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Market study on forestry harvesting  
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MARKET STUDY ON FORESTRY HARVESTING  
AND WOODWORKING EQUIPMENT IN MEXICO

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43-265-052

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## 1. BACKGROUND

Forestry has an old tradition in Mexico. Ever since before the Spanish conquest of Mexico, the indian population relied on Mexico's vast forests for its food, protection and clothing needs. During the 16th century, the first regulatory measures were taken to avoid the destruction of forests, including limitations on wood cutting and primitive reforestation measures. During the 17th century, the exploitation of mahogany, cedar and oak were reserved to the Spanish crown, although British and Dutch invasions of tropical forests were not uncommon.

The massive destruction of Mexico's forests began with the flourishing mining industry, led by the Spanish conquerors. The mines themselves were built and reinforced with wood structures, the transformation of the primary product into metals was fueled with wood and the indigenous population, deprived of their lands, increasingly moved into the wooded areas, deforesting them to grow their crops.

Under the new post-independence regime, a series of regulatory measures were taken to protect the forests and to control the production of wood products. During the 19th century, the exploitation of fine woods was subject to a prior permit requirement, the free importation of wood was allowed to avoid the excessive exploitation of local forests, the first inventory of existing resources was made, the cutting and conservation of forests was regulated and national parks were created to protect both the vegetation and the animal life.

Further efforts have been made in the 20th century to regulate the excessive exploitation of forests and to preserve existing resources. In 1926, the First Forestry Law was passed by President Plutarco Elías Calles, in an effort to officially rationalize the exploitation of Mexican forests. This law was reformed in 1942 and again during the administration of President Miguel Alemán (1945-1950). In 1960, President Adolfo López Mateos authorized a new forestry law to meet the requirements of the times. More recently, in April 1986, a new Forestry Law came into effect, followed, in July 1988, by the Regulations to the Forestry Law.

Although the forests of Mexico have been commercially exploited during the last 70 years, the industry is still considered in its infancy with respect to exploitation and use of up-to-date technology. Despite the country's rich forestry resources, low yields and insecurity on investment have often made imports of lumber and cellulose easier and cheaper than local production. At the same time, deforestation is progressing at a fast pace, at the margin of existing regulations.

The National Development Plan, which outlines President Salinas de Gortari's 1989-1994 policy, calls for an increased supply of

forestry products in order to cover domestic demand within the framework of ecological balance. This implies the reforestation of damaged areas and the thorough application of existing regulations. It also calls for the modernization of the forestry related industry, the creation of new road infrastructure to reach the forests, the preparation of a new inventory of existing resources and the decentralization of technical services.

The forestry sector has the potential of becoming an important contributor to the nations's economy. It will require considerable financial and technical assistance to improve efficiency in silviculture, public and private resource administration and in the manufacture and marketing of its wood products. This will translate into increased opportunities for Canadian firms in the industry.

## 2. ECONOMIC ENVIRONMENT

With the objective of reducing the inflation rate, the Mexican authorities implemented a stabilization program in 1988, called the Economic Solidarity Pact, which features traditional austerity measures, entailing tight fiscal and monetary policies and unorthodox measures, such as price, wage and exchange rate controls. This program has been the cornerstone of Mexico's economic policy over the past four years and has resulted in a drastic reduction of the inflation rate, from an annual rate of 159.2% in 1987 to 51.7% in 1988 and 19.7% in 1989. Inflation rebounded to 29.9% in 1990 but the Mexican government aims to achieve a 14% inflation rate in 1991, which seems a reasonable estimate based on an annual inflation rate of 13.3% as of October 1991. Along with the objective of consolidating the progress made in price stabilization, Mexico's macroeconomic policy in the short run aims to reaffirm gradual and sustained economic recuperation, basically by establishing the necessary conditions to encourage national and foreign investment and by stimulating local demand.

After the 1986 recession, Mexico's gross domestic product (GDP) increased a moderate 1.7% in 1987 and an additional 1.3% in 1988. Domestic economic activity recovered for the third consecutive year in 1989 with a growth rate of 3.1% and further 3.9% in 1990 to reach \$234 billion (1). With an 81.1 million population, per capita GDP was estimated at \$2,874 in 1990. Additionally, manufacturing output grew by 5.2% in 1990 in real terms, private investment and consumption expanded 13.6% and 5.2% respectively and public investment was up 12.8%. During the 1991-1994 period GDP is expected to maintain an average annual growth rate of

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1. Note: All values in this report, unless otherwise stated (Mexican pesos, Mex\$, Canadian dollars, Cdn\$, etc) are quoted in United States dollar equivalents.

2.5%-3%. Preliminary figures for 1991 place GDP growth at 4.5%-5% for this year.

In an effort to revitalize and open the Mexican economy, the Mexican Government undertook a series of structural changes, including the accession to the General Agreement on Tariffs and Trade (GATT) on August 24, 1986 leading to an extensive trade liberalization process: import permits were eliminated on all but 198 of the total 11,812 tariff items based on the Harmonized System adopted in 1988. Official import prices are no longer applicable, nor the 5% export development tax, and import duties were lowered from a maximum of 100% in 1982 to 20% since January 1988. The weighted average tariff rate is now 10.4%. The automotive and computer industries have also been liberalized, through the elimination of prior import permits, to allow free entry of products in these industries. The approval of the North American Free Trade Agreement will further strengthen trade between Canada, the United States and Mexico.

