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A REPORT ON

**THE VENEZUELAN MARKET FOR
CANADIAN GOODS AND SERVICES IN THE
FORESTRY SECTOR**

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**THE CONCLUSIONS CONTAINED HEREIN REPRESENT THE OPINION OF
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A: MAPS

Venezuelan Map

Venezuelan Forests Map

B. OVERVIEW OF THE VENEZUELAN FORESTRY SECTOR

1. EXECUTIVE SUMMARY

The Venezuelan forestry sector has not developed rapidly, notwithstanding the efforts made by public and private sectors, in the last thirty (30) years. As Venezuela has economic potential and as the Canadian forestry sector strength is well-known this study will examine the market potential for Canadian goods and services.

The supply of raw material for the Venezuelan forestry industry is fundamentally provided by the natural tropical forest. It has only been in the last two and a half decades (since 1969) that plantations were started as a complementary activity to the natural supply for mechanical (sawing and wood panels) and pulp, board and paper industries.

Generally speaking, the wood harvested from the Venezuelan natural tropical forest and plantations is processed locally. At the moment, the supply of tropical wood amounts to 640.000 m³(r)/year ⁽¹⁾ whereas the availability of plantation wood (Caribbean Pine) amounts to 163.040 m³(r)/year. In relative terms, 85% of the supply of round wood comes from natural forests; 15% is produced in plantations. It is expected that the supply of wood in the country will grow at a greater speed given:

¹ : (r) roundwood

the incorporation of new management units of natural productive forest; the development of new plantations of pine and eucaliptus; and finally, the incorporation of wood from existing plantations that will be passing to the commercial production phase. It is estimated that in a period of six years Venezuela will be able to supply around 1.3 million m³ from tropical forests and 6.5 million m³ of solids without bark from plantations.

The forestry development scheme of Venezuela follows the same pattern as other countries that are beginning this process. In Venezuela, the forestry sector has two subsectors: the pulp, paper and board industries that are capital intensive, adapt quickly to the requirements of the market, and have a market structure fairly concentrated. They take advantage of the profits that the external market offers and direct to it part of their production. On the other hand, there are the mechanical industries (sawmills and panel producers) that produce exclusively for the internal market; they need substantial changes in technology, organization and administrative processes. There are signs though, that some of the companies from the mechanical industries sub-sector have begun to change technology as a consequence of the devaluation process of the Venezuelan currency, which has stimulated entrepreneurs to seek other markets and new products to manufacture.

The evolution of the external market for tropical wood has created real expectation for exportation. Recently, some companies have begun to export but they still lack modern commercial technology, consumer oriented marketing and greater market intelligence. In order to participate in the external market much of the equipment and machinery will have to be changed and/or there will be a need for new industrial infrastructure. It is here where Canadian Companies have excellent opportunities.

In the short term (1-2 years) the opportunities open to Canadian Companies are to enter as suppliers of machinery, equipment and services for existing projects identified in this study. In the medium term (3-5 years), Canadian Companies with more solid knowledge of the Venezuelan Forestry Sector can participate in joint-venture Projects with local entrepreneurs and/or companies already in operation. Finally, in the long term (>5 years) Canadian Companies could participate as investors in projects related to the management of Tropical Forest lots or concessions and/or plantations.

2. STATISTICAL OVERVIEW

2.1. Venezuela at a glance

Venezuela is situated on the north coast of South America, with a territory of approximately 912,000 square kilometers. As of December 31st 1993, Venezuela had an estimated population of 20.7 million, of which around 83 per cent lived in urban areas. Venezuela has had democratically-elected governments since 1958. The Constitution of Venezuela provides for a federal state with a democratic and representative form of government and separate Legislative, Executive and Judicial Branches. The President of the Republic (who may not succeed himself) and all the members of the National Congress, State Legislatures and Municipal Councils are elected to five year terms. Rafael Caldera is the current President. He took office on February 2nd, 1994.

Below we set out certain economic indicators for Venezuela.

2.1.1. Geophysical

Ample natural resources

- oil and gas
- metals, ferrous and non-ferrous
- hydroelectric power
- arable land
- forestry
- fisheries

UNEMPLOYMENT

1991 = 4.6%

1992 = 8.0%

1993 = 12%

1994 (E) = 15.0%

Interest rates (Commercial Banks)

Loans = 63.00% (June 1994)

Deposits = 42.00% (June 1994)

Exchange rates ⁽³⁾

Bs./US\$ = 190 (June 1994)

Bs./US\$ = 84.60 (June 1993)

International Reserves (Central Bank)

(Jul 1994) US\$ 9.100 (millions)

(Feb 1994) US\$ 11.299 (millions)

(Feb 1993) US\$ 12.112 (millions)

2.2. Contribution of the Forestry Sector to the Venezuelan Economy

2.2.1. It is a source of income and employment for the rural population; around 40 thousand families live off this sector.

³ : At the end of June 1994, a currency exchange control was put into effect, with a fixed exchange rate of Bs. 170 / US \$. The government has said this will be a temporary measure after which currency will again float in a free market environment

2.2.2. It is a market for manufactured consumer goods, forestry inputs and equipment. This suggests that the Forestry Sector provides "market linkages" to stimulate growth elsewhere in the economy . Through forward and backward linkages, growth in forestry output and productivity contributes to the development of new industry and to the rise of GNP over all.

2.2.3. Given the structural characteristics of the Venezuelan Economy (with fundamental weight on the oil sector), the participation of the Forestry Sector is still not significant but it has great potential. At 1984 prices, the Forestry Sector has been participating with an annual average of 0.06% of total GNP for the past 5 years.

2.2.4. Given the increasing demand for tropical wood and tropical wood products, Venezuela has the possibility of increasing its participation in world markets. This is also true in the case of pulp and paper. With an aggressive policy of expansion, the Forestry Sector will grow at a faster pace. It will result in a major diversification of the economy, creating another permanent source of foreign currency for Venezuela.

3. THE FOREST RESOURCE

Venezuela's forestry resource base consists of:

- approximately 50 million hectares of natural forests, and,
- 510,000 hectares of plantations.

3.1. Forestry Land

Land classified as **Forestry Land** covers around 54.82% of Venezuela's total surface. In round numbers,

- Total land surface (Venezuela): 91.2 million ha.
- Forestry surface: 50.0 million ha.

This resource is not evenly distributed throughout the total territory. South of the Orinoco River, Venezuela has some 37 million hectares (74% of the total Forestry Land) while north of the Orinoco (where more than 94% of the population lives) there are 13 million hectares of Forestry Land. Almost all the Forestry Land south of the Orinoco River is public land, made up of tropical humid forests.

In the last 25 years, Venezuela has planted mainly *Pinus caribaea* and, in very small proportion, *Eucaliptus camaldulensis* with the idea of: soil and water conservation; production to satisfy pulp demand for the paper industry; and, round wood for the mills.

Today, approximately 510,000 ha. are under plantations although it has been estimated that Venezuela has potential for 19.21 million ha. that could be planted in 682 units in the 23 "Federal Entities" that form the country, principally in the states of Bolivar, Guarico, Anzoategui, Zulia, Barinas and Portuguesa.

3.2. Natural Forest Management ⁽⁴⁾

The Venezuelan natural forests have been only partially surveyed in the past 30 years. Recent estimates suggest:

<u>USE CAPACITY</u>	<u>OWNERSHIP</u>	<u>No. of ha. (million)</u>
<u>Permanent Production</u>	Public/Private	<u>17</u>
Forest Reserves	Public	12
Forest Lots	Public	2
Protected	Public/Private	3
<u>Park Lands</u>	Public	<u>13</u>
<u>Other</u>	Public/Private	<u>20</u>

⁴: The term "Forest Management" in Venezuela means that before a forestry operation can get underway, the technical features of its harvesting and reforestation plans must be detailed in a "Management Plan". The Venezuelan Forest Service (SEFORVEN) will only recognize a Management Plan prepared by a qualified forester.

Permanent Production:

Under this heading, defined by Venezuelan law, and regulations, we include the following three (3) areas: Forest Reserves, Forest Lots and Protected Areas. By Decree, Venezuela has defined the following areas as Forest Reserves and Forest Lots.

VENEZUELAN FOREST RESERVES AND FOREST LOTS

<u>RESERVES</u>	<u>ha.</u>	<u>LOTS</u>	<u>ha.</u>
Turén	116,400	San Pedro	757,400
Ticoporo	187,142	Caño Blanco (La Bombonera)	20,000
San Camilo	138,500	CVG-El Frío	65,000
Guarapiche	370,000	Río Parguaza	65,700
Caparo	174,370	Dorado-Tumeremo	78,993
Imataca	3,203,250	Fundo Paisolandia	8,100
Sipapo	1,215,500	Fundo Flamerich	19,196
El Caura	5,134,000	Hato Santa Marta	38,516
La Paragua	782,000	El Nuria	171,720
Río Tocuyo	47,640	Chivapure	120,000

Source: Servicio Forestal Venezolano (Venezuelan Forest Service), SEFORVEN.

Protected:

This refers to protection and conservation areas with limited uses (i.e.: protected zones, animal sanctuaries, tourism, research, etc.). Its chief objective is soil and water conservation. Wood production could be a by-product but is not its principal activity.

Park lands:

The Venezuelan Park System (founded in 1978) is formed by 42 National Parks and 21 Natural Monuments covering a total area of 13 million ha., around 16% of the total national territory. The protection, consolidation and management of these Parks and Monuments are the responsibility of the INSTITUTO NACIONAL DE PARQUES (INPARQUES) which reports to the Ministry of the Environment (Ministerio del Ambiente).

3.3. Plantations

Venezuela began its plantations with Pinus caribaea, north of the Orinoco River in the state of Anzoategui. In 1969 around 693 ha. were planted. Today, the public sector has planted around 86% (422,759 ha.) of the total area and the rest, around 14% (67,927 ha.) has been done by the private sector.

Although plantation forestry is not new to Venezuela, there has been few private sector participants. In order to stimulate increased interest in the private sector, a Program for government support and incentives has been proposed to the Executive in the last 5 years in order to obtain results similar to Chile's experience since 1974. The private sector is asking for new laws that would create these supports and incentives.

VENEZUELAN PRINCIPAL RESOURCE BASE (IN PLANTATIONS)
(ANZOATEGUI, MONAGAS)

Year	Planted	Plantations (Total ha.)
1989	43,002	
1990	45,521	
1991	44,860	
1992	31,884	
1993	31,786	490,686

Source: CVG-PROFORCA (State owned planting company)

Venezuela's principal plantations are located in the states of Anzoategui and Monagas. These plantations began in 1969 in Uverito (Monagas) with the objective of planting 180 millions of pine trees in 140,000 ha. in a period of 15 years. It was hoped that this would reduce the pressure on the tropical forest where trees take longer to grow. Plantations were an attractive alternate that would generate a complementary supply of logs for the sawmills and panel producers. In addition, it was an alternative supply of pulp (long fiber) needed for the production of paper (newspapers, magazines, etc.).

Today, the existing plantations in Anzoategui and Monagas are being financed not only by Public Funds but in small numbers by local and foreign investors as can be seen in the chart that

follows. Important groups (like SMURFIT-CARTON DE VENEZUELA, C.A., VENEPAL/STONE CONTAINER, EMPRESAS DELFINO and, others) have new programs.

YEAR	UVERITO	CHAGUARAMAS	COLORADITO	LOS HACHOS	CENTELLA
1969	693	-	-	-	-
1970	1,283	-	-	-	-
1971	3,135	-	-	-	-
1972	4,141	-	-	-	-
1973	9,777	2,036	-	-	511
1974	4,026	5,883	-	-	250
1975	5,778	2,451	-	-	335
1976	3,297	3,467	-	-	298
1977	-	3,491	5,700	-	500
1978	4,536	3,751	4,475	-	817
1979	3,886	3,487	3,637	-	576
1980	5,716	4,579	5,099	-	995
1981	4,841	5,043	5,136	-	1,043
1982	6,750	3,710	3,443	-	-
1983	5,992	2,492	-	-	-
1984	8,315	500	-	-	-
1985	7,926	7,973	-	-	-
1986	9,500	7,000	9,000	1,000	3,000
1987	7,600	10,000	9,500	2,538	-
1988	8,665	10,317	10,474	7,600	-
1989	9,605	8,823	8,678	7,396	-
1990	8,410	10,045	10,368	8,016	-
1991	10,108	8,505	10,193	8,054	-
1992	-	7,318	7,058	13,908	-
1993	-	8,161	4,620	15,535	-
TOTAL Structure %	134,014 27%	119,032 24%	97,381 20%	64,047 13%	8,285 2%

SUBTOTAL ha.	TOTAL %
693	100
1,283	100
3,185	100
4,141	100
12,324	100
10,159	95
8,564	92
7,062	88
9,691	63
13,579	86
11,586	88
16,349	92
16,063	93
13,903	96
8,484	65
8,815	95
15,899	76
29,500	86
29,638	84
37,056	100
34,502	80
36,869	83
36,860	82
28,284	89
28,316	89
422,759 86%	86%

YEAR	GUAYAMURE (*)	IMATAACA	SUBTOTAL ha.	TOTAL %
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	613	-	613	5
1975	770	-	770	8
1976	1,000	-	1,000	12
1977	5,650	-	5,650	37
1978	2,238	-	2,238	14
1979	1,536	-	1,536	12
1980	1,390	-	1,390	8
1981	1,254	-	1,254	7
1982	618	-	618	4
1983	4,600	-	4,600	35
1984	500	-	500	5
1985	5,000	-	5,000	24
1986	5,000	-	5,000	14
1987	5,500	-	5,500	16
1988	-	-	-	-
1989	6,000	2,500	8,500	20
1990	2,188	6,500	7,688	17
1991	600	7,400	8,000	18
1992	1,500	2,100	3,600	11
1993	1,320	2,150	3,470	11
TOTAL Structure %	47,277 10%	20,650 4%	67,927 14%	14%

TOTAL PLANTATION (ha.)	TOTAL PLANTATION (%)
693	100
1,283	100
3,135	100
4,141	100
12,324	100
10,772	100
9,334	100
8,062	100
15,341	100
15,817	100
13,122	100
17,739	100
17,317	100
14,521	100
13,084	100
9,315	100
20,899	100
34,500	100
35,138	100
37,056	100
43,002	100
44,557	100
44,860	100
31,884	100
31,786	100
490,686 100%	100

VENEZUELA - PLANTATIONS (99% PINE + 1% EUCALIPTUS)
(States of ANZOATEGUI and MONAGAS)

VENEZUELA - PLANTATIONS (99% PINE + 1% EUCALIPTUS)
(States of ANZOATEGUI and MONAGAS) (Cont.)

