

## FORESTRY PRODUCTS'

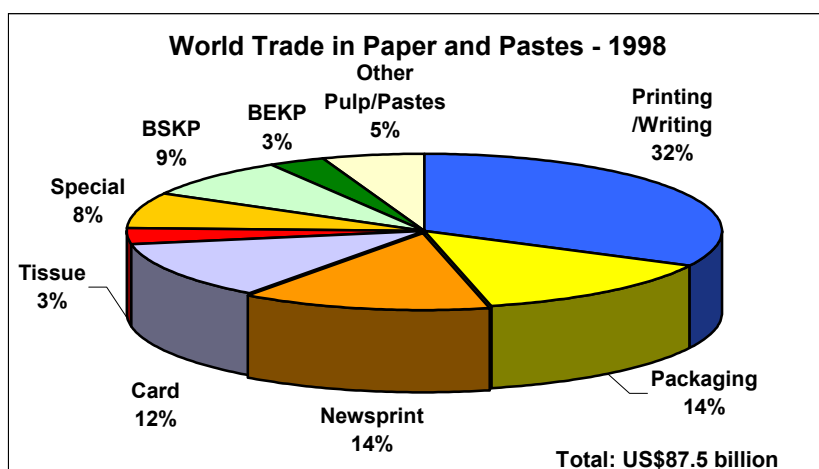
### INDUSTRIAL OPERATIONS DIVISIONS 2

Sector Department 1

## Paper and Pulp – Foreign Trade

During 1998, international trade in paper and pulp totaled some US\$ 87.5 billion (Figure 1), corresponding to a volume of 119 million metric tons. This amount represents around 1/3 of world paper production and 1/6 of world production of pulp and pastes. During the period 1990-98, while world paper production grew at an average rate of 2.8% per year, international trade grew at an average annual rate of 5.9%.

Figure 1



During the first two months of 1999, US exports of paper and pulp declined by the significant figure of around 20% relative to the previous year. Imports rose slightly, by some 3%.

Within Brazil, in the first four months of 1999, exports of paper rose 3.2% in volume terms relative to the same period of 1998. In the case of pulp, the increase was a far greater 18.3%.

### World Trade in Pulp and Pastes

During the period 1990-98, world trade in pulp and pastes (pulp fiber) grew at an average annual rate of 4%. As a result of the closing of plants in the United States and Europe in 1998 and the start of 1999, and the shift in supply to units located in areas of Latin America and Asia with greater comparative advantages, international trade in pastes is growing, and should continue to grow at rates above those of production and consumption.

In 1998, world trade in pulp and pastes reached 30.5 million metric tons, equivalent to 17% of world production (179 million metric tons). The main exporters are located in North America: Canada (9.0 million metric tons), and the United States (4.4 million metric tons). These are

followed by Sweden, Brazil, Finland, Chile, Indonesia, Portugal and Spain as the most important exporters.

Western European (Germany, Italy, France and Britain) and Asian countries (Japan, South Korea, China, Indonesia and Taiwan) are major importers, with each accounting for annual import volumes in excess of 1 million metric tons.

Bleached fiber is the most widely sold variety of fiber, accounting for 90% of total sales. Long fiber pulp from the Northern Hemisphere countries (Scandinavia and Canada) continues to be the world market benchmark for the price and quality of all fibers.

With growth of 81% during the period 1990-98, eucalyptus pulp has been the fastest growing variety in world trade (Table 1). In 1990, sales of eucalyptus pulp represented 14% of all pulp and paste sales, rising to 18% in 1998. Long fiber suffered a slight loss of market share (from 47% to 46%), while short fiber (other varieties) increased its share from 20% to 23%.

*Table 1*

### **World Trade in Pulp and Pastes**

In million t

<b>Category</b>	<b>1990</b>	<b>1998</b>	<b>Change %</b>
<b>Bleached sulfate</b>	<b>18.1</b>	<b>26.5</b>	<b>46.4</b>
.Long fiber - BSKP	10.5	14.0	33.3
.Short f. eucalyptus-BEKP	3.1	5.6	80.6
.Short f. other - BHKP	4.5	6.9	53.3
<b>Unbleached sulfate - UKP</b>	<b>1.1</b>	<b>1.0</b>	<b>-9.1</b>
<b>Sulfite</b>	<b>1.2</b>	<b>0.7</b>	<b>-41.7</b>
<b>High-yield paste</b>	<b>1.9</b>	<b>2.3</b>	<b>21.1</b>
<b>Total</b>	<b>22.3</b>	<b>30.5</b>	<b>36.8</b>

*Source: Hawkins Wright*

### **World Paper Trade**

In 1998, world paper trade amounted to 89 million metric tons, equivalent to 30% of world production. European countries accounted for 56% of this trade, followed by the United States/Canada (28%) and Asia (13%). Brazil's share was 1.3%.