According to official data from the Mexican Secretariat of Commerce and Industrial Development (SECOFI), Mexico's trade balance in 1990 dropped once again to a \$3 billion deficit from -\$645 million in 1989. Exports increased by 17.5% in 1990, from \$22.8 billion to \$26.8 billion, while imports grew 27.3%, from \$23.4 billion to \$29.8 billion in 1990, having already increased 23.8% in 1989 and 54.9% in 1988. As of September 1991, total exports for the year amounted to \$20.7 billion and imports to \$27.2 billion.

Total Mexican imports from Canada increased 24% in 1989 and decreased 1.5% in 1990. Total Canadian exports to Mexico amounted to Cdn\$594 million, while total Canadian imports from Mexico were valued at Cdn\$1,730 million in 1990. According to Mexican figures, in 1989, 1.9% of Mexico's imports came from Canada, while 1.2% of its exports were to Canada. This makes Canada Mexico's fifth largest exporter and sixth largest importer.

### 3. MARKET ASSESSMENT

The Mexican market for forestry harvesting and woodworking equipment increased 78% in 1988, to \$40.6 million. This growth was brought about by a major one time surge in imports of saws and blades, which increased 136%, from \$4.6 million in 1987 to \$11 million in 1988. The market fell by 20% in 1989, but still reflects an increase of 42.4% as compared to 1987. During 1990, consumption grew by 6% to reach \$34.3 million.

This market is expected to experience a moderate growth rate during the next four years, since no major investments have been identified up to date in this sector. The industry has been operating with old and outdated machinery and has started to substitute it for newer equipment as economic conditions have improved and imports have been facilitated. An important factor

has also been the gradual reduction in interest rates with the decrease in inflation, as well as the availability of financial resources for equipment purchases, which was practically non-existent before 1989. This trend is expected to continue in the years to come. By 1994, the total market is expected to reach \$40.1 million after and average annual growth of 4%.

**TABLE 1**  
**THE MEXICAN MARKET FOR -**  
**FORESTRY AND WOODWORKING EQUIPMENT**  
 (\$000 U.S. dollars)

	1987	1988	1989	1990	1994p
Production	8,178	7,452	7,875	7,318	7,110
+ Imports	15,901	34,760	26,065	28,521	34,667
- Exports	1,363	1,590	1,585	1,524	1,633
<b>TOTAL</b>	<b>22,716</b>	<b>40,622</b>	<b>32,355</b>	<b>34,315</b>	<b>40,144</b>

p = projected

Source: Based on import and export data by Secretaría de Comercio y Fomento Industrial and trade interviews.

Imports have played a major role in this industry, since the bulk of forestry harvesting and woodworking equipment is not manufactured in Mexico. Local production is limited to the most simple tools, including saws, hand tools, motors, edge cutters and parts and accessories. All of the larger and more sophisticated equipment is imported, including circular saws, chain saws, plywood presses, particle board manufacturing equipment, boilers and dryers for wood or cellulose, hoists, winches and cranes, planes and cutting tools for working wood, machine tools for working wood, such as sawing machines, planing, milling or cutting machines, sanding or polishing machines, drilling, splitting, defibrating machines, bark stripping machines and lathes.

The following table shows imports of forestry and woodworking equipment between 1987 and 1990.

**TABLE 2**  
**MEXICAN IMPORTS OF FORESTRY AND**  
**WOODWORKING EQUIPMENT**  
(\$000 U.S. dollars)

	1987	1988	1989	1990
<b>WOODWORKING EQUIPMENT</b>				
Sawing machines	1,358	2,661	3,288	2,597
Planing, milling or moulding	1,565	3,391	3,451	2,688
Grinding, sanding or polishing	763	1,019	1,273	1,179
Bending or assembling	318	1,136	1,120	1,176
Drilling or morticing	370	936	1,406	1,069
Splitting, slicing or paring	117	585	138	275
Combined machines	344	765	705	1,124
Other	1,622	2,872	2,941	1,719
<b>TOTAL WOODWORKING</b>	<b>6,457</b>	<b>13,365</b>	<b>14,322</b>	<b>11,827</b>
Particle board manuf.eq.	60	64	276	204
Hand cutting tools	448	1,070	1,997	2,248
Saws and blades	4,654	10,992	4,752	5,322
Boilers and driers	1,292	2,882	2,274	6,186
Hoists and cranes	2,990	6,387	2,444	2,734
<b>TOTAL</b>	<b>15,901</b>	<b>34,760</b>	<b>26,065</b>	<b>28,521</b>

Source: Data by Secretaría de Comercio y Fomento Industrial

Imports accounted for 70% of the total market in 1987 but increased their participation to 83% in 1988, when imports grew 120% as compared to 1987. In 1990, imports represented 83% of total apparent consumption, increasing from 80% in 1989. Imports will continue to dominate the market, mostly because existing demand does not justify the local production of these items at such a small scale and therefore the prices of imported equipment are more competitive than those of locally manufactured products, if available. Used machinery and equipment is also in high demand in Mexico, since state-of-the-art technology is still not frequently used and is limited to the very large firms.

The most important supplier of forestry harvesting and woodworking equipment to Mexico is the U.S., with a 58% market share. Geographical proximity plays a major role in this leadership, since transportation costs can be high. At the same time, spare parts and accessories are therefore more readily available. Also, many U.S. firms have established a presence in Mexico through local distributors, representatives or agents or through joint ventures. Italy and West Germany also have a major presence in Mexico with a 9.3% and 8.1% market share respectively. Brazil, Sweden and Japan have a smaller share of the market, while Canadian products account for one percent of total imports.