SOURCE: CVG- PROFORCA, SEFORVEN, CALCULATIONS BY RODOLFO
RIVERO & ASOCIADOS, C.A.

SOURCE: CVG- PROFORCA, SEFORVEN, CALCULATIONS BY RODOLFO
RIVERO & ASOCIADOS, C.A.

NOTE: (*) MIXED COMPANY (PRIVATE + PUBLIC)

4. CURRENT FORESTRY LEGISLATION

Given the fact that the natural forests of Venezuela and the main plantations are publicly owned (>75%), their uses are regulated by different laws and by-laws that establish the way in which private entrepreneurs can participate in managing and/or have access to the resource. The Venezuelan Forest Service (SEFORVEN), which in turn is part of the Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR), is the agency in charge of the management of Forest Reserves and other productive lots, including the supervision and authorization of plantations. At the government level, in the specific case of plantations, there are two key institutions: Compañía Nacional de Reforestación (CONARE) and CVG-PROFORCA. Both are described in Annex II of this study.

The main laws and by-laws that regulate current forestry activities in Venezuela, are the following:

PRINCIPAL LAWS AND BYLAWS RELATED TO THE VENEZUELAN FORESTRY SECTOR (*)

TITLE	DATE LAW PASSED
Ley Forestal de Suelos y Aguas (Soil and Water Forestry Law)	Jan. 1966 Gaceta Oficial No. 997 and 1.004
Ley Orgánica del Ambiente (Instrumental Law of the Environment)	Jan. 1976 Gaceta Oficial No. 31.004
Reglamento de la Ley Forestal de Suelos y Aguas (Soil and Water Forestry Bylaw)	April 1977 Gaceta Oficial No. 2.022
Ley Penal del Ambiente (Environment Penalty Law)	April 1992 Gaceta Oficial No. 4358 ext.
Decreto No. 2213, mediante el cual se dicta el Reglamento Parcial de la Ley Orgánica del Ambiente sobre estudios de Impacto Ambiental (Decree No. 2213 Partial Bylaw of the Instrumental Law of the Environment in relation to Environment Impact Studies)	April 1992 Gaceta Oficial No. 4418 ext.
Normas sobre Plantaciones Forestales, Comerciales y de Uso Múltiple (Norms for Forestry Plantations for Commercial and/or Multiple Use)	March 1988 Gaceta Oficial No. 33.922
Normas que establecen lineamientos para el financiamiento del desarrollo forestal (Norms with reference to the financing of forestry development)	January 1988 Gaceta Oficial No. 34.148
Decreto No. 2214, mediante el cual se dictan las Normas para la Administración de Actividades Forestales, en reservas forestales, lotes boscosos, áreas boscosas bajo protección y áreas boscosas en terrenos de propiedad privada destinadas a la producción forestal permanente. (Decree No. 2214, in which the Government issues the Norms concerning the administration of activities in forest reserves, lots, forest areas under protection and forest areas in private lands which are used for permanent forestry production)	April 1992 Gaceta Oficial No. 4418 ext.

(*) The current environment legal norms in Venezuela are many. In order to better understand them, we recommend consulting the "Índice de la legislación ambiental vigente" ("Index of the Current Environmental Legislation" December 31st, 1993) edited by the Escritorio Jurídico Ortega, Gabaldón & Asociados.

Legal framework that regulates Venezuelan forest activities:

4.1. Natural Forests

The actions concerning "natural forests" are spelled out in the laws and bylaws as a consequence of the relative importance that natural forests have on total forest development. The majority of the laws for this sector are chiefly directed to protecting the environment. They are of a regulatory nature more than growth oriented.

Depending on the legal status of the region or zone where the resource is located (i.e.: Forest Reserve, Forest Lot, exploitation of private agricultural land, etc.) there would be a need to present a Management Plan (Concession in Forest Reserve) in order to sign a long-term contract or to make a petition for an Annual Permit for forest exploitation in agricultural areas.

4.2. Plantations

Plantations are considered basically under bylaws. They have not yet received the necessary "legal push" for sustained growth.

Given the Country's natural endowment (appropriate and sufficient lands, long periods of sun light, water, etc.), there is a lack of strong participation by the private sector in plantation development. It is argued that the existing laws and bylaws are not enough and should be complemented with others (similar to those of Chile, Brazil and Colombia) to assure the necessary "legal security" and incentives to foster private investment.

5. FOREST INDUSTRY

Although the Venezuelan forest industry is small in relation to other countries in similar stages of development in the Western Hemisphere, it is diversified. The main factories, especially in the pulp and paper sectors, have been or are in the process of being expanded and/or modernized in order to participate more actively in the export market.

5.1. Raw material

Consumption of raw materials for sawmills and wood-based panels have been increasing at an average rate of 10%/year in the past five (5) years. For these two industries consumption of raw material averaged 664,203 m³/year in the 1989-1993 period. Pulp consumption averaged 272.660 MT/year for the same period.

Roundwood consumed by local industry since 1989 is illustrated by the following figures:

VENEZUELA
AGROFORESTAL SUPPLY OF ROUNDWOOD
PERIOD 1989-1993

- M3(R) -

YEAR	NATURAL	TROPICAL	FOREST	PLANTATIONS (PINE)	TOTAL LOCAL SUPPLY
	CONCESSION WITH MANAGEMENT PLAN	ANNUAL PERMITS	TOTAL TFS		
1989	195,061	315,608	510,669	32,411	543,080
1990	230,413	281,263	511,676	60,274	571,950
1991	200,384	319,968	520,353	117,769	638,121
1992	249,215	379,744	628,959	135,867	764,826
1993(e)	261,000	379,000	640,000	163,040	803,040
Total 5yr.	1,136,073	1,675,583	2,811,656	509,361	3,321,017
%	40%	60%	100%	15%	100%
STRUCTURE	////////////////	////////////////	85%		

Source: SEFORVEN/CVG-PROFORCA/CONARE/ASOIMBOSQUES/OWN CALCULATIONS

5.2. Sawmilling

Although sawmilling is declining in importance (giving way to an increase in panel production), we forecast a future increase in demand for machinery and other goods and services for this industry.

The Venezuelan sawmilling industry is characterized by a very large number of small units with poor productivity and low conversion yields. Many of them are still obtaining raw material from annual permits. As entrepreneurs are changing their raw material source (i.e.: concessions) this will trigger additional investments in order to allow participation in long-run Programs (i.e.: concessions).

As of 1993, there were 335 sawmills registered with SEFORVEN:

<u>Lumber Production (m³/year)</u>	<u>% of sawmills</u>
0 - 4999	92%
5000 - 6999	4%
7000 - 7999	0
8000 or more	4%
	<hr/>
	100%

NUMBER OF PLANTS BY PRODUCTION TYPE

LOCATION	SAWMILLS	PLYWOOD PANELS	CHIPWOOD PANELS
Distrito Federal	4	-	-
Anzoategui	10	-	1
Apure	3	-	-
Aragua	17	3	2
Barinas	29	-	-
Bolivar	60	2	-
Carabobo	14	4	1
Cojedes	7	-	1
Falcón	6	-	-
Guárico	14	1	1
Lara	9	-	-
Mérida	5	-	-
Miranda	33	4	5
Monagas	20	-	-
Portuguesa	23	2	-
Sucre	4	-	-
Táchira	13	1	-
Trujillo	3	-	-
Yaracuy	11	-	-
Zulia	44	1	-
Amazonas	2	-	-
Delta Amacuro	10	-	-
TOTAL	335	18	11

General characteristics of Venezuela's sawmill industry:

- a) Characteristics of the sawmill yard.
- b) Availability of installations or equipment for drying and treating wood.
- c) Sawing lines, type of sawing machinery, degree of mechanization and efficiency.

The general situation is described in the following table:

CHARACTERISTICS OF THE VENEZUELAN SAWMILLS

STATE	YARDS	INSTALLATIONS FOR DRYING AND/OR TREATING WOOD	COMMENTS ABOUT THE PRODUCTION LINES
Distrito Federal	None	None	Generally 1 sawmill line, sawing diameter 1,000 to 1,800 mm
Anzoategui	Small	Available	1 to 3 lines
Apure	Badly drained	None	Low productivity
Aragua	Normal	With drying plant	Good productivity
Barinas	Big	With drying plant	Variable productivity; DANKAERT saws
Bolivar	Big	With drying plant	1-3 lines; BRENTA saws
Carabobo	Small	None	1 line
Cojedes	Big	With drying installations (TENDAL)	Saws from 1,000 mm to 1,400 mm
Falcon	Big	None	COMERCIO and PRINMIELTINI saws

Guarico	Big	None	1-3 lines; saws from 1,000 to 1,250 mm
Lara	Small	With drying installations	DANKAERT, BRENTA and ARMENTIAN saws
Merida	Big	One has installations for treating wood	1 line; DANKAERT, BRENTA, CINCINATTI saws
Miranda	Small and Big	No installations for treating wood	1-3 lines; DANKAERT saws
Monagas	Big	No installations for treating wood	1-3 lines
Portuguesa	Big	With drying installations	1 line; saws from 1,200 to 1,800 mm
Sucre	Medium	None	1-2 lines; saws 1,400 to 1,600 mm
Trujillo	Big	None	1 line
Yaracuy	Small	None	1 line; saws 1,200 to 1,400 mm
Zulia	Big	None	1-2 lines
Delta Amacuro	Small	With drying installations	1 line; saws from 1,200 to 1,500 mm
Amazonas	Big	None	1 line

The total processing capacity is around 900,000 m³(r)/year. Much of the machinery used, especially in small plants, is 25 - 40 years old. Generally, the plants do not have installation for drying.

Given the fact that Venezuela is becoming more competitive in the world market due to the devaluation of its currency, modernization processes may be triggered in the sawmilling industry. Some projects are already underway. They will necessarily have to include new sawmills, material handling equipment, dryers, dust collectors, chippers, etc.

5.3. Wood Panels

The Venezuelan wood panel production facilities produce Plywood, Blockboard, Particleboard and Fiberboard (from sugarcane and others). There have been some initiatives for establishing an MDF Plant in the country but up to now no economic group has taken the decision to invest.

Plywood panels have been produced in Venezuela since 1953. Today the production capacity is around 139,000 m³/year in 18 plants. The total production of plywood panels for 1992 was around 125,000 m³.

In Venezuela, particleboard and fiberboard production is done in 11 plants. The aggregate production capacity of these plants amounts to 348,050 m³/year. Three (3) of these plants are closed at the present time. One of the plants in production works with sugarcane fiber as raw material. The present production of particleboard and fiberboard is around 121,000 m³/year, which means that the country is using 35-40% of its production capacity. Imports of fiberboard, especially MDF, have recently entered the Venezuelan market in competition with local production.

5.4. Pulp and Paper industry

The domestic Pulp and Paper industry began around 40 years ago and initially catered to the internal market. As in other countries of South America it has become one of the most dynamic industries of the country/industrial sector. In 1993, Venezuela produced 111,916 MT of Pulp (Chemical and thermo-chemical short fiber) from sugar cane; 239 MT of pulp (chemical-long fiber) was also produced. Today the industry is formed by 13 companies (see ANNEX III).

