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THE FURNITURE INDUSTRY IN INDONESIA ✓

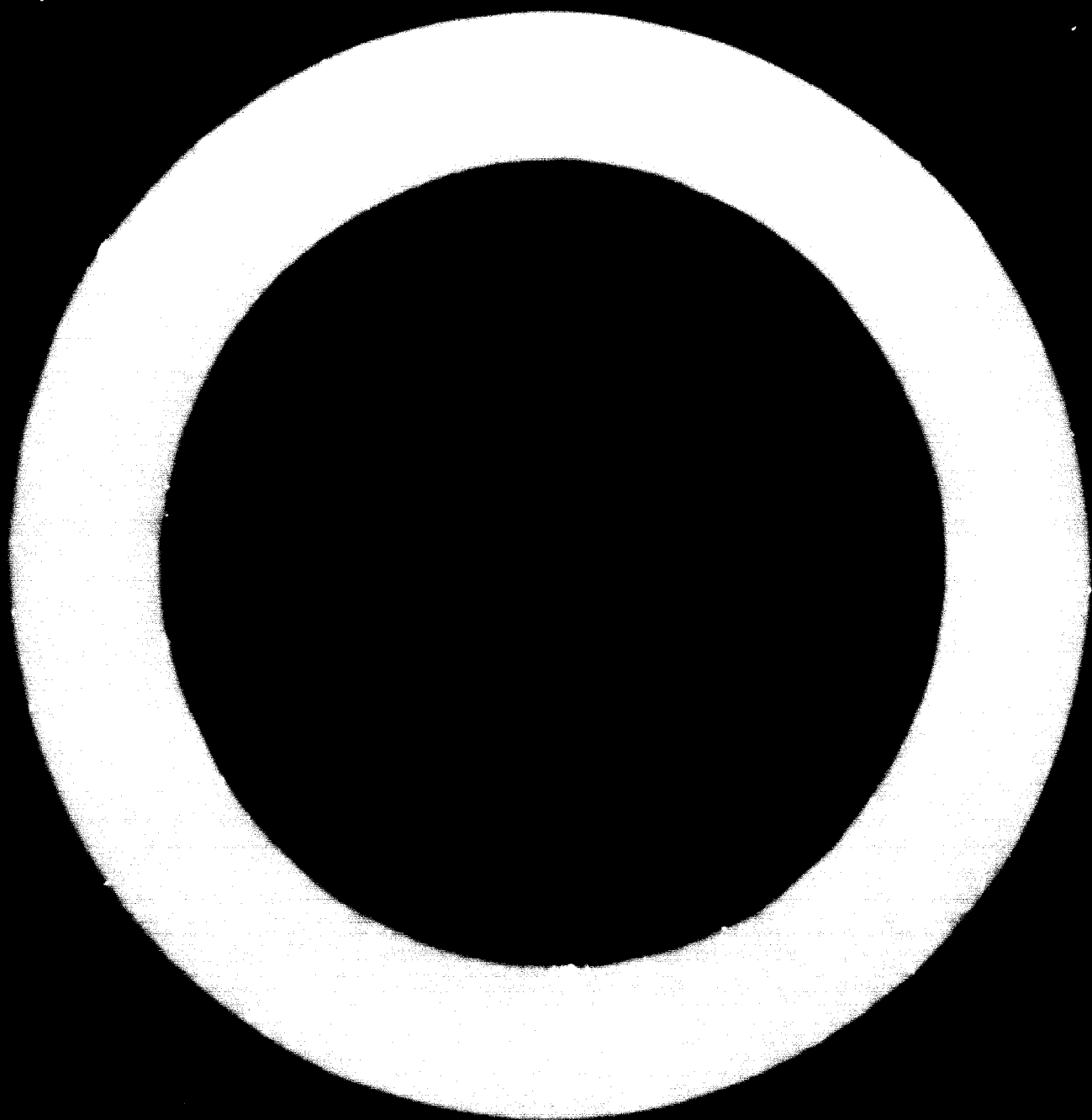
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## Introduction

There are three kinds of furniture manufactures according to the raw material used:

1. Steel Furniture;
2. Rattan Furniture and
3. Wooden Furniture.

The following paper will be concerned with the problems of wooden furniture. in general.

## Climate

Indonesia is a tropical country with an average temperature of 30°C throughout the year, except that in the mountains it is cooler than in cities along the coastal plain. October to April is generally regarded as the wet season, while May to November is usually a much drier period. Humidity is very high, around 78 per cent to 88 per cent. Owing to this humidity and the hot climate, termites destroy certain species of wood, in particular untreated wood. With the recent building boom, including hotels, and offices with air conditioning systems, furniture made of unprocessed wood cannot be used.