**TABLE 3**  
**CANADIAN IMPORTS AND EXPORTS WITH MEXICO**  
(\$000 Canadian dollars)

	IMPORTS FROM MEXICO			EXPORTS TO MEXICO		
	1988	1989	1990	1988	1989	1990
hand tools	6	0	14	3	6	0
hand saws	0	170	182	0	0	3
circular saw blades	0	53	27	1	3	0
chain saw blades	0	0	0	29	234	92
boilers	0	973	0	0	0	0
jacks hoists	0	0	0	17	24	71
cranes	0	0	0	70	56	0
sawing equipment	0	0	0	0	1	86
drilling equipment	0	0	0	39	161	20
other woodworking	0	0	0	152	10	100
<b>TOTAL</b>	<b>6</b>	<b>1,196</b>	<b>223</b>	<b>311</b>	<b>495</b>	<b>372</b>

Source: Statistics Canada - International Trade Division

According to official Canadian data, Canadian exports to Mexico increased 59%, from Cdn\$311,000 in 1988 to Cdn\$495,000 in 1989, but decreased again to Cdn\$372,000 in 1990. The largest categories in 1989 were saws and saw blades (48%), woodworking equipment (35%) and materials handling equipment (16%). In 1990, the most significant imports were of chain saw blades (25%), sawing equipment (23%), materials handling equipment (19%) and drilling equipment (5%). Canadian imports from Mexico were valued at Cdn\$1.2 million in 1989 and Cdn\$223,000 million in 1990, consisting mostly of hand saws and other motor driven hand tools and boilers.

#### 4. THE MEXICAN FORESTRY SECTOR

##### 4.1 RESOURCES

Mexico's forestry sector, comprising wood and wood products, accounted for 1.7% of the country's total GDP and 3% of manufacturing GDP in 1990, equivalent to Mex\$35.4 billion 1980 pesos (or roughly \$1.6 billion). During the 1981-1989 period, this sector decreased at an average annual rate of 2.5%, as compared to a 1.4% annual increase of manufacturing GDP as a whole. Although during the 1981-1986 period the forestry sector followed the general trend of manufacturing GDP, between 1987 and 1990 the latter has experienced moderate to high growth rates, while the forestry sector has shown a continuing decrease.

Mexico's total forested areas represent 143.6 million hectares, or 73% of the country's total territory. This places Mexico among the 11 countries in the world with the largest forestry resources. Approximately 12 million people live in forested areas and an estimated 300,000 live off primary forestry production.

Mexico's total forested area can be further subdivided as follows:

**TABLE 4**  
**MEXICO'S FORESTED AREAS**  
(million ha./% of total territory)

Wooded areas 38.9 ha. (19.9%)	forests 27.5 ha. (14.1%)	coniferae & latifoliate 18.7 ha. (9.6%)
		latifoliate 8.8 ha. (4.5%)
	jungles 11.4 ha. (5.8%)	high 2.1 ha. (1.1%)
		medium 9.3 ha. (4.7%)
Other forested areas: 104.7 ha. (53.4%)	shrubs 29.3 ha. (14.9%)	low jungles 17.9 ha. (9.1%)
		chaparral 7.8 ha. (3.9%)
		mesquite 3.6 ha. (1.9%)
	underbrush 56.1 ha. (28.6%)	rosetofilo 7.0 ha. (3.6%)
		microfilo 38.4 ha. (19.6%)
		crasicaule 10.7 ha. (5.4%)
	disturbed areas 17.8 ha. (9.1%)	
	hydrophilous vegetation 1.5 ha. (0.8%)	

Source: Memoria Económica 1990-1991 - CNIF

The regional distribution of forestry resources is as follows (see Map I):

**TABLE 5**  
**REGIONAL DISTRIBUTION OF FORESTED AREAS**  
 (thousands of ha.)

REGION	FORESTS	JUNGLES	SHRUBS	UNDERBRUSH	TOTAL
I	6,842		7,510	22,374	37,733
II	5,940	980	4,627	6,428	18,925
III	1,509	11	3,576	23,217	29,777
IV	3,422	578	2,091	1,350	8,218
V	2,768	320	1,553	432	7,651
VI	2,536	1,845	2,920	919	12,331
VII	1,419	7,293	4,286		18,507
VIII	2,015	244	1,815	104	5,282
IX	792	135	883	747	4,149
OTHER	239		3	527	1,041
<b>TOTAL</b>	<b>27,482</b>	<b>11,406</b>	<b>29,264</b>	<b>56,098</b>	<b>143,614</b>

Note: Regions - States

- I - Chihuahua, Sonora, Baja California Norte, Baja California Sur
- II - Durango, Sinaloa, Zacatecas
- III - San Luis Potosí, Tamaulipas, Nuevo León, Coahuila
- IV - Jalisco, Nayarit, Colima, Aguascalientes
- V - Michoacán, México, Guanajuato
- VI - Oaxaca, Veracruz, Morelos
- VII - Chiapas, Campeche, Quintana Roo, Tabasco, Yucatán
- VIII - Guerrero
- IX - Puebla, Hidalgo, Tlaxcala
- OTHER- Distrito Federal, Querétaro

Source: Memoria Económica 1990-1991

Cámara Nacional de la Industria Forestal

Forests of temperate and cold climates, covering 27.5 million ha. with a log production potential of two billion cubic meters are found (see Map II):

