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# Argentina and Uruguay

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# Argentina & Uruguay

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**T**here is increasing interest in Argentina and Uruguay for the development of fast-growing commercial timber. Both countries have large areas suitable for the establishment of commercial plantations, and both have governments that are actively encouraging investment. They are also members of South America's important free trade region, Mercosur.

Though overshadowed by their Chilean and Brazilian neighbors, Argentina and Uruguay offer attractive opportunities in forest plantations and markets. Argentina in particular, has a strong domestic market for machinery, consulting services, and wood products.

The Argentinean domestic market, with a population of 35 million, is the second largest in the region. The government estimates that the country has 20 million hectares of potential forestry land. In addition, high forestry growth rates, prime weather and soil conditions, low labor costs, and government incentives make Argentina an attractive country for projects in the forest industry. The period 1993-96 saw investments totaling \$900 million in domestic and foreign capital.

Uruguay lies on the other side of the River of la Plata. As the geographical center of Mercosur, Uruguay has benefited from the free trade region, posting positive growth in recent years after a prolonged recession in the eighties and early nineties.

The Uruguayan government has targeted a number of growth sectors, including forestry. It is offering incentives on 3.4 million hectares of land suitable for forestry plantations. The country's proximity to Argentina and Brazil has made Uruguay a competitive place to grow trees. The country's flat terrain provides suitable conditions for the harvesting and transport of timber. Its subtropical location means high productivity for cultivated timber stands.

## Economic Indicators

1997	Argentina	Uruguay
GDP Growth	8.6%	5.1%
GDP	\$271 billion	\$21 billion
Exports	\$27 billion	\$2.7 billion
Imports	\$33 billion	\$3.1 billion

Source: US Department of Commerce

## Argentina

**A**rgentina is bordered to the west by Chile, in the north by Bolivia and Paraguay, and by Brazil, Uruguay and the South Atlantic Ocean to the east. The continental area is approximately 2,800,000 square kilometers (1,080,000 square miles). The climate varies from the subtropical to the subantarctic, allowing a large variety of environments and productive areas.

Argentina is organized as a federal republic, with 23 provinces and the federal capital, the City of Buenos Aires. Other important cities include Cordoba and Rosario.

The Argentine economy is based on free enterprise, but there is important state participation in many areas such as transportation, utilities, energy, and manufacturing. Agriculture, including agro-industries, is the most important economic sector.

The forest industry is based on hardwood forests and plantations, which supply the lumber industry and provide raw material for the paper and cellulose industries. Secondary products include furniture, fibreboard, wooden articles and chemical extracts.

## Native Forest Area

Province	hectares
Buenos Aires	100,000
Catamarca	1,000,000
Córdoba	1,500,000
Corrientes	300,000
Chaco	5,450,000
Chubut	1,023,000
Entre Ríos	200,000
Formosa	5,666,670
Jujuy	1,792,100
La Pampa	800,000
La Rioja	2,500,000
Mendoza	100,000
Misiones	1,600,000
Neuquén	455,000
Río Negro	434,000
Salta	8,892,425
San Juan	150,000
San Luis	1,100,000
Santa Cruz	335,000
Santa Fe	1,300,000
Santiago del Estero	8,748,000
Tierra del Fuego	630,000
Tucumán	898,922
Total	44,975,117

Source : Secretaría de Recursos Naturales y Desarrollo Sustentable (SRNyDS), 1994

## Native Forests

Argentina's forests are dominated by 35 million hectares of native forest. However, only 50% of this area is available for production purposes, and only 30% of Argentina's annual wood production comes from native forests.

The native forest is concentrated in the Chaco area of the north.

## Native Species in Major Forest Areas

Major Forest Area	Main species
Chaco Forest 24.5 mill. ha	<i>Schinopsis</i> spp. <i>Hymenaea courabil</i> <i>Tabebuia</i> spp.
Tucuman and the Salta Rainforest 2.5 mill. ha	<i>Nectandra</i> spp. Tipa walnut tree <i>Tabebuia</i> spp. Tucumán cedar <i>Cordia</i> spp.
Misiones Rainforest (an extension of the Brazilian rainforest) 2.0 mill. ha	<i>Araucaria angustifolia</i> <i>Balfourodendron</i> <i>riedelianum</i> <i>Nectandra</i> spp. incense tree <i>Cordia</i> spp. <i>Cedrela</i> spp.
Subantartic Forest (in the Andean Slopes) 2.0 mill. ha	<i>Araucaria araucana</i> Neuquén pine evergreen beech pellín oak <i>Quercus</i> cypress mayten <i>Nothofagus</i> spp. cherry tree
Mesopotamic forest (Corrientes and Entre Rios provinces) 1.5 mill. ha	Mostly bushes and shrubs

Source: Secretaría de Agricultura, Ganadería, Pesca y Alimentación (SAGPyA)

## Commercial Plantations

Compared to its native resources, Argentina's plantations seem small, covering only 800,000 hectares. But 70% of Argentina's total wood production comes from these plantations. Nearly all of Argentina's commercial timber stands are privately owned. With ideal weather and soil conditions, Argentina can grow high-yield commercial timber species such as pines, eucalyptus, willow and poplar.

The tree farming business began in 1940, primarily for pulp mill supply. It was later stimulated with tax credits to make the cost of timber generation low, even relative to Chile and Brazil. The annual planting area has reached 30,000 hectares. The 800,000 hectares of existing plantation area represent only 5% of the total potential area for afforestation.

Mesopotamia, in the northeast region, contains more than half of the country's forest plantations. It is composed of the Misiones, Corrientes, and Entre Rios provinces. In the Mesopotamia area there are 550,000 hectares which represent more than 57% of the total planted area. Misiones alone accounts for 55% of the country's pine plantations, equivalent to 200,000 ha. Main species include loblolly pine, slash pine and several Caribbean pines. The other major species are from the genus eucalyptus.

