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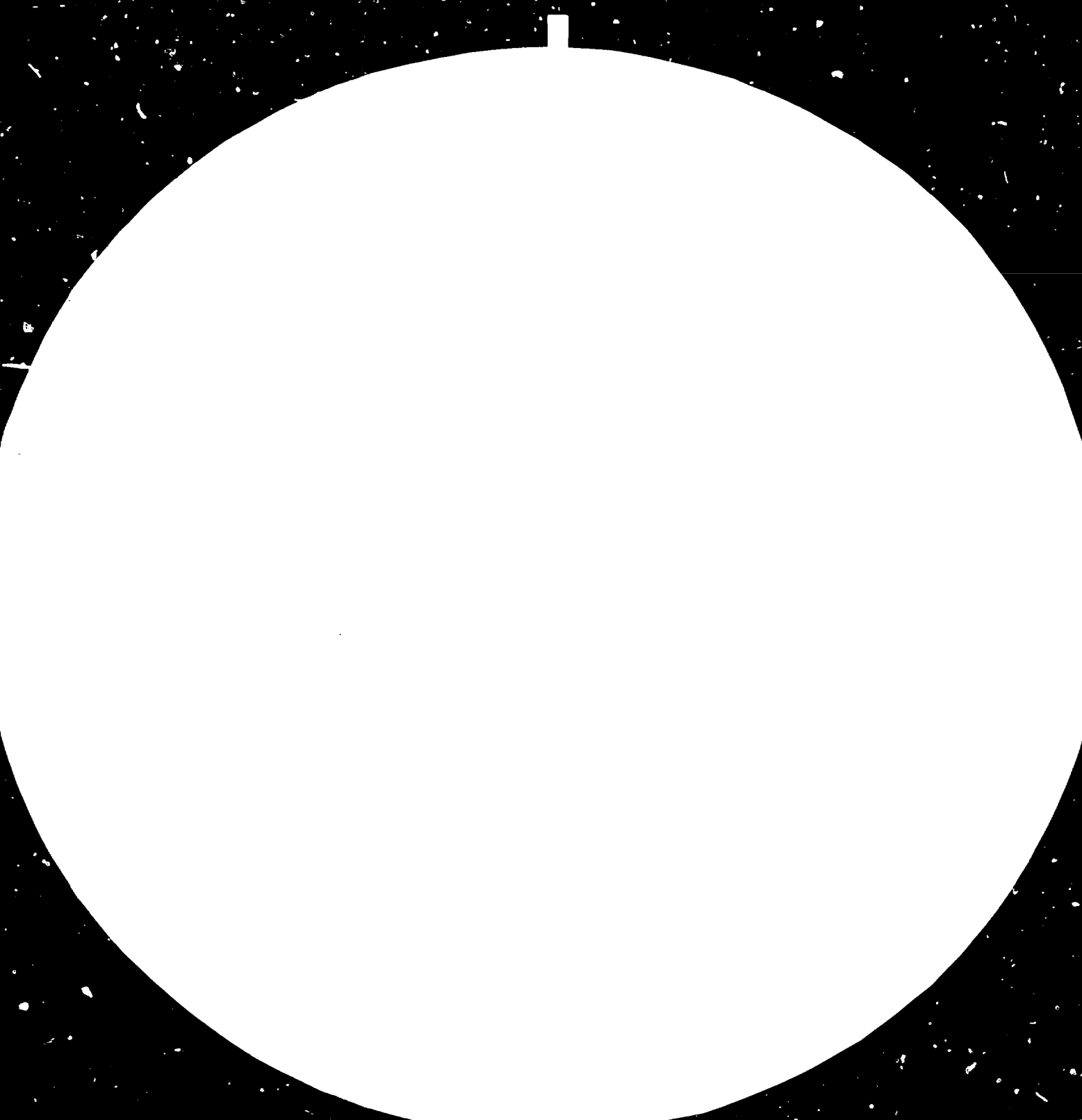

