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THE FURNITURE AND JOINERY INDUSTRIES ✓  
OF MALAYSIA

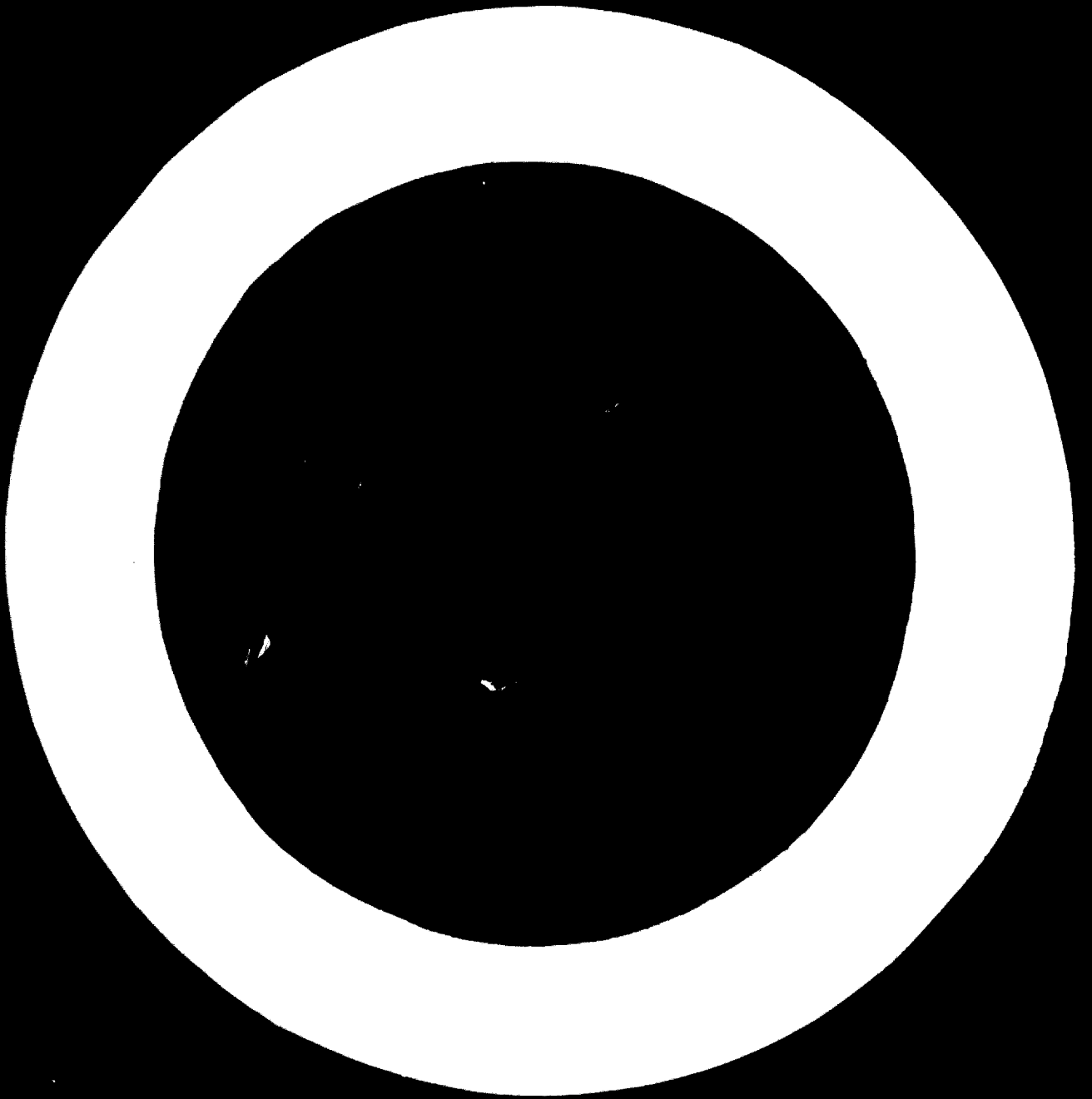
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## I. Introduction

The wood-based industrial sector of Peninsula Malaysia is the second largest foreign exchange earner, next to rubber, having produced an output valued at M\$653 million and brought in foreign exchange earnings of M\$305 million in 1972 through exports of plywood and sawn timber. At 1972 valuations, investment into wood-based industries (excluding land and forest equipment) stood approximately at M\$267 million and involved a total direct employment of approximately 35,000.

