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Global Effects of Accelerated Tariff Liberalization in the Forest Products Sector to 2010

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Abstract

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This study projects the effects of tariff elimination on the world sector. Projections were done for two scenarios: (1) progressive tariff elimination according to the schedule agreed to under the current General Agreement on Tariff or Trade (GATT) and (2) complete elimination of tariff on wood products as proposed within the Asia-Pacific Economic Cooperation (APEC) Accelerated Tariff Liberalization (ATL) initiative. Projections were made by using the global forest products model, which provides equilibrium projections of prices and quantities produced, consumed, and traded for 14 commodity groups. Key assumptions include rates of economic growth, availability of wood, demand (price) elasticities, and tariff scenarios.

Keywords: Accelerated tariff liberalization, ATL, import tariffs, equilibrium projection, market model, forest products, fuelwood, industrial roundwood, pulp, recycled fibers, paper, paperboard.

Summary

The objective of this study was to project the effects of elimination of import tariffs on the world forest sector. The projections are done for two scenarios: (1) progressive tariff reduction according to the current General Agreement on Tariff or Trade schedule and (2) complete elimination of all tariffs within the Asia-Pacific Economic Cooperation countries.

The projections were obtained with the global forest product model (GFPM). The model gives market equilibrium projections of quantities produced, consumed, imported, and exported by each country for 14 commodity groups including fuelwood, industrial roundwood, pulp and recycled fibers, and paper and paperboard. The model also projects world equilibrium prices, up to 2010. Key assumptions include rates of economic growth, availability of wood, demand elasticities, and scenarios for tariff reduction.

This report introduces the problem and objective of this study; summarizes the structure of the GFPM and its assumptions; presents the trends in consumption and net trade from 1997 to 2010, by main world regions, under the Accelerated Tariff Liberalization (ATL) scenario; and shows the effects of ATL agreements on consumption, production, import, and export from 1997 to 2010, for main world regions and the United States. Detailed tables by country and product are in the appendixes (<http://www.fs.fed.us/pnw/pubs/rp534>).

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Introduction

The United States sought elimination of all tariffs in the forest products sector during the Uruguay Round. The round resulted in a reciprocal “zero-for-zero” tariff elimination agreement between the United States, Canada, Finland, Austria, Singapore, Hong-Kong, Japan, European Union (E.U.), Korea, and New Zealand for paper products by 2004. At the same time, there was agreement to reduce, over 5 years, tariffs on wood products. In the United States, such reductions amounted to a cut in average tariffs from about 3.1 to 1.8 percent. Under the Uruguay Agreement Act, Congress gave the Administration authority to seek reduction in tariffs on other wood products (Council on Environment Quality 1999).

In 1997, ministers of Asia-Pacific Economic Cooperation (APEC) countries called for the nomination of sectors for early voluntary sectoral liberalization (EVSL) among their countries. The United States, Canada, Indonesia, and New Zealand proposed the forest sector. In 1998, APEC leaders agreed to move the tariff portion of the EVSL initiative to the World Trade Organization, to conclude an agreement by the end of 1999.

Tariffs remain a significant barrier to trade for forest products (Bourke and Leitch 1998). Although tariffs in countries that are members of the Organization for Economic Cooperation and Development are generally low, they remain high for some products; for example, wood-based panels. In other countries, tariffs between 10 and 20 percent are common and can reach 40 percent.

The Accelerated Tariff Liberalization (ATL) initiative covers all forest products, such as logs and wood products (chapter 44), pulp, paper, and paper products (chapters 47, 48, and 49). Parties to the Uruguay Round zero-for-zero agreement would move up the elimination of tariffs on pulp, paper, and paper products from 1 January 2004 to 1 January 2000. Others would attempt to remove tariffs by the same date but could delay removal until 1 January 2002. The proposal calls for the elimination of tariffs on all other products by 1 January 2002.

The objective of this study was to project the effects of the ATL agreement for the global forest sector in general, and for the APEC countries in particular. For each country and 14 forest groups of forest products, we project consumption, production, imports, exports, and prices. The projections are to 2010, for two scenarios: (1) continuation of the current tariff agreements or (2) elimination of tariffs according to the ATL schedule.

The methods use a dynamic spatial equilibrium model of the world forest sector. The model was applied to project forest product consumption, production, trade, and prices under specific scenarios of economic growth, timber supply, and technical change. These assumptions are held constant in the simulations of the alternative ATL scenarios to judge the effect of the tariff reductions only.

This report reviews the methodology of the global forest products model (GFPM) and describes the countries or regions and the products included in the model, the demand equations, and the timber supply assumptions. Projections from 1997 to 2010 of consumption, net trade, and prices in the main regions of the world are summarized; and the ATL effects of consumption, production, import, and export for the main regions of the world and the United States for the main product groups are presented. The appendixes¹ contain the detail of trends and ATL effects for individual APEC countries.

¹ The appendixes are available on the web at:
<http://www.fs.fed.us/pnw/pubs/rp534>

Methods

Model Structure

Projections of the effects of the ATL agreement were obtained with the GFPM. The GFPM is based on the price endogenous linear programming system (PELPS III) (Zhang et al. 1993), with recent modifications. The model simulates market equilibrium by mathematical programming. The theory is that of spatial equilibrium in competitive markets. The GFPM solves the equilibrium by maximizing the value of the products, minus the cost of production, subject to material balance and capacity constraints in each country and each year. Because material flows throughout the system must balance, the model ensures data consistency within countries and coherence of projections between countries.

In each projection year, for each country and commodity, supply (domestic production plus imports) equals demand (final consumption, plus input in other processes, plus exports). Final demand is price responsive; demand for wood or intermediate products derives from the demand for final products through input-output coefficients that describe technologies in each country. The supply of raw wood and nonwood fibers in each country is price responsive. The supply of recycled paper is constrained by the waste paper supply, which itself depends on the paper consumption and the recycling rate. Each country exports to the world market and imports from the world market. Projected prices are such that they clear markets: at those prices, demand equals supply in each country.

From one year to the next, demand changes in each country because of changes in income. The wood supply shifts according to the chosen scenario. The amount of recycled fiber used for making paper and paperboard changes with technology and recycling policy. Capacity increases or decreases according to new investments that depend on past production and the profitability of production in different countries, as revealed by the shadow price of capacity. Tariff changes affect the cost of imports, *ad valorem*. Then, a new equilibrium is computed subject to the new demand and supply conditions, new technology, new capacity, and new tariff. Trade changes with inertia tied to past trade and production.

The general principle of the GFPM, then, is that global markets optimize the allocation of resources in the short run (within 1 year). Longrun resource allocation is partly governed by market forces, as in capacity expansion and trade, and also by political forces such as the wood supply shifts determined by forest policy, the waste paper recovery rates by environmental policy, the trade tariffs that change the cost of imports, and the techniques of production determined by exogenous progress.

Earlier versions of PELPS and GFPM have been used by the United States and Canadian Forest Services to develop the North American pulp and paper model and the solid wood model, and by the International Tropical Timber Organization to develop the Asia-Pacific tropical timber trade model. The Asia-Pacific forest products model (Zhang et al. 1997) also was built with PELPS, and the Food and Agricultural Organization (FAO 1999) forest products outlook study included GFPM-based projections (Zhu et al. 1998).

Table 1—Countries in the global forest products model^a

Code in model	Country	Code in model	Country	Code in model	Country	Code in model	Country
	Africa:		North and Central America:		Asia:		Europe:
1	Algeria	1	Bahamas	1	Afghanistan	1	Albania
2	Angola	2	Barbados	2	Bahrain	2	Austria
3	Benin	3	Belize	3	Bangladesh	3	Belgium-Luxembourg
4	Botswana	4	Canada	4	Bhutan	4	Bosnia-Herzegovina
5	Burkina Faso	5	Cayman Islands	5	Brunei Darussalam	5	Bulgaria
6	Burundi	6	Costa Rica	6	Cambodia	6	Croatia
7	Cameroon	7	Cuba	7	China	7	Czech Republic
8	Cape Verde	8	Dominica	8	Cyprus	8	Denmark
9	Central African Republic	9	Dominican Republic	9	Hong Kong	9	Finland
10	Chad	10	El Salvador	10	India	10	France
11	Congo	11	Guatemala	11	Indonesia	11	Germany
12	Côte d'Ivoire	12	Haiti	12	Iran, Islamic Republic	12	Greece
13	Djibouti	13	Honduras	13	Iraq	13	Hungary
14	Egypt	14	Jamaica	14	Israel	14	Iceland
15	Equatorial Guinea	15	Martinique	15	Japan	15	Ireland
16	Ethiopia	16	Mexico	16	Jordan	16	Italy
17	Gabon	17	Netherlands Antilles	17	Korea, DPR	17	Macedonia
18	Gambia	18	Nicaragua	18	Korea, REP	18	Malta
19	Ghana	19	Panama	19	Kuwait	19	Netherlands
20	Guinea	20	Saint Vincent	20	Laos	20	Norway
21	Guinea-Bissau	21	Trinidad and Tobago	21	Lebanon	21	Poland
22	Kenya	22	United States	22	Macau	22	Portugal
23	Lesotho	23		23	Malaysia	23	Romania
24	Liberia	24	South America: Argentina	24	Mongolia	24	Slovakia
25	Libyan Arab Jamahiriya	25		25	Myanmar	25	Slovenia
26	Madagascar	26	Bolivia	26	Nepal	26	Spain
27	Malawi	27	Brazil	27	Oman	27	Sweden
28	Mali	28	Chile	28	Pakistan	28	Switzerland
29	Mauritania	29	Colombia	29	Philippines	29	United Kingdom
30	Mauritius	30	Ecuador	30	Qatar	30	Yugoslav Fed. Rep.
31	Morocco	31	French Guiana	31	Saudi Arabia		
32	Mozambique	32	Guyana	32	Singapore	31	Former U.S.S.R:
33	Niger	33	Paraguay	33	Sri Lanka	32	Armenia
34	Nigeria	34	Peru	34	Syrian Arab Republic	33	Azerbaijan
35	Reunion	35	Suriname	35	Thailand	34	Belarus
36	Rwanda	36	Uruguay	36	Turkey	35	Estonia
37	Sao Tome and Principe	37	Venezuela	37	United Arab Emirates	36	Georgia
38	Senegal			38	Viet Nam	37	Kazakhstan
39	Sierra Leone			39	Yemen	38	Kyrgyzstan
40	Somalia					39	Latvia

Table 1—Countries in the global forest products model^a (continued)

Code in model	Country	Code in model	Country	Code in model	Country	Code in model	Country
	Africa continued:				Oceania:		Former U.S.S.R. continued:
41	South Africa			40	Australia	40	Lithuania
42	Sudan			41	Cook Island	41	Moldova, Rep.
43	Swaziland			42	Fiji	42	Russian Federation
44	Tanzania, United Republic			43	French Polynesia	43	Tajikistan
45	Togo			44	New Caledonia	44	Turkmenistan
46	Tunisia			45	New Zealand	45	Ukraine
47	Uganda			46	Papua New Guinea		Uzbekistan
48	Zaire			47	Samoa		
49	Zambia			48	Soloman Islands		
50	Zimbabwe			49	Tonga		
				50	Vanuatu		

^a Region names are for this study only.

Countries and Products

The GFPM deals with 180 countries (see table 1). Each country may produce and trade one or all of the products. This level of resolution was chosen to facilitate data verification, as most international data are collected at country level. Calculating projections by country also facilitates review and criticism of the projections because expert knowledge is more available at the country level than at more aggregate regional or global levels. The list of countries in table 1 is the same as that used by FAO (1998a), and it uses the same nomenclature.

The forest products considered in the GFPM are shown in table 2. They correspond to product groups used by the FAO (1998a) in its statistical work. In the GFPM, there are econometric demand equations for fuelwood and charcoal, other industrial roundwood, sawnwood, veneer sheets and plywood, particle board, fiberboard, newsprint, printing and writing paper, and other paper and paperboard. The supply equations for fuelwood and charcoal, industrial roundwood, and other fiber pulp are price elastic, up to the maximum sustainable production, which is set exogenously. Waste paper supply is constrained by the quantity of paper recovered, an endogenous function of paper consumption. Figure 1 shows the wood and nonwood material flows.

Final Demand

The demand equations for the end products (table 3) are based on derived demand theory for raw material inputs. Dynamic demand models lead then to empirical elasticities of demand for each forest product in relation to national income (measured by real gross domestic product [GDP]) and real product price, in constant U.S. dollars (Baudin and Lundberg 1987, Buongiorno 1978).

The elasticities of demand used in analyzing the effects of ATL are shown in table 3. Different elasticities were used for countries with high or low GDP per person. Elasticities for low-income countries were generally larger in absolute value.