In Corrientes, there are more than 120,000 hectares of plantations specifically, *Pinus elliottii*, *Pinus taeda*, *Pinus caribaea*, and *Eucalyptus grandis*.

Poplar and willows grow best along the Delta of the Parana River, near Buenos Aires. The sandy soils of the Litoral Region along the Uruguay River is particularly suited for planting eucalyptus.

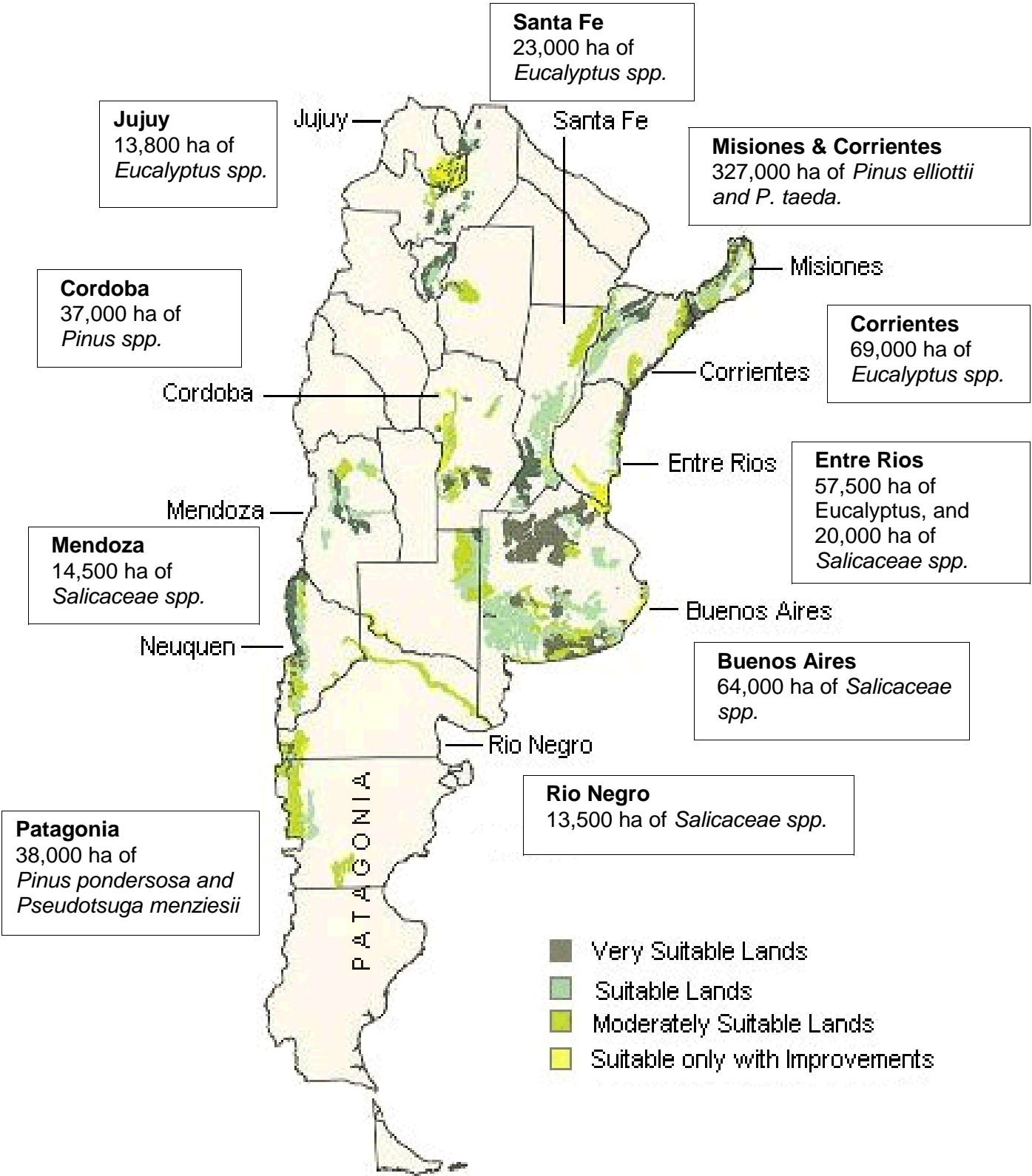
### Plantation species in Argentina

- Loblolly Pine (*Pinus taeda*)
- Slash Pine (*Pinus elliottii*)
- Ponderosa Pine (*Pinus ponderosa*)
- Parana Pine (*Araucaria angustifolia*)
- Hybrid Caribbean Pine (*Pinus caribaea* var. *caribaea* × var. *hondurensis*)
- Eucalyptus (*E. saligna* and *E. grandis*)
- Poplar, Cottonwood (*Populus* spp. Salicaceae family)
- Willow (*Salix* spp. Salicaceae family)
- Douglas-fir (*Pseudotsuga menziesii*)
- Kiri (*Paulownia tomentosa*)
- Paraisos, Chinaberry (*Melia azedarach*)

## Growth Rates by Region

Region	Species	Mean annual Increment	
		m <sup>3</sup> /ha/yr	ft <sup>3</sup> /acre/yr
Mesopotamia	Pines ( <i>Pinus</i> spp.)	35	500
Mesopotamia	Eucalypts ( <i>Eucalyptus</i> spp.)	40	572
Pampeana	Eucalypts ( <i>Eucalyptus</i> spp.)	30	429
Delta	Poplar, willow ( <i>Populus</i> spp., <i>Salix</i> spp.)	22	314
Patagonia	Pines ( <i>Pinus</i> spp.)	18	257
Patagonia	Poplar ( <i>Populus</i> spp.)	30	429

# Plantation Distribution by Species, and Areas Suitable for Planting



Source : SAGPyA

Growth rates of cultivated forests are comparable to those in Chile and Brazil. Silvicultural trials indicate that genetic improvement and intensive management can substantially reduce the rotation age.

