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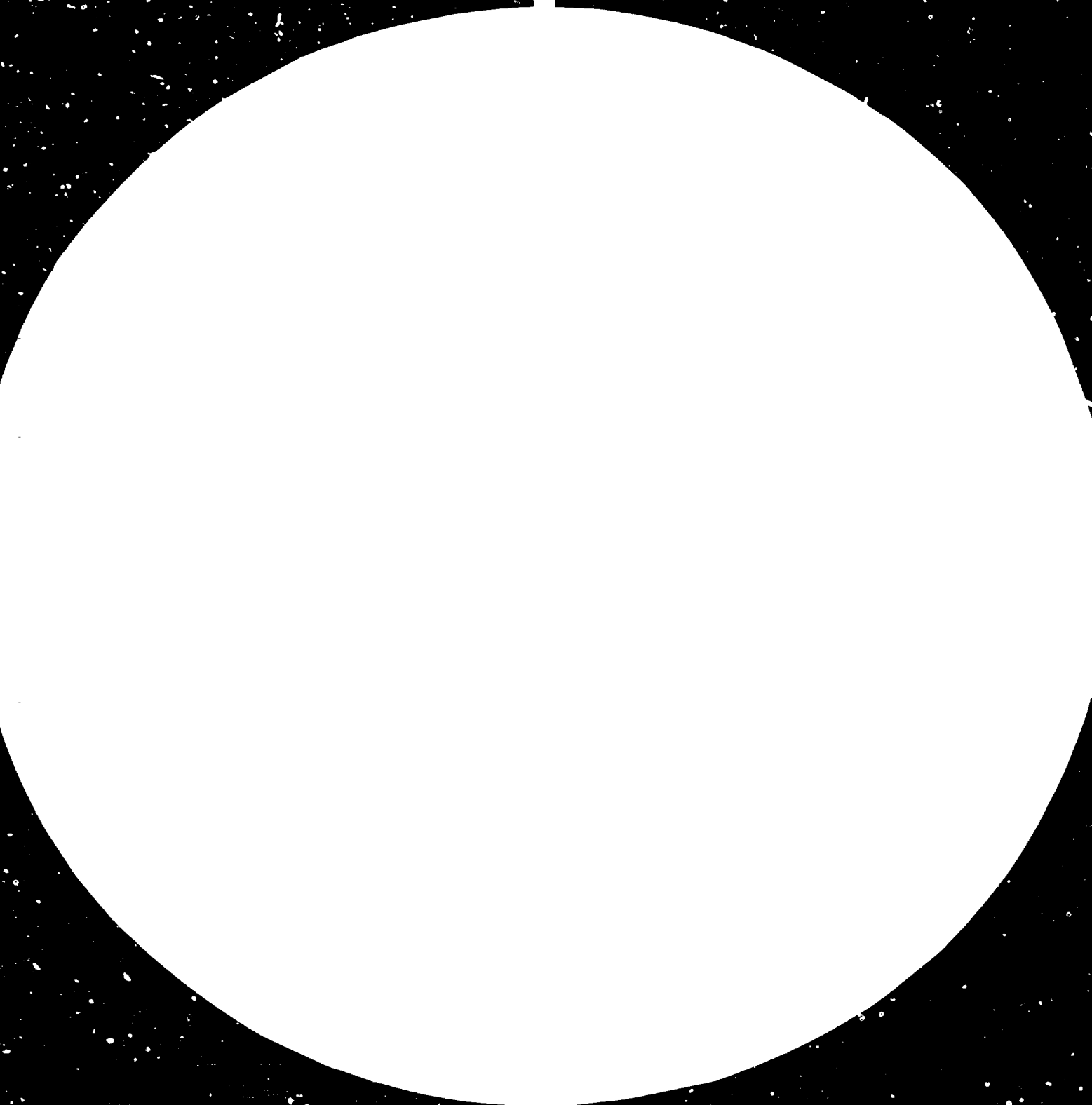
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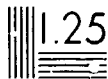
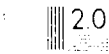
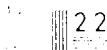
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SITUATION OF THE WOOD INDUSTRY IN MEXICO \*

by

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## Introduction

The Republic of Mexico is located in the American Continent, between Central America and the United States of America and with open coasts to the Gulf of Mexico, the Caribbean Sea and the Pacific Ocean.

The total land area of the country at 1,972,539 Km<sup>2</sup> includes a population of 70,000,000 persons that has been growing by 3.5 per cent a year with a per capita income of US dollars 1,200 per year.

The economy is based on agriculture, sisal, corn, sorghum, coffee, wheat, beans, sugar, rice and livestock, rich in minerals too. Deposits of silver, sulphur, copper, lead, iron and vast reserves of recently discovered oil and natural gas abound in Mexico. The topography is greatly varied and ranges from forests and jungle in the south to deserts in the north.

The city of Mexico City having a population of some 15 million is considered to be one of the largest cities in the world.

The country possesses valuable timber sources in the cold and temperate climates but also in jungles with tropical and sub-tropical climates; all this forest covers a total area of 44.2 million hectares of the national territory.