The categories of paper that are most widely traded internationally are printing and writing paper, which account for 36% of all trade by volume, followed by packaging paper (24% of all trade by volume), and newsprint (22% of all trade by volume). Of the 32 million metric tons of printing and writing paper traded internationally, 60% is manufactured from pulp, and 46% is coated.

During the period 1990-98, world paper trade increased by 58%, with the highest rates registered by pulp-based printing and writing paper and by packaging paper (Table 2 and Figure 2).

Table 2

<b>Category</b>	<b>1990</b>	<b>1998</b>	<b>Change %</b>
Printing/writing *	18,3	32,2	76,2
.CWF	3,5	8,8	149,5
.UWF	5,9	10,4	76,3
.CWC	3,8	6,1	59,7
.UWC	5,0	6,8	37,2
Newsprint	14,7	19,8	34,7
Packaging	13,0	21,2	62,2
Sanitary	1,2	1,8	55,1
Card	7,3	10,3	40,6
Other	1,7	3,7	119,0
<b>Total</b>	<b>56,2</b>	<b>89,0</b>	<b>58,3</b>

Source: PPI

\*Chemical pulp-based: coated - CWF and uncoated - UWF;

Wood containing-based: coated-CWC and uncoated-UWC.

Europe and North America are net exporters of paper, while Asia/Oceania, Latin America and Africa are net importers.

Figure 2



### Brazilian Foreign Trade

The pulp industry has shown itself over the years to be a long-term generator of foreign currency earnings for Brazil. In the case of fiber, eucalyptus pulp production operations have been established that direct most of their production to export markets. Imports, mostly of long fiber, are relatively insignificant, leading to the generation of important trade balance surpluses – US\$ 873 million in 1998.

In the case of paper, companies based in Brazil have the main priority of supplying the domestic market, with the result that volumes of exportable surpluses are subject to considerable variation. Exports are dominated by printing and writing, and packaging paper (kraftliner).

Brazil's principal imports consist of newsprint and coated printing and writing paper. The volumes of such imports are significant, and amount to around 95% of exports. The overall trade surplus is thus small, having failed to reach US\$ 50 million in 1998.

The possible scenarios drawn for Brazilian exports as a result of the devaluation of the Real at the start of 1999 have failed to materialize to the degree envisaged, since domestic demand has remained relatively buoyant, preventing companies from making spot sales to generate instant profits.

### Trade in bleached pulp – Brazilian exports

In 1998, exports of bleached eucalyptus pulp reached 2.61 million metric tons, corresponding to revenues of US\$ 970 million, and representing growth over the period 1990-98 of 53% in volume terms, and 62% in value terms (Table 3). The volume exported represents 8.1% of world trade in bleached sulfate pulp.

Table 3

#### Bleached Pulp: Brazilian Exports

	1990	1997	1998	Chg. (97/98) %
Volume ('000 t)	1,030	2,351	2,610	11.0
Value (US\$ million)	598	947	970	2.4
Avg. Price (US\$/t)	581	403	372	-7.7

Source: BRACELPA

Brazil is the principal exporter of eucalyptus pulp, with 46% of the market for this kind of pulp. Europe, Asia and North America absorb 97% of its sales, with the United States, Japan, France, the United Kingdom, Germany and South Korea the most significant buyers (Table 4 and Figure 3).

