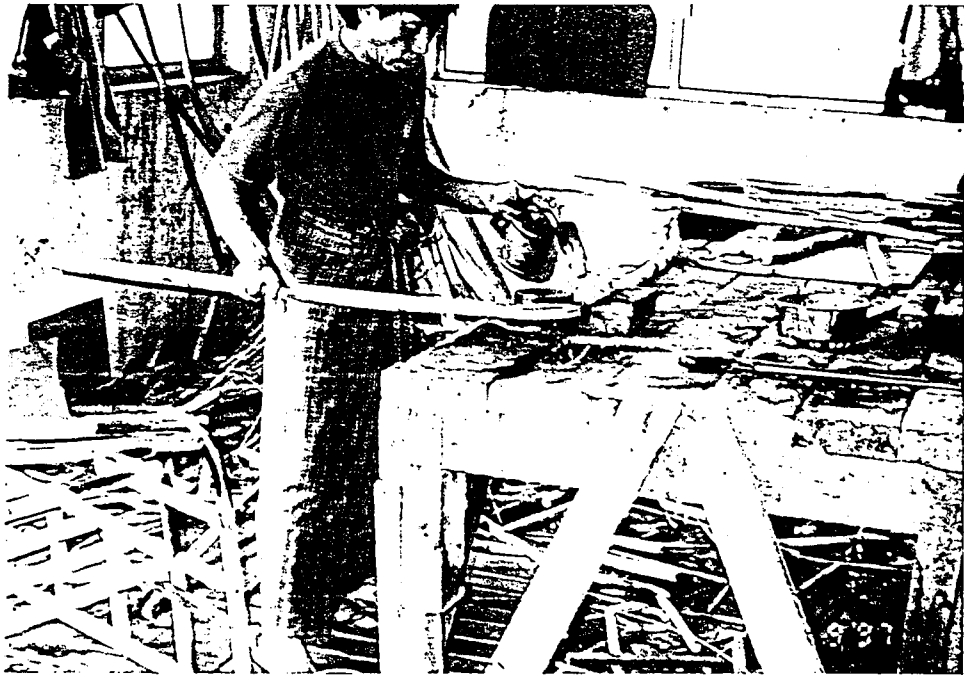
(7) CARPENTERS AT WORK IN MTE FURNITURE FACTORY.



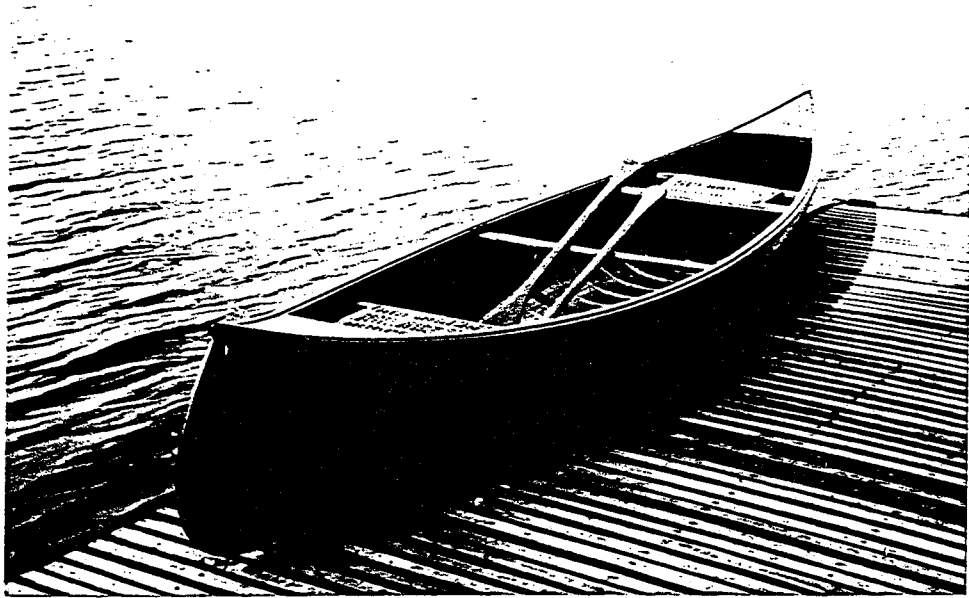
(8) FINISHING TOUCHES AT MTE FURNITURE FACTORY.



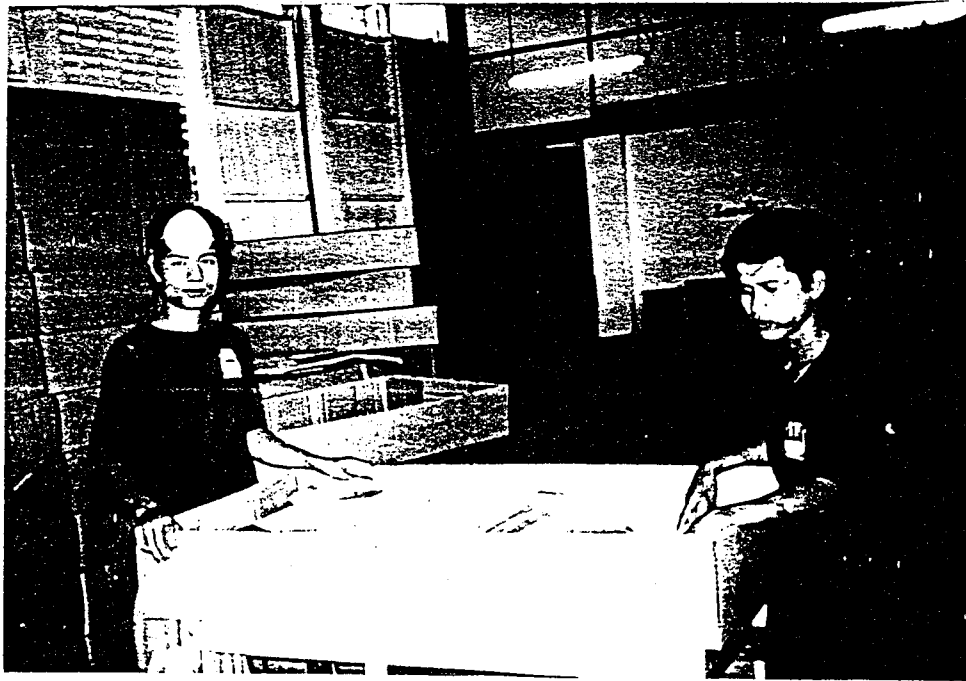
(9) CANE WEAVERS AT WORK AT MTE  
RATTAN FURNITURE FACTORY.



(10) BENDING RATTAN BY A BLOW LAMP AT MTE  
RATTAN FURNITURE FACTORY.



(11) CANOE BUILT BY SCANSIA MYANMAR (A 100% FOREIGN COMPANY)



(12) PRESHIPMENT PACKING (SCANSIA MYANMAR).



(13) YANGON WOOD INDUSTRY LTD. (A 100% FOREIGN COMPANY)