Peninsula Malaysia's wood-based industries range from the simple one saw bench mill to the large integrated export-orientated timber processing plant. Activities of substantial significance in this sector comprise of primary processing activities such as sawmilling and plywood milling; secondary processing activities such as furniture, joinery and wood mouldings; and integrated processing activities from logging to sophisticated and diversified production of wood-based products. Data relating to existing wood-processing industries are summarised in Tables I, II and III.

National forest inventory data show that Peninsular Malaysia has rich forest resources which can sustain a modern wood-based industrial sector. Her total forested area as at the end of 1972 is estimated at 8,352,700 hectares and the area of unexploited, commercial forest which remains for use by industry is approximately 2,356,900 hectares. Of these 2,356,900 hectares, 55% is firmly committed under formal long-term agreements to a number of large scale enterprises including several integrated timber processing plants which are planned for operations during the next 5 to 10 years. The area of disturbed forests, i.e. those which have been felled over but not completely depleted of wood having commercial potential cover approximately 3,988,600 hectares which amount to nearly half the total forest area. Based on the 1972 rate of harvesting, the potential stock of commercial timber would serve that part of the industry which did not have timber concessions for about 43 years.

Industrial profitability in recent years has had encouraged expansion of the timber industry to an extent that established manufacturing capacity is now exporting considerable quantities of sawn timber and plywood to consuming countries. However, present utilization practices seem to result in considerable wastage of timber resources (ranges from 30% to 55%) which can be converted into more value-added finished wood-based products.

Future development of wood-based industries will therefore be towards increasing existing efficiency in terms of improved operational procedures, better management, modernisation, diversification into more sophisticated production lines, systematic exploitation of forest resources and well-conceived plans for expansion into additional new plants.

## II. The Furniture and Joinery Industries

### (a) Present Status

Table I provides data concerning various types of timber processing industries in Peninsular Malaysia as at year 1972. It can be seen therefrom that there are 620 furniture manufacturing enterprises and 95 joineries in Peninsular Malaysia. Malaysia has made impressive progress in these two secondary wood-based industries, though by international standards they are not as yet well-developed. 90% of the total exported furniture and joineries are being manufactured by only 4 companies.

The furniture industry employs about 8,800 persons and the average employment per unit varies from 5 persons in the case of small workshops to 50 persons in the case of large factories. The average investment in machinery and equipment varies from M\$3,000 in the case of small workshops to about M\$30,000 in the case of medium-size units, and about M\$100,000 in the case of larger units. The total value of production of furniture in 1972 is estimated at M\$75 million, of which household furniture accounted for about 60%. Except for a few factories established for the production of knocked-down furniture and furniture components orientated to the overseas market and some large size factories, most of the furniture made by the industry is for domestic consumption.

Although the number of furniture manufacturing units is considerably large, the manufacture of furniture is organised essentially on a small scale and 'family industry' basis. As much as about 55% of these units are small workshops employing 4 to 5 workers. In terms of size this industry can be classified into three categories of enterprises viz :-

<u>Types of Units</u>	<u>Number of Units</u>
(i) small size workshops with output valued at less than M₹50,000 per year, manufacturing against orders;	335
(ii) medium-size enterprises producing between M₹50,000 and M₹300,000 value of furniture per year, mainly against orders;	235
(iii) large-size enterprises with an output of more than M₹300,000 in value of furniture annually and producing in anticipation of market demand.	50

It can be seen from the above that more than 50% of the furniture industry comprise of small manufacturing units producing against orders for the domestic consumers. Only about 8% of the industry consist of large-scale manufacturing units producing mainly in anticipation of market demand both for the domestic and to a small extent the overseas market. Nevertheless, it is anticipated that this category will increase substantially in the near future in view of the following factors:-

- (i) there is a growing awareness by local furniture manufacturers and industrialists on the potential of knocked-down furniture and furniture components in the overseas market;
- (ii) at the same time there is a large number of foreign investors looking into the possibility of producing knocked-down furniture and furniture components in joint-venture with local furniture manufacturers and

entrepreneurs in the region. This is due to the availability of suitable species for furniture making and the cheap production cost prevailing;

- (iii) the current housing boom in the country has increased demand for furniture tremendously. Large-scale operations are necessary to cater for this increase in demand.

This trend is catching up and fast growing as evident by the approval of 5 firms for the manufacture of knocked-down furniture and furniture components during the past four years. Of those, two have begun operations.