Figure 3

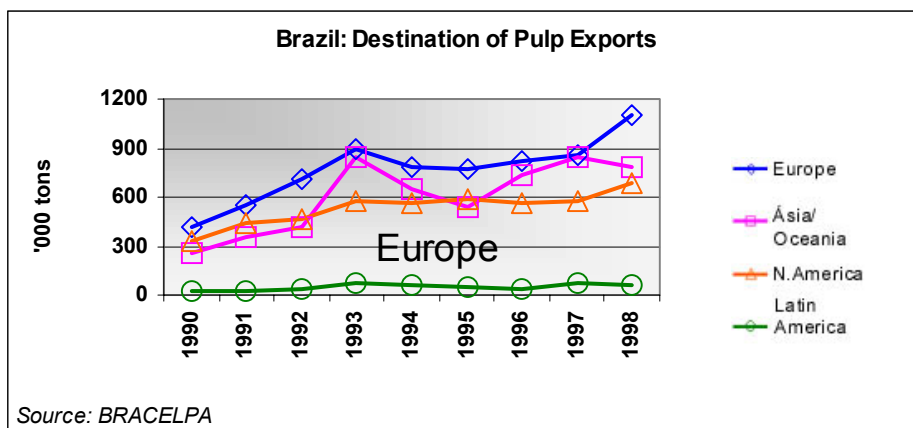


Table 4

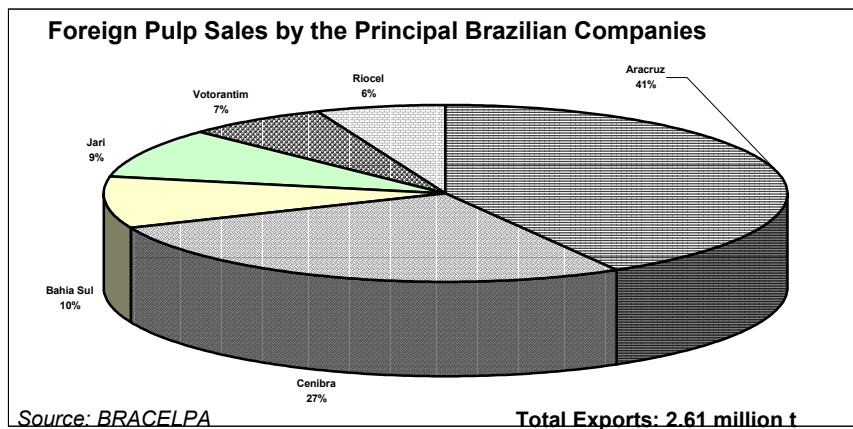
**Brazil - Destination of Exports of Bleached Pulp**  
(In %)

<b>DESTINATION</b>	<b>1990</b>	<b>1998</b>
Europe	40.3	41.3
Asia/Oceania	25.3	31.6
North America	32.4	24.5
Latin America	1.8	2.5
Africa	0.1	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source: BRACELPA

The largest national producers of pulp for the market (Aracruz, Cenibra, Bahia Sul, Jari, Votorantim and Riocel) account for all Brazilian exports (Figure 4).

Figure 4



### Trade in Pulp – Brazilian Imports

Imports of pulp, basically of long fiber, amounted to 290,000 metric tons in 1998, representing growth of 400% over the period 1990-98 (Table 5). 82% of these purchases were supplied by the United States and Argentina.

Table 5

**Pulp: Brazilian Imports**

	1990	1997	1998	Chg. (98/97) %
Volume ('000 t)	58	262	290	10.7
Value (US\$ million)	42	127	142	11.8
Average Price (US\$/t)	724	485	490	1.0

Source: BRACELPA

**Trade in Paper – Brazilian Exports**

In 1998, paper exports amounted to 1.217 million metric tons, or US\$ 930 million in revenues, with a 27% increase in volume and a 51% in value during the period 1990-98 (Table 6). Brazilian export sales represented 1.3% of world trade.

Table 6

**Paper: Brazilian Exports**

	1990	1997	1998	Chg. (98/97) %
Volume ('000 t)	957	1,329	1,217	-8.4
Value (US\$ million)	614	966	924	-4.3
Average Price (US\$/t)	642	727	759	4.5

Source: BRACELPA

Table 7

**Brazil: Paper Exports**

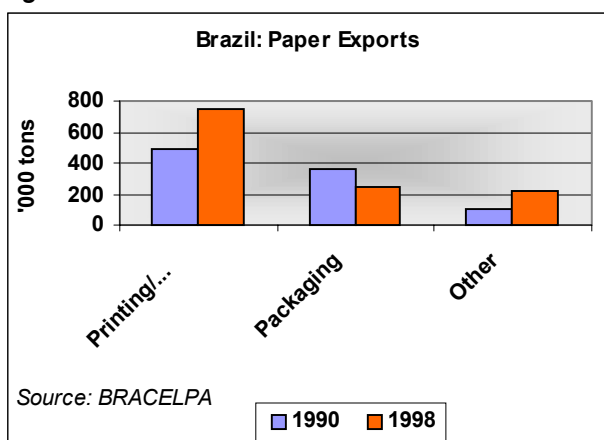
In '000 t

Category	1990	1998	Change %
Printing/Writing	484	751	55.2
.Coated	7	72	928.6
.Uncoated	477	679	42.3
Newsprint	20	16	-20.0
Packaging	366	249	-32.0
Sanitary	12	22	83.3
Card	53	59	11.3
Other	22	120	445.5
<b>Total</b>	<b>957</b>	<b>1,217</b>	<b>27.2</b>

Source: BRACELPA

During the period 1990-98, the principal categories of Brazilian paper exports were printing and writing and packaging paper, which in 1998 represented 62% and 20% of total exports, respectively. During the same period, the highest rates of sales growth were recorded by printing and writing paper (55%), most notably coated paper (928%), and sanitary paper (83%). Sales of packaging paper, especially of kraftliner, fell by 32%, reflecting the increase in domestic consumption, as well as the redirecting of strategy by several companies that began to produce higher value-added products (Table 7 and Figure 5).