PRODUCTS MANUFACTURED BY THE PAPER INDUSTRY IN VENEZUELA

I. TISSUE PAPER

1. Sanitary
2. Napkins
3. Towels
4. Facial

II. PAPERS AND CARDBOARDS FOR PRINTING AND WRITING

1. Bond in different weights and colors
2. Boards of different gauges and colors
3. Multigraph, (stencil)
4. Copy
5. Security for checks
6. Board for cups
7. Base for covering
8. Base for autocopying
9. Register
10. For books
11. Base to carbonize
12. Photocopy
13. Serigraphy
14. With water mark

III. PACKING PAPER

1. M.G. Natural and white
2. M.F. Natural and white
3. M.F. and M.G. colors
4. Multi-sheet and packing paper
5. Asphalted
6. Paraffin

IV. INDUSTRIAL CARDBOARDS AND PASTEBOARDS

1. For corrugated lids (Liner)
2. Medium for corrugation (Medium)
3. Grey board for rigid boxes and other uses
4. Board for pliable cases
5. White board 80
6. White solid sulphate
7. White periodic verso board
8. Special boards

V. CORRUGATED BOARD

1. Boxes in a wide range of different types
2. Board dividers
3. Packing for agricultural and industrial products
4. Nucleous

VI. PACKING PRODUCTS

1. Bags of different bottoms with and without printing
2. Bags with handles
3. Multi-sheet sacks with different bottoms and opening
4. Glued paper

VII. COVERED PAPERS

1. For printing in general and for graphic arts
2. For laminations
3. Litho, Glase, Mat, Grani, Web offset, anti-grease
4. Bond super rolled
5. Special papers

STATUS OF THE VENEZUELAN PULP AND PAPER INDUSTRY (1993)

DESCRIPTION			
1)	Number of mills	38	
2)	Total investment (at Bs. 170/US\$)	283,357,502	US\$
3)	Production capacity of paper and boards	833,800	MT
4)	Exports of paper and boards	58,501	MT
5)	Imports of paper and boards	166,544	MT
6)	Pulp production	112,155	MT
7)	Recolection of local recyclible fibers	264,276	MT
8)	Import of recyclible fibers	174,605	MT
9)	Headcount (persons)	7,368	
10)	Annual payroll (US\$)	23,897,715	US\$

SOURCE: Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)

VENEZUELA

USE OF INSTALLED CAPACITY FOR PULP PRODUCTION (1993)

TYPE OF PULP	PRESENT CAPACITY	PRODUCTION (1993) (MT)	% USE OF INSTALLED CAPACITY
CHEMICAL/TMC	24,000 MT/year	20,152	84%
CHEMICAL/short fiber	100,000 MT/year	91,764	51%
CHEMICAL/long fiber	30,000 MT/year	239	1%

SOURCE: Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)

VENEZUELA

TOTAL SUPPLY OF PULP (1993)

TYPE OF PULP	LOCAL PRODUCTION (MT)	IMPORTS (MT)	TOTAL SUPPLY (MT)
CHEMICAL/TMC	20,152	5,802	25,954
CHEMICAL/short fiber	91,764	50,552	142,316
CHEMICAL/long fiber	239	123,019	123,258
TOTAL	112,155	179,373	291,528
STRUCTURE (%)	38%	62%	100%

SOURCE: Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)

The per-capita domestic consumption of pulp and paper products in Venezuela was around 34.58 kgs:

PULP AND PAPER INDUSTRY
ESTIMATED CONSUMPTION IN 1993
(MT)

ITEM	PRODUCTION	IMPORTS	EXPORTS	ESTIMATED
CONSUMPTION				
- Newsprints	-	103,368	-	103,368
- Other writing and printing papers	275,005	8,195	(16,063)	267,137
- Tissues and other absorbing papers	157,566	25	(28,782)	128,809
- Wrapping and packing papers and boards	166,441	21,050	(13,536)	173,955
- Cigarette papers	-	1,313	-	1,313
- Others	8,784	32,594	(120)	41,258
TOTAL	607,796	166,545	(58,501)	715,840

SOURCE: Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)

VENEZUELA

STRUCTURE OF THE ESTIMATED CONSUMPTION OF FINAL PRODUCTS (1993)

-%-

ITEM	PRODUCTION %	IMPORTS %	EXPORTS %	ESTIMATED CONSUMPTION
- Newsprint	-	100	-	100
- Other writing and printing paper	103	3	(6)	100
- Tissue and other absorbing papers	122	-	(22)	100
- Wrapping and packaging papers and boards	96	12	(8)	100
- Cigarette paper	-	100	-	100
- Others	21	79	-	100
TOTAL	85	23	(8)	100

SOURCE:

- Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)
- Calculations of RODOLFO RIVERO & ASOCIADOS, C.A. (Economic Consultants)

5.5. Industrial Wood Consumption

As we have stated before, the supply of roundwood for the forest industries comes from Natural Forests and from Plantations. In the last five (5) years industrial wood consumption came mainly from natural forest logs. Pine from plantations are used as a complement.

INDUSTRIAL WOOD CONSUMPTION

('000 m³ (r))

<u>YEAR</u>	<u>NATURAL FOREST SPECIES</u>	<u>PINE</u>	<u>TOTAL</u>
1989	511	32	543
1990	512	60	572
1991	520	118	638
1992	629	136	765
1993 (e)	640	163	803

(r) roundwood

(e) estimate

With rare exceptions, the local forest industries are the end users of the Venezuelan wood. Around 49% of the wood is used for sawmills and 51% for wood based panels. In 1992, the export of wood products reached only 2,440 m³.

5.6. Forest Industry Output

Sawmills and panel producers are the consumers of the Venezuelan industrial wood production, with tropical species constituting the bulk of the input. Over the last five years sawmilling output has shown the following trends:

VENEZUELA
ESTIMATES OF SAWMILLING PRODUCTION
('000 m³/year of Lumber)

<u>YEAR</u>	<u>NATURAL FOREST SPECIES</u>	<u>PINE</u>	<u>TOTAL</u>
1989	334	21	355
1990	160	19	179
1991	175	40	215
1992	206	45	251
1993	N.A.	N.A.	N.A.

N.A.: Data not available

Tropical species make the greatest contribution but plantation pine has been increasing and will be still greater in subsequent years.

Wood panels also represent an important segment of the Venezuelan forest industry.

WOOD-based Panel Production

('000 m³/year)

<u>YEAR</u>	<u>PLYWOOD PANELS</u>	<u>OTHER PANELS (*)</u>
1989	108	47
1990	112	52
1991	115	121
1992	125	130
1993	N.A.	N.A.

N.A.: Data not available

(*) : Particleboard (woodchip) and fiberboard (sugarcane)

In the last five (5) years Venezuela's pulp, paper and board industry has directed its efforts to greater participation in local pulp production and to increasing export of final products.

VENEZUELA - PULP PRODUCTION

(MT)

<u>YEAR</u>	<u>MECHANICAL PULP</u>	<u>CHEMICAL PULP</u>
1989	6,814	81,264
1990	-0-	95,907
1991	-0-	87,806
1992	-0-	102,393
1993	-0-	112,155

5.7. Forest Products Trade

Up to now, there has been only small volumes of exports of lumber, wood manufacture, plywood and logs which, in 1992, amounted to 2.440 m³ for a total value of US\$ 2,010,397. Exports were principally made to Colombia, Italy, USA and the Caribbean.

In the case of pulp and paper, the principal items exported in the last five years were:

PULP, PAPER AND BOARD INDUSTRY

EXPORTS 1989-1993

(MT)

ITEM	Y E A R				
	1989	1990	1991	1992	1993
Writing and Printing P.	1,169	4,824	2,721	1,531	4,812
Kraft Liner	252	99	0	3,088	4,727
Med. Corrug.	203	961	4,913	13,778	6,524
Tissue	23,320	43,607	25,459	28,017	28,782
Wrapping and packing papers	205	1,362	627	694	748
Boards	2,462	5,985	6,036	8,994	12,788
Others	0	0	0	460	120
TOTAL	27,611	56,838	39,756	56,562	58,501

SOURCE:

- Servicio Forestal Venezolano (Venezuelan Forest Service), SEFORVEN
- Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board Producers) (APROPACA)

6. FUTURE DEVELOPMENT TRENDS

In Venezuela, at this moment, to make economic projections of the forestry sector for the short and medium term is not an easy task due to: macroeconomic disequilibrium in the principal economic variables; absence of information about a long-term economic plan; uncertainty in Public Finances associated with structural problems of Public Revenues (oil prices have recently increased but are unstable); crisis in the Financial System; and, contradictory signals in the area of Public Policy. Any estimation made at this stage should be very conservative in nature, but positive, given the country's natural resources.

For these projections, we assure growth in industrial exploitation (given the end products) plus availability of raw materials from the existing concessions, new concessions, annual permits and the now maturing plantations.

6.1. Availability of raw material

The natural forest currently provides the bulk of the supply of wood that the forest industry requires. Nevertheless, actual and new plantations will (in the next six (6) years) change the present picture by increasing the wood supply for industrial purposes.

It is estimated that by the year 2000, there could be a supply of 1,284,864 m³(r) of natural tropical wood and around 6,500,000 m³ of solid volume of wood without bark from plantations. By that year the total industrial supply could depend about 13% from the natural tropical forest and around 87% from plantations.

6.2. Forest industry development

Estimated principal investments by local and foreign companies:

a) Lumber manufacturing: The expansion of local supply will be dictated by new firms entering the market (with investments already on the way). These will increase production capacity by about 60,000 m³/year. They will locate their plants principally in Anzoategui, Monagas, Bolivar and Barinas States.

b) Wood panels: There are groups interested in a MDF plant to be located near the plantation areas of CVG-PROFORCA. Other types of wood panels are planned by foreign investors (i.e.: Louisiana Pacific).

c) Pulp and Paper: Local companies (individually or with joint-venture projects) have already been very active in this sector, as can be seen in the following table:

COMPANY	PROJECT	COMMENT
1) Smurfit/ CARTON DE VENEZUELA	<p>a) Invested US\$40 million in a Plant in Valencia to increase production capacity for boards.</p> <p>b) Invested US\$100 million in San Felipe in MOCARPEL. The modernization process consists in the installation of two pulp plants, one for short-fiber (eucaliptus) and one for long-fiber (pine). It increased production capacity from 91 to 115 thousand tons of paper and boards.</p> <p>c) Plans to invest in the "Orinoco Project" in 1995 around US\$ 250 million. It will use some 500,000 MT/year of wood (Pine) from CVG-PROFORCA that will be processed in a plant and pulp mill for the production of corrugated paper.</p>	<p>- a KOBAYASHI ultraformer, increasing capacity from 50 to 85 thousand tons.</p> <p>- beginning of the vertical integration of SMURFIT in the Forest Sector</p> <p>- the initial capacity will be 150 thousand MT. and a second phase to bring it to 250 thousand MT. For export to the US, Caribbean and Europe</p>
2) Papeles Maracay	Start-up phase of the Pulp mill (BCTMP)	- The cost is US\$ 1.8 million
3) Papeles Venezolanos	Finished installation of Pulp Plant (BCTMP)	- Investment figures not available
4) MANPA	Expansion of complementary plants	Use of more capacity for recycable raw material. Investment figures not available
5) VENEPAL	Modification and expansion of board productions. Expansion of its plant for processing recycable fiber up to 400 MT	- Investment of aprox. US\$ 17 million

6) VENESTONE (Joint Venture: Venepal (51%) Stone Container Corporation (49%))	Installation of a Processing Plant (Wood Chips) using Pine as raw material. Initially it will begin producing 600,000 MT of wood chips and later will transform into a Pulp Plant	- The investment for the first phase of US\$ 60 million. Exports for approximately US\$ 30 millions (1994-1995)
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6.3. MARKETS

In the past, the bulk of the raw material generated in Venezuela was processed locally. This situation could change, depending on the outcome of the present economic policies that the government may implement. If economic disequilibrium persists, many of the projected investments will be put "on hold" and most of the raw material will have to be exported with a minimum value-added. If on the other hand, economic stability is obtained and projected investments continue in the forest sector, Venezuela will be one of the most active markets in Latin America for goods and services in the forestry sector.

6.4. Investment requirements (Estimation to year 2000)

The following investment requirements should be taken as minimum requirements, taking into account present investment plans of local and foreign companies (investments of current Projects) plus estimations of increase or modifications in present industrial capacity.

Investment Requirements in Sawmilling

Period	Investment per m ³ /year (US\$)	Capacity increase/modifiation ('000 m ³ /yr)	Total investment in industry ('000 US\$)
1994-1996	180	60	10,800.00
1997-2000	180	1,500	270,000.00

Investment Requirements in Wood Panel Industry

Period	Investment per m ³ /year (US\$)	Capacity increase/modifiation ('000 m ³ /yr)	Total investment in industry ('000 US\$)
1994-1996	700	50	35,000.00
1997-2000	700	120	84,000.00

Investment requirements in the Pulp and Paper Industry

With the data available for this study, the Projects that may be put into effect in the next 2/3 years amount to around US\$ 400 million.

6.5. Finance Requirements

The Venezuelan Financial Sector is, at the present time, in serious difficulties with more than 50% of its institutions now state-owned. It has been estimated that this sector will need four (4) years or more to "bounce-back". Today all the financial institutions are under strict government control and supervision. This situation naturally limits the import of capital goods for projects and makes long-term investment decisions difficult.

Some financial limitations can be marginalized if equipment and/or services suppliers are willing to participate in project financing.

This can be done through:

- i) participation in a local company as share-holder (joint-venture): the machinery and/or service exported to Venezuela could be used as capital investment.
- ii) offering credit lines for foreign exchange requirements that could be reimbursed through some export mechanism.
- iii) utilization of existing Canadian Government institutions that could offer credit lines and/or other services in order to promote increased exports.
- iv) A combination of (i) to (iii).

**C: COMMERCIAL POTENTIAL FOR CANADIAN GOODS AND SERVICES
IN THE FORESTRY SUBSECTORS OF VENEZUELA**

7. SILVICULTURE-Roundwood

7.1. Natural forests

Both protected and natural Venezuelan forests fall primarily under state ownership:

- The 50 million ha. of Forest Land are found in the following Venezuelan Regions:

<u>REGION</u>	<u>%</u>
Andes	8
Zulia	7
Centro Occidente	6
Centro	2
Capital	1
Llanos	2
Nor Oriental	3
Guayana	71
Insular	--
	<hr/>
	100%

- The management of these forests is primarily in the hands of medium-sized local companies. Large international forestry corporations have not participated actively in the management of Venezuelan natural forests. The exploitation of forests through annual permits is generally done by small scale sawmills with primitive technology.