In terms of the nature of production activity of the enterprises, three groups can be identified viz.:-

- (i) those operating factories and sell their finished product wholesale or retail;
- (ii) those operating without factories, but buy furniture in an unfinished form, put in the fittings etc. and complete the finishing; and
- (iii) those producing furniture in small workshops and sell them in an unfinished form to the above (ii) or to 'traders-cum-finishers'

The type of products made by the industry may be divided into two broad categories, viz.,

- (a) furniture i.e. consisting of movable articles such as chairs, tables and beds to furnish houses and commercial or public buildings.
- (b) Cabinet work i.e. cases, cabinets, counters and other interior woodwork that is fixed in place, and is generally non-movable after it is installed.

Of the two, cabinet work constitutes a greater part of the production activities of medium and large manufacturing units in terms of value of output.



Broadly more than 200 individual items of wooden furniture and cabinet work are being manufactured and these include chairs, writing tables, dressing tables, dining tables, cupboards, kitchen cabinets, drawing room sets, bedsteads and radio and television cabinets. To suit the purse and preference of different types of clientele, three standards of furniture and cabinet work are being produced, viz.:-

- (i) utility quality;
- (ii) medium price; and
- (iii) high class and expensive types

Though the Malaysian forest produces a wide variety of timber the timber species suitable and commonly used in the manufacture of furniture and cabinet work are confined to light hardwoods such as Meranti (Malayan Iron Wood), Nyatoh and Damar Minyak (Malayan Laurel Wood) of the softwood grade.

The 95 joineries in Peninsular Malaysia employ about 1,400 people. Most of these are concentrated in Selangor, Kedah, Johore and Perak. The total investment in machinery and equipment in these joineries is estimated at about M\$5.5 million and output estimated at M\$11 million.

A major segment of the joinery industry consists of small-size factories/workshops. More than 70% of existing joineries employ less than 20 workers. The products made include doors, windows, door and window frames, interior wood work such as partitions and mouldings, floorings and hollow blocks.

(b) Problems

Peninsular Malaysia has not reached the stage to manufacture well designed, well constructed, high quality furniture for the overseas market on a large scale. This is an extremely complex form of manufacture requiring specially qualified expertise in design and high sensitivity to the whims and changes of demand in the international market.

This market is so highly selective and unpredictable that attempts to enter into export orientated furniture production would be difficult in view of the existing status of the industry.

As already noted, a major segment of the furniture industry in Peninsular Malaya consists of small workshops. They are characterised by limited capital equipment and low output volumes. These workshops are handicapped by non-availability of finance for expansion or modernisation. They also lack technical know-how, especially in the matter of design and the selection of modern machinery.

Quality to a large extent determines the acceptance of the furniture in the market especially the overseas market. Among the factors which determine the quality of good furniture are accurate measurements, exact cutting and precision joining. The lack of modern know-how and equipment among the majority of the small furniture workshops makes it difficult to ensure that these factors are taken care of, and consequently they fail to attain the quality of furniture produced to acceptable standards. The lack of proper seasoning, chemical treatment and sophisticated finishing methods and facilities affects adversely the quality and attractiveness of furniture.

The absence of designing skills and kiln drying facilities is a common feature even among those furniture makers who are relatively well organised and well-equipped. One salient characteristic of the designs used by furniture manufacturers is that they are conceived for hand-made furniture and are not, therefore, suitable for machine production. Under such circumstances, mechanization of production has not been possible on any significant scale. Further, little attention seems to have been given to research in product development, design and utilization of less known species with a view of venturing into the overseas market. Since production is mainly made against orders and the scale of operations is small and that furniture making is still profitable, though competition has increased substantially recently, furniture manufacturers seem contented with existing production arrangements. Thus except for a few large factories whose set up and future out-look are geared towards the overseas market, research into designs, product development and utilization of less known species is lacking in the country.

(c) The Potential

The current annual demand for furniture in Peninsular Malaysia is estimated at about M\$70 million per annum. In the light of past trends in the consumption of furniture and the present status of the construction industry in the country, it is anticipated that the domestic demand for wooden furniture will increase at the rate of about 7.6% per annum in the next 2 years and reach about M\$100 million to M\$120 million per annum by 1975.