The National Institute of Agricultural Technology (INTA) has classified the most important areas for productive forestry in Litoral and Patagonia (see tabel below).

## Plantation Development

**T**he development of the forest industry is one of the principal goals of the government of Argentina. The Federal Government has established planted forest incentives that provide reimbursement of between \$340-\$700/acre, up to 15 months after planting. The incentives are available to both domestic and foreign investors, but

are limited to 1,700 acres/year of planting, per enterprise.

The Secretary of Agriculture, Livestock, Fisheries, and Food (SAGPyA) is the organization in charge of forestry; other important federal agencies include the Ministry of Economy, and Public Services and Works. Additional plantation establishment incentives are offered by local governments and vary by region. Argentina welcomes foreign direct investment, which has become a key component of its economic growth. The climate for foreign investment is considered among the most favorable in Latin America.

Argentina's 1996 forestry development plan aims to have an additional 2.7 million hectares planted by the year 2005. By this time, the number of people employed in the primary sector should reach 124,350. Ultimately, Argentina expects to achieve raw material self-sustainability, and to be

## Plantation Distribution by Species and Areas Suitable for Planting

Area	Species	Site conditions
<b>Mesopotamia (Misiones):</b> located in the north east and the traditional native forest region	<i>Pinus elliottii</i> <i>Pinus taeda</i> <i>Araucaria angustifolia</i> <i>Melia azedarach</i> Paulownia	70-80 inches/year rainfall  Good soil conditions
<b>Litoral region along Uruguay river:</b> located in the provinces of Corrientes and Entre Rios	<i>Eucalyptus saligna</i> <i>Pinus spp.</i>	40 inches/year rainfall  Sandy soils bordering Brazil
<b>Delta of Parana River :</b> located in Buenos Aires and along the Entre Rios Delta	<i>Populus spp.</i> <i>Salix spp.</i>	40 inches/year rainfall Dams ensure optimum irrigation for tree growth. Near big cities (12 million consumers)
<b>Patagonia</b>	This area has 1 million hectares available for afforestation. Good for planting <i>Pinus ponderosa</i> and <i>Pseudotsuga menziesii</i> .	The best regions are located by the Andes mountains adjacent to the forests of the South of Chile.

Source: Instituto Nacional de Tecnología Agricultura (INTA), 1997

transformed into a forestry export country. It hopes to bring in \$5.4 billion by 2015 from the export of forest products. Argentina intends to achieve these forestry aims by:

- Promoting the concentration of forests in areas suitable for growth, and proximate to the manufacturing and marketing sectors
- Applying available technology to reduce costs
- Introducing intensive management that will increase timber quality
- Improving average productivity per hectare by 3% a year
- Reducing rotation lengths by 10-20%

## Plantation Investment

**T**hough lagging behind its Chilean and Brazilian neighbors in plantation development, Argentina has attractive soil and climatic conditions for the propagation of fast-growing pines and eucalyptus. In addition, land prices are low, even by South American standards.

Misiones and Buenos Aires have higher planting costs due to smaller lots that are only semi-mechanized. Corrientes and Entre Rios have large scale plantations that can achieve economies of scale, and use mechanized planting and more advanced nursery techniques.

## Afforestation Goals: Plantings per year

Year	Area (1000 ha)
1996	75
1997	120
1998	180
1999	240
2000	300
2001	360
2002	360
2003	360
2004	360
2005	360

Source: National Forestry Plan, 1996

Argentina's important domestic market, and its strong trade relationship with the Mercosur countries (200 million consumers), makes it a strategic place to invest. During the period of 1993-1997 investment in the forestry industry reached \$900 million, with major foreign investment coming from Chilean paper and panel industries.

## Land Prices and Plantation Costs by Region

Province	Land Price (\$/ha)	Species	Planting Cost (\$/ha)
Misiones	150-400	<i>Pinus spp.</i>	500-600
Corrientes	--	<i>Pinus spp.</i>	500-600
Corrientes	300-400	<i>Eucalyptus spp.</i>	400-500
Entre Rios	400-700	<i>Eucalyptus spp.</i>	400-500
Patagonia	100-300	<i>Pinus spp.</i>	400-500
Buenos Aires	100-200	<i>Populus/ Salix spp.</i>	500-800