7.2. Plantations

In 1961, Pinus caribaea var. hondurensis was introduced in the State of Monagas (Venezuela), through an agreement between the Dirección de Recursos Naturales Renovables of the Ministerio de Agricultura y Cría (MAC) and the Forest Service of the Island of Trinidad. A small number of trees were brought and planted near Maturin (Monagas). Later, in 1965, the MAC established an experimental lot of 0.5 ha. in Cachipo (Monagas), approximately 40 kilometers northeast of Maturin. Once the first positive results were obtained, the MAC began (1966) a Plantation Program with an initial planting of 15 ha. The Program continued up to 1971 with 895 ha. planted.

In 1966 the Corporación Venezolana de Guayana (CVG) located experimental lots of P.caribaea near Uracoa (Anzoategui); and, in 1969, began in Uverito (Anzoategui) a large scale plantation program of the same species. Uverito today has more than 134,000 ha. planted and the total Plantation Program of CVG comprises more than 422,000 ha.

The majority of the plantations are state-owned and have been cultivated through:

- a) An improved process of selecting and obtaining the appropriate seeds and establishing modern nurseries.

- b) Correct soil preparation for plantation.
- c) Improved technology, appropriate equipment and trained personnel.
- d) Better maintenance of areas under plantation.
- e) Protection of areas under plantation.
- f) Monitoring of forest growth, mapping and management through modern information systems.

7.3. Possible areas of interest for Canadian suppliers of goods and services in silviculture

Venezuela has had access to goods and services from all over the world. Despite present currency exchange controls, it is expected that the Forestry Industry (especially state-owned plantations and companies with viable economic projects), will have access to the necessary foreign currency to import goods and services. The specific areas of interest to Canadian suppliers are:

GOODS

- For National Parks:

- a) Research: Laboratories and equipment.
- b) Operation: Instruments and equipment.
- c) Protection: Equipment.
- d) Wild life: Laboratories and field equipment.

- For Plantations:

- a) Plant breeding and nursery laboratories, instruments, machinery and equipment.
- b) Planting equipment and tools.
- c) Thinning and pruning tools.

SERVICES

- For National Parks:

- a) Consultancy: design, organization, management.
- b) Consultancy: wild life management. Training programs.

- For plantations:

- a) Nursery operation and management.
- b) Plantation technology.
- c) Mechanization of operations.
- d) Control systems.

8. FOREST HARVESTING

There are different technologies applied to Forest Harvesting according to the type of forest. In the case of a natural forest, the operator works through selective cutting, reduced volumes per ha. and high volume logs that in many cases

have to be transported over a long distance. In the case of plantations there is more productivity in harvesting and greater volume per ha. (per specie) as clear cutting is generally used. On average the logs are medium-to-small-size (length = 2,5 meters; diameter = 15-25 cm).

With the present structure of forest production, the main market for suppliers of goods and services is in the system used for harvesting in the natural forest where the predominant logging technique uses skidders. Also road construction equipment, log loading and unloading equipment, and transportation equipment (trucks) used. In the medium term (2 to 5 years) there will be a shift to harvesting plantations that will increase the demand for harvesting equipment.

8.1. Possible areas of interest for Canadian suppliers of goods and services in forest harvesting

GOODS

- Felling and logging equipment and tools.
- Road construction equipment.
- Log loading, unloading and yarding equipment.

SERVICES

- Consultancy: Computer software for harvest control and economic and technical evaluation.

9. KILN DRYING

Lumber must be dried before it can be manufactured into a finished product especially if the final product is destined for export markets. In Venezuela, as in most countries, two methods used are: air drying and kiln drying. In air drying, lumber is merely stacked in the open (or in sheds) to allow natural air circulation. This method is slow, offers no control over temperature/relative humidity and often causes cracking and distortion in the lumber. Furthermore, particularly in areas where the relative humidity is high (zones near the Tropical Humid Forest), wood cannot be brought to a low enough moisture content by air drying alone.

Kiln drying offers a means to control temperature and relative humidity in drying.

9.1. Possible areas of interest for Canadian suppliers of goods and services in kiln drying.

In the next five years lumber output will continue to expand with changes in the product mix: pine production will increase notably in total supply and there will be an increasing demand for kiln drying, especially if the end product is destined for export markets. In this area Canadian suppliers have market potential for:

GOODS

- Kiln chambers and equipment
- Kiln instruments
- Kiln control systems (humidity, temperature, etc.)
- Kiln related equipments and parts.

SERVICES

- Consultancy: Technical planning
- Market assistance in exports
- Personnel training

10. CHIPPING EQUIPMENT

Chippers are used in Venezuela to process plant residuals; to produce chips for export; or, to obtain raw material for certain interrelated and/or complementary industries.

10.1 Possible areas of interest for Canadian suppliers of goods in chipping operations

There are present opportunities for:

GOODS

- Portable chippers
- Stationary sawmill chippers
- Stationary pulp mill chippers
- Large stationary chippers for export operations
- Chipper accessories

SERVICES

- Consultancy: chip export market for softwoods and hardwoods

11. SAWMILLS

Modernization of the present plants is necessary in order for Venezuela to be internationally competitive.

There are two ways in which sawmilling capacity is expected to change: first, new installed capacity; and, second, old sawmills will be modernized/refurbished as wood supply increases and product mix changes.

11.1 Possible areas of interest for Canadian suppliers of goods and services in sawmilling

GOODS

- Sawmilling machinery and equipment.
- Production control systems.
- Wood preservatives and anti-stain chemicals.

SERVICES

- Lumber marketing studies and marketing assistance.
- Sawmilling design, engineering and programming.
- Sawmilling information system and management consulting.
- Sawmilling equipment selection and procurement.

There are very few local companies that sell sawmilling machinery and equipment. They represent chiefly Spanish, German and Italian manufacturers plus some American equipment. In general, local companies are not familiar with Canadian suppliers.

12. PULP AND PAPER

The local Pulp, Paper and Board Industries have been associated more with sugar cane than with forests. Nevertheless, there has been an effort to become more involved in plantation programs (Pine and Eucaliptus) and in expanding/modernizing production capacity to use the local wood supply. In the short- and-medium-term it is expected that there will be growth in this industry given the availability of more wood (plantations), the need for import substitution of pulp, and, the increase in export of paper and boards.

12.1 Possible areas of interest for Canadian suppliers of goods and services in the pulp and paper industry

GOODS

- Machinery and equipment for new mills.
- Machinery and equipment parts to modernize plants and/or maintain existing operations.
- Hardware and software to improve the efficiency of the plant.

SERVICES

- New plant design and equipment selection.
- Consulting: process improvement, alternative uses of forest by-products (industrial uses).
- Consulting: market assistance.

13. FOREST FIRE FIGHTING

In Venezuela, forest fire prevention and forest fire fighting is coordinated by the Fundación para la Protección contra Incendios Forestales (FUNDAINCENDIOS) which reports to the Ministerio del Ambiente (MARNR). There is a need to expand this service and change its operational model.

FOREST FIRE OCCURRENCE

(1987-1992)

YEAR	No. of FF	Area (ha.)
1987	1,609	176,711
1988	774	15,111
1989	752	6,374
1990	2,817	18,528
1991	2,417	119,378
1992	2,830	137,064

SOURCE: Servicio Forestal Venezolano (Venezuelan Forest Service)
(SEFORVEN)

13.1 Possible areas of interest for Canadian suppliers
of goods and services for forest fire fighting

GOODS

- Forest fire fighting equipment and tools (water and chemical transportation equipment)

SERVICES

- Consulting in forest fire fighting planning, operation and training
- Forest fire fighting system-design, revamping and implementation.
- Forest fire fighting institutions-organization.

14. ENVIRONMENTAL STUDIES

Venezuela has been active in all environmental areas, including forestry. On January 3rd, 1992, was passed the Ley Penal del Ambiente (Environment Penalty Law) which determines the penalties for environmental infractions.

The impact of deforestation in tropical forest and the environmental impact of introducing new species is of concern. In general, before establishing an industrial plant, environmental impact studies must be analyzed and approved by the Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR).

14.1 Possible areas of interest for Canadian suppliers of services for environmental studies.

Both natural forests (deforestation and soil conditions) and plantations (new land use) require constant environmental impact assessment. In the case of industrial infrastructure, the main concern is waste treatment and/or disposal. These are the areas where Canadian suppliers can offer their expertise.

15. ENGINEERING SERVICES

Venezuela has strong engineering capability, although a very small number of large consulting firms. (Generally these firms work in the oil industry, the state-owned enterprises, the Ministeries, the communication sector and the large corporations). Highly specialized fields are generally covered by "in house personnel" and supplied by equipment manufacturers or to lesser degree by foreign consulting firm.

SERVICES

- Industrial plant projects
- Consulting in production processes

16. PEST CONTROL SERVICES

During the different contacts made for this study, no evidence was found that there exists a Pest Control Service of any kind for the mixed natural forest. There are some preventive actions taken in the case of plantations during its initial phase.

SERVICES

- Pest control institution / organization

17. FORESTRY OPERATIONS SAFETY EQUIPMENT

As there are laws that protect the labor force, the forestry industry as a whole is very concerned with safety. Some possibilities for Canadian suppliers are:

GOODS

- Specialized safety equipment and tools.

SERVICES

- Training and demonstrations on safety procedures, practices and uses of specialized equipment and tools.

ANNEX I. OVERVIEW OF THE VENEZUELAN COMMERCIAL FOREST SPECIES

I.1. NATURAL FOREST:

The Venezuelan tropical forest are made up of multiple species:

VENEZUELA - LIST OF PRINCIPAL FOREST SPECIES (NATURAL FORESTS)

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
Algarrobo(+)	Hymenaea courbaril
Almedrón	Vochysia lehmanni
Amarillón	Terminalia obovata
Anime rosado	Protium neglectum
Anoncillo	Xilopia sp.
Apamate(*)	Tabebuia rosea
Bacú	Cariniana pyriformis
Bálsamo	Myroxilon balsamun
Berraco	Dieffenbachia pieta
Bucare Erythrina poeppigiana	
Burrito	Mataiba scrobiculata
Caña fístola	Cassia moschata
Cacao Eschweilera subglandulosa	
Cacao de monte	Theobroma sp pulcherrimum
Cacho de venado	Mabea piririi
Camoruco(+)	Sterculia apetala
Candilero	Cordia collococca
Canelo Mataiba scrobiculata	
Caoba(*) (+)	Swietenia macrophylla
Cara caro	Enterolobium cyclocarpum
Carabalí(+)	Albizzia caribensis
Caramacate	Hintella triandra
Carne asada	Hieronyma laxiflora
Cartán Centrolobium paraense	
Casabe	Torrubia pacurero
Cedro(*) (+)	Cedrela odorata
Cedro blanco	Simaruba amara
Cedro dulce	Trichillia cuneata
Ceiba(+)	Ceiba petandra

COMMON NAME

Cuajo
Charo(+)
Chupón(+)
Chicle
Clavellino
Coco de mono
Cojón de verraco
Congrio
Cuero de sapo
Curarire
Dividive
Flor Amarillo
Gateado
Guácimo
Guamo
Guayabón
Guarataro
Hierrito
Higuerón
Hueso de pescado
Indio desnudo
Jabillo(+)
Jebe
Jobo(+)
Laurel
Laurel blanco
Lechero
Mahomo
Majagua
Mangle blanco
Mangle negro
Mangle rojo
MasagMwro
Merecure
Mijao(*) (+)
Murcillo(+)
Orura
Palo de agua
Palo negro
Pardillo

SCIENTIFIC NAME

Virola surinamensis
Piratinera charo
Chrysophyllum caragasanum
Ecclinusa guianensis
Caesalpinia pulcherri
Lecythis ollaria
Stemmadenia grandiflora
Aristolochia grandiflora
Lonchocarpus pictus
Tabebuia serratifolia
Caesalpinia coriara
Tabebuia guayacán
Astronium graveolens
Guazuma fomentosa
Inga acuminata
Terminalia amazonia
Mouriri huberi
Licania densiflora
Ficus sp
Pithecellobium poltcep
Bursera simaruba
Hura crepitans
Lonchocarpus margaritensis
Spondias mombin
Gutteria foliosa
Nectandra rigida
Sapium subletianum
Lonchocarpus sp
Heliocarpus popayanensis
Langucularia racemosa
Avicennia nitida
Rhizophora mangle
Stryphonodendrom polystachum
Parinarium pachiphyllum
Anacardium excelsum
Erisma uncinatum
Swartzia leptopetala
Symmeria paniculata
Acalypha diversifolia
Cordia alliodora

COMMON NAME

Pardillo negro(*)
Peonía *Ormosia macrocalix*
Perhuétano
Picatón
Pilón(+)
Puy(+)
Purgo(+)
Roble(*)
Salado *Vochysia venezolana*
Samán(*)(+)
Sangre drago
Saqi-saqi(*)(+)
Sun-sun
Trompillo
Vera
Vero
Zapatero(+)

SCIENTIFIC NAME

Cordia apurensis

Mouriri sp.
Loxopterigium sagotti
Andira jamaicensis
Tabebuia serratifolia
Manilkara bidendata
Platymiscium pinnatum

Pithecelobium samán
Pterocarpus vernalis
Bombacopsis quinata
Didymopanax morototoni
Guarea guara
Bulnesia arbórea
Lonchocarpus sp.
Peltogyne porphyrocardia

NOTE:

1970(*) - 8 native species commercially used

1992(+) - only 18 species used. These numbers will increase when more commercial effort is made to introduce new species to the market place.