- 48.2% in the Western Sierra Madre
- 20.8% in the neo-volcanic sierra
- 15.6% in the Southern Sierra Madre
- 9.0% in the Eastern Sierra Madre
- 5.1% in the Sierra of Chiapas
- 1.3% in the Baja California peninsula

Forests of tropical and semitropical climates cover 11.4 million ha with a potential log production of 1.1 billion m3 and are found (see Map II):

72.5% in the Southeast  
 8.9% along the coasts of the Gulf of Mexico  
 18.6% along the Pacific litoral

#### 4.2 PRODUCTION

The exploitation of Mexico's forests is subject to a prior authorization granted by the Secretariat for Agriculture and Hydraulic Resources (Secretaría de Agricultura y Recursos Hidráulicos - SARH) for the specific exploitation of certain areas and varieties. During 1990, a total of 2,355 authorizations were granted, as compared 4,313 in 1989. The following table lists authorized volumes by species and actual production:

SPECIES	AUTHORIZED VOLUME		PRODUCTION VOLUME	
	000 m3 logs		000 m3 logs	
	1989	1990	1989	1990
Pine	10,823	6,702	7,462	6,817
Other coniferae	611	305	311	303
Oak	3,208	2,279	438	383
Other leafed	330	261	170	190
Precious	127	14	74	40
Tropical	794	161	433	369
<b>TOTAL</b>	<b>15,893</b>	<b>9,722</b>	<b>8,888</b>	<b>8,102</b>

Source: Memoria Económica 1990-1991 - CNIF

The vast majority of forestry resources, estimated at 80%, are in the hands of ejidos or community properties, which are officially assigned by the Secretariat of Agricultural Reform (Secretaría de la Reforma Agraria - SRA). The remaining 15% is held by small proprietors and the state. This structure of land holdings was mostly intended to distribute the land to a large number of families for agricultural purposes or eventually for cattle raising, both of which are basically short term activities. This has created a strong competition to forestry, which has a long term yield and requires large and long term investments. Additionally, agreements for the concession of land for the exploitation of forestry resources are only valid for one year (as opposed to 20 years before President Echeverría). This has made investment in the sector riskier and long term exploitation and reforestation more difficult. Other structural problems the local industry has to face are the high transportation costs since, due to lack of rivers, wood has to be hauled over land on trucks, mostly on small mountain roads which do not allow massive

transportation. This factor significantly increases exploitation costs and makes competition with imported products difficult.

Mexico's total production of timber products, in thousands of m3 logs, between 1985 and 1989 was as follows:

PRODUCT	1985	1986	1987	1988	1989	1990
Scantling (1)	6,082	5,508	6,137	5,840	5,807	5,487
Pulp	2,864	2,410	2,664	2,591	2,349	1,954
Posts & piles	237	173	149	164	156	139
Fuel	484	454	492	495	443	440
Sleepers	279	413	349	224	133	82
<b>TOTAL</b>	<b>9,946</b>	<b>8,958</b>	<b>9,791</b>	<b>9,314</b>	<b>8,888</b>	<b>8,102</b>

Note: (1) includes boards, packaging wood, carved wood, wood for veneer, wood waste, pieces for sawmills and veneer and other log products.

Source: Memoria Económica 1990-1991 - CNIF

Mexico's total production in tons of non-timber products was as follows between 1985 and 1989:

PRODUCT	1985	1986	1987	1988	1989	1990
Resins	43,463	30,410	44,180	43,443	36,296	32,923
Fibers	6,171	7,394	6,257	6,914	3,047	4,790
Rhizome	1,970	3,912	3,129	1,388	1,081	415
Wax	657	2,058	1,387	1,983	1,385	2,205
Gum	186	220	392	548	834	370
Other	14,587	17,055	17,859	52,512	31,445	27,613
<b>TOTAL</b>	<b>67,034</b>	<b>61,049</b>	<b>73,204</b>	<b>106,788</b>	<b>74,088</b>	<b>68,316</b>

Source: Memoria Económica 1990-1991 - CNIF

The decrease in production during the last three years is due to the longstanding and structural problems of Mexico's forestry sector described above, in addition to a lack of policy definitions by the central government, the trade liberalization policies, which have brought about a strong competition of imported wood products, and a decrease in technical services for the forestry sector.

#### 4.3 TRADE BALANCE

Total imports of materials and manufactured products increased 51% during 1989, from \$444.7 million to \$673.5 million and decreased an estimated 19% in 1990 to \$545.9. The large volume of imports is due mostly because local production has been unable to

cover demand due to the above mentioned factors. This upward trend in imports has been felt since 1982, when imports were at their all time low of \$176.7 million as a result of the economic crisis and the high import barriers imposed by the government at the time. Imports have steadily increased since then, although 1988 and 1990 showed a decrease brought about by a reduction in imports of pulp and paper waste products used in the manufacture of paper.