Although most of the furniture made by the industry is for domestic consumption, a number of relatively large-scale furniture manufacturers have made inroads to the overseas market and are able to export furniture comparable in quality to the standards of furniture made by producers in Scandinavian countries. In view of this, it can be seen that the large-scale segment of Peninsular Malaysia's furniture industry is in a position to gear its production to meet the requirements of international markets. In fact most of these large scale manufacturers have been undertaking wood work for furnishing large office buildings and hotels of international standards. Nevertheless, systematic market studies and research would be necessary in order to launch effective promotional activities for the export of Malaysian furniture. However, this would involve large amount of funds, time, efforts and considerable risks due to the complexity of the market for furniture overseas. In view of these difficulties and the tremendous international market potential for component furniture parts there is great scope for the manufacturer of a vast variety of component parts for all types and designs of furniture. These parts can be produced locally and shipped to consuming countries for final assembly. The risk factor and shipping costs (related to completely assembled furniture) would be significantly reduced and at the same time a valuable base is secured to facilitate the local manufacture of well design and high quality furniture.

The future prospects of the Malaysian furniture industry for development in this direction are bright due to the following factors which place Peninsular Malaysia in an advantageous position:-

- (1) Malaysian saw timber and plywood exports are well established and in this manner, the Malaysian timber species are familiar and well known to overseas countries;

- (2) the raw materials for the manufacture of furniture are available in abundance and relatively cheaper;
- (3) production costs are relatively lower due to low labour wage, electricity rates etc.;
- (4) the availability of traditional furniture manufacturing skill. With further training in mass production and modern designing techniques there would be no dearth in manufacturing skill.

As indicated earlier, there has evolved in recent years a trend to manufacture knocked down furniture and component furniture parts for the overseas market. This trend is being stimulated by product promotion efforts of the Government and the awareness by local manufacturers of the tremendous potential of these products in the overseas market. Coupled with the advantageous position of Peninsular Malaysia as indicated in the previous paragraph and the influx of foreign capital to set up this type of furniture manufacturing units, it is anticipated that supply to the overseas markets would be increased significantly in the next 10 years.

### III. ORGANISATIONS RELATING TO WOOD PROCESSING INDUSTRIES:

Broadly speaking, there are six organisations in the public sector, and three organisations in the private sector in the country which deal with the various aspects of the development of both primary and secondary wood processing industries in Malaysia. Those in the public sector are: the Federal Forest Department, and the Forest Research Institute of the Ministry of Primary Industries; the Majlis Amanah Ra'ayat (or MARA) (a Trust for the advancement of indigenous people) of the Ministry of National and Rural Development; the Federal Industrial Development Authority (FIDA) and the Malaysian Industry Export Board (MIEB) of the Ministry of Trade and Industry; and the Standards Institution of Malaysia (SIM) of the Ministry of Technology, Research and Local Government. The specific responsibilities of these agencies are briefly summarised below:-

- (1) Federal Forest Department - Formulation of policies and providing advice and direction to State Forest Departments with regards to forest management in all its aspects; regulation and control of timber exports and provision of training to timber graders; regulation

and licensing of primary wood processing industries through State Forest Departments; plan and advise Federal and State Governments on the orderly development of the wood-based industrial sector; and provision of timber advisory services.

- (ii) Forest Research Institute - Conduct silvicultural research of indigenous forests to improve timber quality and stocking in the forests; carry out research into establishment of quick growing industrial tree species; identify and suggest remedial measures against plant and timber destroying agencies; conduct research into the various uses of timbers; provide information on correct, efficient and maximum utilisation of timber and on processing techniques; and provide training to sawmill workers in specialised fields of milling.
- (iii) MARA - Provision of assistance to Bumiputra industrialists engaged in wood processing, especially those in rural areas; training workers engaged in Bumiputra wood processing enterprises; providing financial assistance to Bumiputra enterprises for expansion and modernization; participation in large-scale wood processing ventures.
- (iv) FIDA - Evaluation of projects for the establishment of plywood and secondary wood-based industries as well as integrated timber processing complexes; provision of technical and managerial assistance to existing timber processing industries, particularly secondary wood-based industries such as furniture, joineries and mouldings; conducting problem shooting studies of individual industries and providing advisory service; and promotion of new secondary wood-based products such as parquet flooring, knock-down furniture, pre-finishing of plywood, etc.
- (v) Standards Institution of Malaysia - Formulating standard specifications in respect of timber products.
- (vi) Malaysian Timber Export Board - to promote the development of the domestic timber industry; to regulate and control the trade, marketing and distribution of timber;

to promote and improve the trade and markets for timber; to encourage effective utilisation of timber with emphasis on product diversification; to promote improvement and economy in the methods of exploiting and processing timber; to provide technical advisory services to the timber industry; and to organise and assist in the consolidation of the small-scale timber industries and closer integration of activities so as to achieve greater efficiency.