I.2 PLANTATIONS:

TABLE I
SPECIES USED IN THE VENEZUELAN PLANTATIONS

SPECIES	USES
Caribbean Pine var. hondurensis, Eucaliptus grandis	Soil conservation
Caribbean Pine var. hondurensis, P. oocarpa, E. grandis, E. urophylla	Pulp and paper Mechanical industry
Teca, Gmelina, Pardillo, Caoba, Saqui-saqui, Apamate	Mechanical industry

Parkia oppositifolia Spruce, ex Benth.
Jacaranda copaia (Aubl.) D. Don
Simarcuba amara Aubl.
Spondias mombin L.
Trattinickia sp.
Erisma uncinatum Warm.
Alexa imperatricis (Schomb.) Baill.
Sterculia pruriens (Aubl.) Schum.
Didymopanax sp.
Ocotea grandulosa Lasser
Couratari pulchra Sandw.
Stryphnodendron polystachyum (Miq.) Kleinh.
Catostemma commune Sandw.
Cordia alliodora (R & P) Cham.
Carapa guianensis Aubl.
Inga splendens Willd.
Protium sp.
Copaifera sp.
Couratari multiflora (Smint.) Eyma.
Inga alba (Sw.) Willd.
Licania sp.
Parinari excelsa Sabine
Terminalia guianensis Eichl.
Pera glabrata (Schott.) Baill.
Aspidosperma album (Vahl.) Ben ex Pichon
Centrolobium paraense Tul. var.
 orinocense Benth.
Astronium Lecointei Ducke
Cassia moschata H.B.K.
Tetragastis panamensis (Engl.) C.K.
Parinari rodolphii Hub.
Protium sp.
Chrisophyllum sp.
Platymiscium pinnatum (Jacq.) Dugand
Chaetocarpus Schomburgkianus (O. Ktze)
Dipteryx sp.
Hymenaea courbaril L.
Lecythis sp.
Licania aff. micrantha Miq.
Pouteria egregia Sandw.
Piranhea longpedunculata Jablosnaky
Manilkara bidentata (A.D. C.) Chev.
Schweilera subglandulosa (Steud.) Miers.
Tabebuia serratifolia (Vahl. Nicholson?)
Peltogyne porphyrocardia Griseb.

Hueso de pescado
Sinaruba
Cedro blanco
Jobo
Maro
Murefello
Leche de cochino
Majagua
Sunsún
Laurel
Capa de tabaco
Caro montañero
Baramán
Pardillo
Carapa
Guamo
Caraño blanco
Currucay
Tampipio
Guamo colorado
Gateado
Merecurillo
Pata de danta
Pilón rosado
Hielito

Cartán
Pata de zamuro
Cañafístola
Maramo
Merecure montañero
Azucarito
Chupón
Roble
Cacho
Sarrapia
Algarrobo
Tinajito
Hierrito
Purguillo
Caramacate
Purguo
Majaguillo
Araguaney
Zapatero

0.22	0.24	2.2	5.2	2.4
0.32	0.37	5.5	8.4	1.5
0.34	0.37	1.7	4.9	2.9
0.38	0.42	3.3	7.0	2.1
0.38	0.45	3.9	6.4	1.6
0.40	0.44	3.0	6.8	2.3
0.41	0.46	3.8	9.0	2.4
0.45	0.51	3.4	8.4	2.5
0.46	0.54	5.9	8.5	1.4
0.46	0.50	2.9	6.7	2.3
0.50	0.55	4.1	6.2	1.5
0.52	0.58	3.4	6.9	2.0
0.52	0.62	4.9	12.5	2.5
0.54	0.61	3.9	7.0	1.8
0.54	0.62	5.5	9.0	1.6
0.55	0.62	3.7	7.9	2.1
0.55	0.62	4.3	6.3	1.5
0.55	0.60	2.7	4.6	1.7
0.56	0.63	4.8	8.3	1.7
0.56	0.62	3.7	8.2	2.2
0.61	0.71	4.2	11.1	2.6
0.64	0.75	4.6	8.4	1.8
0.65	0.74	4.7	9.0	1.9
0.66	0.75	5.6	9.0	1.6
0.68	0.79	6.0	8.9	1.5
0.69	0.74	2.6	5.1	2.0
0.69	0.89	4.5	8.5	1.9
0.71	0.75	2.2	4.9	2.2
0.71	0.81	4.8	8.3	1.7
0.72	0.85	5.8	10.0	1.7
0.73	0.82	4.7	6.8	1.4
0.75	0.88	6.2	12.3	2.0
0.78	0.84	2.9	5.0	1.7
0.81	0.94	4.6	9.2	2.0
0.81	0.93	5.4	8.1	1.5
0.81	0.88	2.9	5.6	1.9
0.83	0.94	4.9	8.6	1.7
0.86	1.01	5.3	12.0	2.3
0.91	1.11	7.3	9.9	1.4
0.91	1.05	6.0	9.0	1.5
0.92	1.09	6.8	9.0	1.3
0.92	1.09	6.6	12.1	1.8
0.92	1.05	5.5	7.0	1.3
0.93	1.05	4.0	8.3	2.1

In this country the tropical forest region with the most heterogeneous production is Guayana (Bolívar State). Some of the physical characteristics of the species from Guayana can be observed in Table II.

TABLE II
VENEZUELA: SPECIFIC WEIGHT AND CONTRACTION OF THE MAIN FOREST SPECIES
(NATURAL FOREST-GUAYANA)

Scientific name	Common name
------------------------	--------------------

Specific weight	Contraction %	Relation
Furnace dry weight	Rad.	Tang/Rad
Green volume Dry volume	Tang.	

**ANNEX II. RELEVANT ORGANIZATIONS IN THE VENEZUELAN FORESTRY
SECTOR AND THEIR ROLES**

II.1. Ministerio del Ambiente y de los Recursos Naturales

Renovables: (MARNR)

Objective: Planning arm of National Executive regarding the enhancement of the quality of life, of the environment and of the renewable natural resources; the development and execution of programs of conservation, protection, improvement, regulation, use of water, the forests, the land and the soil; the census (tree population), conservation, protection, regulation and improvement of the native fauna and flora; the National Parks.

Address: MARNR, Torre Sur, Centro Simón Bolívar, El Silencio, Caracas.

Telephone: (02) 414210 / 4081190 / 4081191

Fax: (02) 408.1210

Telex: 24305 MARNR VEN VC

Minister: Eng. Roberto Pérez Lecuna

II.2. Servicio Forestal Venezolano (SEFORVEN)

Objective: Public entity that coordinates and promotes the policies and actions of conservation, use and development of the productive forests and forest lands of the country; and takes into consideration the conservation, protection and improvement of the environment.

Address: SEFORVEN, Torre Sur, Centro Simón Bolívar, Piso 22, El Silencio,
Caracas.

Telephone: (02) 408-1501 / 402-1202

Fax: (02) 483-9158

Sectorial General Director: Eng. Samuel Mendoza

II.3. Instituto Nacional de Parques (INPARQUES)

Objective: To guarantee the Venezuelan society the preservation, protection and management of the National Parks and the Natural Monuments; the promotion of recreation.

Address: Av. Francisco de Miranda con Av. Francisco
Fajardo, near Parque del Este, Caracas.

Telephone: (02) 2380181/3133/3901/0242

Fax: (02) 2392698

President: General Francisco de Asís Loreto Mejías

II.4. Fundación Instituto Botánico de Venezuela

Objective: Scientific Research. In charge of the administration, development and maintenance of the Jardín Botánico de Caracas, (located in the Jurisdicción del Distrito Federal, Caracas) and the Herbario Nacional de Venezuela (Caracas).

Address: Av. Salvador Allende, Los Caobos, Caracas.

Telephone: (02) 662-9254

Fax: (02) 662-9081

President: Eng. Francisco Juanez

II.5. Fundación para la protección y control de incendios forestales

(FUNDAINCENDIOS)

Objective: To share the responsibilities and help the Ministerio del Ambiente y los Recursos Naturales Renovables (MARNR) to prevent, detect and control forest fires.

Address: Torre Sur, Centro Simón Bolívar, piso 19, El Silencio, Caracas.

Telephone: (02) 408-1676 / 408-1934

Fax: (02) 408-1676

Manager: Eng. Andrés Rolando Clavier

II.6. Fundación Laboratorio Nacional de Productos Forestales

(LABONAC)

Objective: Technological research related to national timber-yielding species; supply technical assistance, information and advice to industries and to public and private entities that use and/or transform woods; help to develop study program for undergraduate and graduate students of the School of Forestry Science of the Universidad de Los Andes (Mérida); promote national training courses for private and public entities; participate in agreements and scientific/technological interchanges with international entities.

Address: Universidad de Los Andes (ULA), Vía Los Chorros de Milla.
Mérida, Estado Mérida.

Telephone: (074) 40-1660 / 40-1661

Fax: (074) 44-2606

Director: Eng. Judith Mogollón

II.7. Fundación Instituto Forestal Latinoamericano (IFLA)

Objective: Provide technical basis to efficiently help to conserve, develop and profit from forest resources as well as to handle, use and commercialize the Latin American forest products.

Address: Universidad de los Andes. Facultad de Ciencias
Forestales. Mérida, Estado Mérida.

Telephone: (074) 44-0535 / 44-8906

Fax: (074) 44-2606

Director: Eng. Anibal Luna

II.8. Compañía Nacional de Reforestación (CONARE)

Objective: Institute of the Venezuelan Government that formulates and carries out forestry plantation programs. Also performs research activities concerning forestry plantations.

Address: Centro Andrés Bello. Torre Oeste, piso 7, Ave. **Andrés**

Bello, Caracas.

Telephone: (02) 781-1397

Fax: (02) 782-3523

President: Eng. Gustavo Berroeta

II.9. CVG - PROFORCA

Objective: To execute the forestry plantation projects of the Corporación Venezolana de Guayana; to supply the raw material required by private, public and mixed industrial entities.

Address: Torre "Las Mercedes", piso 4, Ofc. 401, Chuao,

Caracas.

Telephone: (02) 993-7148

Fax: (02) 924470

Director: Eng. Arquímedes Rodríguez

II.10. Asociación Venezolana de Bosques Manejados (ASOIMBOSQUES)

Objective: To group all manufacturers that have a direct relationship with the managed forest; that is, the forests that have been allotted by the State under management plans (concessions).

Address: Av. Libertador, Ed. Libertador 75, Piso 9, Caracas.

Telephone: (02) 761-6710

Fax: (02) 761-6710

Executive Director: Dra. María Auxiliadora Alvarado

II.13. Asociación Venezolana de Plantadores Forestales (ASOPLANT)

Objective: To group Companies with forestry plantation/projects.

Address: Edificio Johnson & Johnson, piso 2, Oficina 2-B, Ave.

Rómulo Gallegos, Los Dos Caminos, Caracas.

Telephone: (02) 234-3130 to 34

Fax: (02) 234-6542

Executive Director: Eng. Beatriz Pericchi A.

**II.14. Asociación Venezolana de Productores de Pulpa, Papel y Cartón
(APROPACA)**

Objective: This is the top organization representing the Venezuelan paper industry. Its main goals are: the definition of trends and policies for this industry; the development of the natural resource as a source of raw material; and, the protection of the environment.

Address: Edificio Johnson & Johnson. Piso 2, Oficina 2-B. Av. Rómulo Gallegos. Los Dos Caminos. Caracas.

Telephone: (02) 234-3130 to 34

Fax: (02) 234-6542

Executive Director: General Raimundo Guisantes

II.15. Universidad de los Andes. Facultad de Ciencias Forestales.

Objective: Academic and research activities related to undergraduate and graduate studies in Forestry Sciences.

Address: Universidad de los Andes, Facultad de Ciencias Forestales, Mérida, Edo. Mérida.

Telephone: (074) 40-1500 / 40-1111

Fax: (074) 40-1503

Dean: Eng. Douglas Rojas

II.19. Sociedad Venezolana de Ciencias Naturales (SVCN)

Objective: Research, study and protection of renewable natural resources.

Address: Calle Cumaco con Arichuna. Edificio Sociedad
Venezolana de Ciencias Naturales. Piso 1. Urb. El Marqués,
Caracas.
Telephone: (02) 22-4812
Fax: Not available
President: Dr. Ramón Aveledo Ostos

II.20. Sociedad de Ciencias Naturales La Salle (SCNLS)

Objective: A scientific institution, that orients the policies of studies and use of the natural resources available in the country.

Address: Edificio Fundación La Salle. Piso 5, ala norte. Av. Mariperez con
Av. Boyacá. Caracas.
Telephone: (02) 793-5792
Fax: (02) 793-2447
President: Eng. Luis A. Rivas Larrazabal
Director: Mr. Jesús Hoyos

II.21. Sociedad Venezolana de Ingenieros Forestales (SVIF)

Objective: Forestry engineering professionals that act as a consulting group for the Government forestry. They also promote courses and seminars on forestry.

Address: Colegio de Ingenieros de Venezuela. Parque Los
Caobos. Caracas.

Telephone: (02) 571-2691 / 571-3944

Fax: (02) 574-4683

President: Eng. Rafael Vilorio Díaz

II.22. Ministerio de Agricultura y Cría (MAC). Dirección de Sanidad Vegetal

Objective: Among other activities, the MAC is responsible for the regulation, supervision and control of the manufacture, trade and use of pesticides, fertilizers, chemicals and biological products for agricultural use.