The world price for each commodity in the base year (1997) was the weighted average of unit values of imports and exports, across all countries. In the GFPM, prices are

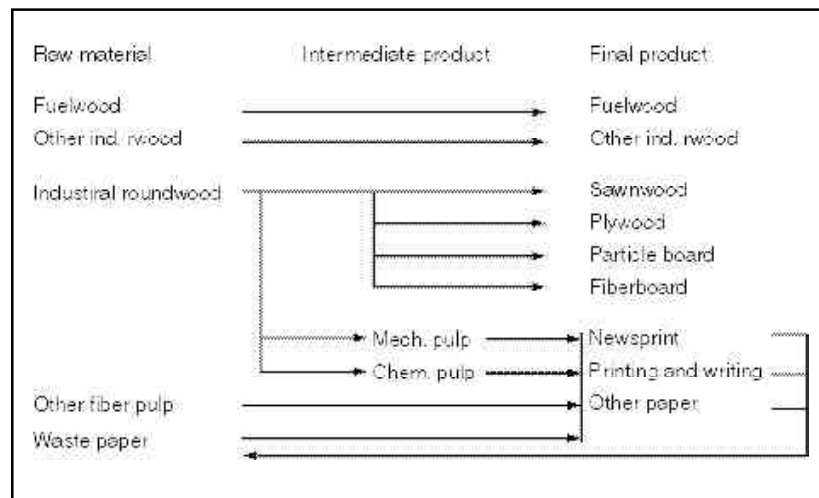


Figure 1—Product transformations in the global forest products model.

Table 2—Products in the global forest products model^a

SITC code	Product	Unit	Demand	Supply
245	Fuelwood and charcoal	1000 m ³	E	E
246/247	Sawlogs and pulpwood	1000 m ³	I	E
	Other industrial roundwood	1000 m ³	E	E
248	Sawnwood	1000 m ³	E	I
634.1,634.3/4	Veneer and Plywood	1000 m ³	E	I
634.2	Particle board	1000 m ³	E	I
634.5	Fiberboard	1000 m ³	E	I
251.2	Mechanical wood pulp	1000 M.T.	I	I
251.91,.61,.62,.3,.4,.5	Chem/semichem. wood pulp	1000 M.T.	I	I
251.92	Other fiber pulp	1000 M.T.	I	E
251.1	Waste paper	1000 M.T.	I	E
641.1	Newsprint	1000 M.T.	E	I
641.2/3	Printing and writing paper	1000 M.T.	E	I
EX641	Other paper and paperboard	1000 M.T.	E	I

^aE indicates demand or supply is represented with an econometric equation; I indicates that it is represented with input-output coefficients.

M.T. = metric ton.

endogenous (the equilibrium between demand and supply leads to the prices). So, no assumption has to be made about future prices.

The data on production, imports, and exports in each country and in the base year (1997) were obtained from the FAO statistical database (FAO 1999).

The GDP data are exogenous to the GFPM and nothing else is used to shift demand. The assumptions on the GDP growth rate of each country and the implications for the regions are summarized in table 4. Real GDP was assumed to grow at about 4 percent per year from 1994 to 2010 in Africa, at 2.7 percent per year in America, 4.6 percent per year in Asia, and 2.4 percent per year in Europe.

Table 3—Price and income elasticities of demand for end products

Product	Country	Price	Income
Fuelwood and charcoal	High income ^a	-0.62	-2.26
	Low income ^b	-.10	.40
Other industrial roundwood	High income	-.05	-.58
	Low income	-.37	.19
Sawnwood	High income	-.16	.32
	Low income	-.21	.46
Veneer and plywood	High income	-.13	.73
	Low income	-.22	.74
Particle board	High income	-.24	1.15
	Low income	-.05	.65
Fiberboard	High income	-.52	.82
	Low income	-.52	.82
Newsprint	High income	-.05	1.14
	Low income	-.18	1.05
Printing and writing paper	High income	-.15	1.66
	Low income	-.37	1.11
Other paper and paperboard	High income	-.06	.94
	Low income	-.14	.92

^a Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Kuwait, Luxembourg, Netherlands, Norway, New Zealand, South Africa, Spain, Sweden, Switzerland, United Kingdom, and United States.

^b Rest of the world.

Raw Material Supply

In any given year and country, the supply of industrial roundwood is a function of the price of industrial roundwood. The price elasticity of supply was set at 0.8. This price elasticity indicates the percentage of change in supply that would result from a 1-percent change in price, other things being equal.

In addition, the supply equations are assumed to shift over time to simulate changes in supply independent of prices. The rates of shifts were estimates of how much timber production would change without a change in price. These rates of shift differ by country and are based on various information about past production, forest area and stock, growth rates, extent of plantations, and policies of each country. In some countries of Asia, upper bounds were set on the timber supply, regardless of price, to reflect perceived limits on the potential sustainable timber production of the country. The rate of shifts relied mostly on the data of the global fiber supply study (GFSS, FAO 1998b); the rate of shift is the annual percentage change in the “commercially available wood supply” projected by the GFSS. The resulting aggregate average rates of shift of industrial roundwood supply, by region, were 0.71 percent in North, Central, and South America, 0.63 percent in Europe and the former U.S.S.R., 1.14 percent in Africa, and 1.4 percent in Asia and Oceania. The detailed rates of shift used in the ATL analysis are shown in table 5.

Table 4—Growth rate of real gross domestic product (percent per year¹)

Country	1997-2000	2001-2005	2006-2010
Africa:	3.94	4.03	4.03
Algeria	3.47	3.61	3.61
Angola	2.93	5.00	5.00
Benin	4.28	6.30	6.30
Botswana	6.23	6.50	6.50
Burkina Faso	4.14	4.87	4.87
Burundi	4.41	4.76	4.76
Cameroon	4.86	3.86	3.86
Cape Verde	6.82	7.28	7.28
Central African Republic	3.62	3.65	3.65
Chad	4.05	4.89	4.89
Congo	5.54	3.52	3.52
Côte d'Ivoire	5.40	5.10	5.10
Djibouti	2.70	3.19	3.19
Egypt	3.89	3.60	3.60
Equatorial Guinea	2.15	4.26	4.26
Ethiopia	5.59	5.82	5.82
Gabon	2.12	4.40	4.40
Gambia	2.48	4.26	4.26
Ghana	5.43	5.56	5.56
Guinea	4.48	4.54	4.54
Guinea-Bissau	4.99	6.00	6.00
Kenya	4.11	5.52	5.52
Lesotho	6.53	7.52	7.52
Liberia	.14	.82	.82
Libyan Arab Jamahiriya	2.00	3.00	3.00
Madagascar	3.33	4.29	4.29
Malawi	2.99	2.74	2.74
Mali	4.68	5.52	5.52
Mauritania	3.47	3.54	3.54
Mauritius	6.89	7.17	7.17
Morocco	5.67	4.54	4.54
Mozambique	5.00	5.50	5.50
Niger	4.96	5.13	5.13
Nigeria	3.52	3.63	3.63
Reunion	6.00	5.00	5.00
Rwanda	5.13	5.77	5.77
Sao Tome and Principe	5.92	5.98	5.98
Senegal	4.65	5.75	5.75
Sierra Leone	.63	6.13	6.13
Somalia	1.60	1.94	1.94
South Africa	3.12	3.04	3.04
Sudan	3.48	3.09	3.09
Swaziland	4.53	7.87	7.87
Tanzania, United Republic	4.85	5.14	5.14
Togo	6.31	6.95	6.95
Tunisia	5.38	4.83	4.83
Uganda	6.53	6.09	6.09
Zaire	5.00	5.00	5.00
Zambia	3.73	3.02	3.02
Zimbabwe	5.21	5.14	5.14

Table 4—Growth rate of real gross domestic product (percent per year¹) (continued)

Country	1997-2000	2001-2005	2006-2010
America:	2.65	2.73	2.73
North and Central America—			
Bahamas	2.00	3.00	3.00
Barbados	3.34	3.50	3.50
Belize	4.00	4.50	4.50
Canada	2.75	2.97	2.97
Cayman Islands	4.00	4.50	4.50
Costa Rica	2.02	4.17	4.17
Cuba	2.00	3.50	3.50
Dominica	2.00	3.00	3.00
Dominican Republic	3.28	3.28	3.28
El Salvador	4.77	4.52	4.52
Guatemala	3.96	3.65	3.65
Haiti	3.12	3.37	3.37
Honduras	3.96	4.05	4.05
Jamaica	.93	2.04	2.04
Martinique	2.00	2.00	2.00
Mexico	4.52	4.88	4.88
Netherlands Antilles	1.00	1.00	1.00
Nicaragua	3.81	3.21	3.21
Panama	3.37	4.19	4.19
Saint Vincent	3.00	3.50	3.50
Trinidad and Tobago	2.83	3.60	3.60
United States	2.45	2.40	2.40
South America—			
Argentina	4.41	4.88	4.88
Bolivia	4.21	3.76	3.76
Brazil	3.26	4.01	4.01
Chile	6.49	6.04	6.04
Colombia	3.86	4.66	4.66
Ecuador	3.12	3.49	3.49
French Guiana	1.50	1.50	1.50
Guyana	3.06	3.34	3.34
Paraguay	2.48	3.26	3.26
Peru	3.49	4.58	4.58
Suriname	1.60	2.00	2.00
Uruguay	2.37	2.90	2.90
Venezuela	2.47	3.13	3.13
Asia Pacific:	4.56	4.58	4.58
Asia—			
Afghanistan	2.00	2.50	2.50
Bahrain	1.52	2.50	2.50
Bangladesh	5.04	6.27	6.27
Bhutan	5.00	5.00	5.00
Brunei Darussalam	2.00	2.00	2.00
Cambodia	6.00	6.00	6.00
China	8.06	7.30	7.30
Cyprus	5.20	5.00	5.00
Hong Kong	5.22	5.50	5.50
India	6.21	5.95	5.95
Indonesia	7.79	7.53	7.53
Iran, Islamic Republic	3.59	3.55	3.55

Table 4—Growth rate of real gross domestic product (percent per year¹) (continued)

Country	1997-2000	2001-2005	2006-2010
Asia continued—			
Iraq	10.07	4.40	4.40
Israel	4.50	5.00	5.00
Japan	3.12	2.97	2.97
Jordan	5.01	4.98	4.98
Korea, DPR	2.00	2.00	2.00
Korea, REP.	6.26	6.32	6.32
Kuwait	2.30	2.00	2.00
Laos	5.00	6.00	6.00
Lebanon	7.00	8.00	8.00
Macau	5.50	6.00	6.00
Malaysia	7.95	7.68	7.68
Mongolia	2.00	3.00	3.00
Myanmar	6.14	4.44	4.44
Nepal	5.07	5.46	5.46
Oman	2.58	3.41	3.41
Pakistan	5.56	5.49	5.49
Philippines	5.31	5.34	5.34
Qatar	1.00	3.00	3.00
Saudi Arabia	2.30	2.76	2.76
Singapore	6.88	6.44	6.44
Sri Lanka	5.77	6.51	6.51
Syrian Arab Republic	4.60	5.12	5.12
Thailand	6.19	7.00	7.00
Turkey	3.61	5.71	5.71
United Arab Emirates	1.80	3.00	3.00
Viet Nam	6.00	6.50	6.50
Yemen	2.98	3.08	3.08
Oceania—			
Australia	3.60	3.50	3.50
Cook Island	2.00	3.00	3.00
Fiji	1.99	2.68	2.68
French Polynesia	3.50	4.00	4.00
New Caledonia	1.00	1.50	1.50
New Zealand	2.66	2.80	2.80
Papua New Guinea	1.86	2.28	2.28
Samoa	1.50	1.50	1.50
Solomon Islands	5.00	5.50	5.50
Tonga	3.00	3.50	3.50
Vanuatu	1.50	2.00	2.00
Europe and Former U.S.S.R.:	2.36	2.91	2.91
Europe—			
Albania	1.00	1.50	1.50
Austria	1.90	2.20	2.20
Belgium	2.24	2.40	2.40
Bosnia-Herzegovina	5.00	5.50	5.50
Bulgaria	.48	3.38	3.38
Croatia	4.90	5.50	5.50
Czech Rep.	4.60	4.90	4.90
Denmark	2.52	2.30	2.30
Finland	3.46	2.80	2.80
France	2.08	2.53	2.53
Germany	2.37	2.67	2.67

Table 4—Growth rate of real gross domestic product (percent per year¹) (continued)

Country	1997-2000	2001-2005	2006-2010
Europe continued—			
Greece	2.74	2.48	2.48
Hungary	2.72	4.31	4.31
Iceland	3.81	2.20	2.20
Ireland	6.60	5.40	5.40
Italy	1.97	2.57	2.57
Macedonia	2.00	3.00	3.00
Malta	4.11	3.38	3.38
Netherlands	2.86	2.60	2.60
Norway	3.56	3.00	3.00
Poland	5.11	4.81	4.81
Portugal	3.08	2.80	2.80
Romania	2.09	4.24	4.24
Slovakia	4.60	4.90	4.90
Slovenia	4.90	5.50	5.50
Spain	2.92	3.10	3.10
Sweden	1.92	2.10	2.10
Switzerland	1.55	2.52	2.52
United Kingdom	2.56	2.52	2.52
Yugoslav Federal Republic	3.50	4.00	4.00
Former U.S.S.R.—			
Armenia	6.19	5.90	5.90
Azerbaijan	8.90	11.63	11.63
Belarus	.24	4.60	4.60
Estonia	4.00	5.30	5.30
Georgia	9.40	9.18	9.18
Kazakhstan	3.49	5.48	5.48
Kyrgyzstan	6.10	5.00	5.00
Latvia	3.79	4.80	4.80
Lithuania	3.71	4.80	4.80
Moldova Rep	.38	5.00	5.00
Russian Federation	1.40	5.80	5.80
Tajikistan	-5.06	5.20	5.20
Turkmenistan	.50	5.00	5.00
Ukraine	-.56	5.86	5.86
Uzbekistan	1.80	4.50	4.50

Supply curves for fuelwood and charcoal had the same elasticities and rates of shifts as those for industrial roundwood. For industrial roundwood used in the round (other industrial roundwood), the supply curves were assumed to be horizontal so that supply in each country was equal to the projected demand, at current prices and projected income. This simplification is legitimate because the world trade of this product is small.

