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THE WOOD INDUSTRY OF KOREA ✓

by

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1. GEOGRAPHICAL LOCATION AND CLIMATE

Korea, geographically is a peninsula protruding into the ocean on the eastern coast of Asia, and is located opposite to Japan across the East Sea and the Korean channel in the East and South respectively, and borders China across the Yalu and Tuman Rivers and Yellow Sea in the north west.

Considering the geographical location, Korea is located between the largest continent and the ocean, and bridges the two.

Korea belongs to the temperate zone which is in the middle latitude region. The mild peninsular climate is influenced and formed by the continental weather of the Mongolian region and by the marine weather of the Pacific Ocean.

Hot and humid summer weather is caused by the Asiatic monsoon which is also characterized by dry and wet periods, and also cold winters. The Asiatic monsoon which characterizes the weather differences of summer and winter forms the continental weather.

Korea receives much precipitation from the southeasterly monsoon bringing much moisture from the Pacific Ocean in summer but the north-westerly monsoon brings in only a little amount of precipitation during winter.

2. STATUS OF FORESTRY

Forest land in South Korea as of the end of 1972 is 6,652,000 hectares, of 67% of the total land area.

The classification of stocked forest land by forest type shows that coniferous forest is 3,333,000 ha in area (58%), deciduous forest 1,218,000 ha (21%), mixed forest 1,220,000 ha (21%) and bamboo stand 7,516 ha.

In forest-age class, the forest stand in 1st to 30th year occupy 5,471,000 ha (95%), those in 31st to 50th year 277,000 ha (5%), and those in over 51st year 24,000 ha.

Total stock volume as of the end of 1972 is 72,696,000 m³ and the average stock per a hectare is no more than 10.9 m³ which is a really poor figure compared with the international standard.

The classification of total stock volume by forest type shows that coniferous forest is 33,634,000 m³ (46%), deciduous forest 25,683,000 m³ (35%) and mixed forest 13,379,000 m³ (19%).

When the stock is mentioned in age class; stock in age class from one to 30-year old trees is 52,411,000 m³ with 72% of total stock volume, that from 31 to 50 year old trees is 18,269,000 m³ with 25% and the stock volume in over 51-year is 2,016,000 m³ with 2% of total volume.

3. TIMBER INDUSTRY

A) Lumbering

As of the end of 1973 there are 1892 saw mills in Korea which are capable of supplying 4,536,000 m³ of sawn timber. The most part of the saw mills is situated scattered throughout the country, on a small scale and in small consumption areas in order to produce domestic timber.

However, because of an increase in foreign timber imported, a comprehensive industrial complex was constructed near a large log pond at Incheon as the first of its kind in the country in 1970 with a view to systematizing lumber production, production of standard size goods, maximum utilization of sawmill by-products, stabilization of wood price and smooth marketing of products.

Saw Mills

Year	No. of Saw Mills	No. of Band Saws	No. of Saws	Total	Sawmilling Capacity
1967	1,613	1,507	899	2,406	3,922
1968	1,798	1,893	882	2,775	4,080
1969	1,912	2,066	787	2,853	4,425
1970	1,912	2,247	844	3,091	4,650
1971	1,898	2,472	901	3,373	4,694
1972	1,892	2,538	779	3,361	4,536

Data derived from forestry in Korea by office of Forestry Republic of Korea

B) Plywood Manufacturing

Since 1961, thanks to the export policy of the Government and as the quality and price of Korean-made plywood was very good and reasonable, production facilities were suddenly enlarged and this product has contributed to a large extent to national economic development as the promising export item.

There are 12 plywood manufacturing plants in Korea with annual production capacity of about 470 billion square feet and all are situated in harbour cities so as to be able to reduce transport expenses and costs incidental to export.

It is planned that new plant construction and expansion of existing plants will be strictly controlled by the Government for optimum utilization of existing facilities, taking into consideration the achieving of a sound development of the plywood industry and demand of the country as well as abroad. The Government is planning to produce new types of products including special and exterior decorative goods to be able to meet consumer's liking.

Plywood Production, Export and Local Supply by Year

Class Year	Quantity of Products **)	Export		Quantity of Local Supply
		Quantity *)	Value *)	
1968	2,383,944,040	1,762,448,505	67,832,392	561,856,796
1969	2,209,349,849	1,537,558,881	81,587,145	488,093,500
1970	2,840,197,302	2,246,299,961	100,628,067	628,887,743
1971	3,331,242,175	2,669,880,020	132,792,555	631,186,856
1972	3,703,314,511	3,287,508,126	176,279,073	554,953,279
1973 (First half)	2,532,843,254	1,914,093,571	138,148,142	359,048,200

*) Unit

Quantity: ft
Value: US\$

**) Thickness before 1969: 1/8" basis
1969 - 1972: Only the panel surface
After 1973: 4 mm basis

Plywood Exports by Years and Countries

Year	1968	1969	1970
Country	(Unit: US\$)	(Unit: US\$)	((Unit: US\$)
U.S.A.	67,222,519	77,130,977	87,182,415
Japan	293,978	3,946,841	12,496,796
Canada	306,617	351,620	512,612
United Kingd.		1,528	99,373
Belgium			76,300
Netherland			77,000
Sweden			1,824
Others	9,278	156,179	181,747
Total	67,832,392	81,587,145	100,628,067