Address: Parque Central, Torre Este, pisos 1 al 20.

Telephone: (02) 509-0131

Fax: (02) 573-4781

Minister: Dr. Ciro Añez Fonseca

II.23. Ministerio de Fomento

Objective: The formulation, coordination, evaluation, planning and promotion of the external commerce of Venezuela.

Address: Centro Comercial Los Cedros. Avenida Libertador. Caracas.

Telephone: (02) 531-0009 / 531-0016 / 531-0017

Fax: (02)762-0460

President: Dr. Alberto Poletto

**ANNEX III. LIST OF MAJOR CORPORATE ENTITIES OF THE FORESTRY
SECTOR.**

Objective: The planning and performance of the activities of the National Government (Ejecutivo Nacional) in the sectors of industry, commerce and consumer protection.

Address: Edificio Sur. Centro Simón Bolívar. El Silencio. Caracas.

Telephone: (02) 41-9344

Fax: Not available

Minister: Dr. Alberto Poletto

II.24. Oficina Central de Estadísticas e Informática (OCEI)

Objective: Central agency in the production and publication of statistics. It compiles, analyzes and publishes demographic, economic, commercial, social and administrative statistics.

Address: Edificio Fundación La Salle, Avenida Boyacá con Maripérez, Caracas.

Telephone: (02) 782-1133 / 782-1212

Fax: (02) 782-2243

Director: Eng. Edgar Paredes Pisani

II.25. Instituto de Comercio Exterior (ICE)

III.1 Forest Contractors and owners

III.1.1 Natural Forests (Contractors)

ASERRADERO EL MANTECO

Representing Agent: Mr. Antonio Gaspard

Address: Torre 18, Piso 14, Letra F, Esquina El Empalme y Mirador, La Campiña, Caracas.

Telephone: (02) 731.1774 / 731.1522:

Fax: (02) 744090

CONTACA CONTRAENCHAPADOS TACHIRA, C.A.

Representing Agent: Mr. Jorge Ruiz del Vizo

Address: Calle el Parque con calle Santa Lucía, Edif. Torre Delta, Urb. El Bosque, Chacaíto,
Caracas

Telephone: (02) 952.1865 /952.1794

Fax: (02) 952.1725

CODEFORSA CORPORACION DE DESARROLLO FORESTAL, S.A.

Representing Agent: Mr. Zoltan Gaspard

Address: Av. Prolongación Los Higueroles No. 21- 4, Las Luces, EL Cementerio, Caracas.

Telephone: (02) 631.9487

Fax: (02) 631.6541

ASERRADERO MATAMOROS, C.A.

Representing Agent: Mr. José Matamoros

Address: Av. Raúl Leoni, Upata, Edo. Bolívar.

Telephone: (088) 21461 / 21442

Fax: Not available

ASERRADERO YOCOIMA

Representing Agent: Mr. Paolo Grisafi
Address: Vía Guasipati, Zona Industrial Upata, Edo. Bolívar.
Telephone: (088) 21438 / 21365
Fax: Not available

INTECMACA INDUSTRIA TECNICA DE MADERA, C.A.

Representing Agent: Mr. Jorge Ruiz del Vizo
Address: Calle El Parque con calle Santa Lucía, Edif. Torre Delta, El Bosque, Caracas.
Telephone: (02) 952.1865 / 952.1794
Fax: (02) 952.1725

AGROPECUARIA LA BOMBONERA

Representing Agent: Mr. José Luis Betancourth
Address: Av. Venezuela, Edif. Torre América, Mezzanina PH-B, Bello Monte, Caracas
Telephone: (02) 762.7272
Fax: (02) 762.4137

CONSORCIO SOMAGUA

Representing Agent: Mr. Raúl Pietrantoni
Address: 2da. Ave. Zona de Reserva Industrial, Upata, Edo. Bolívar.
Telephone: (085) 25912
Fax: Not available

EMALLCA EMPRESA MADERERA DEL ALTO LLANO OCCIDENTAL C.A.

Representing Agent: Mr. Nello Bonato
Address: Av. Cuatricentenaria, 120 mts. de la Guardia Nacional, Barinas, Barinas.
Telephone: (073) 461147
Fax: Not available

IMADELCA, INDUSTRIA MADERERA DEL CAPARO

Representing Agent: Mr. Octavio Parra Parada

Address: Sede Edif. Corpoandes, Campo Móvil, Barinas, Barinas

Telephone: Not available

Fax: Not available

CORPORACION INDUSTRIAL TRIPLEX, S.A.

Representing Agent: Mr. George Spiropoulos

Address: Av. Boulevard del Cafetal Qta. 371 C, Chuao, Caracas

Telephone: (02) 993.1458

Fax: (057) 512731

ASERRADERO ZAMORA

Representing Agent: Mr. Federico Grand

Address: Av. Presidente Leoni, Maturin, Edo. Monagas

Telephone: Not available

Fax: Not available

IMCIBOLCA

Representing Agent: Mr. Ali Torrealba

Address: Calle Carvajal, Edif. Montilla No. 5-25, Barinas, Edo. Barinas

Telephone: (073) 461831

Fax: (073) 460664

COMAFORI

Representing Agent: Mr. Uber Mantovani

Address: Carretera Upata-Guasipati, Km. 2, Upata, Edo. Bolívar

Telephone: (088) 21448

Fax: (088) 21448

MADERORCA

Representing Agent: Eng. Salvador Barbera

Address: Calle Cuchivero, Torre Continental, Torre 9 PB, Alta Vista, Puerto Ordaz, Edo. Bolívar.

Telephone: (086) 610014

Fax: (086) 612662

HNOS. HERNANDEZ

Representing Agent: Mr. Felix Hernández

Address: Av. Romulo Gallegos, Upata, Edo. Bolívar

Telephone: (088) 2166

Fax: Not available

EL YAURE-TEMAICA

Representing Agent: Mr. Hortencio Alvarez

Address: Av. Principal de Pueblo Nuevo, Tres Esquinas, San Cristobal.

Telephone: Not available

Fax: Not available

NURIAFOR

Representing Agent: Mr. Antonio Gaspard

Address: Torre 18, Piso 14, La Campiña, Caracas.

Telephone: (02) 731.1774

Fax: (02) 744.298

III.1.2. Plantations (Owners)

The main corporate entities that are engaged in plantation activities in Venezuela are:

AGROPECUARIA LA BOMBONERA

Contact: Mr. José Luis Betancourth
Address: Ave. Venezuela, Edif. Torre América, Mezzanina PH-B, Bello Monte, Caracas.
Telephone: (02) 762.7272
Fax: (02) 762.4137

COMPAÑIA NACIONAL DE REFORESTACION (CONARE)

Contact: Mr. Gustavo Berroeta
Address: Centro Andrés Bello, Torre Oeste, piso 7, Ave. Andrés Bello, Caracas.
Telephone: (02) 781.1397
Fax: (02) 782.3523

CONTACA CONTRAENCHAPADOS TACHIRA, C.A.

Contact: Mr. Jorge Ruíz del Vizo
Address: Calle El Parque con calle Santa Lucía, Edif. Torre Delta, Urb. El Bosque, Chacaíto, Caracas.
Telephone: (02) 952.1865/952.1794
Fax: (02) 952.1725

CARTON DE VENEZUELA, S.A. (SMURFIT CARTON DE VENEZUELA)

Contact: Mr. Pietro Filesi
Address: Ave. La Estancia, Edif. Banaven, Nucleos A y B, piso 4, Chuao, Caracas.
Telephone: (02) 913666
Fax: (02) 929949

CVG-PROFORCA

Contact: Mr. Arquímedes Rodríguez
Address: Torre Las Mercedes, piso 4, Ofic. 401, Chuao, Caracas.
Telephone: (02) 9937148
Fax: (02) 924470

C.A. VENEZOLANA DE PULPA Y PAPEL "VENEPA"

Contact: Mr. Juan Calvo
Address: Ave. Andrés Bello, Edificio Las Fundaciones, Piso 5 y 6, Caracas.
Telephone: (02) 571.9611
Fax: (02) 571.5264

MANUFACTURA DE PAPEL "MANPA"

Contact: Mr. Alejandro Delfino
Address: Ave. Francisco de Miranda con Ave. Principal Country Club, Edif. Torre Country Club, Chacafto, Caracas.
Telephone: (02) 901.2010
Fax: (02) 901.2410

III.2. Mechanical industry

The catalogue of the wood mechanical industry (sawmills, panel producers) is maintained by SEFORVEN as part of its functions of census and control of this type of industry. At the moment there are 364 industrial plants registered.

III.2.1. Sawmills

Venezuela has 335 sawmills, almost all of them with installed capacity of less than 500 m³(s) a year. The sawmills with capacity over 7000 m³(s) a year are the following:

14 MOST IMPORTANT SAWMILLS IN VENEZUELA (BARINAS/BOLIVAR) 1994

NAME	REPRESENTANTIVE	STATE	ADDRESS TELEPHONE and FAX
CONTACA	JORGE RUIZ DEL VIZO	BARINAS	Carretera Nacional via San Cristóbal, Socopo. Telephone: (02) 7311774/1522: Fax: (02)9521725
EMALLCA	NELLO BONNATO	BARINAS	Ave. Cuatricentenario, Barinas. Telephone: (073) 461147 Fax: (073)460643
ASERRADERO ZAMORA	LEON DE JESUS MORENO	BARINAS	Sitio San Miguel, Km. 2 Santa Barbara. Telephone: Not available Fax: Not available
INCIBOLCA	ALI TORREALBA	BARINAS	Av. Industrial, Edif. INCIBOLCA primer piso, Barinas. Telephone: (073)461831 Fax: (073) 460664
CORP.IND. TRIPLEX	GEORGE SPYROPOULOS	BARINAS	Av. Boulevard El Cafetal, Quinta 371-C, Urb. Chuao, Caracas. Telephone: (02) 9931458 Fax: (057) 512731

ASERRADERO EL MANTECO, C.A.	ANTONIO GASPARD	BOLIVAR	Av. Mirador con Ave. El Empalme, Edificio Torre 18, piso 14, Caracas Telephone: (02) 7311774/7311522 Fax: (02)744298
EL PAO,C.A.	ANTONIO CATAPNO	BOLIVAR	Carretera El Pao, Km. 15, San Felix Telephone: Not available Fax: Not available
EL BOSCO, C.A.	MIGUEL TODISCO	BOLIVAR	Vía Principal de la Población de Guasipati. Telephone: Not available Fax: Not available
HERMANOS HERNANDEZ	FELIX HERNANDEZ	BOLIVAR	UPATA. Telephone: (088)2166 Fax: Not available
INPROTECMA	L. LUIGGI	BOLIVAR	SAN FELIX. Telephone: Not available Fax: Not available
ASERRADERO MATAMOROS , C.A.	JOSE MATAMOROS	BOLIVAR	Carretera UPATA/GUASIPATI Km. 2 UPATA. Telephone: (088)21461 Fax: Not available
SANTA ROSA, S.A.	UBER MANTOVANI	BOLIVAR	Carretera UPATA/GUASIPATI Km. 2 UPATA. Telephone: Not available Fax: Not available
YOCOIMA, C.A.	PAOLO GRISAFI	BOLIVAR	Carretera UPATA/GUASIPATI Km. 2 Telephone: (088)21438. Fax: Not available
CVG- ASERRADERO UVERITO	ARQUIMEDES RODRIGUEZ	BOLIVAR	UVERITO, Caserio Chaguaramas Telephone: PROFORCA (086) 6106664/610041. Fax: (02) 924470

III.2.2. Plywood Panel

These companies are members of the Asociación Nacional de Industriales de Chapilla y Contraenchapados (ANICC).

CORPORACION INDUSTRIAL TRIPLEX

Representing Agent: Mr. George Spyropulos

Address: Comienzo Ave. Boulevard del Cafetal, Quinta 371-C frente a Residencias Papagayo
antes de la Urb. Santa Marta.

Telephone: (02) 9931458 / 9931417 /9937917

Fax: (02) 925128

Plant: Avenida Circulación vía Barinas-Guarenas, Edo. Portuguesa.

Telephone: (057) 510058

Fax: (057) 512731

MADERERAS OCEANICA

Representing Agent: Mr. Giuseppe Di Mauro

Address: Carretera No. 4 entre Calle 31 y Ave. Ferrocarril, Zona Industrial, Barquisimeto, Edo.
Lara.

Telephone: (051) 451962 / 450207

Fax: (051) 451962

INDUSTRIAS DI MARCO

Representing Agent: Mr. Andrea Di Marco

Address: Zona Industrial La Hamaca, 1er. Calle Norte Sur, Maracay, Edo. Aragua.

Telephone: (043) 547212

Fax: (043) 547943

CONTRAENCHAPADOS TACHIRA (CONTACA)

Representing Agent: Mr. Jorge Ruiz del Viso

Address: Ave. El Parque con Calle Santa Lucía, Edif. Delta, Urb. El Bosque, Chacaíto, Caracas.

Telephone: (02) 952-1865 / 952-1782 / 952-1662 / 652-1646 / 952-1794

Fax: (02) 952-1752

Plant: Ave. El Parque de Exposiciones La Concordia, San Cristobal, Edo. Táchira

Telephone: (076) 29101-29106

Fax: Not available

INDUSTRIAS PANEL

Representing Agent: Mr. Miguel Martínez

Address: Zona de Vista Alegre, Parque Carabobo, Valencia, Edo. Carabobo.