**TABLE 6**  
**MEXICO'S IMPORTS OF WOOD AND LUMBER PRODUCTS**  
(000 U.S. dollars)

	1986	1987	1988	1989	1990
RAW MATERIALS	37,512	26,349	52,260	57,291	105,619
Firewood & charcoal	239	185	2,408	2,635	4,229
Wood squared	905	1,462	2,382	2,607	2,735
Lumber with a primary process	36,368	24,702	47,470	52,049	98,655
MANUFACTURED WOOD	13,306	17,161	31,441	34,477	63,581
Boards	5,418	11,256	22,318	23,907	39,711
Other	7,888	5,905	9,123	10,570	23,870
MATERIALS USED IN PAPER MANUFACTURING	224,466	394,755	258,957	444,386	213,332
PAPER, CARDBOARD & THEIR MANUFACTURES	123,900	26,676	102,068	137,370	163,401
<b>TOTAL VALUE</b>	<b>399,184</b>	<b>464,941</b>	<b>444,726</b>	<b>673,524</b>	<b>545,933</b>
<b>TOTAL VOLUME</b> (000 m3)	<b>2,278.9</b>	<b>2,806.4</b>	<b>1,776.2</b>	<b>2,420.0</b>	<b>3,233.3</b>

Source: Memoria Económica 1990-1991 - CNIF

Mexico's exports of raw materials and manufactured products from wood were \$281 million in 1989 (1.3 million m3) and \$231 million (1.1 million m3) in 1990, down from an all time high of \$310 million in 1988. These were composed of manufactured wood products (55%), paper, cardboard and their products (33%), pulp and wood waste for the manufacture of paper (4%) and raw materials (8%). Mexico also exported \$1.1 million or 1.7 million kilograms of colophony in 1990.

#### 4.4 MANUFACTURE

In 1989, there were a total of 2,403 plants in the forestry sector as follows:

INDUSTRY	NBR. PLANTS	INSTALLED CAPACITY million	% used	EMPLOYMT 000	TOTAL INVESTMT million \$
sawmills	954	7.6 m3	76%	23.8	275.9
box manufacturers	1,182	118 units		8.6	14.5
impregnators	21	1.3 m3	40%	2.3	2.4
pulp and paper	73	4.5 ton	79%	34.7	1814.0
board lumber	49	1.4 m3	47%	11.4	720.2
resins	18	0.06 ton	63%	8.0	17.9
secondary workshops	106				

Source: Memoria Económica 1989-1990 - CNIF

Data for 1990 show a total of 2,321 plants and reflect the following changes:

INDUSTRY	NBR. PLANTS	INSTALLED CAPACITY million	% used	EMPLOYMT 000	TOTAL INVESTMT million \$
sawmills	978	7.8 m3	70%	24.5	329.2
box manufacturers	1,179	117 units		8.5	23.3
impregnators	20	1.2 m3	44%	2.2	43.7
pulp and paper	75	4.8 ton	80%	34.1	1863.0
board lumber	51	1.4 m3	40%	11.2	720.2
resins	18	0.042 ton	83%	5.0	10.0

Source: Memoria Económica 1990-1991 - CNIF

Twenty four new sawmill plants were installed in 1990, increasing capacity by 200,000 tons but the use of this capacity decreased from 76% to 70%. Capacity also increased for the production of pulp and paper and the utilization also slightly grew as production of the paper, paper products, printing and publishing industry increased 8.6%. In all other areas, installed capacity decreased with the general contraction of the industry, which fell 15% to 20%.

The industrial transformation of wood products has operated at an average 60% of capacity, partially due to the unavailability of raw materials, the exploitation of resources below those authorized by SARH (approximately 50%), the low use of secondary products, the inefficient use of machinery and equipment and the inadequate geographical location of many industrial plants.

The largest companies operating in Mexico in the forestry, woodworking, pulp and paper sectors include the following:

**COMPANY****PRODUCT**

Celulosa de Chihuahua	PP
Celulósicos de Chihuahua	WPP
Chapas y Triplay del Sureste	SM, PLY
Cía. de las Fábricas de Papel San Rafael	PP
Cía. Forestal Bosques de Oaxaca	ROL, SM
Cía. Forestal de Oaxaca	ROL, SM, RES
Cía. Industrial de Atenquique	PP
Corporación Emssa	PLY, SM, POL
Doddoli Hermanos	SM, BOX
Duraplay de Parral	PB, PLY
Fábricas de Papel Tuxtepec	PP
Fibracel	FIB
Floresta de Oaxaca	SM
Forestal Halcón	SM, BOX
Grupo Industrial Durango	PLY
Grupo Industrial Guadiana	SM, PB, MAN, IMP
Industrial de Valles	ROL
Industrial Forestal La Loma	SM
Industrias Resistol	PB
Madera Industrial de Quintana Roo	PLY, SM
Maderas Conglomeradas	PLY, PB
Maderas y Derivados de Cualcomán	SM, WPP
Molduradora de Casas Grandes	SM, MAN
Novopan de México	PB
Plywood Ponderosa de Durango	PLY
Plywood Ponderosa de México	SM, PLY
Ponderosa de Chihuahua	SM, BOX, WPP
Ponderosa Dimensional	BOX, MAN
Ponderosa Industrial	SM, MAN
Triplay de Chihuahua	PLY
Triplay de Oaxaca	PLY
Triplay y Tableros Enchapados de Oaxaca	PLY, SM

**Note:**

BOX-boxes and packaging	PLY-plywood
FIB-fiber boards	PP-pulp&paper
IMP-impregnation	RES-resins
MAN-manufactured products	ROL-wood in rolls
PB-particle board	SM-sawmill
WPP-wood for pulp&paper & particle board	

**5. REGULATIONS**

The Mexican forestry sector is regulated by three major frameworks:

The Mexican Constitution (Article 27)

The Forestry Law (April 1986) and

The Regulations to the Forestry Law (July 1988).

Additionally, the Rural District Development Law and the General Law of Ecological Balance and Environmental Protection influence decisions in this sector.