Year	1971	1972
Country	(Unit: US\$)	(Unit: US\$)
U. S. A.	124,731,666	151,624,530
Japan	6,438,609	20,476,082
Canada	1,208,863	1,682,642
United Kingdom	101,949	1,075,217
Belgium	52,645	112,100
Netherland	10,094	30,206
Australia	70,496	787,411
Sweden	1,951	29,962
Norway		42,952
Denmark	67,253	91,599
Rep. of Germany	29,168	51,545
China Taiwan	17,533	13,969
Hong Kong		7,098
Others	62,328	253,760
Total	132,792,555	176,279,073

1973 Plywood Exports by Countries

	S/F (Panel Surface Basis)	Pct. Total Volume %	Value in US\$	Pct. Export Value %
United States	2,215,998,546	65.9	181,102,348	62.0
Japan	981,203,127	29.2	96,797,315	33.1
Canada	72,669,800	2.2	4,745,699	1.6
Australia	12,199,224	0.4	1,012,988	0.3
United Kingdom	27,713,936	0.8	2,840,600	1.0
Hong Kong	296,000	-	38,000	-
Denmark	9,895,880	0.3	957,538	0.3
Netherland	8,981,804	0.3	1,032,135	0.4
Sweden	1,998,400	-	168,980	-
Norway	3,363,200	0.1	288,631	0.1
Rep. of Germany	1,577,600	-	124,295	-
Belgium	2,044,512	-	158,532	-
Spain	112,000	-	19,006	-
Italy	880,000	-	103,518	-
France	64,000	-	5,760	-
Malaysia	3,100,000	0.1	203,000	0.1
Kuwait	10,184,672	0.3	1,200,617	0.4
New Zealand	544,000	-	76,907	-
Singapore	1,520,000	-	106,400	-
Africa, South	18,000	-	1,795	-
Iran	640,000	-	23,040	-
China Taiwan	224,000	-	31,530	-
Sierra Leone	34,112	-	3,239	-
Local	7,129,198	0.2	1,100,021	0.4
Total	3,352,392,011		292,142,794	

1973 Korean
Plywood Exports
To the United States
by Types
S/F Panel Surface Basis

Common Plywood	1,849,579,874
Prefinished	225,329,152
Overlaid	115,073,160
Fancy	2,609,760
Print	23,242,600
Particle Board	164,000
Total	<u>2,215,998,546</u>
(Total value US\$ 181,102,348)	

1973 Korean
Plywood Production
S/F Panel Surface Basis

Common Plywood	
Production by thickness	
3.6 mm	264,975,291
3.6 mm - 6.0 mm	2,883,327,159
6.0 mm - 12.0 mm	64,575,438
12.0 mm	310,019,855
Total:	3,522,897,743
Speciality Plywood	
Prefinished	303,268,581
Overlaid	174,506,519
Fancy Plywood	60,056,189
Printed Plywood	54,483,530
Particleboard	61,020,231
Total:	<u>653,335,050</u>
Grand Total:	4,176,232,793

C) Production of hardboard and chipboard

As timber utilization and the wood processing industry developed, the production of hardboard and chipboard has emerged as the most rational way to utilize the forest products to the utmost.

Hardboards were imported until the first half of 1962 but import of boards has been banned since the latter half of 1962, as domestic production could meet the demand of boards, which saved US\$ 600,000 of foreign exchange annually.

With increased manufacturing technique and improved quality of goods the prospect of exporting to south east Asian countries is getting brighter. Korea has two hardboard and two chipboard manufacturing factories.

Production of Hardboard and Chipboard by Years

Year	Hardboard	Chipboard	Total
1967	543,380	1,076,130	1,619,510
1968	554,652	1,140,000	1,694,652
1969	695,689	964,655	1,660,344
1970	671,326	909,640	1,580,966
1971	926,504	1,071,858	1,998,362
1972	400,354	1,525,989	1,926,343

Data derived from Forestry in Korea by Office of Forestry Republic of Korea.

4. IMPORT OF TIMBER

Korea is depending upon foreign timber for more than 80 % of the total timber demand. The major countries from which Korea is importing timber are Indonesia, Malaysia, Philippines, U.S.A. New Zealand.

But importing conditions are getting worse and the cost of import is getting higher. The timber exporting countries plan to protect their forest resources and to develop their wood processing industries through control of exports of their timber.

For normal import of exotic timber it is planned to exploit the forest land of foreign countries with our capital and techniques as well as to purchase exotic timber.