Telephone: (049) 29392

Fax: (049) 29494

MADERERAS PRENSADAS (MADEPREN)

Representing Agent: Mr. Manuel Trujillo

Address: Prolongación Los Higueroles, No. 21-24 detrás del teatro Riviera, Las Luces, El Cementerio.

Telephone: (02) 6317589 - 6316541

Fax: (02) 6319487

Plant: Redoma de Araure, Acarigua, Edo. Portuguesa

Telephone: Not available

Fax: Not available

ENCHAPES 1001

Representing Agent: Mr. Antonio Arias

Address: Conglomerado Industrial Manuel Olivares Betancourt, Galpones 6 y 7, Zona Industrial
2, San Vicente, Maracay, Edo. Aragua.
Telephone: (043) 541925 / 540090
Fax: (043) 540045

CODIBU

Representing Agent: Mr. Antonio Bussi
Address: Sector Industrial El Piñoral, a 500 mts. Redoma del Distribuidor Palo Negro, Maracay,
Edo. Aragua.
Telephone: (043) 342877
Fax: (043) 342877

XILOPAN

Representing Agent: Mr. Enzo and Mr. Silvio Chiesa
Address: Calle Terepaima No, 500514-20, Urb. El Llanito, Petare, Edo. Miranda.
Telephone: 215455 / 211480
Fax: 212844

MADERAS TERCADAS, C.A. (MATECA)

Representing Agent: Mr. Roger Hernández
Address: Avda. Principal Urb. Portuaria No. 27, (frente al Aeropuerto, detrás del Cementerio)
Puerto Cabello, Edo. Carabobo.
Telephone: Not available
Fax: Not available

TABLICA

Representing Agent: Mr. Arellano: 5731689
Address: Ave. Andrés Bello, Edif. Olympo, Piso 8, Ofic. 29, Caracas
Telephone: (063) 51495 / 51496 (02) 5731689
Fax: (02) 5730389

CONTRAENCHAPADOS CABIMAS

Representing Agent: Mr. Francisco Di Fiori

Address: Ave. Intercomunal, Sector Bello Monte No. 113, Cabimas, Edo. Zulia.

Telephone: (064) 43767

Fax: (064) 41149

MANUFACTURA Y DERIVADOS DE LA MADERA C.A. (MADEMACA)

Representing Agent: Mr. Aldo Gugliota

Address: Carretera Upata San Felix, Km. 1 La Asmonia, Upata, Edo. Bolívar

Telephone: (088) 21996 / 22415

Fax: (088) 463293

FINEWOOD DE VENEZUELA

Representing Agent: Mr. Josep Arvay

Address: Ave. Urdaneta, Esquina Urapal, Edificio Casa Vera, piso 7 Ofic. 708, Caracas.

Telephone: (02) 5729053 / 5728090 / 5726921

Fax: (02) 5765290

INDUSTRIAS MADERERAS YARACUY (IMAYA)

Representing Agent: Mr. Angel San Roman

Address: 6a. Ave. No. 1-36, San Felipe, Edo. Yaracuy.

Telephone: (054) 42813

Fax: (054) 312696

III.2.3. Particleboard Panel

The following are companies that have factories of chipwood panels (with the exception of TABLOPAN which handles sugar cane fiber):

MADERAS VEROPAN, C.A.

Representing Agent: Not available

Address: Zona Industrial, Carretera Nacional Cagua-Villa de Cura, Estado Aragua.

Telephone: Not available

Fax: Not available

Installed capacity: 6,000 m³ (facility presently closed)

TABLOPAN DE VENEZUELA, C.A. (Sugar cane fiber)

Representing Agent: Dr. Freddy Rojas P.

Address: Carretera Nacional La Encrucijada, San Mateo, Edo. Aragua.

Telephone: (044) 72073 / 71909

Fax: (044) 51921

Installed capacity: 93,000 m³

TABLEROS INDUSTRIALES, C.A. (TABLICA CENTRO)

Representing Agent: Mr. Francisco Difiore

Address: Valencia, Edo. Carabobo.

Telephone: (041) 379410

Fax: Not available

Installed capacity: 20,000 m³

TABLECA

Representing Agent: Not available

Address: San Carlos, Edo. Cojedes

Telephone: Not available

Fax: Not available

Installed capacity: 30,000 m³ (facility presently closed)

AGLOMERADOS GUARICO

Representing Agent: Mr. Jorge Ruiz del Vizo

Address: El Sombrero, Edo. Guárico

Telephone: (046) 63467

Fax: (046) 63486

Installed capacity: 39,600 m³

FIBROXIL, C.A.

Representing Agent: Mr. Enzo Chiesa

Address: Tapaima, Puente Rio Grande, Municipio Guatire, Edo.
Miranda

Telephone: (02) 214555/220409

Fax: (02) 220409

Installed capacity: Not available

LEROS, C.A.

Representing Agent: Not available

Address: Cúa, Edo. Miranda

Telephone: Not available

Fax: Not available

Installed capacity: 30,000 m³ (facility presently closed)

AIMCA

Representing Agent: Mr. Esteban Bravo

Address: Baruta, Edo. Miranda

Telephone: (02) 931533/931722

Fax: (02) 931553

Installed capacity: 10,000 m³

TABLEROS DEL TUY

Representing Agent: Mr. Federico Shustob
Address: Zona Industrial La Aguada, Santa Lucía, Edo. Miranda.
Telephone: (039) 481641/481672
Fax: (039) 481641
Installed capacity: 3,000 m³

XILOPAN

Representing Agent: Mr. Enzo Chiesa
Address: Calle Terepaima, El Llanito, Petare, Edo. Miranda
Telephone: (02) 214555/220409
Fax: (02) 220409
Installed capacity: 3,000 m³

INDUSTRIAS MADEPREN, C.A.

Representing Agent: Mr. Manuel Trujillo
Address: Redoma de Araure/Acarigua, Acarigua, Edo. Portuguesa
Telephone: (055) 51424 / 51025 - (02) 6319487 / 6317589
Fax: (02) 6316541
Installed capacity: Not available

TABLEROS INDUSTRIALES, C.A. (TABLICA EL ROSARIO)

Representing Agent: Mr. Francisco Difiore
Address: Salida hacia Machiques, Villa del Rosario, Dtto. Perijá, Edo. Zulia.
Telephone: (064) 41874 / 41992
Fax: (064) 41149
Installed capacity: 49,450 m³

PRODUCTORES FORESTALES SOLEDAD (PROSOL, C.A.)

Representing Agent: Mr. Noel Dazur
Address: Zona Industrial Playa Blanca, Soledad, Edo. Anzoategui
Telephone: (085) 711370/71433
Fax: (085) 71442
Installed capacity: Not available

III.3 Pulp, paper and board industries

The Asociación Venezolana de Productores de Pulpa, Papel y Cartón (Venezuelan Association of Pulp, Paper and Board producers, (APROPACA) is formed by the following members:

CARTON DE VENEZUELA, S.A. (SMURFIT CARTON DE VENEZUELA)

Representing Agent: Mr. Pietro Filesi, Executive President

Address: Av. La Estancia, Edif. Centro Banaven, núcleos A y B, piso 4, Chuao, Apartado de Correos 609, Caracas 1010A.

Telephone: (02) 913666 (serial)

Fax: (02) 929949

Plant: Calle El Hatillo, Petare, Edo. Miranda

Telephone: (02) 2567568

Fax: (02) 2568680

Telex: 25346

Cable: Cartoven

Annual production capacity: 6,000 MT Liner; 14,000 MT Industrial cardboards

Total investment: Bs. 1,064,000,000

Machines in use: 1

Number of employees: 91

Annual payroll: Bs. 84,000,000

Manufactured products: Paper for corrugated lids (liner); paper for corrugation (Medium); Grey board for rigid boxes and other uses; non-covered industrial cardboards for pliable cases; special boards.

CARTONERA DEL CARIBE, C.A.

Representing agent: Mr. Saltiel Beracha, President

Address: Av. Urdaneta, Edif. Centro Financiero Latino, Piso 16, Oficina 9, Caracas
Telephone: (02) 5619411 / 5619433 / 5619477
Fax: (02) 5638761

Plant: Zona Industrial San Vicente I, Maracay, Edo. Aragua
Telephone: (043) 545532 / 544821
Fax: (043) 545532

Annual production of installed capacity: 16,000 MT
Total investment: Bs. 200,000,000
Number of employees: 150
Machines in use: 5
Annual payroll: Bs. 49,125,000
Manufactured products: Grey board; Fibre board (brown and black); impregnated cellulose; recycled leader.

CARTONES NACIONALES, S.A. (SMURFIT CARTONES NACIONALES)

Representing Agent: Mr. Pietro Filesi, Executive President

Address: Av. La Estancia, Edif. Banaven, núcleos A y B, 4to. piso, Chuao, Apartado de Correos 609, Caracas 1010-A.
Telephone: (02) 913666 (serial)

Plant: Av. Domingo Olavarría, Zona Industrial Sur, Valencia, Edo. Carabobo. Apartado de Correos 448.
Telephone: (041) 306511 / 308811
Telex: 45492
Fax: (041) 349222
Cable: Cartonal

Annual production capacity: 80,000 MT Industrial cardboards
Total investment: Bs. 2,711,000,000
Machines in use: 1
Number of employees: 276
Annual payroll: Bs. 320,000,000
Manufactured products: Industrial covered cardboards for pliable cases; grey board for boxes and other uses; special boards and cardboards.

C.A. FABRICA DE PAPEL DE MARACAY (PAPELES MARACAY)

Representing Agent: Lic. Alejandro Delfino, President

Address: Av. Francisco de Miranda con Av. Principal del Country Club, Edif. Torre Country Club, piso 5, Chacafto, Apartado Postal 1050, Caracas

Telephone: (02) 9012010 / 9012446 al 48

Fax: (02) 9012466

Telex: 23507 Manpa VC

Cable: Manpa

Plant: Calle Guayamure, Zona Industrial La Hamaca, Apartado Postal 72, Zona Postal 2104

Telephone: (043) 462496 al 98 / 468430 / 465226

Fax: (043) 468327 / 465226

Telex: 48182

Cable: PADEL

Annual production capacity: 57,300 MT Tissue; 7,000 MT containers and wrappers; 24,000 MT BCTMP Pulp.

Total investment: Bs. 6,547,000,000

Machines in use: 6

Number of employees: 874

Annual payroll: Bs. 366,191,000

Manufactured products: Tissue papers: napkins, sanitary napkins, facial towels; wrapping paper; industrial paper; BCTMP pulp.

C.A. VENEZOLANA DE PULPA Y PAPEL "VENEPA"

Representing Agent: Dr. Juan Calvo, Vicepresident

Address: Av. Andrés Bello, Edif. Las Fundaciones, piso 5 y 6, Apartado Postal 2075, Caracas 1010-A.

Telephone: (02) 5719611 Master

Fax: (02) 5715264

Telex: 21717 VENEPA

Plant: Carretera Morón, Coro, Km. 12, Estado Carabobo.

Apartado Postal: 198 Puerto Cabello

Telephone: 5719311 (043) 334541/333477

Fax: 5719311

Telex: 45237 VENEPA VC

Annual production capacity: 75,000 MT printing and writing; 60,000 MT containers and wrappers; 74,000 MT Kraft Liner; 39,600 MT industrial cardboards; 30,000 MT medium corrugated; 120,000 MT short fiber chemical pulp.

Total investment: Bs. 26,399,054,000

Machines in use: 5

Number of employees: 1,269

Annual payroll: Bs. 93,845,612

Manufactured products: papers for writing and printing, cardboard Kraft paper; multi-sheet and wrapping; boards for corrugated lids (liner); multi-sheet sacks; medium board for corrugation; grey board for rigid boxes and other uses; board for pliable cases; special papers and boards; short fiber chemical pulp.

MANUFACTURAS DE PAPEL, C.A. "MANPA"

Representing Agent: Lic. Alejandro Delfino, Executive President

Address: Av. Francisco de Miranda con Av. Principal del Country Club, Edif. Torre Country Club, Chacafto, Apartado Postal 2646, Caracas.

Telephone: (02) 9012010 /901201 /9012311

Fax: (02) 9012410 / 9012349

Telex: 23507 MANPA - VP

Plant: Final Sur Calle Mariño, Zona Industrial, Maracay, Edo. Aragua

Telephone: (043) 352011 /352233

Fax: (043) 340844

Telex: 43474 MANPA V.E.

Annual production capacity: 70,000 MT printing and writing; 50,000 MT containers and wrappers

Total investment: Bs. 15,700,000,000

Machines in use: 3

Number of employees: 1.733

Annual personnel payment: Bs. 1,343,900,000

Manufactured products: writing, printing and wrapping papers; Kraft papers; cardboard; register papers; multi-sheet sacks; paper bags; cups board; notebooks, scrap-books, continuous forms, reams, quires.

CARTON DE VENEZUELA, S.A. (SMURFIT MOCARPEL)

Representing Agent: Mr. Pietro Filesi, Executive President

Address: Av. La Estancia, Edif. Centro Banaven, 4to. piso, núcleos A y B, Chuao, Apartado de Correos 609, Caracas 1010-A

Telephone: (02) 913666 (Serial)

Fax: (02) 929949

Plant: Carretera Panamericana, zona Carbonero, San Felipe, Edo. Yaracuy

Apartado Postal: 111 - San Felipe

Telephone: (054) 39201 / 39202 /39304

Cable: Mocarpel - San Felipe

Annual production capacity: 50,000 MT liner; 45,000 MT medium corrugated; 20,000 TM short fiber chemical pulp (bagasse)

Total investment: Bs. 4,260,000,000

Machines in use: 1

Number of employees: 304

Annual payroll: Bs. 360,000,000

Manufactured products: paper for corrugated lid (liner); paper for corrugation (Medium); multi-sheet paper; short fiber chemical pulp.