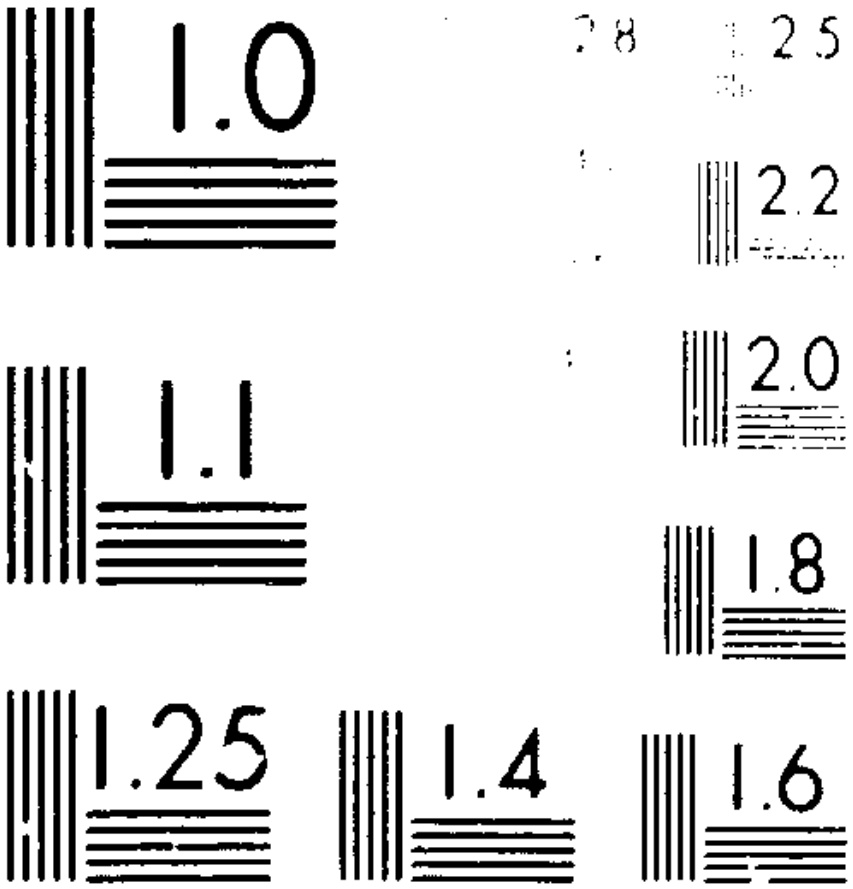
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WOOD PROCESSING INDUSTRIES AS A BASIS FOR INDONESIA'S ECONOMIC DEVELOPMENT *

by

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I. INTRODUCTION

Tropical hardwood is one of the main potential natural resources in Indonesia which for a long time had not been fully utilized for the benefit of the country.

It is only a few years ago that the Indonesia government had issued a policy that will gradually decrease the export of logs and increase the export of processed wood, which will give a much higher benefit to the country.

Although the domestic wood processing industries at present are only in the beginning stage of development, the new policy of the government will give a big thrust to the development of the domestic industries and accelerate the country's economic development.

II. COUNTRY SITUATION

1. Wood Resources

- Forest resources is one of Indonesia's main natural potential and formerly the number two foreign exchange earner after oil and gas. Production forest covers about 56 million ha. with a standing stock of about 88 million M3. Based on the Indonesian system of forest exploitation, that is a system of selective cutting, which cut only trees with a diameter higher than 50 cm., the potential annual production of logs can reach as much as 48 million M3.

  The big potential province of forest resources are Central and East Kalimantan with a potential production of logs of 24 million M3, which is 50% of the national annual wood production.

- With the new policy of the Indonesian government to decrease gradually the export of logs and on the other hand to increase the export of processed wood, many wood processing industries have been constructed in the last few years, especially in the provinces with potential forest resources.