The estimated volume of wood growing within this forest is 3,259.3 million m<sup>3</sup> with a distribution as follows: forest with cold and temperate climate at 2,139.8 million m<sup>3</sup>; jungles with tropical and sub-tropical climate at 1,119.5 million m<sup>3</sup>.

The net sustained annual growth in forests and jungles according to the National Forest inventory is 44.3 million m<sup>3</sup> and equivalent to 1 per cent of the total growing stock.

The annual growth of softwood forests reaches 28.8 million m<sup>3</sup> and that of hardwood forests is 15.5 million m<sup>3</sup>.

The production in 1978 reached a volume of 8.1 million m<sup>3</sup>: 6.9 million m<sup>3</sup> of softwoods and 1.2 million m<sup>3</sup> of hardwoods.

The above mentioned production of 8.1 million m<sup>3</sup> represents only 18.3 per cent of the net annual growth. This means that Mexico has an available additional annual volume of 36.2 million m<sup>3</sup> to satisfy the consumption of wood as an industrial raw material, a quantity that is four times greater than present production requirements.

The breakdown of Mexico's annual wood requirements (8.1 million m<sup>3</sup>) is as follows:

	<u>Percentage</u>
Construction Industry	49.8
Telephone and Electric Lines	1.8
Pulp and Paper	27.5
Fuel	7.8
Packing	2.8
Railway Sleepers	9.1
Wood Based Panels	3.9
Various Uses	2.3

The wood industry in Mexico is divided into three main categories (data given refers to that of 1976):

I.	<u>Sawmill industry</u>	<u>US Dollars</u>
	Value of production	175,000,000.00
	Cost of investment	77,083,300.00
	Number of employees	10,550
	Number of plants	643
II.	<u>Wood based panels industry</u>	
	Production	342,800 m <sup>3</sup>
	Cost of investment	45,832,300.00
	Number of employees	6,380
	Number of plants	39
III.	<u>Pulp and paper industry</u>	
	Production	1.9 million tons
	Cost of investment	337,500,000.00
	Number of employees	22,000
	Number of plants	65

Breakdown of the Wood Based Panel Industry:

A)	<u>Plywood Production</u>	<u>US Dollars</u>
	Number of plants	28
	Total capacity	2,805,500 m <sup>3</sup>
	Number of employees	5,200
	Annual salaries	5,000,000.00
B)	<u>Fibre Board Production</u>	
	Number of plants	2
	Total capacity	33,000 m <sup>3</sup>
	Number of employees	180
	Annual salaries	1,000,000.00
C)	<u>Particle Board Production</u>	
	Number of plants	9
	Total capacity	215,400 m <sup>3</sup>
	Number of employees	1,000
	Annual salaries	3,000,000.00

Firms Producing Particle Board

<u>Name</u>	<u>Location</u>	<u>Starting Date</u>
Aglomerados de Yucatan, S.A.	Colonia Yuc.	1975
Aglomerados de Parral, S.A.	Hidalgo del Parral Chih.	1968
Fibracel, S.A.	Ciudad Valles S.L.P.	1968
Grisotex, S.A.	Durango, DGO	1974
Maderas Conglomeradas, S.A.	San Juan Ixhuatepec Edo. de Mexico	1973
Maderas Moldeadas de Durango, S.A.	Durango, Dgo	1975
Novopan de Mexico, S.A.	Oaxaca, Oax.	1967
Organismo Publico Decentralizado Forestal Vicente Guerrero	Papanao, Gro.	1969
Prensados Mexicanos, S.A.	Coacalco, Edo. de Mexico	1972



Firms Producing Plywood

<u>NAME</u>	<u>LOCALITION</u>	<u>STARTING YEAR</u>
TRYPLAY Y MADERAS DE DURANGO, S.A.	DURANGO DGO.	1951
TRIPLAY Y MADERAS DEL NORTE S.A.	DURANGO DGO.	1963
PRODUCTORA DE TRIPLAY S.A.	DURANGO DGO.	1965
INDUSTRIAL DE MADERA OCCIDENTAL, S.A.	DURANGO DGO.	1970
ESTADO DE MEXICO CHAPAS Y TRIPLAY S.A.	AYOTLA EDO.DE MEXICO.	1936
SINGER MEXICANA, S.A.	NAUCALPAN, EDO. DE MEXICO.	1970
C.V. DIVISION VAN BEUREN		
TRIPLAY FABRICADO DE MEXICO, S.A.	LERMA EDO. DE MEXICO	1971
MADERAS CONGLOMERADAS, S.A.	SAN JUAN IXHAUTEPEC EDO. DE MEXICO.	1972
FABRICA DE TRIPLAY DEL CAMHER, S.A.	SAN JUAN IXHAUTEPEC EDO. DE MEXICO.	1973
PLYWOOD PONDEROSA DE MEXICO, S.A.	CD. ANAHUAC CHIH.	1951
DURAPLAY DE PARRAL, S.A.	HIDALGO DEL PARRAL CHIH.	1958
TRIPLAY DE CHIHUAHUA, S.A. DE R.L. DE C.V.	PARRAL, CHIH.	1975
TRIPLAY PONDEROSA DE PARRAL, S.A.	HIDALGO DEL PARRAL CHIH.	1972
CIA. FORESTAL DE CHIAPAS, S.A.	COMITAN CHIS.	1966
TRIPLAY DE PALENQUE, S.A.	LA LIBERTAD CHIS.	1974
CHAPAS Y TRIPLAY DEL SURESTE, S.A.	CHIAPA DE CORZO CHIS.	1976
MADERAS Y CHAPAS TECNICALES, S.A.	SAN ANDRES TUXTLA, VER.	1974
AGLOMERADOS DEL PARRAL, S.A.	SUCHILAPA VER.	1975
TRYPLAY DE OAXACA, S.A. DE C.V.	OAXACA, OAX.	1957
TRYPLAY PENINSULAR, S.A.	DZILAM DE BRAVO YUC.	1975
FORESTAL MEXICANA, S. DE R.L.	INDUSTRIAL VALLEJO, MEXICO D.F.	1964
INDUSTRIAS FORESTALES DE NAYARIT, S.A.	TEPIC NAYARIT	1973
MADERAS INDUSTRIALES DE QUINTANA ROO. S.A.	CHEMUMAL Q. ROO.	1958
TRIPLAY Y AGLOMERADOS, S.A.	PACHUCA HGO.	1946
TRIPLAY DE CAMPECHE, S.A.	CAMPECHE, CAMPS.	1950