## 5.1 THE FORESTRY LAW

This law defines and regulates:

- The preparation and control of forestry programs;
- The administration of forestry resources;
- The integral management of forestry resources within their ecological system;
- The creation of reserves and other areas for preservation;
- The forestry related education, culture, training and research;
- The protection of forests against fire, plagues and other sanitary problems;
- The development and restauration of forestry resources and nurseries;
- The preservation, protection, certification, reproduction and distribution of seeds and vegetative material;
- The exploitation of forestry resources and technical services;
- Forestry production;
- The creation of roads and transportation infrastructure;
- The supply of raw materials to the industry;
- The proper operation of industrial plants and warehouses;
- Inspection and vigilance.

The above, within the following objectives:

- Obtaining higher yields;
- Protecting and preserving existing forestry resources;
- Maintaining high productivity levels;
- Promoting production, exports and employment in the sector;
- Promoting the industrialization of forestry resources;
- Attaining a local industry capable of satisfying local demand;
- Improving productivity of parastate companies in the sector;
- Promoting forestry development through incentives, tariffs and financing;
- Promoting the active participation of land owners in the production, industrialization, use and vigilance of existing resources;
- Promoting education, training and research to satisfy human capital and technological needs;
- Promoting a forestry culture among the population at large;
- Developing an integral rural development;
- Promoting the cooperation of private, public and state entities in the field.

The Secretariat of Agriculture and Hydraulic Resources (SARH) is the administrative body for the enforcement of the law and the signature of multilateral agreements. It is also responsible for the preparation of an inventory of existing resources (the most recent one was done in 1975) and of statistical data on the sector, as well as of policy guidelines and development programs for the sector. Basically, the SARH is in charge of regulating, developing and overseeing all aspects related with the exploitation, preservation and reforestation of forestry

resources, as well as their distribution and industrial transformation.

Any change in the use of forestry land towards agricultural, cattle raising, urban, recreational and other uses requires the preparation of a technical and socioeconomic study to evaluate the feasibility of such a change and the conformity with existing regulations. Unless the study is approved, no such changes can be made. The exploitation of forestry resources is reserved exclusively to Mexican citizen and is subject to a permit granted by SARH based on "studies for integral management". This includes permanent, temporary, eventual (building a road) exploitation, and that for scientific, construction or plantation purposes. Integral management should consider the use and exploitation of forestry resources with the highest possible productivity and without damage to the environment. No permit is granted without such approved study. Additionally, SARH grants technical services to the forestry sector, mostly through concessions granted to land owners or professionals, which are in charge of overseeing the "integral management" as stipulated in the study and of conducting the exploitation of forestry resources. These services are payable by the exploitation permit holders.

## 5.2 REGULATIONS TO THE FORESTRY LAW

These were designed to spell out and enforce the Forestry Law in its administrative and specific aspects. It includes regulations on the following items:

- Preparation of the inventory of forestry resources by SARH;
- Preparation of the Forestry Sector Program by SARH;
- Coordination agreements with state and municipal governments, parastate companies, "ejidos", communities, social and private organizations;
- The Forestry Development Fund for the promotion of financing and investment programs;
- The division of the national territory into regions, each of which is to be managed integrally based on individual studies to be prepared with the cooperation of SARH, state and municipal governments, the private and social sector, to define areas used for forestry exploitation, reserves, reforestation, roads, etc.;
- The requirements to change the use of land from forestry to other uses, including an application and a technical study with their specifications;
- National forestry reserves and areas to be used for conservation;
- The prevention of fires and responsibilities in fighting them by the federal, state, municipal governments and land owners;
- Sanitary measures to avoid and fight plagues and other illnesses in forested areas;
- The determination of closed seasons;
- The reforestation and restauration of forests by SARH;

- The exploitation of forestry resources in cold and temperate climates can be made with four methods: total cut, with father trees, with successive or protection cuts (dividing the total area and rotating the zones exploited), and with selective cuts (cutting only certain trees within the whole area). Which one is used will depend on the characteristics of the land and forest and on the integral management studies;
- The exploitation of tropical forests needs to be complemented by improvement measures such as cutting old and malformed trees, reforesting with high value species, cleaning and sanitary cuts;
- Exploitation permit holders are responsible for the regeneration of the vegetation in the exploited area;
- SARH grants all permits for the exploitation of forestry resources, change in the use of land, and collection for scientific, educational and other purposes.
- A technical study is necessary to obtain exploitation permits;
- SARH or a concessionaire of SARH will provide technical services to each region such as the preparation of the integral management studies, providing training and education in forestry related matters, supervising the application of the management studies, preparing production and distribution programs for raw materials, preparing infrastructure programs, providing information, coordinating the management studies with infrastructure requirements, production, industrial development and sector programs, and marking the trees and vegetation to be cut;
- The creation of roads, production and distribution, warehousing, as well as industrial plants require certain permits and are subject to specific regulations in order to be allowed to operate;
- The transportation of lumber and raw materials extracted from forests requires special permits to supervise the conformity with exploitation permits for the area.

In general terms, it can be said that the regulations are very limiting. Every aspect of forestry exploitation is subject to permits, studies and a myriad of requirements. This has made exploitation difficult and also costly, reason for which imported products are very competitive in Mexico.

## 6. MARKET ACCESS

As a result of Mexico's accession to GATT, the Mexican government has gradually opened the economy to international markets. Tariffs have been lowered from a maximum 100% in 1983, to 20% since December, 1988. The official price system has been totally eliminated and import permits are required on only 198 of the total 11,812 items in the Mexican Harmonized Tariff System.