- Another potential wood resource which up till now had not been fully utilized is woodwaste from logging, sawmills and plywood-mills.

Estimated potential of woodwaste from 1981 till 1989 is given in Table 1. Potential of woodwaste in 1981 is estimated at 19 million M3 and will increase to 37 million M3 in 1989.

Measures must be taken how to utilize this wood potential for the production of other wood products, generation of energy, etc.

2. Wood Processing Industries

- Table 2 gives the position of the sawmills in June 1981. Total installed capacity of sawmills is 12,3 million M3, constructed by the forest concession holders and the local population.

  Sawmills constructed by the forest concession holders and those under construction, each with an average installed capacity of 30.000 M3, are mostly modern units and oriented to the export market. Those constructed by the local population are mostly small units oriented to supply the local and interinsular market.

  Most of the operating sawmills are located in Kalimantan mainly the provinces West, Central and East Kalimantan.

  While for those under application beside Kalimantan most of the invested capital will be dispersed to the provinces Riauw, Jambi, Maluku and Irian Jaya.

- Table 3 gives a position of the plywood mills in June 1981. Plywood mills are mainly constructed by the forest concession holders, mainly located in South Kalimantan, with an average annual installed capacity of 50.000 M3 and are mainly oriented to the export market.

  However, with the new mills now under construction and those under application, location of the plywood mills will be more dispersed to the provinces Riauw, Jambi, West, Central, South, East Kalimantan, Central Sulawesi, Maluku and Irian Jaya.

- Table 4 gives the projection of logs requirement for the sawmills, the plywood mills and for export from 1981 till 1989. Projection of wood requirement is based on 80% of the installed capacity of the wood processing industries.

  The installed capacity of sawmills is projected to increase from 12,3 million M3 in 1981 to 16,5 million M3, while the installed capacity of the plywood mills from 1,5 million M3 in 1981 to 7 million M3 in 1989.

Export of logs is projected to gradually decrease from 5,6 million M3 in 1981 to zero in 1985. On the other hand export of sawntimber and plywood is projected to increase and in 1985 Indonesia is projected to export only processed wood products.

Aggressive marketing promotion is necessary to attain this objective.

3. Marketing projections for wood products

- Table 5 gives the marketing projection for wood products (sawntimber and plywood) for the domestic and export market from 1981 till 1989.

The main consumption center for sawntimber and plywood is Java. Domestic consumption of sawntimber is projected to increase from 4,8 million M3 in 1981 to 8,4 million in 1989.

Utilization of plywood in Indonesia is not yet popular and in 1981 domestic consumption of plywood is about 0,9 million M3. However, with progress in economic development, domestic consumption of plywood is projected to reach 3,4 million in 1989.

Export of sawntimber in 1980 is 1,2 million M3 and for 1981 is estimated at 2 million. Taken into account the rapid increase in demand of sawntimber in the world market, export of sawntimber from Indonesia is projected at 4,8 million in 1989.

Export of plywood in 1980 is 300.000 M3 and for 1981 is estimated at 900.000 M3.

Taken into account the increased import of plywood and other wood-based panels in the world market which in 1980 had reached 3,2 million M3, export of plywood and other wood-based panels from Indonesia in 1989 is projected at 3,6 million M3. Comparing the present installed capacity of sawmills with the market demand, domestic as well as the export market, it can be concluded that the domestic sawmills can supply the domestic as well as the export market till 1984. From 1984 on the capacity of the domestic sawmill must be expanded from 12,3 million M3 to reach a capacity of 16,5 million M3 in 1989 to meet the domestic as well as the export demand.

Present capacity of domestic plywood mills is not big enough to meet the domestic demand and the demand in the export market. Present capacity of domestic plywood mills is projected to be gradually expanded from 1,5 million M3 to 7 million M3 in 1989.