Source : SAGPyA, 1996

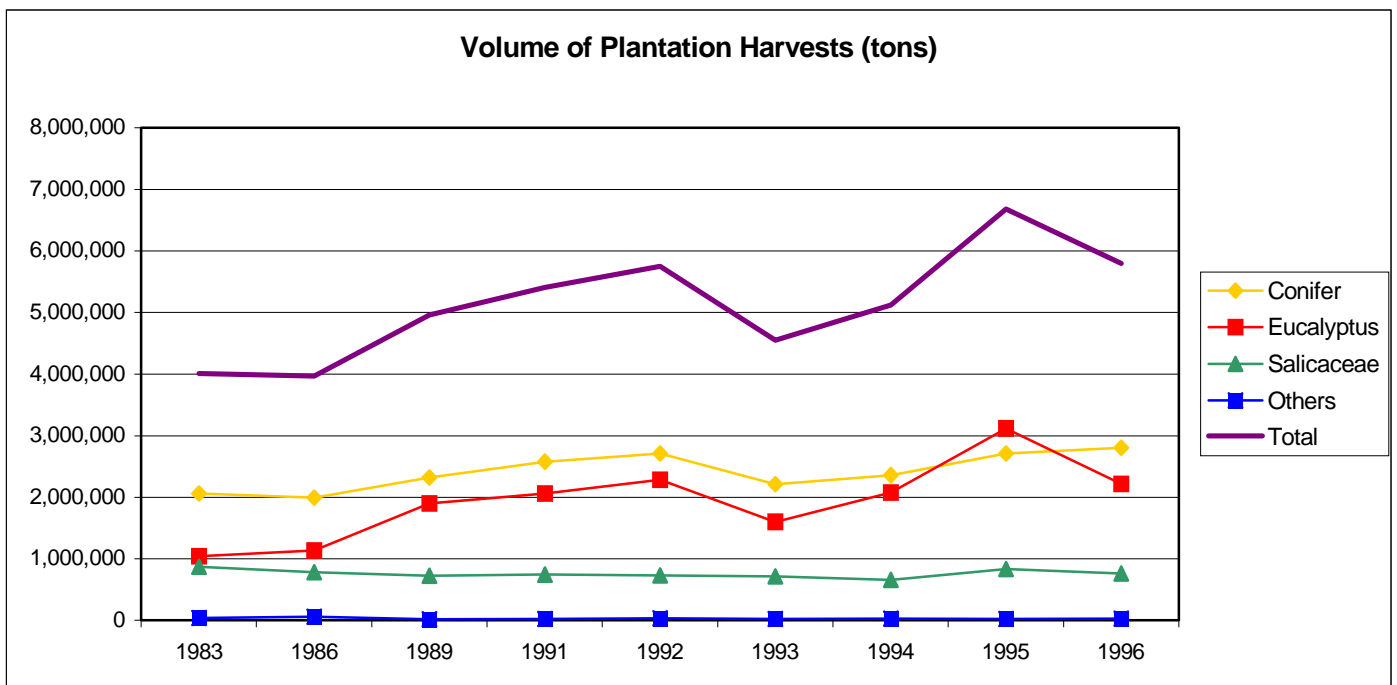
## Timber Harvests

**T**imber harvests from planted forests have been climbing since 1986. The largest increases are in Eucalyptus harvesting in Entre Rios and Corrientes.

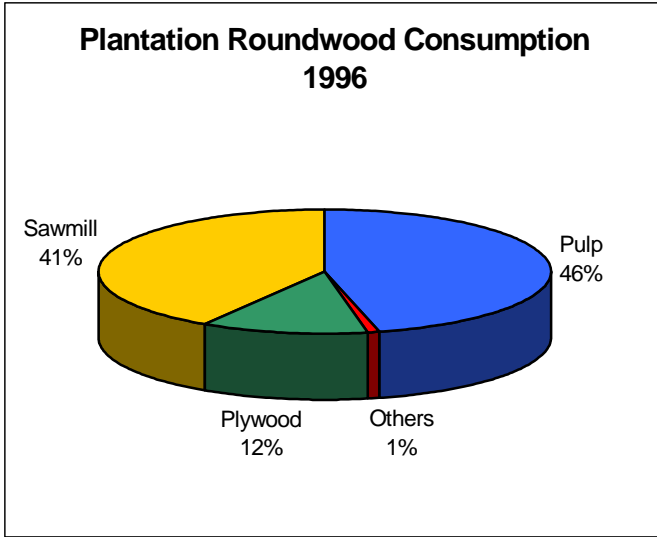
The most important harvesting area is Misiones province, with 2.44 million metric tons harvested annually, equivalent to 36.4% of the country's total. Other important forestry areas are Buenos Aires (1.3 million tons), Corrientes (1.21 million tons), and Entre Rios (1.1 million tons).

### Volume of Plantation Harvests by Species 1983-1996 (tons)

Year	Conifer	Eucalyptus	Salicaceae	Others	Total
1983	2,059,457	1,040,401	870,275	37,664	4,007,797
1986	1,991,686	1,137,677	781,814	59,401	3,970,278
1989	2,319,619	1,898,054	724,263	15,130	4,957,066
1991	2,579,272	2,059,061	742,957	22,693	5,403,983
1992	2,708,312	2,280,184	729,352	31,963	5,749,896
1993	2,213,442	1,602,494	713,848	20,112	4,549,896
1994	2,360,465	2,074,315	657,598	27,984	5,120,272
1995	2,709,201	3,116,856	836,082	22,821	6,684,961
1996	2,802,385	2,216,214	756,427	25,093	5,800,119



## Roundwood Consumption from Plantations in 1996



Source : SAGPyA, 1997

## Forest Products Industry

The Argentinean forest industry has an annual production of 3.5 million cubic meters. About 90% of the raw material supply is from the provinces of Misiones, Buenos Aires, Corrientes, and Entre Rios. Most of the production is consumed in the domestic market, with exports going mainly to South American and European markets.

In 1995, the Argentinean forest industry was composed of 2,300 companies with 23,000 employees. The pulp and paper sector consumed the largest portion of plantation harvests (55%), while sawmill production consumed 30%. The remainder went to the plywood industry (12%), which mainly uses *Eucalyptus* and *Salicaceae*.

The sawmill industry is heavily dependent on the domestic construction sector. Most sawmills are small, low technology, family-owned companies. The sawmills are located in and around high consumption areas such as major cities and secondary manufacturing facilities. Sawn lumber production reached 1 million cubic meters in 1996.

The veneer industry is centered in Misiones and in the northwestern region of Argentina. Most of these companies use native species, although a few use poplar and Parana pine. Veneer production, which reached 1,000 m<sup>3</sup> in 1996, is largely utilised by the plywood sector. Thin veneer sheets are manufactured in Misiones and Buenos Aires by companies that use species from the native forest and plantations, as well as some imported African hardwoods. The principal destination of this product are board manufacturers and furniture companies.