The supply of other fiber pulp (from straw, bagasse, etc.) had the same price elasticity as industrial roundwood, 0.8, and a shift rate of 3 percent per year in China (the main supplier of other fiber pulp) and 4 percent per year in other countries. The supply of waste paper was assumed to be horizontal, with an upper bound defined by the previous year's consumption and the maximum recycling rate for the country.

Table 5—Roundwood supply shift rate, 1997-2010

Country	Percent per year	Country	Percent per year	Country	Percent per year	Country	Percent per year
Africa:	1.14	America:	0.71	Asia Pacific:	1.43	Europe and U.S.S.R.:	0.63
Algeria	0.00	North and Central America:		Asia—		Europe—	
Angola	0.42	Bahamas	0.00	Afghanistan	0.50	Albania	-1.25
Benin	0.00	Barbados	0.00	Bahrain	0.50	Austria	0.53
Botswana	0.00	Belize	0.30	Bangladesh	-0.80	Belgium	0.00
Burkina Faso	0.00	Canada	0.60	Bhutan	0.56	Bosnia-Herz.	0.00
Burundi	0.00	Cayman Islands	0.00	Brunei	-0.07	Bulgaria	1.55
Cameroon	1.35	Costa Rica	-1.95	Cambodia	0.26	Croatia	2.26
Cape Verde	0.00	Cuba	-0.16	China	1.15	Czech Rep.	0.27
Central Af. Rep.	0.55	Dominica	0.00	Cyprus	0.50	Denmark	0.65
Chad	0.00	Dominican Rep.	-1.39	Hong Kong	0.00	Finland	0.94
Congo	2.00	El Salvador	3.72	India	2.54	France	0.78
Côte d'Ivoire	-0.30	Guatemala	-1.68	Indonesia	2.13	Germany	0.15
Djibouti	0.00	Haiti	0.00	Iran	0.50	Greece	0.00
Egypt	0.00	Honduras	-2.03	Iraq	0.50	Hungary	0.69
Equatorial Guinea	-0.18	Jamaica	0.00	Israel	0.50	Iceland	0.00
Ethiopia	0.00	Martinique	0.00	Japan	1.52	Ireland	3.49
Gabon	-0.03	Mexico	-0.12	Jordan	0.50	Italy	0.24
Gambia	0.00	Netherlands Antil.	0.00	Korea, DPR	0.67	Macedonia	0.00
Ghana	-0.94	Nicaragua	-1.99	Korea, Rep.	2.21	Malta	0.00
Guinea	-0.99	Panama	-1.67	Kuwait	0.00	Netherlands	0.52
Guinea Bissau	0.32	Saint Vincent	0.00	Laos	1.37	Norway	1.24
Kenya	3.14	Trinidad & Tobago	0.00	Lebanon	0.50	Poland	0.09
Lesotho	0.00	United States	0.60	Macau	0.50	Portugal	0.53
Liberia	-0.26			Malaysia	-1.09	Romania	0.00
Libyan Arab Jam.	0.00	South America:		Mongolia	-0.70	Slovakia	0.36
Madagascar	-0.72	Argentina	2.98	Myanmar	0.86	Slovenia	0.77
Malawi	10.07	Bolivia	1.00	Nepal	1.32	Spain	1.03
Mali	0.00	Brazil	1.34	Oman	0.00	Sweden	0.63
Mauritania	0.00	Chile	1.69	Pakistan	1.49	Switzerland	0.46
Mauritius	0.00	Colombia	0.53	Philippines	1.80	United Kingd	2.21
Morocco	1.69	Ecuador	-0.73	Qatar	0.50	Yugoslav FR	0.00
Mozambique	0.00	French Guiana	1.82	Saudi Arabia	0.50		
Niger	0.00	Guyana	0.56	Singapore	0.00	Former U.S.S.R.:	
Nigeria	-0.69	Paraguay	-1.69	Sri Lanka	1.29	Armenia	0.20
Reunion	0.00	Peru	0.61	Syrian Arab Rep	0.50	Azerbaijan	0.20
Rwanda	0.00	Suriname	1.53	Thailand	-0.06	Belarus	2.10
Sao Tome and Pr.	0.00	Uruguay	2.36	Turkey	0.50	Estonia	2.79
Senegal	0.00	Venezuela	0.10	Un. Arab Em.	0.00	Georgia	0.20
Sierra Leone	-2.60			Vietnam	3.03	Kazakhstan	0.20
Somalia	0.00			Yemen, Rep.	0.50	Kyrgyzstan	0.20
South Africa	2.02					Latvia	1.41
Sudan	-0.59			Oceania—		Lithuania	2.18
Swaziland	3.00			Australia	1.02	Moldova Rep	2.10
Tanzania, U. Rep.	4.20			Cook Is	-1.79	Russian Fed	0.20
Togo	0.00			Fiji	8.33	Tajikistan	0.20
Tunisia	3.00			French Polyn.	0.00	Turkmenistan	0.20
Uganda	3.50			New Caledon.	0.50	Ukraine	2.10
Zaire	0.57			New Zealand	3.80	Uzbekistan	0.20
Zambia	1.51			Papua New Guinea	3.84		
Zimbabwe	4.45			Samoa	0.00		
				Solomon Is	3.00		
				Tonga	0.50		
				Vanuatu	3.19		

Intermediate Product Supply and Demand

The GFPM simulates the transformation, in each country, of wood and other raw materials (other fiber pulp and waste paper) into end products (sawnwood and panels), or intermediate products (pulp), which are in turn transformed into end products (papers). These successive transformations, and the attendant supplies and demands, are represented by activity analysis.

The corresponding input-output coefficients were estimated for the base year (1997). The estimation procedure was such that the implied consumption, production, and trade of all products were as close as possible to the national statistics, as reported in FAO (1999), whereas the input-output coefficients stayed within a plausible range, given prior knowledge of the technology. For example, the total amount of pulp and other fibers consumed per ton of paper had to be close to unity.

Each production activity represented with input-output coefficients corresponds to a manufacturing cost. This is the cost of all inputs (capital, wages, energy, etc.), excluding the cost of raw materials explicit in the model. This cost was estimated in the base year (1997) as the unit value of the output, minus the cost of all inputs, at world prices.

Similarly, all the supply curves for raw materials and the demand curves for end products were calibrated to supply or demand the amounts observed in each country at world price. Because the calibration is made at world import price, the supply curves and manufacturing costs include the cost of transportation, which is therefore set at zero for all trade flows in the base year.

Calibrated in this way, the solution of the model in the base year is almost identical to the observed quantities and corresponding prices for all products and countries.

Assumptions on Accelerated Tariff Liberalization

In the GFPM, a change in tariff is equivalent to a change in transport cost for imported commodities. Most tariffs are ad valorem, so the effect of a change in tariff changes with the price level. For technical reasons, the new tariff is based on last year's world price, computed by the spatial equilibrium mechanism.

Two scenarios were implemented: (1) a base scenario, analog to the continuation of current agreements (2) and an ATL scenario to simulate the accelerated removal of tariffs. The details of the tariff reductions assumed in the two scenarios are shown in table 6.

Base scenario—According to Barbier (1996), because of the Uruguay Round of global agreement on trade and tariffs (GATT), major developed countries were committed to reducing tariffs by 50 percent on solid wood products over 5 years starting in 1995, and completely phasing out tariffs on pulp and paper by 2004.

For this study, we had data on tariffs in 1997. For solid wood products (fuelwood, industrial roundwood, sawnwood, veneer and plywood, particle board, and fiberboard), we assumed that tariffs had been reduced by one-sixth from 1995 to 1997, and that they would be reduced further by one-sixth each year in 1998 and 1999. For pulp (mechanical pulp, chemical pulp, other fiber pulp, and waste paper) and paper (newsprint, printing and writing paper, other paper, and paperboard), we reduced 1997 tariffs by one-seventh each year from 1998 onwards, thereby leading to total tariff elimination by 2004.

Text continues on page 19.