- Furniture and furniture components are one of the export commodity from Indonesia which has a good prospect in the future. Export of furniture and their components in 1980 is 860 ton with a value of US$3 million.

  The main importing countries are:

  . European Economic Community, with West Germany, The Netherlands and France as the biggest importers. Export in 1980 to the EEC countries is US$711.000,--

  . Japan is the biggest importer of furniture from Indonesia and in 1980 export to Japan reach a value of US$1 million. However, it is only 0,4% of the total value of furniture which Japan had imported in 1980.

  . Export of furniture to Australia and New Zealand in 1978 reached a value of US$32.000,-- and during the last few years there are possibilities for export to Canada and USA for furniture and their components.

III. ANALYSIS

1. Location of Indonesia's tropical wood resources is outside of Java and based on the Indonesian system of forest exploitation annual production of logs can reach as much as 48 million M3. On top of this there is another potential source of wood which up to now has not been fully utilized, this is wood waste from logging operation, sawmills and plywood mills. Present available wood waste from logging and industry is estimated at 20 million M3.

2. Formerly, export of logs is the number two foreign exchange earner for the country after oil and gas. However, export of logs does not give the optimum value added to the country beside that the price of logs is much affected by price fluctuations in the international market.

   Present policy of the Indonesian government calls for a gradual decrease of the export of logs and increase of the export of processed wood such as sawntimber, plywood, furniture, woodworkings, etc., which means that the development of the wood processing industries must be promoted and accelerated.

3. Indonesia's wood processing industries at present are only beginning to develop. Installed capacity of the sawmills is 13,3 million M3 per annum, ranging from big and modern units constructed by the forest concession holders to small units constructed by the local population.

Installed capacity of plywood mills is 1, 5 million M3 per annum, mainly big and modern units, oriented to the export market.

A few modern furniture making plants mostly located closed to the big cities to supply the domestic market are now beginning to enter the export market.

4. Although the domestic wood processing industries are in the beginning stage of development, the prospect of development is good, taken into account the available wood resources which up to now has not been fully utilized, in particular the woodwaste from logging and industry. Domestic demand of wood products is expected to increase rapidly with the growth of population and progress in economic development. With strict quality control, increase of efficiency and productivity of the domestic industry, Indonesian market share of wood products in the international market can be increased.

5. To increase Indonesia's market share in the international market for wood products, such as sawntimber, plywood, furniture, etc., several measures must be carried out such as:

- increasing the efficiency and productivity of the domestic industry.
- strict quality control adjusted to the standard and requirement of the export market.
- aggressive marketing to penetrate potential export market.

IV. POSSIBILITIES FOR COOPERATION

Taken into account the vast hardwood resources in Indonesia, development of wood processing industries will be one of the foundations of the country's economic development as well as a basis of cooperation among Asean countries. Form of cooperation among Asean countries will cover a wide range of possibilities, such as:

- Cooperation in marketing of Asean wood products to penetrate the international market as well as to stabilize the price of Asean wood products
- Change of information on marketing, technology to increase efficiency and productivity, saving of energy, etc.

V. CONCLUSIONS AND RECOMMENDATIONS

1. Indonesia's vast hardwood resources, which up to now has not been fully utilized, can be used as one of the foundations to accelerate the country's economic development as well as a basis for cooperation among Asean countries.

2. Although Indonesia's domestic wood processing industries are still in the beginning stage of development, the prospect for the wood processing industries is bright, taken into account the growing domestic demand for wood products as well as the possibility to increase the export of Indonesian wood products in the near future.

3. To accelerate the development of the domestic wood processing industries, several measures must be taken, such as:

   - increasing the efficiency and productivity of domestic wood processing industries, strict quality control adjusted to the demand of the export market, aggressive marketing, etc.

4. In the implementation of the above measures, cooperation among Asean countries will cover a wide range of possibilities from equity participation to cooperation in marketing, exchange of technology, experience and information.