Plywood production is concentrated in Misiones and Neuquen provinces. Production reached 37,600 m<sup>3</sup> in 1995, declining slightly to 36,000 m<sup>3</sup> in 1996. The installed capability of this industry is 90,000 m<sup>3</sup>/year.

Increased exports of fruits and other agricultural products has spurred growth in the packing industry. The most commonly used species are poplar, willow, eucalyptus and pine. The major companies are located in Buenos Aires, the Parana Delta, Rios, Rio Negro, Corrientes, and Mendoza.

The furniture industry is focused around Buenos Aires and Santa Fe. There are about 1,100 companies in the country employing more than 10,000 workers. In the domestic market, the most popular species are Algarrobo and Pine.

## Pulp and Paper Production by Region 1995

Region	Volume (tons)
Misiones	363,000
Buenos Aires	170,000
Jujuy	96,000
Santa Fe	63,000
Tucuman	34,000

Source: SAGPyA, 1996

## Forest Products Production 1994-96

Product	1994	1995	1996
Fiberboard (m <sup>3</sup> )	93,926	104,115	182,819
Particleboard (m <sup>3</sup> )	196,684	288,368	370,297
Veneer (m <sup>3</sup> )	892	1,303	1,250
Treated lumber (m <sup>3</sup> )	152,145	174,880	165,000
Plywood (m <sup>3</sup> )	33,567	37,622	36,000
Pulp (tons)	652,895	755,597	754,000
Paper (tons)	781,728	1,025,196	1,100,000

Source : SAGPyA, 1997

The flooring industry produces 1 million cubic meters per year for the domestic and export markets. The principal parquet industrial regions are Buenos Aires and Misiones. Since 1930, native woods, such as calden, guatambu, algarrobo, parana pine, domestic walnut tree, and vivar have been used to manufacture parquet flooring. Plantation eucalyptus is also commonly used for this product.

There are 66 companies in the pulp and paper industry, employing 10,000 workers throughout the country. However, seven leading companies produce more than 50% of the industry's total output.

The most important pulp and paper company is Celulosa Argentina SA, which owns 25% of the country's total installed capacity. The plants are located close to the raw material and the markets. Short fiber production is established in the Parana Delta (from *Salicaceae*), and Capitán Bermudez (from *Eucalyptus*). Long fiber production is located in Misiones. Pulp and paper production totaled 657,000 tons and 1,108,000 tons respectively, in 1996.

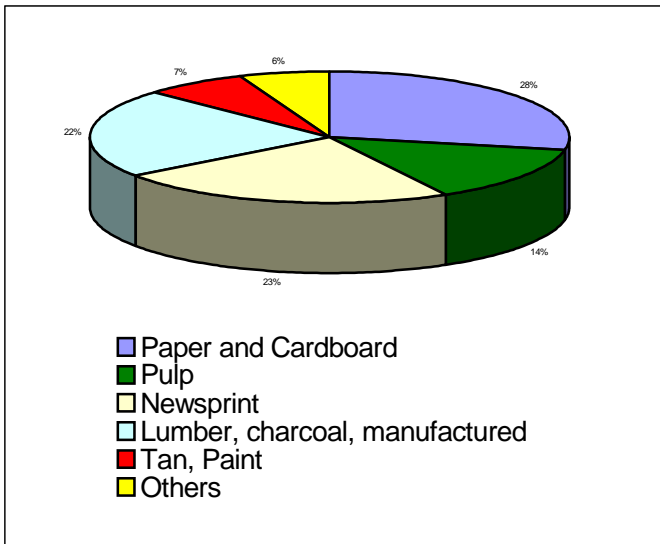
## Forest Products Trade

Since 1991, Argentina has been a net wood importing country. While exports have grown steadily, imports have been growing at a faster rate to match consumption. Argentina has tended to export logs and import finished wood products because its wood processing sector was under developed. The principal import product is paper, which represents 55% of the forestry imports.

Argentina has an important domestic market, with room to expand. For example, the current plywood consumption rate is 7m<sup>3</sup>/year per 100 persons, (half the rate of consumption in Brazil), and paper consumption is at 90 lbs/year/person (Spain: 260 lbs/year/person).

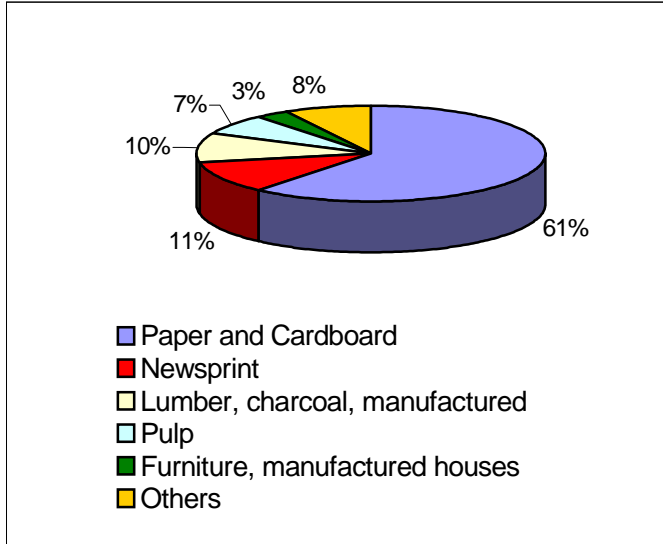
With its ambitious afforestation program, Argentina is hoping to reverse the negative trade balance. Currently, forestry only accounts for 2% of total exports. The principal markets for the Argentinean exports are European countries such as, Spain, Italy, Norway, Finland, and Portugal and the Mercosur countries (Brazil, Uruguay, Paraguay, Chile).