The import climate for forestry and woodworking equipment improved as a result of this commercial liberalization.

Therefore, imports of equipment for this industry are subject to an ad valorem duty of maximum 20% assessed on the invoice value. In addition, a customs processing fee of 0.8% is assessed on the invoice value. A 10% value added tax (recently reduced from 15%) is then assessed on the cumulative value of both taxes in addition to the invoice value. Some manufacturers who use imported inputs for their products under a Mexican Government approved manufacturing plan may have the duty and/or VAT waived or rebated. Raw materials, intermediates and machinery for use in manufacturing or assembling products for export are generally eligible to be imported either duty free or under bond.

Formerly, in order to bid on tenders and sell to a government agency or decentralized company, foreign manufacturers required having a local resident agent and to have the foreign supplier registered and accepted by the Secretariat of Planning and Budgeting (Secretaría de Programación y Presupuesto - SPP). As of July 1991, the above requirement for prior registration with SPP has been eliminated. The new procedures now in force require the foreign supplier to have a local agent or representative and it has to be registered through his local representative as an accepted supplier with each government ministry and/or decentralized agency according to the international tender requirements under review.

International tenders financed by the World Bank or the International Development Bank are open to all member countries of these institutions. More recently, the World Bank, where its credits are involved, has required that bid documents should also include an affidavit confirming that the Canadian company is a bona fide Canadian company with an official residence in Canada and that Canada is recognized as a contributing member to the World Bank.

There are no official metric requirements applicable to imports into Mexico. However, since the metric system of units is, by law, the official standard of weights and measures in Mexico, importers will usually require metric labeling for packaged goods, although the English system is also used. Dual labeling is acceptable. Imported products should be labeled in Spanish containing the following information: name of the product, trade name and address of the manufacturer, net contents, serial number of equipment, date of manufacture, electrical specifications, precautionary information on dangerous products, instructions for use, handling and/or product conservation and mandatory standards. Mexico adheres to the International System of Units (SI). Electric power is 60 cycles with normal voltage being 110, 220 and 400. Three phase and single phase 230 volt current is also available.

Prepared by: Caroline Verut  
for the Canadian Embassy  
Mexico City, August 1990  
Updated December 1991

To call all telephone and fax numbers listed below from Canada, unless they are preceded by a different area code, dial 011-525 first, otherwise dial 011-52-(area) number.

NOTE: The information on companies not located in Mexico City was not confirmed.

**APPENDIX I:  
INDUSTRIAL CHAMBERS AND ASSOCIATIONS**

**ASOCIACION DE INDUSTRIALES FORESTALES DE DURANGO, A.C.**

**DURANGO FOREST INDUSTRIALISTS ASSOCIATION**

Independencia 135 Sur

Durango, Dg.

Phone: (181) 29-712 19-690

Fax: (181) 24-435

**ASOCIACION NACIONAL DE DISTRIBUIDORES DE TABLEROS Y LAMINADOS DE MADERA Y PLASTICO, A.C.**

**NATIONAL ASSOCIATION OF WOOD DISTRIBUTORS**

Insurgentes Sur 598 - Sótano

Col. del Valle

03100 México D.F.

Phone: 543-98-19

Fax: 543-98-19

Contact: Sr. Adolfo López  
Presidente

**ASOCIACION NACIONAL DE FABRICANTES DE TABLEROS DE MADERA**

**NATIONAL ASSOCIATION OF WOOD BOARD MANUFACTURERS**

Viaducto Miguel Alemán 277

Col. Escandón

11800 México D.F.

Phone: 516-25-45 516-25-47

Fax: 516-25-46

Contact: Lic. Gilberto González Rusek  
Presidente

**CAMARA NACIONAL DE LA INDUSTRIA FORESTAL**

**NATIONAL FORESTRY INDUSTRY CHAMBER**

Viaducto Miguel Alemán 277

Col. Escandón

11800 México D.F.

Phone: 516-25-45 al 47

Fax: 516-25-46

Contact: Lic. Armando Santiago Pineda  
Director General

**CAMARA NACIONAL DE LAS INDUSTRIAS DERIVADAS  
DE LA SILVICULTURA  
NATIONAL CHAMBER FOR SILVICULTURE RELATED INDUSTRIES  
Baja California 255  
Col. Hipódromo Condesa  
06170 México D.F.  
Phone: 584-40-44**

**CAMARA NACIONAL DE LA INDUSTRIA MADERERA Y SIMILARES  
NATIONAL CHAMBER FOR THE WOOD INDUSTRY  
Santander 15-301  
Phone: 598-67-25  
Fax: 598-69-32  
Contact: Sr. Oscar Gonzalez Cabrera  
Director General**

**UNION DE MADEREROS DE DURANGO, A.C.  
DURANGO WOODMAKERS UNION  
Fanny Anitua 1474  
Durango, Dgo.  
Phone: (181) 33-311 15-375**

**UNION DE PRODUCTORES E INDUSTRIALES  
FORESTALES DE CHIHUAHUA, A.C.  
CHIHUAHUA FORESTRY PRODUCERS AND INDUSTRIALISTS UNION  
Juárez 8  
Chihuahua, Chih.  
Phone: (14) 16-20-11 16-20-88  
Fax: (14)14-01-71**

**APPENDIX II:  
USEFUL GOVERNMENT MINISTRIES AND  
DECENTRALIZED AGENCIES**

**SECRETARIA DE AGRICULTURA Y RECURSOS HIDRAULICOS**  
Av. Insurgentes Sur 476 - Piso 13  
Col. Roma Sur  
06768 México D.F.  
Phone: 584-00-96 584-02-71  
Fax: 584-26-99