Firms Producing Fibreboard

<u>NAME</u>	<u>LOCALITION</u>	<u>STARTING YEAR</u>
FIBRACEL, S.A.	CIUDAD VALLES, S.L. P.	1950
GRISOTEX, S.A.	DURANGO, DGO.	1970

Consumption of Wood Based Panels

	<u>Plywood</u> ( m <sup>3</sup> )	<u>Fiberboard</u> ( m <sup>3</sup> )	<u>Agglomerate Wood</u> ( m <sup>3</sup> )
Production	163,400	28,700	150,700
Imports	12,200	9,000	16,200
Exports	-	3,600	-
Consumption	175,600	26,000	166,900

Commercial Status of the Wood Industry

	<u>US Dollars</u>
Total Imports	212,046,080.00
Total Exports	18,642,000.00

Percentage Distribution of Imports on Wood Industry (By Cost)

Raw Materials	8.3
Wood Manufacturers	3.0
Materials used for Production of Paper	61.3
Paper, Board and its Manufacturers	27.4

Percentage Distribution of Exports on Wood Industry (By Cost)

Raw Material	8.0
Wood Manufacturers	87.3
Materials used on Paper Production	0.2
Paper, Board and its Manufacturers	11.7

The Mexican deficit in housing is growing at such a speed that the construction industry could never solve the shortage generated by a population growing by 3.5 per cent a year.

To attack this problem, the National Programme of Housing of the Mexican Government warns, that for 1981, 1,780,000 new actions on housing should be taken: 1,100,000 for progressive housing, 658,000 for construction of new houses and 964,000 for housing improvement.

This same programme marks the great need for new solutions in order to have a diversification into the traditional methods and a

better option for progressive construction and auto-construction.

Wood is a basic building material in other countries, but not in Mexico because the traditional building methods are based on stone and concrete, that is the reason to think that the creation of programmes for the intensive use of wood on construction programmes can help to solve the problem of housing and furniture for low income families.

With the idea that a prototype low-cost house, built on 70 m<sup>2</sup> and having two levels and three bedrooms, requires the equivalent of 20 m<sup>3</sup> of wood and that Mexico has a potential of 36,200,000 m<sup>3</sup> which can be obtained from the country's forests actually in exploitation, the great possibility of using wood becomes immediately apparent.

Construction of 250,000 houses of the kind mentioned above, on which a volume of 5,000,000 m<sup>3</sup> of wood would be used, will not have any negative effect on the natural resources and will help to create new jobs and better industrialization.

Wood has the advantage that it is a renewable resource and so permits the prefabrication and massive production consequently reducing construction time and cost. Cost by unit can be reduced if the production of the components is done where the resource itself grows and industries are established.

It is important to note that wood can be used for construction of housing components such as door frames, doors, furniture dividers, closets, book cases, modular kitchens, floors, chests, ceilings, and of course wood is very important to the production of low cost furniture for housing: beds, tables, chairs, desks cabinets, sofas, etc.

For the success of this programme the following steps should be taken:

- a) Promotion of the use of wood for house construction and its incorporation into the housing programme in Mexico;

- b) Elaboration of norms, standards, manuals and regulations for the application of wood in construction;
- c) Promotion of the manufacture of housing components for all types of buildings including schools and offices;
- d) Development of training programmes for workers, technicians and designers with emphasis on the use of wood and wood in construction;
- e) Promotion of better communication with institutes, research centers, firms, industries, universities, etc. in other countries with experience in wood construction and use.

The use of wood in construction housing elements and furniture is a challenge for the Mexican technicians and industrialists, however, we are facing the problem with intelligence and courage and intend to improve the national economy by improved capacity in this field.