### Value of Forest Products Exports 1996



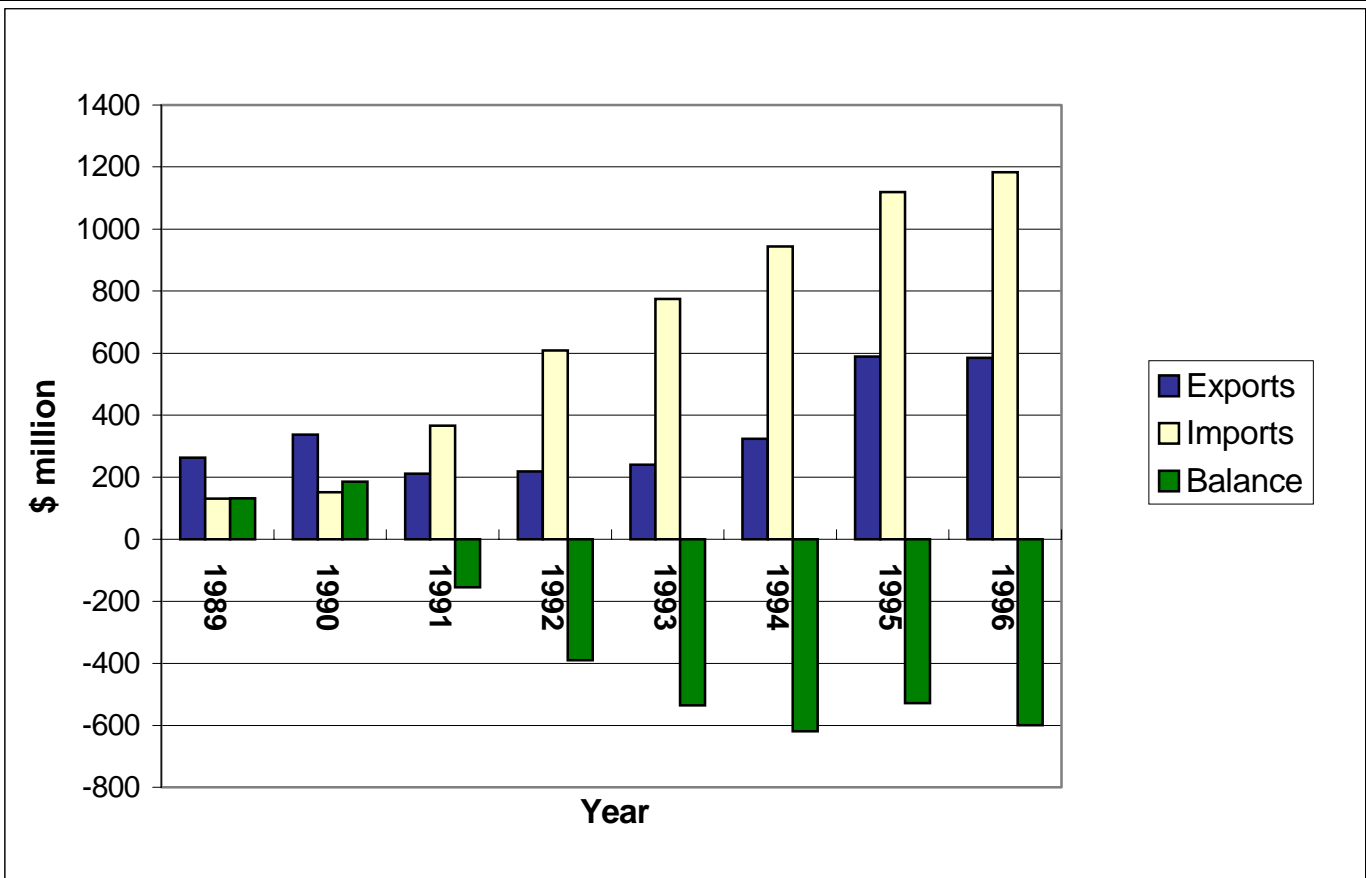
Source : SAGPyA, 1996

### Value of Forest Products Imports 1996



Source : SAGPyA, 1996

### Forest Products Trade 1989-1996



Source: SAGPyA, 1997

## Uruguay

**U**ruguay is a small country positioned between the two giants of South America, Argentina and Brazil. Its territory covers an area of 17.1 million hectares with a population of 3.15 million inhabitants. The main industries are agriculture and cattle.

Uruguay's importance as a forestry country lies more in its potential for fast-growing plantations than in existing resources or industry. There is available land for planting eucalyptus and pines. The country's flat terrain, good weather conditions, proximity to Mercosur, and government support for afforestation projects provide opportunities for an expansion of the forestry industry.

## Forest Resources

**I**ndustrial forestry production in Uruguay is entirely based on plantations. Only 5% of the total national land area is classified as forest. Of this, three-quarters is native forest. However, native forest is protected from harvesting by law.

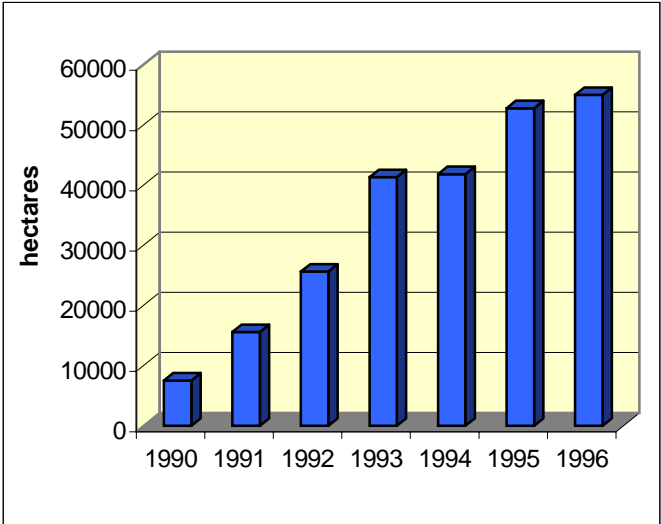
Since 1975 the government has offered incentives for the development of the forestry industry. The period 1990-1997 saw an increase in plantation area of 26%. Topographic and weather conditions make Uruguay an excellent place for fast growth species. The country has identified 3.6 million hectares of land suitable for afforestation.