Table 6—Tariff rates in alternative scenarios

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
America:								
Canada—				<i>Percent</i>				
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	0	0	0	0	0	0	0	0
Veneer and plywood	6	5	4	4	4	4	0	0
Particle board	2.5	2.1	1.7	1.7	1.7	1.7	0	0
Fiberboard	0	0	0	0	0	0	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	0	0	0	0	0	0	0	0
Other paper and paperboard	2	1.7	1.4	1.1	0	0	0	0
Mexico—								
Fuelwood and charcoal	10	8.3	6.7	6.7	6.7	6.7	0	0
Saw logs and pulpwood	10	8.3	6.7	6.7	6.7	6.7	0	0
Industrial roundwood (other)	10	8.3	6.7	6.7	6.7	6.7	0	0
Sawnwood	10	8.3	6.7	6.7	6.7	6.7	0	0
Veneer and plywood	15	12.5	10	10	10	10	0	0
Particle board	20	16.7	13.3	13.3	13.3	13.3	0	0
Fiberboard	15	12.5	10	10	10	10	0	0
Mechanical wood pulp	5	4.3	3.6	2.9	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	5	4.3	3.6	2.9	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	15	12.9	10.7	8.6	0	0	0	0
Printing and writing paper	10	8.6	7.1	5.7	0	0	0	0
Other paper and paperboard	10	8.6	7.1	5.7	0	0	0	0
United States—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	0	0	0	0	0	0	0	0
Veneer and plywood	5	4.2	3.3	3.3	3.3	3.3	0	0
Particle board	0.8	0.7	0.5	0.5	0.5	0.5	0	0
Fiberboard	0.6	0.5	0.4	0.4	0.4	0.4	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	1.5	1.3	1.1	0.9	0	0	0	0
Other paper and paperboard	2.4	2.1	1.7	1.4	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
Brazil—	Percent							
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	10	8.3	6.7	6.7	6.7	6.7	0	0
Sawnwood	10	8.3	6.7	6.7	6.7	6.7	0	0
Veneer and plywood	10	8.3	6.7	6.7	6.7	6.7	0	0
Particle board	10	8.3	6.7	6.7	6.7	6.7	0	0
Fiberboard	2	1.7	1.3	1.3	1.3	1.3	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	20	17.1	14.3	11.4	0	0	0	0
Other paper and paperboard	12.5	10.7	8.9	7.1	0	0	0	0
Chile—								
Fuelwood and charcoal	11	9.2	7.3	7.3	7.3	7.3	0	0
Saw logs and pulpwood	11	9.2	7.3	7.3	7.3	7.3	0	0
Industrial roundwood (other)	11	9.2	7.3	7.3	7.3	7.3	0	0
Sawnwood	11	9.2	7.3	7.3	7.3	7.3	0	0
Veneer and plywood	11	9.2	7.3	7.3	7.3	7.3	0	0
Particle board	11	9.2	7.3	7.3	7.3	7.3	0	0
Fiberboard	11	9.2	7.3	7.3	7.3	7.3	0	0
Mechanical wood pulp	11	9.4	7.9	6.3	0	0	0	0
Chemical and semichemical wood pulp	11	9.4	7.9	6.3	0	0	0	0
Other fiber pulp	11	9.4	7.9	6.3	0	0	0	0
Waste paper	11	9.4	7.9	6.3	0	0	0	0
Newsprint	11	9.4	7.9	6.3	0	0	0	0
Printing and writing paper	11	9.4	7.9	6.3	0	0	0	0
Other paper and paperboard	11	9.4	7.9	6.3	0	0	0	0
Asia and Oceania:								
Brunei—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	20	16.7	13.3	13.3	13.3	13.3	0	0
Industrial roundwood (other)	20	16.7	13.3	13.3	13.3	13.3	0	0
Sawnwood	20	16.7	13.3	13.3	13.3	13.3	0	0
Veneer and plywood	20	16.7	13.3	13.3	13.3	13.3	0	0
Particle board	20	16.7	13.3	13.3	13.3	13.3	0	0
Fiberboard	0	0	0	0	0	0	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	0	0	0	0	0	0	0	0
Other paper and paperboard	0	0	0	0	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
China—	Percent							
Fuelwood and charcoal	9	7.5	6	6	6	6	0	0
Saw logs and pulpwood	2	1.7	1.3	1.3	1.3	1.3	0	0
Industrial roundwood (other)	6	5	4	4	4	4	0	0
Sawnwood	9	7.5	6	6	6	6	0	0
Veneer and plywood	20	16.7	13.3	13.3	13.3	13.3	0	0
Particle board	22	18.3	14.7	14.7	14.7	14.7	0	0
Fiberboard	22	18.3	14.7	14.7	14.7	14.7	0	0
Mechanical wood pulp	2	1.7	1.4	1.1	0	0	0	0
Chemical and semichemical wood pulp	2	1.7	1.4	1.1	0	0	0	0
Other fiber pulp	2	1.7	1.4	1.1	0	0	0	0
Waste paper	2	1.7	1.4	1.1	0	0	0	0
Newsprint	15	12.9	10.7	8.6	0	0	0	0
Printing and writing paper	20	17.1	14.3	11.4	0	0	0	0
Other paper and paperboard	15	12.9	10.7	8.6	0	0	0	0
Hong Kong—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	0	0	0	0	0	0	0	0
Veneer and plywood	0	0	0	0	0	0	0	0
Particle board	0	0	0	0	0	0	0	0
Fiberboard	0	0	0	0	0	0	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	0	0	0	0	0	0	0	0
Other paper and paperboard	0	0	0	0	0	0	0	0
Indonesia—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	10	8.3	6.7	6.7	6.7	6.7	0	0
Veneer and plywood	20	16.7	13.3	13.3	13.3	13.3	0	0
Particle board	10	8.3	6.7	6.7	6.7	6.7	0	0
Fiberboard	10	8.3	6.7	6.7	6.7	6.7	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	25	21.4	17.9	14.3	0	0	0	0
Newsprint	5	4.3	3.6	2.9	0	0	0	0
Printing and writing paper	15	12.9	10.7	8.6	0	0	0	0
Other paper and paperboard	10	8.6	7.1	5.7	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
Japan—	Percent							
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	6.8	5.7	4.5	4.5	4.5	4.5	0	0
Veneer and plywood	7.1	5.9	4.7	4.7	4.7	4.7	0	0
Particle board	6	5	4	4	4	4	0	0
Fiberboard	3.1	2.6	2.1	2.1	2.1	2.1	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	2.5	2.1	1.8	1.4	0	0	0	0
Other paper and paperboard	2.1	1.8	1.5	1.2	0	0	0	0
Korea—								
Fuelwood and charcoal	2	1.7	1.3	1.3	1.3	1.3	0	0
Saw logs and pulpwood	2	1.7	1.3	1.3	1.3	1.3	0	0
Industrial roundwood (other)	2	1.7	1.3	1.3	1.3	1.3	0	0
Sawnwood	5	4.2	3.3	3.3	3.3	3.3	0	0
Veneer and plywood	8	6.7	5.3	5.3	5.3	5.3	0	0
Particle board	8	6.7	5.3	5.3	5.3	5.3	0	0
Fiberboard	8	6.7	5.3	5.3	5.3	5.3	0	0
Mechanical wood pulp	2	1.7	1.4	1.1	0	0	0	0
Chemical and semichemical wood pulp	2	1.7	1.4	1.1	0	0	0	0
Other fiber pulp	2	1.7	1.4	1.1	0	0	0	0
Waste paper	2	1.7	1.4	1.1	0	0	0	0
Newsprint	8	6.9	5.7	4.6	0	0	0	0
Printing and writing paper	8	6.9	5.7	4.6	0	0	0	0
Other paper and paperboard	8	6.9	5.7	4.6	0	0	0	0
Malaysia—								
Fuelwood and charcoal	20	16.7	13.3	13.3	13.3	13.3	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	0	0	0	0	0	0	0	0
Veneer and plywood	40	33.3	26.7	26.7	26.7	26.7	0	0
Particle board	20	16.7	13.3	13.3	13.3	13.3	0	0
Fiberboard	20	16.7	13.3	13.3	13.3	13.3	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	5	4.3	3.6	2.9	0	0	0	0
Printing and writing paper	15	12.9	10.7	8.6	0	0	0	0
Other paper and paperboard	20	17.1	14.3	11.4	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
Philippines—	Percent							
Fuelwood and charcoal	3	2.5	2	2	2	2	0	0
Saw logs and pulpwood	3	2.5	2	2	2	2	0	0
Industrial roundwood (other)	3	2.5	2	2	2	2	0	0
Sawnwood	10	8.3	6.7	6.7	6.7	6.7	0	0
Veneer and plywood	20	16.7	13.3	13.3	13.3	13.3	0	0
Particle board	20	16.7	13.3	13.3	13.3	13.3	0	0
Fiberboard	20	16.7	13.3	13.3	13.3	13.3	0	0
Mechanical wood pulp	3	2.6	2.1	1.7	0	0	0	0
Chemical and semichemical wood pulp	3	2.6	2.1	1.7	0	0	0	0
Other fiber pulp	3	2.6	2.1	1.7	0	0	0	0
Waste paper	3	2.6	2.1	1.7	0	0	0	0
Newsprint	10	8.6	7.1	5.7	0	0	0	0
Printing and writing paper	3	2.6	2.1	1.7	0	0	0	0
Other paper and paperboard	10	8.6	7.1	5.7	0	0	0	0
Singapore—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	0	0	0	0	0	0	0	0
Veneer and plywood	0	0	0	0	0	0	0	0
Particle board	0	0	0	0	0	0	0	0
Fiberboard	0	0	0	0	0	0	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	0	0	0	0	0	0	0	0
Other paper and paperboard	0	0	0	0	0	0	0	0
Thailand—								
Fuelwood and charcoal	1	0.8	0.7	0.7	0.7	0.7	0	0
Saw logs and pulpwood	1	0.8	0.7	0.7	0.7	0.7	0	0
Industrial roundwood (other)	1	0.8	0.7	0.7	0.7	0.7	0	0
Sawnwood	5	4.2	3.3	3.3	3.3	3.3	0	0
Veneer and plywood	20	16.7	13.3	13.3	13.3	13.3	0	0
Particle board	20	16.7	13.3	13.3	13.3	13.3	0	0
Fiberboard	20	16.7	13.3	13.3	13.3	13.3	0	0
Mechanical wood pulp	7	6	5	4	0	0	0	0
Chemical and semichemical wood pulp	7	6	5	4	0	0	0	0
Other fiber pulp	7	6	5	4	0	0	0	0
Waste paper	7	6	5	4	0	0	0	0
Newsprint	35	30	25	20	0	0	0	0
Printing and writing paper	35	30	25	20	0	0	0	0
Other paper and paperboard	35	30	25	20	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
Australia—	Percent							
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	5	4.2	3.3	3.3	3.3	3.3	0	0
Veneer and plywood	5	4.2	3.3	3.3	3.3	3.3	0	0
Particle board	5	4.2	3.3	3.3	3.3	3.3	0	0
Fiberboard	5	4.2	3.3	3.3	3.3	3.3	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	0	0	0	0	0	0	0	0
Printing and writing paper	5	4.3	3.6	2.9	0	0	0	0
Other paper and paperboard	5	4.3	3.6	2.9	0	0	0	0
New Zealand—								
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	0	0	0	0	0	0	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	8	6.7	5.3	5.3	5.3	5.3	0	0
Veneer and plywood	8	6.7	5.3	5.3	5.3	5.3	0	0
Particle board	7.5	6.3	5	5	5	5	0	0
Fiberboard	6.5	5.4	4.3	4.3	4.3	4.3	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	7.5	6.4	5.4	4.3	0	0	0	0
Printing and writing paper	7.5	6.4	5.4	4.3	0	0	0	0
Other paper and paperboard	7.5	6.4	5.4	4.3	0	0	0	0
Papua New Guinea—								
Fuelwood and charcoal	40	33.3	26.7	26.7	26.7	26.7	0	0
Saw logs and pulpwood	40	33.3	26.7	26.7	26.7	26.7	0	0
Industrial roundwood (other)	40	33.3	26.7	26.7	26.7	26.7	0	0
Sawnwood	40	33.3	26.7	26.7	26.7	26.7	0	0
Veneer and plywood	100	83.3	66.7	66.7	66.7	66.7	0	0
Particle board	55	45.8	36.7	36.7	36.7	36.7	0	0
Fiberboard	55	45.8	36.7	36.7	36.7	36.7	0	0
Mechanical wood pulp	40	34.3	28.6	22.9	0	0	0	0
Chemical and semichemical wood pulp	40	34.3	28.6	22.9	0	0	0	0
Other fiber pulp	40	34.3	28.6	22.9	0	0	0	0
Waste paper	40	34.3	28.6	22.9	0	0	0	0
Newsprint	11	9.4	7.9	6.3	0	0	0	0
Printing and writing paper	11	9.4	7.9	6.3	0	0	0	0
Other paper and paperboard	11	9.4	7.9	6.3	0	0	0	0

Table 6—Tariff rates in alternative scenarios (continued)

Country and commodity	Tariff rates							
	1997	1998	1999	Base scenario			ATL scenario	
				2000	2004	2010	2000	2010
Europe:								
European Union ^a —				<i>Percent</i>				
Fuelwood and charcoal	0	0	0	0	0	0	0	0
Saw logs and pulpwood	1	0.8	0.7	0.7	0.7	0.7	0	0
Industrial roundwood (other)	0	0	0	0	0	0	0	0
Sawnwood	2	1.7	1.3	1.3	1.3	1.3	0	0
Veneer and plywood	8.2	6.8	5.5	5.5	5.5	5.5	0	0
Particle board	8.2	6.8	5.5	5.5	5.5	5.5	0	0
Fiberboard	8.2	6.8	5.5	5.5	5.5	5.5	0	0
Mechanical wood pulp	0	0	0	0	0	0	0	0
Chemical and semichemical wood pulp	0	0	0	0	0	0	0	0
Other fiber pulp	0	0	0	0	0	0	0	0
Waste paper	0	0	0	0	0	0	0	0
Newsprint	4.5	3.9	3.2	2.6	0	0	0	0
Printing and writing paper	7.2	6.2	5.1	4.1	0	0	0	0
Other paper and paperboard	5.7	4.9	4.1	3.3	0	0	0	0

^a Each country of the European Union is treated individually: Austria, Belgium-Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

Accelerated tariff liberalization scenario—Under the ATL scenario, tariffs are the same as in the base scenario for 1998 and 1999. Beginning in 2000, the tariffs would be eliminated for all commodities.

There are 180 countries in the GFPM. Changes in tariffs corresponding to each scenario were assumed only for the countries listed below (For other countries, it was assumed that there would be no change):

- America:
Canada, Mexico, United States, Brazil, and Chile
- Asia and Oceania:
Brunei, China, Japan, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand; Australia, New Zealand, and Papua New Guinea
- European Union:
Austria, Belgium-Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom

Thus, it was assumed that forest products would be traded more freely worldwide between 1997 and 2010 in response to market responses to the tariff cuts. The adjustment of trade flows between countries or regions, however, will likely take time, thus inertia constraints were introduced to limit yearly trade changes to be within a specified fraction of the previous year's net supply (i.e., domestic supply plus imports,

also equal to domestic consumption plus exports). As detailed in the appendixes (see footnote 1), this is an extension of earlier trade inertia constraints (Buongiorno and Gilless 1984, Kallio et al. 1987, Zhang et al. 1997), meant to recognize the effect of the size of the domestic market on trade (Devarajan et al. 1997).