## Timber

Indonesia has 120 millions hectares of forest area i.e. 2/3 of the total land area. Of this forest area, 48 million ha are protected; 24 millions ha are worked, 18 million ha are used for agricultural purposes and the remaining 32 million ha are exploited otherwise. The main species of timber exported from Indonesia are: Meranti (*Shorea spp*) Teak (*Tectona grandis*) Ramin, Agathis, Pulai, Ebony, and other fancy woods.

The building development and increase in the furniture trade has led to an expansion in timber marketing at home and abroad. In the last few years, the timber trade has increased from US\$0.3 million in 1966, to US\$230 millions in 1972. Almost all the timber is exported in the form of logs, owing to the lack of saw mill facilities compared with the total forest area, on the various islands. Up to 1967, logging activities were

restricted to the islands of Java and Sumatra owing to the lack of capital (See Table 1 below)

Timber Production  
(in million cubic metres)

<u>Year</u>	<u>Production</u>	<u>% Increase</u>
1966	1.253	-
1967	2.853	20.2
1968	3.828	34.2
1969	6.206	62.1
1970	10.496	69.1
1971	12.600	20.2
1972	16.000	28.3

Recently the Government proposed exporting processed timber instead of logs. It would be more profitable to export ready-made articles such as plywood, particle/chip board, furniture or furniture components. Since the olden days the Indonesians have produced furniture only from teak because of its resistance against termites and damp weather in an unprocessed state: natural drying was used. Owing to the increased demand and the possible decrease in the production of teak, recent prices have reached an all-time high. Actually there are other species of timber which can be used for furniture, but modern processing and treatment techniques are required.

From this Seminar we hope to learn about timber processing enabling us to make low-cost furniture from common timber. At the moment, we can mention species of timber, other than those being used in furniture manufactures, such as meranti, mahogany, ebony, merawan, rasanala, all of which have to be processed in advance. In Indonesia there are only a few saw mills with preservation and kiln dry facilities. These saw mills, besides supplying the furniture factories, will also benefit the handicraft and wood-carving industries as well.

As we all know, manu wood carvings, especially those from the island of Bali exported to countries with lower humidities suffer damage from the change in climatic conditions.

As soon as we are able to produce non-teak furnitures using modern equipment and techniques, our products will be of better quality and available at a reasonable price; a good example being the price of meranti wood which is approximately one-fifth of that of teak.

#### Other material uses and their availability

In general, furniture in Indonesia is made of solid teak, table top and side-boards included. The lack of plants producing chipboard or particle board make the use of such articles unpopular.

Several furniture components are made of 4 m/m plywood or covered with formica.

Other furniture materials which are still being imported are:

1. Furniture hardware;
2. Rubber webbings/springs/coil springs;
3. Upholstery materials;
4. Some metal parts for office furnitures;
5. Teak veneers.

In fact, these articles can be manufactured in Indonesia.

#### Labour power

Many furniture factories are still using manpower as a means of production. In other words, the use of machinery is still not very widespread. These factories are more likely than not to be home industries. Carpenters inherit their skills from their parents, experienced colleagues and friends, except those who have had the opportunity of attending elementary technical school.

In fact, carpentry training is needed if one is to obtain skilled labour capable of handling wood working equipment. We feel the need for a technical school with wood working machinery as a practical demonstration unit.

For furniture designs we have our own architects or interior designers, graduates of several technical institutes in Indonesia. The problem of furniture design is the absence of any patent warranty, which is not conducive to design development.

#### Furniture Factories

At present, mechanized furniture plants are urgently required. In order to have the factories develop accordingly, we must have technical know-how on industrial design. The use of effective machines has to be considered a very essential item. It is a question whether automation is needed in the Indonesian furniture industry as social conditions differ from those of the developed countries. The emergence of large plants will influence the growth of small scale industries. Thus, the larger units must produce articles which cannot be made by smaller plants. The question of automation is one of degree.

#### Marketing

Hitherto domestic marketing has been favourable, and will continue to be so in the future following the growth of new buildings. To ensure competitive prices, we always have to produce better quality at a lower cost. Usually furniture factories produce various type of furniture such as household furniture, office furniture, and hotel furniture. Thus, more time is needed to deliver these objects as there are no factories specializing in the producing of one type of furniture. There are many foreign companies from developed countries interested in importing Indonesian furniture, unfortunately some of local industries are still unable to meet this demand owing to low capacities.

#### Trends

In view of the quantity of local wood production, I am convinced that if the above mentioned problems can be solved, the furniture industry will flourish rapidly. Generally the local industries need capital and technical know-how in order to expand their business. Thus the Government has invited foreign enterprises to invest capital in Indonesia.





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