Figure 5



Around 83% of export sales are absorbed by countries in South America, Europe and Asia (Table 8). Argentina, the United States, the United Kingdom and Chile are important purchasers of Brazilian paper.

Table 8

### Brazil – Destination of Paper Exports

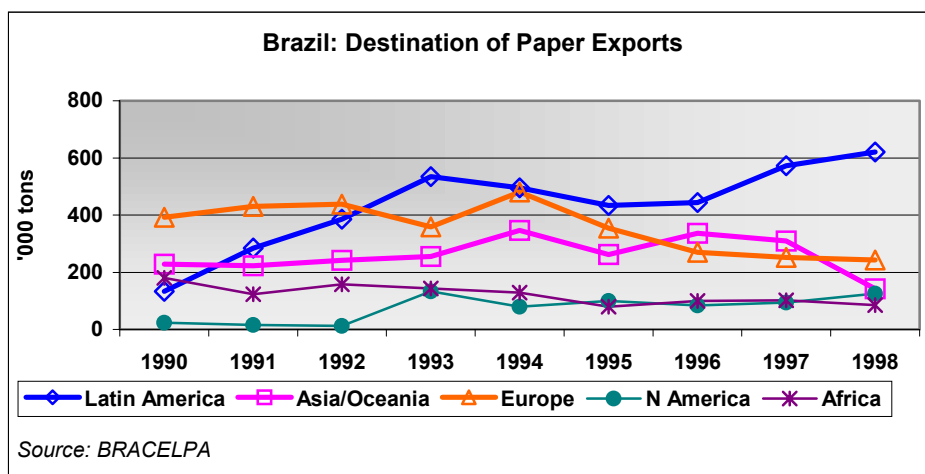
(In %)

DESTINATION	1990	1998
Latin America	13.9	51.0
Europe	41.0	20.0
Asia/Oceania	23.9	11.7
North America	2.4	10.4
Africa	18.8	7.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source: BRACELPA

During the period 1990-98, there was a notable increase in sales of paper to Latin America (367%), and to North America (448%), but a reduction in sales to Europe, Asia and Africa (Figure 6). Sales to Europe and Africa have fallen slowly to levels in 1998 that were less than half of those of 1990. Purchases by Asian countries remained stable until 1997, falling abruptly in 1998 to half the level of purchases in the previous year.

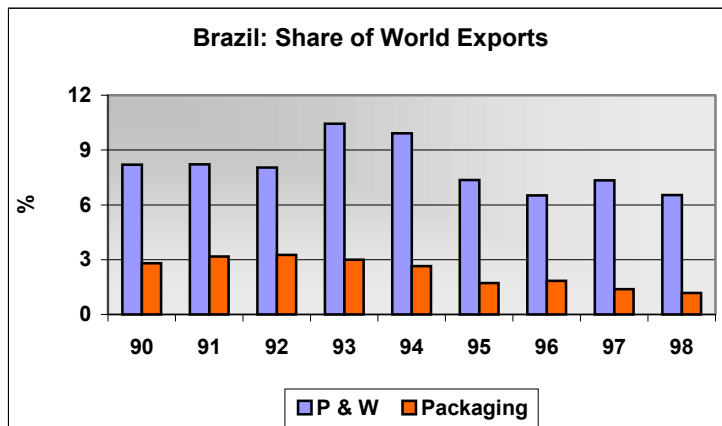
Figure 6



Exports of printing and writing paper during the period 1990-98 were around 8% of world exports, while exports of packaging paper, that accounted for as much as 3%, currently account for less than 1% of world trade (Figure 7).

From 1993 onwards, Brazilian exports of packaging paper have shown a declining trend. With the aim of obtaining better financial results, producers have chosen to place their products in the domestic market where margins are generally better. In the case of packaging paper, the reduction in exports is also due to the redirecting of production towards higher value-added paper.

Figure 7



The outlook for Brazilian paper exports is a positive one, and in addition to the general reasons mentioned in the introduction to this report, the industry has in its favor the fact that the Argentine paper industry is particularly disorganized and incapable of responding to increases in demand in the short/medium term. This creates excellent opportunities for Brazilian producers to consolidate their presence in the Southern Cone.