**Profr. Carlos Hank González**  
Secretario de Agricultura y Recursos Hidráulicos  
Phone: 584-00-96

**Dr. Manuel Mondragón y Kalb**  
Subsecretario Forestal  
Phone: 584-73-30

**Lic. José Andrés Casco Flores**  
Director General de Estudios del  
Sector Agropecuario y Forestal  
Phone: 523-86-47

**Ing. Jesús Cardeña Rodríguez**  
Director General de Política Forestal  
Phone: 554-56-20

**Lic. Juan Manuel Flores Athiè**  
Director General de Recursos Materiales  
y Servicios Generales  
Phone: 589-12-11

**APPENDIX III:  
POTENTIAL DISTRIBUTORS AND REPRESENTATIVES**

**CENTROMAC, S.A.**

Blvd. Avila Camacho 140  
53560 Naucalpan, Edo. de Méx.  
Phone: 394-88-93 394-56-93  
Fax: 576-41-50  
Contact:

**EUROMEX, S.A.**

Calz. de las Armas 18  
Fracc. Industrial Las Armas  
54080 Naucalpan, Edo. de Mex.  
Phone: 394-88-93 394-56-93  
Fax: 394-48-34  
Contact:

**IMPORTACION Y SERVICIO PROAL, S.A.**

Calz. Azcapotzalco La Villa 1015-B  
Col. Industrial Vallejo  
02300 México D.F.  
Phone: 587-03-91 587-06-88  
Fax: 587-54-97  
Contact: Ing. Carlos Proal  
Director General

**MEXICO VIRUTEX, S.A. DE C.V.**

Blvd. M. Avila Camacho 120-A  
53390 Naucalpan, Edo. de Mex.  
Phone: 576-03-61 358-86-60

**MOTOSIERRAS INTERNACIONALES, S.A. DE C.V.**

Fray Servando Teresa de Mier 1030  
Col. Jardín Balbuena  
15900 México D.F.  
Phone: 762-82-90 762-83-71  
Contact: Sra. Patricia Landin  
Director General

**REIMAQ, S.A. DE C.V.**

Calle 4-A No. 2152  
Col. Ferrocarriles  
Guadalajara, Jal.  
Phone: (36) 12-56-19 12-56-20  
Fax: (36) 12-42-57  
Contact:



**SIERRAS Y MAQUINARIAS, S.A. DE C.V.**

Efrén Rebolledo 41

Col. Obrera

06800 México D.F.

Phone: 761-59-28 588-93-52

Fax: 588-56-53

Contact: Ing. Arturo Puente  
Director General

**TALLERES BOLIVAR, S.A.**

Dr. Liceaga 7

Col. Doctores

06720 México D.F.

Phone: 578-34-11

Fax: 588-18-40

Contact: Sr. Edgar Rodríguez  
Director General

**TALLER M. MARTINEZ**

Alonso Capetillo 138

Col. Ampliación Sn. Pedro Xalpa

02710 Azcapotzalco, México D.F.

Phone: 556-05-66 358-83-50

Fax: 358-47-30

Contact: Sr. Martínez  
Director General

**TECNOPLAN, S.A. DE C.V.**

Río Guadalquivir 50

Col. Cuauhtémoc

06500 México D.F.

Phone: 514-18-03 511-14-88

Fax: 208-24-02

Contact: Sr. Dirk Johannsen  
Director General

**TECNICENTRO MADERERO, S.A. DE C.V.**

Venustiano Carranza 2419

Chihuahua, Chih.

Phone: (14) 12-47-78 12-97-85

Contact: Ing. Héctor O. Abbud

**APPENDIX IV:  
PRINCIPAL MEXICAN FOREST  
DEVELOPERS AND SAWMILL MANUFACTURERS**

**ASOCIACION FORESTAL VASCO DE QUIROGA**  
Cuaptitzio 128  
Uruapan, Mich.  
Phone: (452) 39-585

**CIA. SILVICOLA INDUSTRIAL S. DE R.L.**  
Apdo Postal 87  
Morelia, Mich.  
Phone: (451) 48-363 47-066

**CIA. FORESTAL DE OAXACA, S. DE R.L. DE C.V.**  
Monte Elbruz 132 - Piso 1  
Col. Lomas de Chapultepec  
11000 México D.F.  
Phone: 540-67-25 540-67-28  
Fax: 202-43-98  
Contact: C.P. Alfonso Pandal Gras  
Director General

**DURAPLAY DE PARRAL, S.A.**  
Barrio de España s-n  
Parral, Chih.  
Phone: (152) 26-194 26-295

**FLORESTA DE OAXACA, S. DE R.L. DE C.V.**  
Curidurías 313 - Int. A  
Oaxaca, Oax.  
Phone: (951) 53-178

**FORESTAL CHAPULTEPEC, S.A. DE R.L. DE C.V.**  
Av. Universidad 1507  
Chihuahua, Chih.  
Phone: (181) 19-535

**GRUPO INDUSTRIAL GUADIANA, S.A. DE C.V.**  
Carretera Panamericanan Km 959  
34000 Durango, Dgo.  
Phone: (181) 33-322  
Fax: (181) 33-525

**PONDEROSA DE CHIHUAHUA, S. DE R.L.**  
Av. Universidad 1507  
Chihuahua, Chih.  
Phone: (14) 13-15-18 13-37-84



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