Other Assumptions

Other assumptions governing the projected effects of the ATL agreement related to changes in capacity, fiber input mix, and trade inertia. In the GFPM, capacity changes are endogenous. They depend on changes in past production and on relative profitability of additional capacity in different countries. Capacity data for the base year, 1997, were estimated from the production data. Thereafter, global capacity growth is predicted with a distributed-lag function linking capacity change to changes in past production. Then, global capacity growth is allocated to different countries according to the shadow price (the marginal value of one unit of additional capacity) revealed by the equilibrium computations (Gilless and Buongiorno 1987, Zhang et al. 1993).

The technology, defined by input-output coefficients and associated manufacturing costs, was held constant at the 1997 level, except for paper and paperboard. For paper and paperboard, it was assumed that the amount of recycled paper used in newsprint, printing and writing paper, and paper and paperboard would increase gradually between 1997 and 2010 to reach levels predicted by other studies (Ince 1994, Mabee 1998).

Mathematical Formulation of Global Forest Product Model

The GFPM simulates dynamic market equilibrium for the global forest sector. Every year, demand, supply, trade, and prices are computed that clear markets for all products and in all regions (static phase). Then, the model parameters are updated to reflect exogenous and endogenous changes from one year to the next (dynamic phase). Exogenous changes include economic growth, technical change, potential timber supply, and trade inertia; they are assumptions. Endogenous changes include capacity growth and availability of recycled fibers; they are determined by the model. The model then computes the quantity-price equilibrium next year as shaped by the intervening changes. It reiterates the static and dynamic phases for every year until the end of the projection.

Static phase—The equilibrium for each year of the projection is obtained with an optimization model that simulates world markets. It finds the production, consumption, and trade that maximize the total value of consumption minus the total cost of production and transport, for all products in all countries, in a given year. All the variables refer to that year. Objective function:

$$\max Z = \sum_i \sum_k \int_0^{D_{ik}^*} P_{ik}(D_{ik}) dD_{ik} - \sum_i \sum_k \int_0^{S_{ik}^*} P_{ik}(S_{ik}) dS_{ik} - \sum_i \sum_k Y_{ik} m_{ik} - \sum_i \sum_j \sum_k c_{jk} T_{ijk} , \quad (1)$$

where

i, j = country;
 k = product;
 P = price in U.S. \$;
 D = final product demand;
 S = raw material supply;

Y = quantity manufactured;
 m = cost of manufacture;
 T = quantity transported. In this version of the model, each country exports to the world market and imports from the world market; and
 c = cost of transportation, including tariff.

Demand for final products:

$$D_{ik} = a_{ik} P_{ik}^{s_{ik}} X_i^{\alpha_{ik}} D_{ik,1}^{h_{ik}}, \quad (2)$$

where

D_{-1} = demand in the previous year;
 X = gross domestic product, in real U.S. \$;
 s, α, h = elasticities with respect to price, GDP, and past demand.

Wood supply and nonwood fiber supply:

$$\begin{aligned} P_{ik} &= P_{ik}^0, \\ S_{ik} &\leq S_{ik}^U \end{aligned} \quad (3)$$

where

P^0 = cost of production, and
 S^U = potential supply.

Material balance:

$$\begin{aligned} \sum_j T_{jik} + S_{ik} + Y_{ik} - D_{ik} - \sum_n a_{ikn} Y_{in} - \sum_j T_{jik} &= 0 \quad \forall i, k \\ T_{jik}^L &\leq T_{ijk} \leq T_{ik}^U \quad \forall i, j, k, \end{aligned} \quad (4)$$

where

a_{ikn} = input of commodity k per unit of n , and
 T^U, T^L = upper and lower bounds on imports and exports.

Price:

The market-clearing price is the shadow price of the material balance constraint (4).

Manufacturing capacity:

$$Y_{ik} \leq K_{ik} \quad \forall i, k, \quad (5)$$

where

K = current capacity of production.

Waste paper recovery:

$$S_{ir} \leq S_{ir}^U \quad \forall i, r, \quad (6)$$

where

r = recycled paper, and

S^U = upper bound on recycled paper supply.

Dynamic phase—Yearly changes in the market equilibrium conditions are brought about by:

- Shifts of the demand curves, due to changes in X at the projected GDP growth rate.
- Shifts of the upper bounds on wood supply, S , at the assumed rate of growth of potential supply.
- Changes of manufacturing coefficients m to reflect technical change, especially increasing use of paper recycling.
- Changes of capacity, determined as follows:

At global level, capacity change is a function of changes in production during the past 3 years:

$$\Delta K_k = b_{1k} \Delta Y_{k,-1} + b_{2k} \Delta Y_{k,-2} + b_{3k} \Delta Y_{k,-3}, \quad (7)$$

then, global capacity change is allocated to each country in proportion of its production level and the marginal value of capacity revealed by the shadow price of capacity in the static phase.

$$\Delta K_{ik} = \frac{Y_{ik} \pi}{\sum_j Y_{jk} \pi} \Delta K_k, \quad (8)$$

where

Δ = yearly change, and

π = shadow price of capacity (endogenous, from constraint (5)).

- Changes in waste paper recovery:

$$S_{ir}^U = \sum_k w_{ikr} D_{ik,-1} , \quad (9)$$

where

w_{ikr} = maximum possible recovery rate (exogenous).

• Changes in tariff:

$$c_{ij} = c_{ij,-1} + (t_j - t_{j,-1}) P_{jk,-1} , \quad (10)$$

where

t = the ad valorem tariff rate, in percentage.

• Trade inertia:

$$T_{ijk}^U = \left(\frac{T_{ijk,-1}}{N_{ik,-1}} + e \right) N_{ik,-1}$$

$$T_{ijk}^L = \left(\frac{T_{ijk,-1}}{N_{ik,-1}} + e \right) N_{ik,-1}$$

$$N_{Nik} = S_{ik} + \sum_j T_{jik} = D_{ik} + \sum_j T_{ijk} , \quad (11)$$

where

e = the absolute value of the maximum yearly change in the ratio of import or export to net supply (exogenous).

Projections with Accelerated Tariff Liberalization, 1997-2010

The outlook presented here corresponds to the scenario with ATL. The purpose is to compare the projections from 1997 to 2010 with past trends from 1965 to 1997. The detailed projections under this scenario are in appendixes 1 through 4 (see footnote 1), where they also are compared to projections without the ATL (see also “The Effects of Tariff Liberalization, 1997-2001”).

The global forest sector has expanded greatly during the last three decades, and overall trends show a rising production, domestic consumption, and trade. In most parts of the world, the major measurable factors affecting consumption of forest products are general economic growth and prices. Many other influences, however, are relevant and reflected indirectly by the GDP and price elasticities: level of residential investment, technical and economic competitiveness of sawnwood and panels in the building sector, development in electronic media, competitiveness of paper and paperboard for packaging, for example.

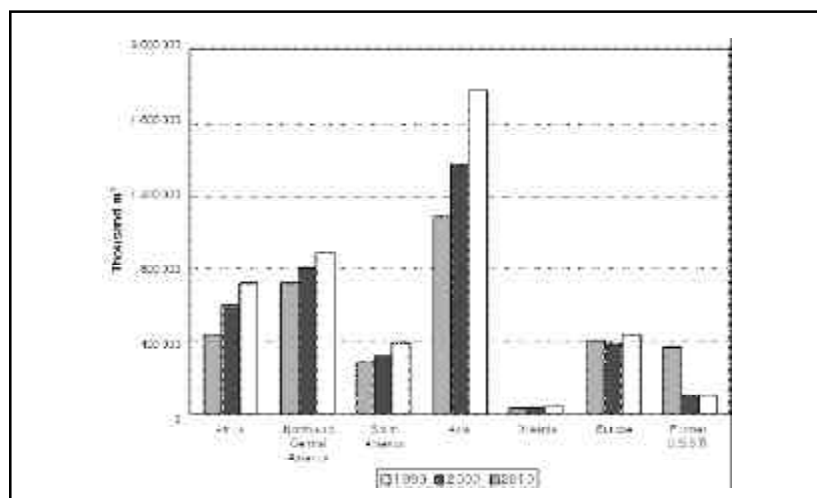


Figure 2—Consumption of roundwood.

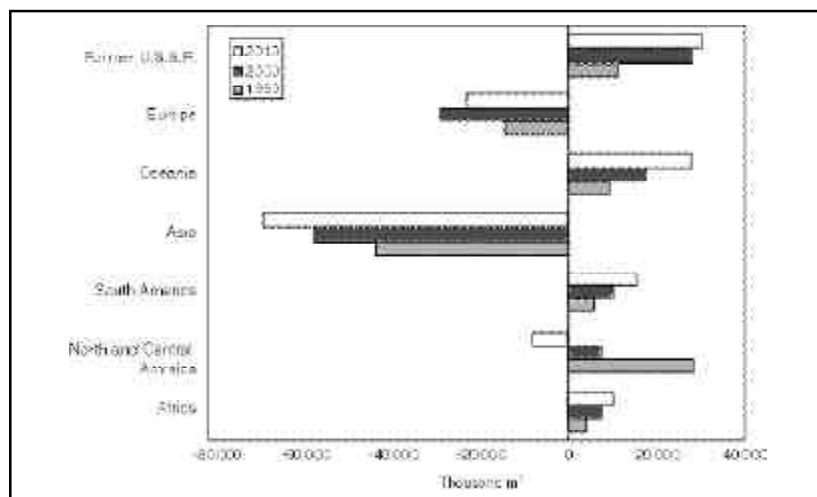


Figure 3—Net trade of roundwood.

Roundwood

Total consumption of roundwood in the world has increased almost 50 percent between 1961 and 1997, from 2.2 billion m³ to nearly 3.4 billion m³. The projections show that the world demand for wood will continue to rise, especially in Asia where rapidly growing economies are concentrated (fig. 2). According to the projections, the world total roundwood consumption would reach 3.6 billion m³ by 2000 and 4.4 billion m³ by 2010, an increase of 8 percent and 29 percent, respectively, from the 1997 level. In 1997, Asia and Europe were net importers of roundwood. By 2010, the projections show that all regions will retain their trading status, but North and Central America will become net importer (fig. 3). This reflects, in part, the effects of timber harvest restrictions implemented in the United States.

Fuelwood and Charcoal

The world total consumption of fuelwood and charcoal increased 61 percent from 1 billion m³ in 1965 to about 1.8 billion m³ in 1997. The projections show that the world demand for fuelwood and charcoal will continue to rise, especially in Asia and Africa

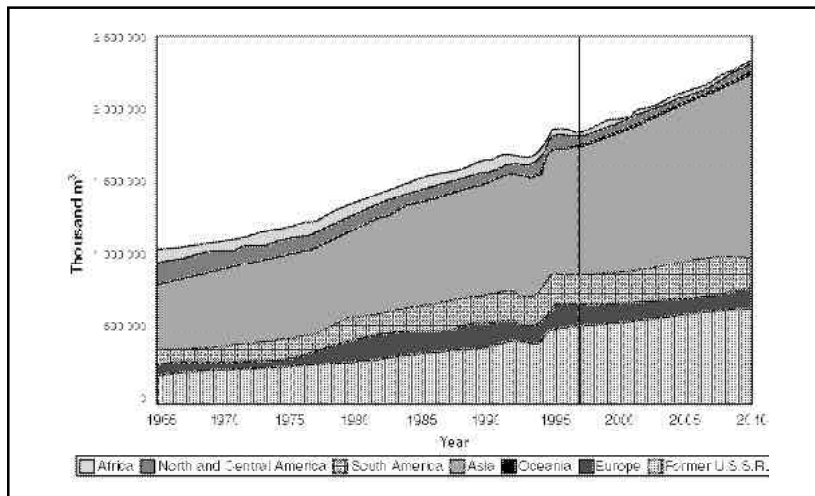


Figure 4—Consumption of fuelwood.

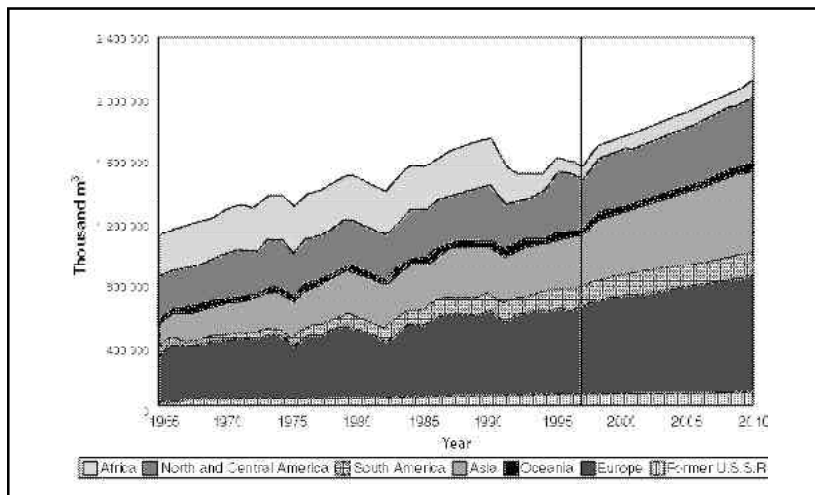


Figure 5—Consumption of industrial roundwood.