### Trade in Paper – Brazilian Imports

Imports of paper increased by 208% during the period 1990-98 (Table 9). Foreign purchases apply principally to newsprint and printing and writing paper, which together account for 72% of total purchases (Table 10 and Figure 8). Imported newsprint accounts for over 2/3 of national consumption, with the majority (some 70%) purchased from Canada.

Table 9

**Paper: Brazilian Imports**

	1990	1997	1998	Chg. (98/97) %
Volume ('000 t)	294	978	904	-7.6
Value (US\$ million)	244	904	883	-2.3
Average Price (US\$/t)	830	924	977	5.7

Source: BRACELPA

Table 10

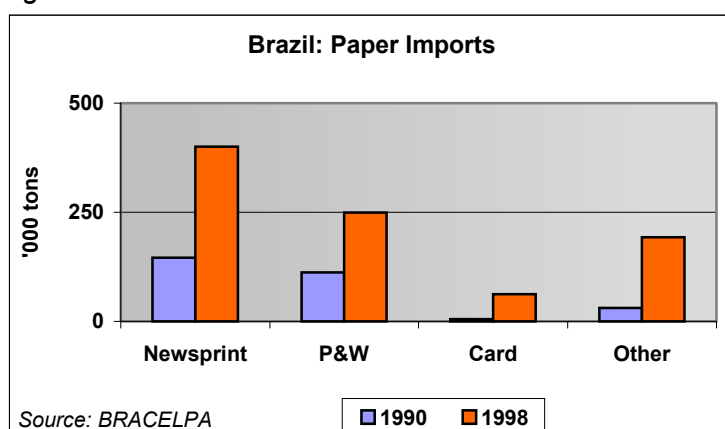
**Brazil - Imports of Paper by Category**

(In '000 metric tons)

Category	1990	1998	Change %
Newsprint	146	400	174.0
Printing/Writing	112	249	122.3
Special	15	173	1,053.3
Card	5	62	1,140.0
Packaging	10	19	90.0
Sanitary	6	1	-83.3
<b>Total</b>	<b>294</b>	<b>904</b>	<b>207.5</b>

Source: BRACELPA

Figure 8



Source: BRACELPA

The United States, Canada and Finland are major suppliers of paper to Brazil, accounting for 69% of its purchases (Table 11 and Figure 9).

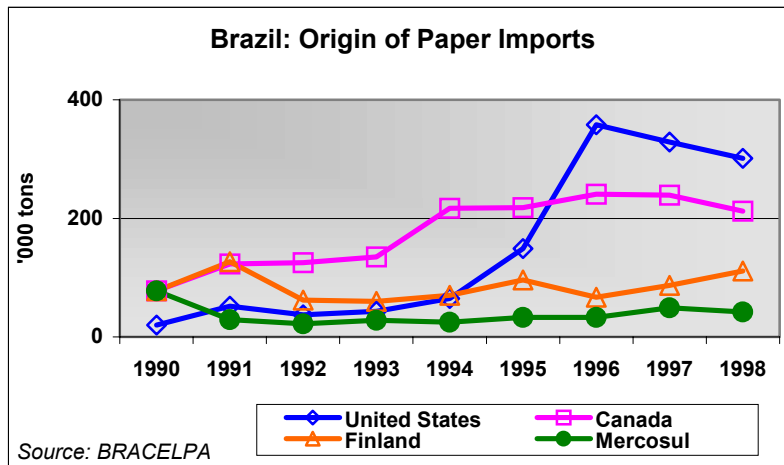
Table 11

**Brazil – Origin of Paper Imports**  
(In %)

Origin	1990	1998
United States	6.8	33.3
Canada	26.5	23.5
Finland	26.5	12.3
Germany	0.7	6.4
Mercosul	26.5	4.6
Other	12.9	19.9
Total	100.0	100.0

Source: BRACELPA

Figure 9



## Conclusion and Prospects

The recovery of pulp prices starting in the second quarter of 1999 point to good prospects for pulp and paper exporting segments for the remainder of 1999 and in 2000. These improvements are principally due to the reduction in the number of new projects around the world, to the improvement in economic conditions in several Asian countries, and to the continued robustness of the US economy.

The possibility that China and the other Far Eastern countries continue with their economic recoveries are positive signals for American exporters of wood shavings for recycling and exporters of virgin fiber. The installation of large paper machines in China and the integration of machines in Indonesia should provide scope for North American (US and Canadian), Chilean and Brazilian suppliers of fiber to expand their markets.

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