Log Imports by Year and Countries
(Unit: m³)

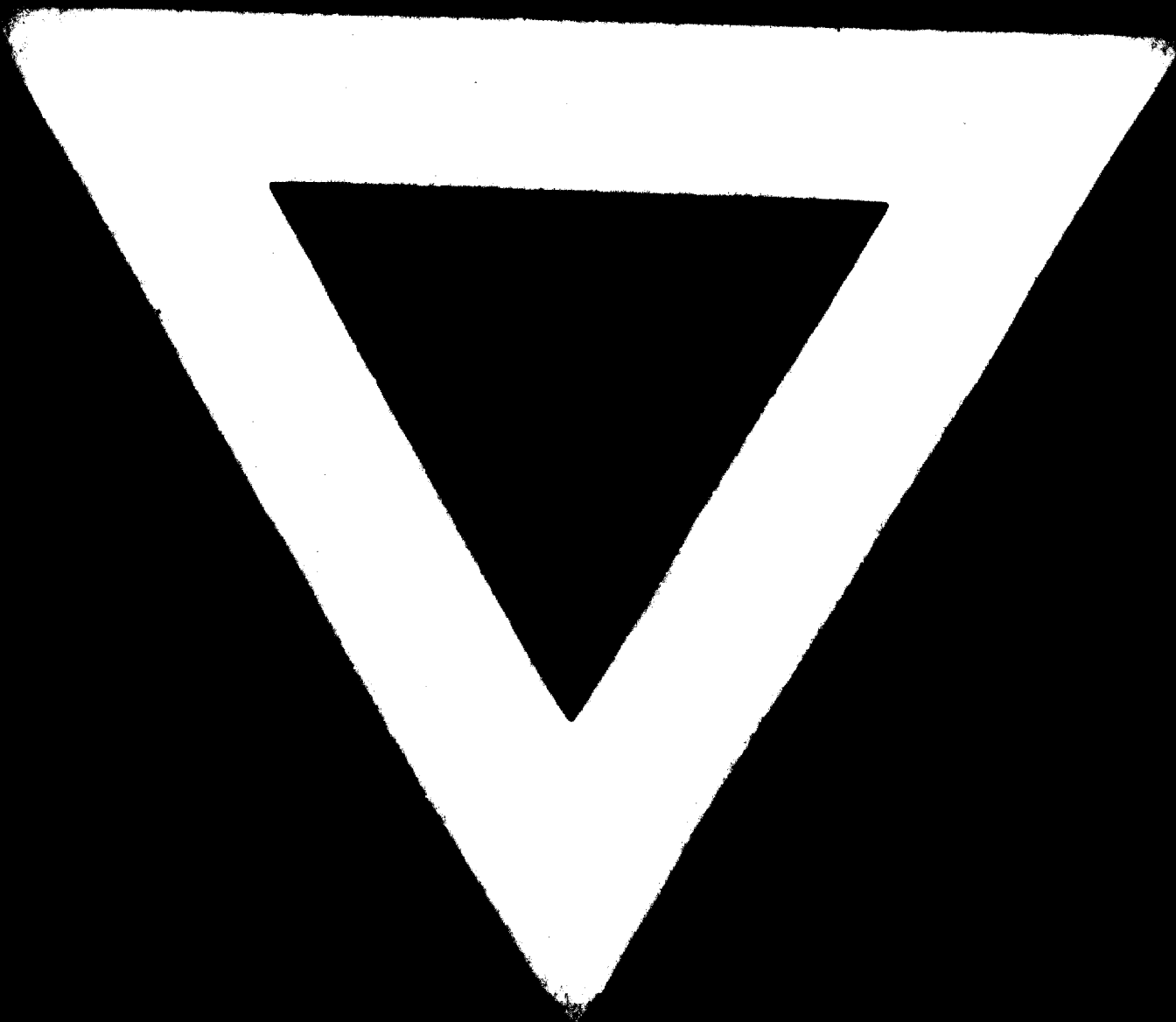
Year	Countries Philippines	Malaysia	Indonesia	Total
1965	161,000	350,000		511,000
1966	277,000	430,000		707,000
1967	418,000	574,000		992,000
1968	375,000	879,000	5,000	1,259,000
1969	907,000	1,048,000	50,000	2,005,000
1970	844,000	1,056,000	210,000	2,110,000
1971	811,000	1,156,000	735,000	2,702,000
1972	376,000	1,126,000	1,314,000	2,816,000
1973 (First half)	120,395	799,181	878,481	1,798,057

(Unit: US\$)

Year	Countries	Philippines	Malaysia	Indonesia	Total
1965		5,530,000	11,900,000		17,430,000
1966		9,396,000	15,250,000		24,646,000
1967		14,653,000	22,309,000		36,962,000
1968		13,020,000	33,012,000	211,000	46,243,000
1969		32,231,000	41,385,000	1,875,000	75,491,000
1970		31,956,000	48,020,000	8,571,000	88,547,000
1971		32,497,000	49,090,000	29,142,000	110,729,000
1972		13,844,000	41,090,000	51,268,000	106,831,000
1973 (first half)		6,804,716	45,675,369	49,778,672	102,258,757

Data derived from Plywood Statistics in Korea by Korea Plywood Industries Association.





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