(fig. 4). Growth would occur however, at a slower rate than in the past decade, in all regions. In North and Central America, Oceania, and Europe, fuelwood consumption is expected to decrease slightly in the next 13 years.

Industrial Roundwood

Between 1965 and 1997, because of moderate growth in population and rapid growth in the economy, world consumption of industrial roundwood has shown sustained increases. Total consumption was about 1523 million m^3 in 1997, about one-third above the 1965 level. According to the projections, the world industrial roundwood consumption would reach 2039 million m^3 by 2010, an increase of 34 percent from the 1997 level (fig. 5). Because of the regional imbalance between production and consumption, there would be an increase in trade. The trade deficit of Asia would increase from 56 million in 1997 to 68 million m^3 in 2010, and the trade deficit of Europe would decrease slightly (fig. 6). Exports of South America are projected to almost double, whereas North and Central America would become a net importer in 2010.

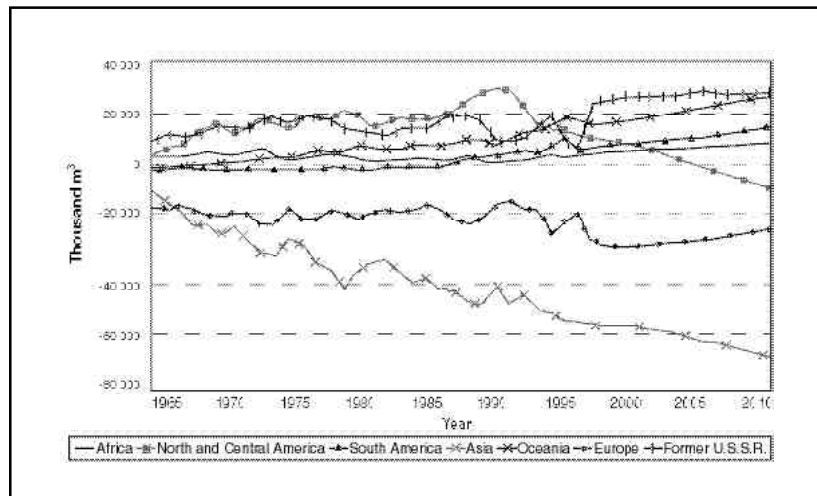


Figure 6—Net trade of industrial roundwood.

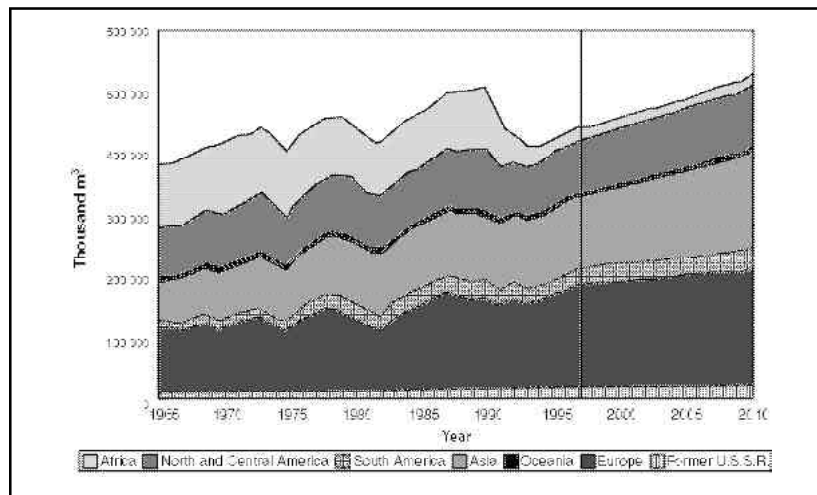


Figure 7—Consumption of sawnwood.

Sawnwood

Sawnwood and sleepers (sawnwood in short) includes coniferous and nonconiferous species. The world sawnwood consumption rose slightly, from 383 million m^3 in 1965 to 441 million m^3 in 1997. In 1990, it reached its peak, 508 million m^3 , and then dropped sharply until 1994 (fig. 7). This was largely due to the decrease in the consumption of the former U.S.S.R, which consumed only about one-fourth of its 1990 consumption in 1994. From 1997 to 2010, global sawnwood consumption is projected to grow from 441 to 532 million m^3 .

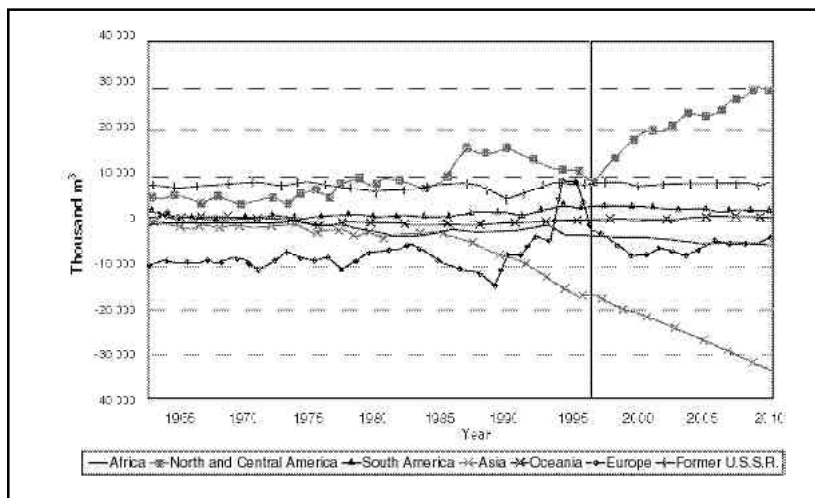


Figure 8—Net trade of sawnwood.

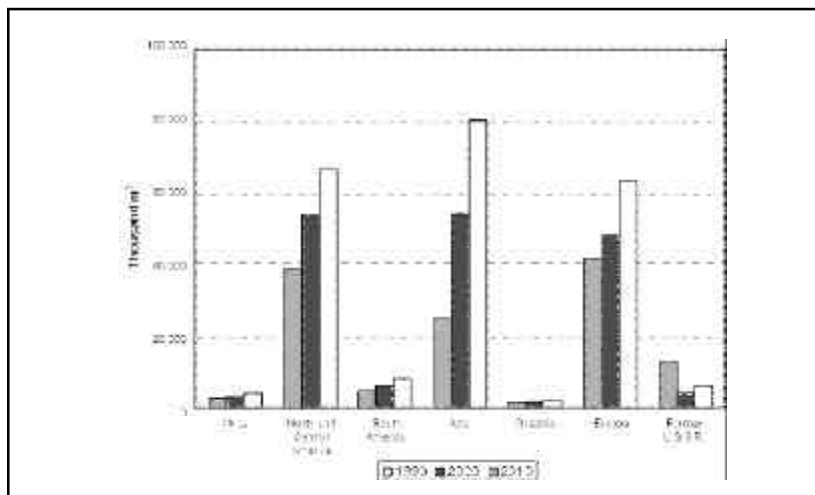


Figure 9—Consumption of wood-based panels.

In 1997, the three net exporting regions were the former U.S.S.R., North and Central America, South America, and Oceania, respectively. They are projected to continue to be net exporters by 2010 (fig. 8). By 2010, North and Central America is projected to increase its surplus with 29 million m^3 of net exports. Net exports of Oceania will almost double, whereas the former U.S.S.R. and South America would stay at about their 1997 level. Symmetrically, the largest net importer is projected to continue to be Asia whose net imports would reach 33 million m^3 by 2010, followed by Africa at 5.5 million m^3 .

Wood-based panels—From 1965 to 1997, the demand for wood-based panels grew faster than for any other forest product. World consumption went from 42 million m^3 to 154 million m^3 , with an average growth of 4.1 percent per year. The 1997 distribution of the world's consumption by panel type was plywood and veneer, 40 percent; particle board, 45 percent; and fiberboard, 15 percent. Wood-based panels consumption was expected to grow during the next 13 years to 231 million m^3 in 2010 (fig. 9).

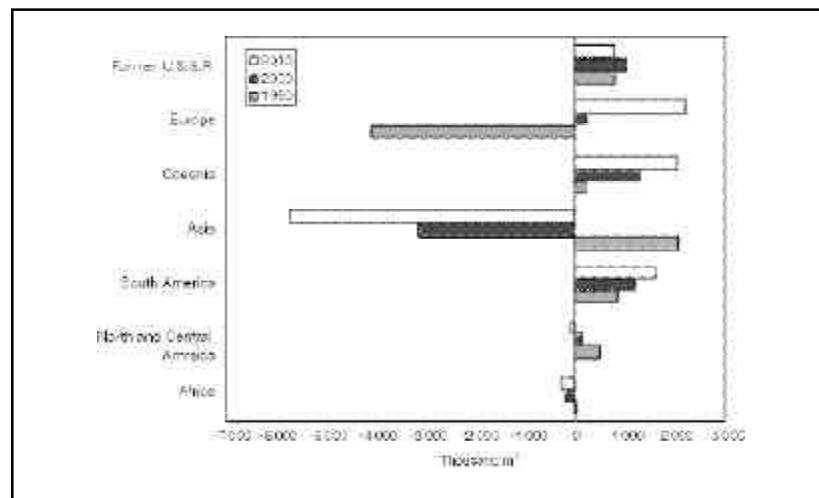


Figure 10—Net trade of wood-based panels.

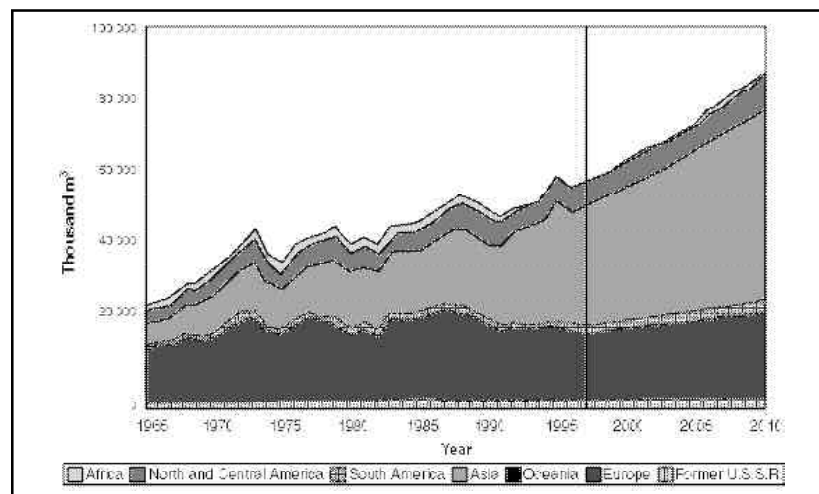


Figure 11—Consumption of veneer and plywood.

From 1965 to 1993, Asia, the former U.S.S.R., and South America were net exporters, but Asia became a net importer after 1993. The projections are that by the year 2010, Europe and Oceania will become the largest and the second net exporters, respectively, whereas South America and the former U.S.S.R. would still be net exporters. Asia would become by far the largest net importer, reaching 5.8 million m³ by 2010, whereas North and Central America would nearly balance its trade (fig. 10).

Veneer sheets and plywood—The world consumption of veneer sheets and plywood increased from 27 million m³ in 1965 to 60 million m³ in 1997. It is projected that world consumption would increase from 60 million m³ in 1997 to 89 million m³ in 2010, for an average annual growth rate of 3 percent (fig. 11). Although in 1997, Asia was the largest net exporter and Europe the largest net importer, by 2010, South America is projected to be the largest net exporter of plywood and veneer, and Europe would continue to be the largest net importer (fig. 12).