The bodies which deal with timber industries in the private sector include the Malaysian Plywood Manufacturers' Association; the Sawmillers' Association and the Malaysian Furniture Manufacturers' Association. As the names indicate, these Associations look after the interests of the manufacturers of the respective products.

The principal activities undertaken by these Associations include:-

- (i) the regulation of price and quality of veneer, plywood, sawn timber, and furniture;
- (ii) conducting market study relating to demand in overseas countries;
- (iii) providing a forum for the discussion of common problems of members;
- (iv) seeking governmental assistance with regards to policy matters affecting the industry;
- (v) public relations work, particularly concerning assistance to be rendered to foreign traders interested in buying Malaysian plywood and other timber products.

Table I

Types and Number of Wood-based Processing Industries in Peninsular Malaysia - 1972

Types	Number of Units in Operation	Estimated Employment
1. Integrated Timber Processing Plants	3*	1,500
2. Sawmills	487	24,000
3. Veneer & Plywood	31	13,000
4. Furniture Factories/Workshops	620	8,800
5. Joineries	95	1,400
6. Particle Board Mills	1	45
7. Wooden boxes, cases and crates manufacturers	40	240
8. Prefabricated Housing Units	6	120
9. Match factories	3	570
10. Pencil factories	1	35
11. Wooden slab makers	2	40
12. Wooden chips makers	1	300

\* Not in full operation

Source: (a) Malaysian Timber Export Board

(b) Forest Department

**Table II**  
**Estimates of Investment, Employment and Output in Respect of**  
**Selected Wood-based Processing Industries in Peninsular**  
**Malaysia - 1972**

Type of Manufacturing Process	Number of Manufacturing Units	Estimated Total Investment in Machinery and Equipment (M\$)	Estimated Total Employment	Estimated Total Output	
				Quantity	Value (M\$)
1. Saw Mills	487	59 million	24,000	2.89 mn tons	534 million
2. Veneer and Plywood	31	200 million	13,000	714 mn. sq.ft.	52 million
3. Furniture Factories/Workshops	620	3 million	8,800	-	75 million
4. Joineries	95	5.5 million	1,100	-	11 million
5. Wooden boxes, cases and crates Manufacture	40	n.a.	240	n.a.	2 million
6. Particle Board Mill	1	n.a.	40	n.a.	0.45 million

Source: (a) Forest Department

(b) Malaysian Timber Export Board

(c) Malaysian Plywood Manufacturers Association

(d) Field Investigations



Table III

Trends in Output and Exports of Selected Wood-based Processing Industries in Peninsular Malaysia

Name of Product	Year	Output		Exports	
		Quantity	Value (\$M)	Quantity	Value (\$M)
1. Sawn Timber	1968	1.41 mn. tons	205 mn.	0.59 mn. tons	110.75 mn.
	1969	1.44 mn. tons	216 mn.	0.61 mn. tons	126.00 mn.
	1970	1.65 mn. tons	290 mn.	0.86 mn. tons	152.00 mn.
	1971	1.74 mn. tons	*313 mn.	0.73 mn. tons	145.80 mn.
	1972	2.89 mn. tons	*534 mn.	0.99 mn. tons	225.60 mn.
2. Plywood	1968	225 mn. sq.ft.	27 mn.	151 mn. sq.ft.	22.4 mn.
	1969	339 mn. sq.ft.	47 mn.	255 mn. sq.ft.	36.0 mn.
	1970	430 mn. sq.ft.	60 mn.	320 mn. sq.ft.	45.0 mn.
	1971	490 mn. sq.ft.	69 mn.	381 mn. sq.ft.	56.0 mn.
	1972	714 mn. sq.ft.	99 mn.	565 mn. sq.ft.	79.4 mn.
3. Furniture	1968	-	65 mn.	-	-
	1969	-	65 mn.	-	-
	1970	-	66 mn.	-	0.57 mn.
	1971	-	*71 mn.	-	0.41 mn.
	1972	-	*76 mn.	-	0.87 mn.

\* Estimates

- Source: (a) Forest Department  
 (b) Malaysian Timber Export Board  
 (c) Malaysian Plywood Manufacturers' Association  
 (d) Field Investigations



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