Commercial plantations originated in the 70's to supply the national forest products industry and to be used as fuelwood. There is currently only 300,000 ha of plantations. About 83% of the plantation area is eucalyptus, most notably *E. grandis* and *E. globulus*. Around 15% is pine plantations (mainly *P. elliotii* and *P. taeda*), while 2% is composed of *Salicaceae* and other species.

The eucalyptus plantations reach growth rates of up to 60 m<sup>3</sup> per hectare per year, with an average growth rate of 35 m<sup>3</sup> per hectare per year. The pine plantations have growth rates of up to 25 m<sup>3</sup> per hectare per year.

Although the forestry area has tripled in size in recent years, the planted area remains too small for industrial purposes. The annual planting area is about 55,000 hectares per year, with most of the planting areas along the west coast.

## Annual Planting Area 1990-96



Source: Promocion de Inversiones y Exportaciones

## Plantation Distribution

State	% of Total Forest Area
Rio Negro	22.9
Rivera	15.6
Paysandu	13.5
Tacuarembó	9.3
Lavalleja	8.5
Durazno	8.3
Soriano	6.1
Florida	4.3
Cerro Largo	3.4
Maldonado	2.3
Rocha	1.6
Canelones	1.6
San Jose	0.9
Colonia	0.7

Source: Informativo STCP  
Total Forest Area = 300,000 ha

Of Uruguay's 19 provinces, the areas with the greatest forestry potential are the Rivera, Tacuarembó, Cerro Largo, Lavalleja, Durazno, Treinta y Tres, Paysandú, and Río Negro provinces. These areas are typically classified into three regions: West coast, East, and Center-North.

Almost 61% of existing plantations are located in the states of Rivera, Tacuarembó, Paysandú, and Río Negro.

Several international companies have purchased land for afforestation in Uruguay. Weyerhaeuser Corp (USA), Shell (Holland), Emce (Spain), West Fraser (Canada), Cholguan (Chile), Madesal (Chile), Los Alpes (Chile) and other Chilean companies are major foreign buyers. Important Uruguayan forestry companies such as Cofusa, Fymnsa, Caja Bancaria, Paso Alto, and other small investors from Mercosur have invested in forestry land.

## Legal Frame for Afforestation

The 1987 Forestry Law 15,939 forms the basis for Uruguay's forest development plan. The law defines an area of 3.6 million hectares for afforestation. Selected species are eligible for financial incentives (see insert below); these species were selected because of their presence in Argentina and Brazil, thus producing a concentrated fiber resource.

The law also allows property tax waivers, and tax exemptions on machinery imports, supplies for afforestation activities, forest management, harvesting, and wood transportation (article 66).

Forest subsidies of between 20% to 50% of the afforestation cost are available, depending on the species planted, afforestation density, and type of establishment. Plantation owners must meet the

## Afforestation Priority Areas and Species

### Planted species eligible for financial incentives in Uruguay

- Lobolly Pine  
*Pinus taeda*
- Slash Pine  
*Pinus elliottii*
- Eucalyptus  
*E. saligna*  
*E. grandis*  
*E. globulus*
- Poplar, Cottonwood  
*Populus spp.*  
(*Salicaceae family*)
- Willow  
*Salix spp.*  
(*Salicaceas family*)



Source: Promoción de Inversiones y Exportaciones

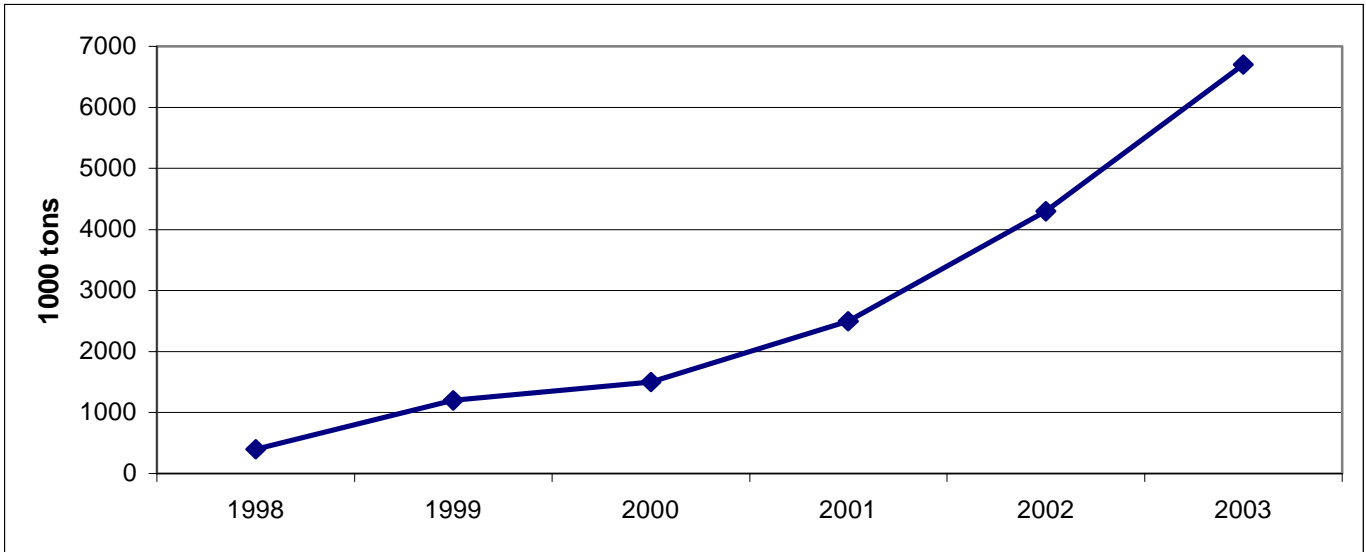
following requirements to be eligible for these subsidies:

- Afforest in designated priority forest areas
- Afforest with the species indicated by law
- Plant a minimum forest area of 10 hectares
- Prepare a forestry plan for the project that has been evaluated and signed by a professional forest engineer or agronomist
- Ensure that 75% of the original planted density survives after one year of establishment

As part of its Forestry Infrastructure Plan to promote the development of the forestry sector, Uruguay is modernizing two important railway lines exclusively for the transportation of timber. The two lines run north-south.

The Rivera-Florida-Montevidео line is 560 km long, and the Blanquillo-Florida line is 180 km long. Approximately 30% of Uruguay's 3.6 million ha of forestry priority areas are found along these lines, namely the Rivera, Tacuarembó and Durazno areas.

### Projected Timber Availability 1998-2003



Source : Promocion de Inversiones y Exportaciones

### Plantation Costs by Region

Region	Cost (\$/ha)	Forestry land potential use	Provinces
West coast	na	Pulp and sawn lumber	- Paysandu - Rio Negro
East	500	Pulp	- Lavalleja - Treinta y tres
Center-North	900	Sawn lumber	- Rivera - Tacuarembó

Source : Forestacion Nacional, 1999

## Forest Products Industry

**H**istorically, Uruguay has not been a forestry country. Its forestry industry supplied the domestic market alone, and the timber was used specifically for the paper companies or as fuel. This is beginning to change as the government targets forestry as a growth sector. Uruguay is following the Chilean forestry example, launching codes such as Law 15,939 to support investment in the forestry industry.

Five years ago, 80% of the timber harvest was used as fuelwood for domestic and industrial purposes. Fuelwood is the second most important energy source in Uruguay. Due to high petroleum prices, there is a trend towards the substitution of petroleum boilers with wood boilers.

In the 1950s, Uruguay was a lumber importing country. Today, there are several sawmills that supply the domestic market, although many of these are not modern facilities capable of meeting international standards. However, several companies--particularly those close to the major cities--are investing in new processing technology to aim for the export market.

In 1996, lumber exports totaled 54,000 m<sup>3</sup>, exceeding imports by 11,000 m<sup>3</sup>. The lumber industry consumes 500,000 tons per year, generating 7,000 jobs in 800 companies.

Uruguay's main forestry industry is pulp and paper. Several important companies compose the Uruguayan paper industry: FNP, PAMER, IPUSA, CICSSA, and Cartonera Pando. The main products are newsprint (FNP, IPUSA), cardboard (PAMER, CICSSA), tissue (PAMER, IPUSA), and other papers (FNP, PAMER, IPUSA, Cartonera Pando). The industry consumes 160,000 tons of timber and 100,000 tons of fuelwood. It employs 3,000 workers principally in the companies FNP, PAMER, IPUSA, and CICSSA.

## Value of Forestry Exports

Export Product	1996 (\$,000)	1997 (\$,000)
Pulp logs	27,557	34,755
Sawn lumber	7,802	7,888
Veneer	-	215
Pulp	47	44
Used paper	724	272
Paper and Cardboard	20,962	32,529
<b>Total</b>	<b>57,092</b>	<b>75,683</b>

Source: Promocion de Inversiones y Exportaciones

## Forestry Trade

**U**ruguay's main forestry export is in the form of logs to pulp and paper companies. Exports are destined to Spain, Italy, Portugal, Finland, Sweden, Norway, Japan, Israel, Argentina, Brazil, Peru, and Venezuela. Some international pulp and paper companies have purchased eucalyptus plantations and land suitable for afforestation to secure a resource base. Uruguay's principal markets for pulpwood are Scandinavia and Spain. Uruguay is also exporting sawn timber for pallets (*Eucalyptus grandis*) to Italy.

On balance however, Uruguay remains a net importer of forest products. Over the last six years, the total value of forest products imports have exceeded total exports, sometimes by a margin as high as two-to-one. Forestry has been identified as a growth sector for US exports, and Uruguay is considered a good test market for firms interested in entering the Mercosur region.

## Outlook

Argentina and Uruguay will emerge as the next big forestry countries of South America. Their availability of potential forestry land, and excellent topographic and weather conditions makes both countries attractive for investment opportunities. The geographic positions of these countries also make them accessible to important markets such as Mercosur (Argentina, Uruguay, Paraguay, and Brazil), the East Coast of North America, and Europe.

The governments in both countries are actively encouraging development in the forestry sector, supporting afforestation programs with subsidies and tax exemptions. Their forestry plans include the promotion of a diversified plantation program, covering such species as *Pinus*, *Eucalyptus*, and *Salix*. Argentina is expecting to have an area of 2.6 million hectares by 2005, and Uruguay has defined 3.6 million hectares with forestry priority.

Several international companies, attracted to the region's fast growth rates, have purchased land for afforestation. The principal objectives of these projects are to supply the pulp and sawn lumber industries in the region, and to export abroad.

Finally, it is important to mention that this is an industry in development. Although there is an excellent potential for forestry, there is also a need for technology, consulting, and infrastructure services. The governments are investing in public services to improve port and road conditions.

In the future, the two countries of the Rio de la Plata will change their traditional roles from agriculture and livestock based economies to forestry countries.