PAPCO, S.A.

Representing Agent: Dr. Gustavo J. Larrazábal E.

Office and Plant: Final Av. Henry Ford, Zona Industrial Sur, Valencia, Edo. Carabobo,
Apartado Postal 625
Telephone: (041) 332494 / 332522 / 332602 / 333970
Fax: (041) 331256

Annual production capacity: 1,400 MT containers and wrappers

Total Investment: Bs. 188,558,219

Machines in use: 1

Number of employees: 73

Annual payroll: Bs. 31,423,471

Manufactured products: M.G. color papers; paraffin paper; asphalted paper; carbon paper (monocarbon).

PAPELERA ARAGUA, C.A.

Representing Agent: Mr. Manuel Antonio Sosa O.

Address: Edif. CAVENDES, Piso 13, Ofic. 13-01, Av. Fco. de Miranda, Caracas
Telephone: (02) 2841246 / 2855737
Fax: (02) 2832543

Plant: Calle Isafas Medina Angarita, Zona Ind. Campo Alegre, Cagua, Edo. Aragua.
Telephone: (044) 71644 / 71296
Fax: (044) 75186

Annual production capacity: 12,000 MT medium and liner; 6,500 MT tissue

Total investment: Bs. 330,493,000

Machines in use: 2

Number of employees: 395

Annual payroll: Bs. 172,000,000

Manufactured products: lids and medium for corrugation; board for spiral tubes; corrugated board containers; napkins, sanitary napkins; kitchen towels; sulphite paper.

PAPELERA GUAICAIPURO, C.A.

Representing Agent: Mr. Jean Douzoglou, President

Address: Av. Baralt, Edif. Oyon, Local A, Quinta Crespo, Caracas.
Telephone: (02) 4820891 / 4820893
Fax: (02) 4820893

Factory: Zona Industrial La Hamaca, 2da. Transversal, Maracay, Edo. Aragua.
Telephone: (043) 549714 / 549745
Fax: (043) 546757
Telex: 48374 Pagua V.C.
Apartado Postal: 173 Maracay

Annual production capacity: 30,000 MT tissue; 2,800 MT containers and wrappings
Total investment: 1,275,434,654
Machines in use: 3
Number of employees: 487
Annual payroll: Bs. 212,328,698
Manufactured products: Tissue paper: napkins, sanitary napkins, towels; sulphite paper.

PAPELES NACIONALES FLAMINGO, C.A.

Representing Agent: Lic. Antonio Ferrer de S.J.M., Executive Director

Address: Av. Francisco de Miranda, Edif. Torre Country Club, Piso 12, Chacaíto, Apartado de Correos 2434, Carmelitas, Caracas 1010-A
Telephone: (02) 9012310
Fax: (02) 9012438
Cable: Flamingo

Plant: Carretera Guacara, San Joaquín, Guacara, Edo. Carabobo, Apartado de Correos 52, Guacara
Telephone: (045) 61246 / 61247 / 714119 / 715406
Fax: (045) 717152
Télex: 41280 PNFCA VC
Cable: Flamingo

Annual production capacity: 11,700 MT tissue
Total investment: Bs. 236,283,925
Numbers of employees: 395
Machines in use: 2
Annual payroll: Bs. 98,465,080
Manufactured products: Tissue paper: napkins, sanitary napkins, towels.

PAPELES VENEZOLANOS, C.A. (Subsidiary of KRUGER INC., CANADA)

Representing Agent: Dr. José R. León, President

Address: Avenida Principal de Los Ruices, Edif. Hilocentro, 3er piso, Caracas, Apartado de Correos 624 Carmelitas, Caracas 1010A

Telephone: (02) 2381037 (Master)

Fax: (02) 2399823

Télex: 25435

Cable: PAVECA

Plant: Carretera Guacara, San Joaquín, Guacara, Edo. Carabobo. Apartado de Correos 003, Guacara 2015-A.

Telephone: (045) 714047 (Master)

Fax: (045) 63212

Télex: 41265 PAVEC - VC Guacara

Cable: PAVECA

Annual production capacity: 89,600 MT Tissue

Total investment: Bs. 7,371,000,000

Number of employees: 1,269

Machines in use: 5

Annual payroll: Bs. 1,167,713,000

Manufactured products: Tissue-papers: sanitary napkins, napkins, towels, facial; wrapping papers; OTC paper.

ABCD LE CARTIERE

Representing Agent: Mr. Giovanni Siciliano D., President

Address: Av. Francisco Solano, Esq. con calle Los Mangos, Edif. Yocoima, Piso 9, Ofic. 9-D, Urb. Las Delicias, Sabana Grande, Caracas

Telephone: (02) 717041 / 7627036 / 7623789

Fax: (02) 7623789

Telex: 7628418

Plant: Urbanización Industrial Cantarrana, Matalinda, Av. 5, Esquina Calle 6, Charallave, Edo. Miranda

Telephone/Fax: none

Annual production capacity : 1,200 MT

Total investment: Bs. 366,000,000

Machines in use: 3

Number of employees: 52

Annual payroll: Bs. 24,000,000

Manufactured products: Artistic paper: for graphic arts, serigraphy, lithography; security paper: personalized check books with water-marks, stamped paper; shares, bonds, certificates, etc. All personalized with water marks.

**ANNEX IV. LIST OF FIRMS INTERESTED IN REPRESENTING CANADIAN
SUPPLIERS IN VENEZUELA**

**LIST OF FIRMS INTERESTED IN REPRESENTING CANADIAN
SUPPLIERS IN VENEZUELA**

The traditional suppliers of goods and services for the Venezuelan forestry sector have been Germany, Italy, Spain and the USA. Nevertheless, there is interest by local companies to know about products from other countries such as Canada.

The following list presents local companies with experience in the Venezuelan forestry sectors which may be interested in representing Canadian equipment and service suppliers.

**MACHINES AND ACCESORIES FOR THE WOOD INDUSTRY
(SAWMILLS; CARPENTRY SUPPLIES)**

1) **RUBERMAQUINAS, C.A.**

Contact: Mr. Santino Rubera, President

Office: Final Calle del Medio, Edif. Hermanos Rubera, Local B. Prado de María,
Caracas.

Telephone: (02) 62.66.84/62.64.22/61.68.39/ 61.67.85

Fax: (02) 62.66.84

2) **DIGEMAQ**

Contact: Mr. Mauro Schillani, Manager

Office: Calle Los Laboratorios, Edificio GEXIM, Los Ruices, Caracas.

Telephone: (02) 239.1811 / 239.6719 / 239.8502

Fax: (02) 239.8502

3) **RUBHERMAN**

Contact: Mr. Santino Rubera, President

Office: Av. Nueva Granada No. 13-09/11-07 entre Calle Padre Machado y C. El
Colegio, Prado de María, Caracas.

Telephone: (02) 616540

Fax: (02) 626686

DRYERS AND SPECIAL MACHINES

1) **OMAS DE VENEZUELA**

Contact: Mr. Santino Savio

Office: Ruta 9, Colinas de Santa Mónica, Quinta "Roxana", Caracas.

Telephone: (02) 661.3172 / 693.1005

Fax: (02) 661.2091;

Factory: Edif. Omasven, Calle Sixto Díaz, La Matica, Los
Teques, Edo. Miranda.

Telephone: (032) 314676 / 323029

Fax: (032) 323927

HEAVY EQUIPMENT AND/OR SPARE PARTS

1) **EPAICA, C.A.**

Contact: Mr. Julio César Hernández

Office: Av. Principal de Puente Hierro, Edif. 19 de Abril, P.B., Caracas

Telephone: (02) 545.4471

Fax: (02) 545.0632

2) **VENEQUIP**

Contact: Mr. Carlos Bellosta

Office: Zona Industrial Los Ruices, Calle Milán, Edif. VENEQUIP, Caracas.

Telephone: (02) 22.78.55 / 21.09.21 / 22.67.11

Fax: (02) 227855

3) **OTTO WOLFF DE VENEZUELA, C.A.**

Contact: Dr. Dirk Dickerhoff

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7) **ALL TRACTORS PARTS**

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ANNEX V. PRINCIPAL FORESTRY PUBLICATIONS

1. "Estadísticas Forestales" del Servicio Autónomo Forestal Venezolano (SEFORVEN)

Contents: Forestal Statistics. Production, consumption, exports
and imports.

Level: State, Regional and National

Frequency: Annual

Contact: Diomira Barrios

Address: Centro Simón Bolívar, Torre Sur, Piso 22, El Silencio, Caracas

Telephone: (02) 408.1107

Fax: (02) 483.9158

2. Ministerio del Ambiente y de los Recursos Naturales Renovables (MARN). "Memoria y Cuenta".

Contents: Presents and quantifies the activities developed by the principal
dependencies of the Ministry and related organisms during the year.

Level: National

Frequency: Annual

Contact: Rosalba Rios

Address: MARNR, Torre Sur, piso 22, Centro Simón Bolívar, El
Silencio, Caracas.

Telephone: (02) 414210 / 4081190 / 4081191

Fax: (02) 483.9158

3. **SEFORVEN. "Revista del Servicio Autónomo Forestal Venezolano"**

Contents: Publications of technical related to articles forestry problems. Information about the activities of SEFORVEN (Venezuelan Forest Service).

Level: Local, State, Regional and National

Frequency: Semiannual

Contact: Samuel Mendoza

Address: Centro Simón Bolívar, Torre Sur, Piso 22, El Silencio, Caracas

Telephone: (02) 408.1501

Fax: (02) 483.9158

4. **CONARE. "Boletín Informativo"**

Contents: Technical information about the activities and programs of the Compañía Nacional de Reforestación (National Company of Reforestation)

Level: National

Frequency: Twice monthly

Contact: Gustavo Berroeta

Address: Centro Andrés Bello, Torre Oeste, Piso 7, Ave. Andrés Bello, Caracas

Telephone: (02) 781.1397

Fax: (02) 782.3523

5. **CONARE. "Venezuela Forestal"**

Contents: Technical bulletin which presents results of forestry programs and research.
Level: National
Frequency: Three times yearly
Contact: Gustavo Berroeta
Address: Centro Andrés Bello, Torre Oeste, Piso 7, Ave. Andrés Bello, Caracas
Telephone: (02) 781.1397
Fax: (02) 782.3523

6. APROPACA. "Revista de la Asociación Venezolana de Productores de Pulpa, Papel y Cartón"

Contents: Account of the activities of the Association during the year, statistical information and listing of members companies. Conditions in the sub-sector of pulp, paper and cardboard.
Level: National
Frequency: Annual
Contact: Raimundo Guisantes
Address: Edificio Johnson & Johnson, piso 2, Oficina 2-B. Av. Rómulo Gallegos. Los Dos Caminos, Caracas.
Telephone: (02) 234-3130 to 34
Fax: (02) 234-6542

7. Instituto Forestal Latinoamericano (IFLA). "Serie Maderas comerciales de Venezuela".

Contents: Presents descriptive information about trees and wood, and appropriate techniques for their processing, transformation and use.

Level: Regional

Frecuency: Variable periods

Contact: Eng. Anibal Luna

Address: Universidad de Los Andes, Facultad de Ciencias Forestales. Mérida,
Estado Mérida.

Telephone: (074) 44-0535/44-8906

Fax: (074) 44-2606

8. Sociedad Venezolana de Ingenieros Forestales. "Boletín".

Contents: Organ of the Sociedad de Ingenieros Forestales (Forestry Engineers Society) and of their members.

Level: National

Frecuency: Three times a year

Contact: Eng. Rafael Viloria Díaz

Address: Colegio de Ingenieros de Venezuela, Parque Los Caobos, Caracas

Telephone: (02) 571-2691/571-3944

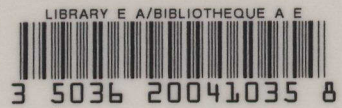
Fax: (02) 574-4683

9. Universidad de Los Andes. Facultad de Ciencias Forestales. Instituto de Silvicultura. "Estudios Técnicos".

Contents: Presents the results of technical research in the forestry field.
Level: Local, State and National.
Frecuency: Variable.
Contact: Eng. Douglas Rojas
Address: Universidad de Los Andes, Facultad de Ciencias Forestales, Mérida,
Edo. Mérida.
Telephone: (074) 40-1500/40-1111
Fax: (074) 40-1503

10. Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR). "Serie de Informes Técnicos: Aspectos Forestales".

Contents: Presentation of results of technical studies undertaken to evaluate specific technical problems, reach conclusions and draw concrete recommendations.
Level: Local, State and/or National
Frecuency: Variable
Contact: Samuel Mendoza
Address: MARNR, Torre Sur, Piso 22, Centro Simón Bolívar, El Silencio,
Caracas.
Telephone: (02) 408-1501
Fax: (02) 483-9158



11. Ministerio del Ambiente y de los Recursos Naturales Renovables (MARNR). "Serie: Planificación y Ordenación de los Recursos Forestales".

Contents: Presentation of the results of the forestry studies. Source of information for forest sector planning.

Level: State and/or National

Frecuency: Variable

Contact: Samuel Mendoza

Address: MARNR, Torre Sur, Piso 22, Centro Simón Bolívar, El Silencio, Caracas.

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