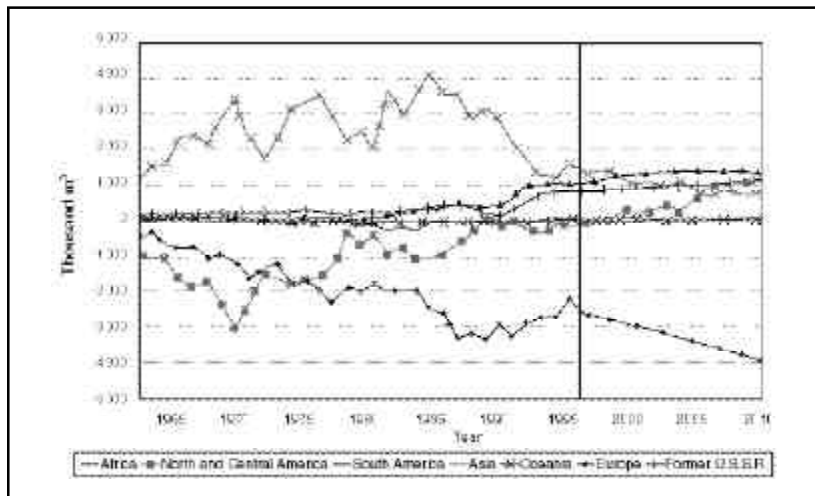


Figure 12—Net trade of veneer and plywood.

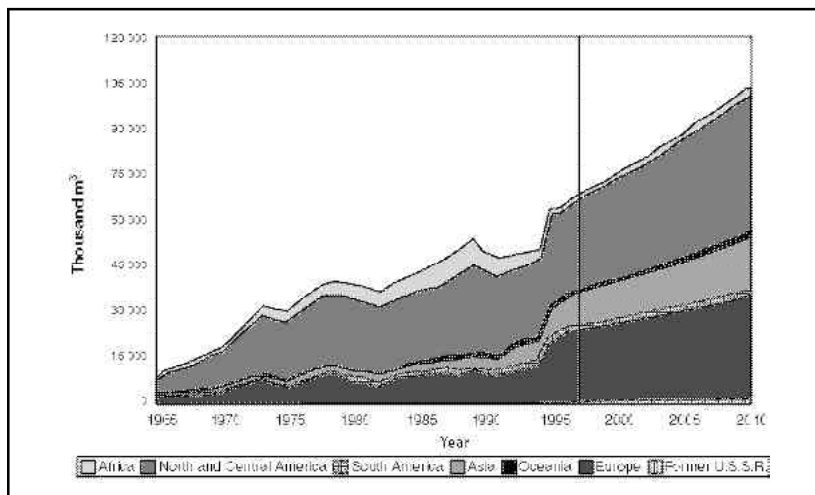


Figure 13—Consumption of particle board.

Particle board—The world consumption of particle board grew fast, from 9 million m³ in 1965 to 70 million m³ in 1997. Meanwhile, it is projected that the world particle board consumption would continue to increase to 105 million m³ in 2010 (fig. 13). Europe switched from being the largest net importer of particle board in 1989 to the largest net exporter in 1994. In 1997, Asia was the largest net importer of particle board (fig. 14). The 2010 projections show Europe to still be the largest net exporter, at a slightly higher level than in 1997. Asia would continue to be the largest net importer, and its net imports of particle board would increase steadily, reaching 2224 thousand m³ by 2010.

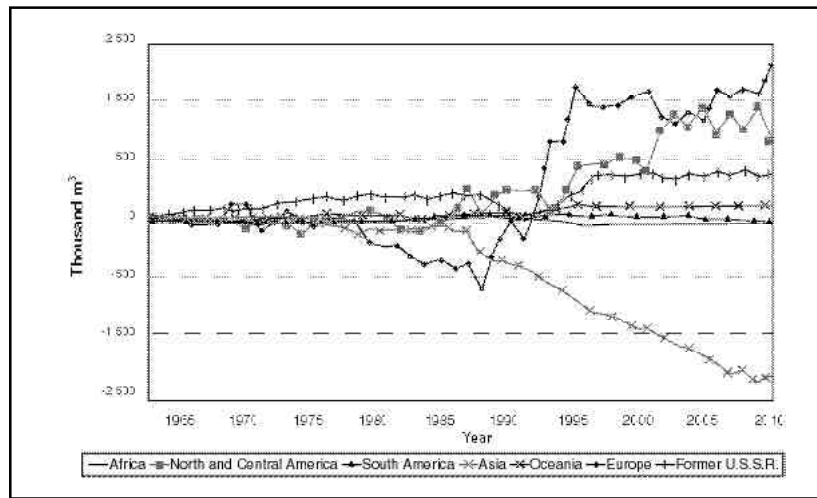


Figure 14—Net trade of particle board.

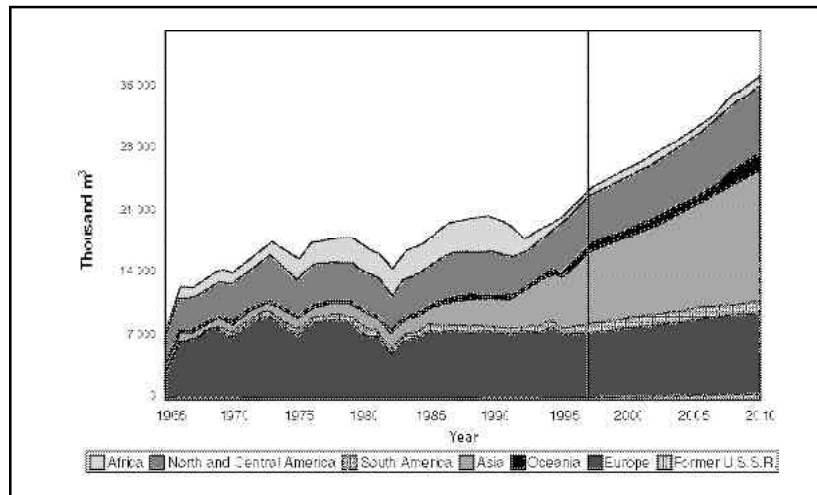


Figure 15—Consumption of fiberboard.

Fiberboard—The world consumption of fiberboard increased from 6.4 million m³ in 1965 to 23 million m³ in 1997. (Asia had the largest consumption of fiberboard among the regions.) The projections suggest that the world fiberboard consumption will continue increasing from 23 million m³ in 1997 to 36 million m³ in 2010 (fig. 15). By 2010, Asia, North and Central America, and Europe will be the three main consuming regions, respectively. The net exporting regions in 1997 (South America, North and Central America, Oceania, Europe, and the former U.S.S.R.) are projected to still be net exporters in 2010 (fig. 16). The main net importing region would still be Asia by 2010, its deficit in fiberboard trade increasing to about 3918 thousand M.T. in 13 years.

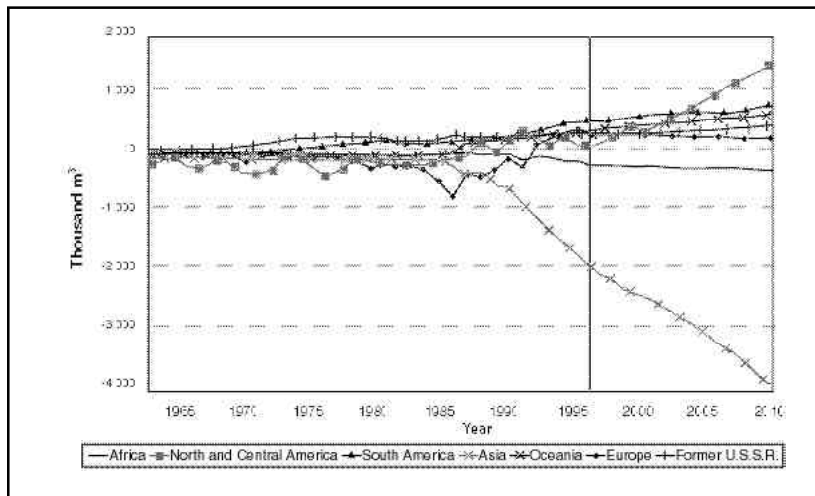


Figure 16—Net trade of fiberboard.

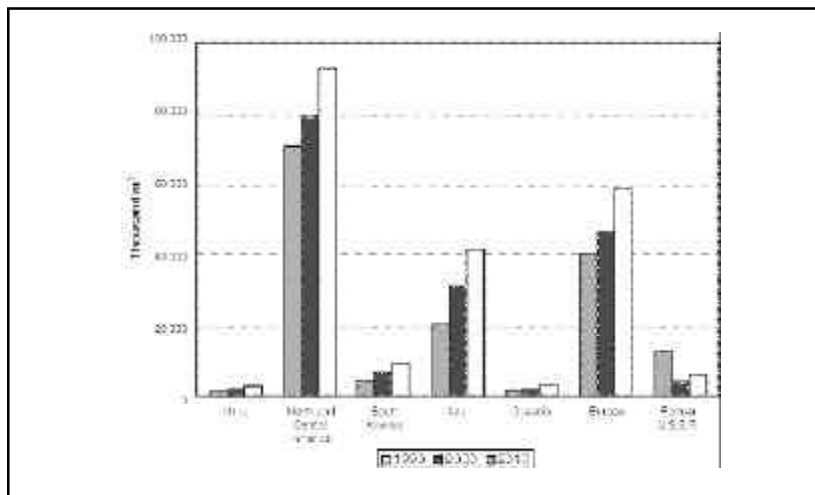


Figure 17—Consumption of wood pulp.

Fiber furnish—Total fiber furnish includes all wood pulp, waste paper, and other fiber pulps. The world consumption of fiber furnish, which almost tripled from 1965 to 1997, is projected to reach 490 million M.T. by 2010, from 289 million M.T. in 1997.

Wood pulp—Wood pulp includes mechanical pulp and chemical pulp. Wood pulp consumption was expected to grow to 216 million m³ by 2010, from 158 million m³ in 1997 (fig. 17). In 1997, Asia was the largest net importer and North and Central America the largest net exporter. The projections show the same rankings for 2010 (fig. 18).

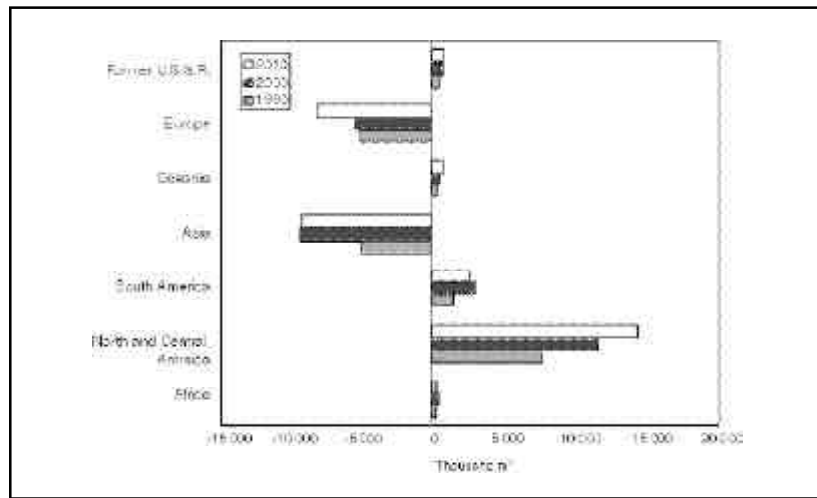


Figure 18—Net trade of wood pulp.

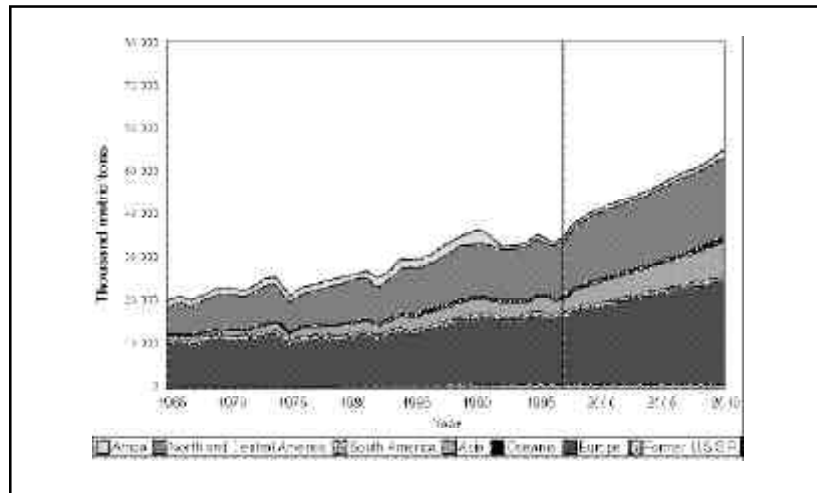


Figure 19—Consumption of mechanical wood pulp.

Mechanical pulp—From 1997 to 2010, consumption of mechanical pulp is projected to grow fastest in Asia and Africa, and slower in other regions (fig. 19). Oceania, the largest net exporter in 1997, would continue to expand its world market share and be the largest exporter by 2010 (fig. 20). North and Central America would be the second largest net exporter, and Europe would still be a small net exporter by 2010, with little change. Asia would continue to be the major importer and would increase its net imports by 2010 to about 980,000 M. T.

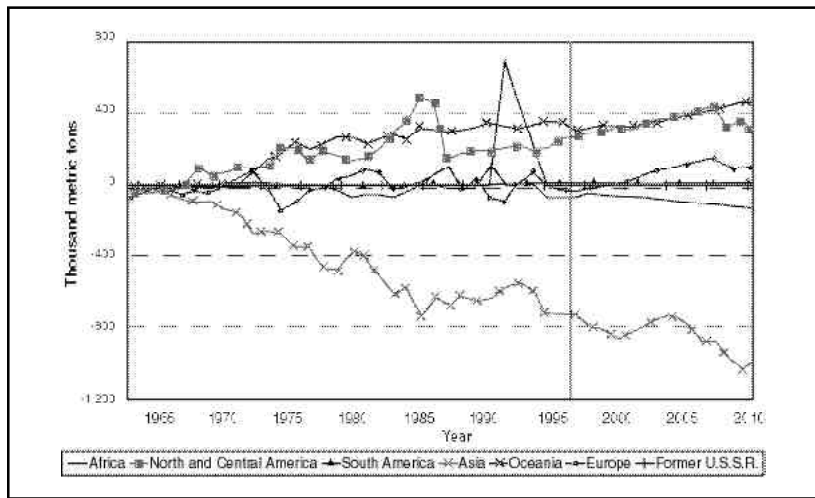


Figure 20—Net trade of mechanical wood pulp.

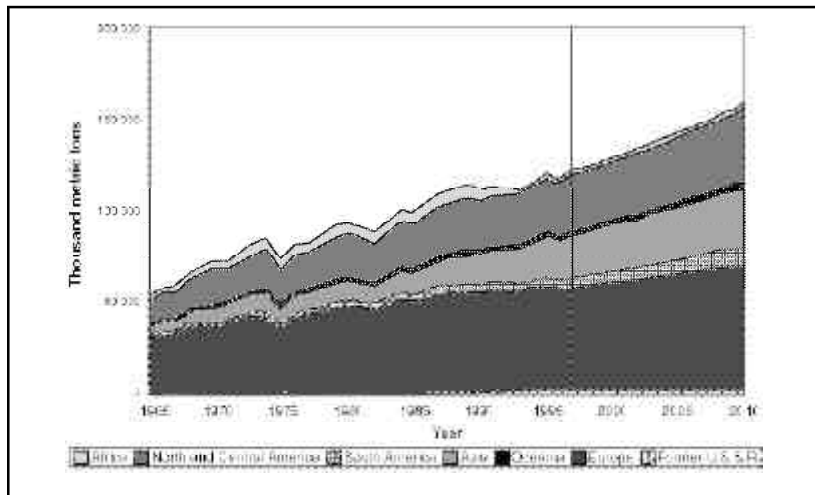


Figure 21—Consumption of chemical/semichemical wood pulp.

Chemical pulp—Chemical pulp consumption is projected to increase the most in Africa and Oceania, and least in North and Central America (fig. 21). North and Central America would remain the largest net exporter of chemical pulp, and Europe would exceed Asia to be the largest net importer (fig. 22). Net exports for South America are projected to decrease slowly until 2010.

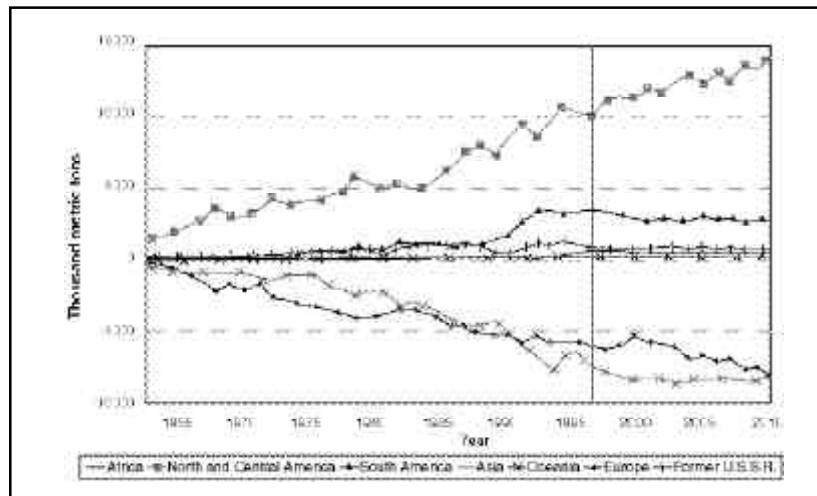


Figure 22—Net trade of chemical/semichemical wood pulp.

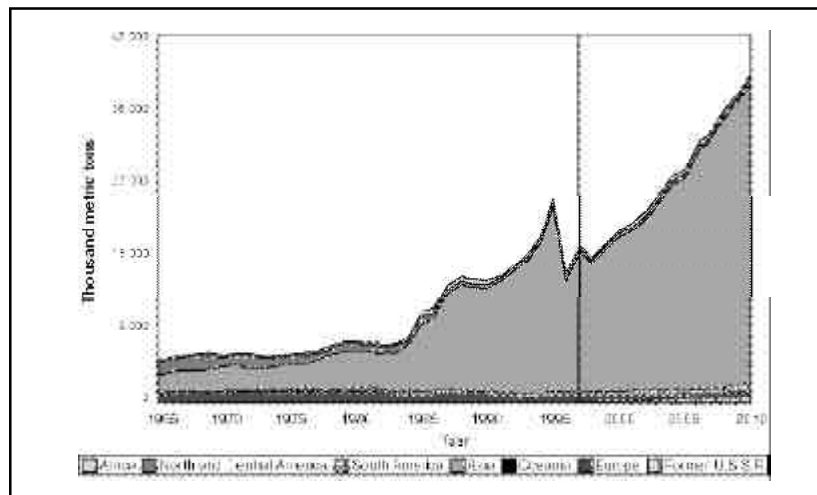


Figure 23—Consumption of other fiber pulp.

Other fiber pulp—Figure 23 indicates that consumption of other fiber pulp has increased rapidly in Asia after 1984 because of large fiber needs caused by quick development in the economy and limited wood fibers of the region. Other fiber pulp consumption in Asia is projected to approach 38 million M.T. by 2010, larger than the sum of mechanical and chemical pulp consumption.

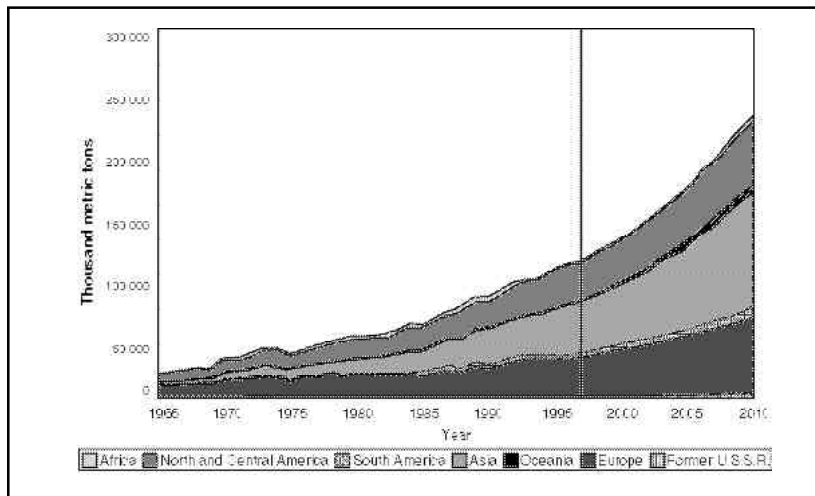


Figure 24—Consumption of wastepaper.

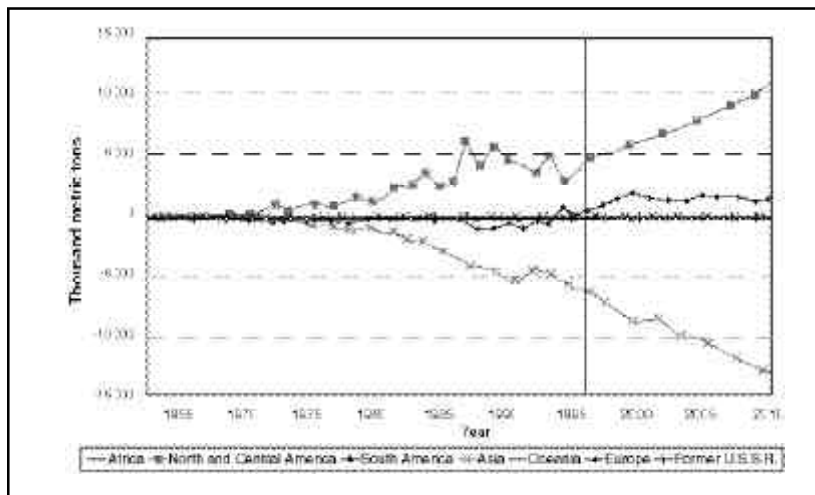


Figure 25—Net trade of wastepaper.

Waste paper—According to the projection, consumption and production of wastepaper would increase fast in Asia and South America (fig. 24). Asia would remain the largest net importer, whereas North and Central America would remain the major net exporter. The projections suggest that exports from the region will continue to increase fast (fig. 25). Net imports for Asia would increase by 50 percent by 2010. The net surplus of Europe also would continue to increase steadily.

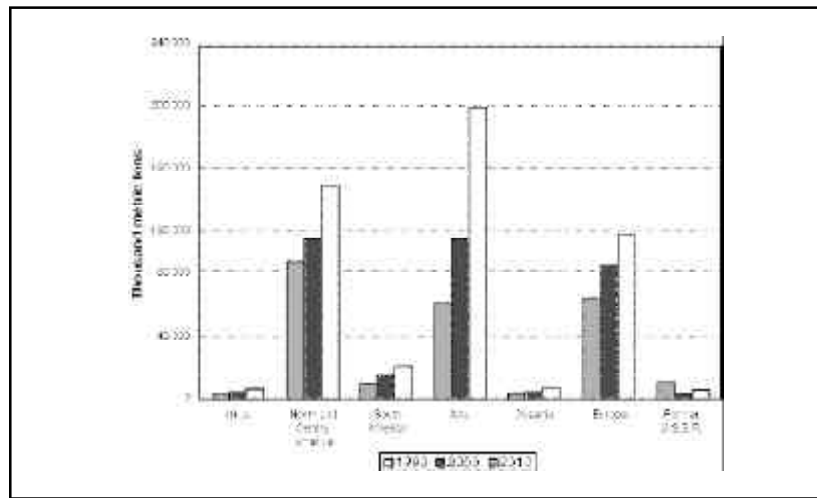


Figure 26—Consumption of paper and paperboard.

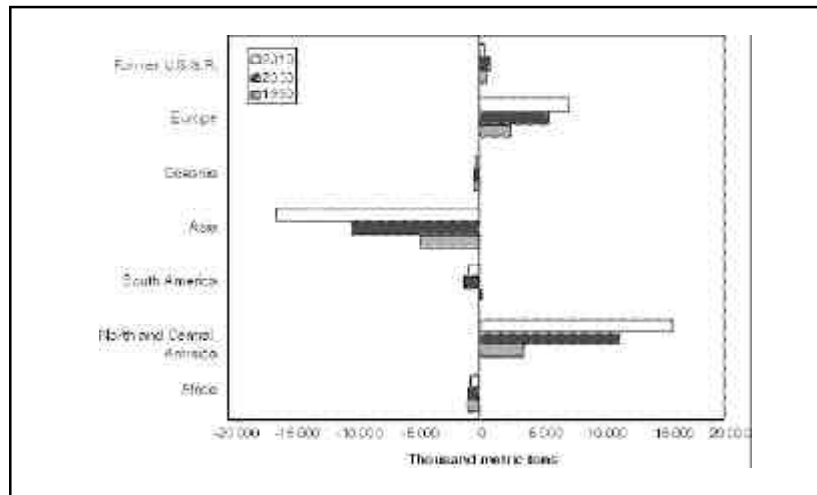


Figure 27—Net trade of paper and paperboard.

Paper and Paperboard

The paper and paperboard group includes newsprint, printing and writing paper, and other paper and paperboard. Figure 26 shows that according to projections, Asian consumption would exceed that of North and Central America by 2000. This is due essentially to the faster rate of GDP growth for Asia presumed in the scenario. Figure 26 also shows the world consumption of paper and paperboard would be 500 million M.T. by 2010, from 294 million M.T. in 1997. Figure 27 suggests that North and Central America would exceed Europe to become the largest net exporter of paper and paperboard by 2010, reaching 15 million M.T. Net imports for Asia would almost double in 13 years.

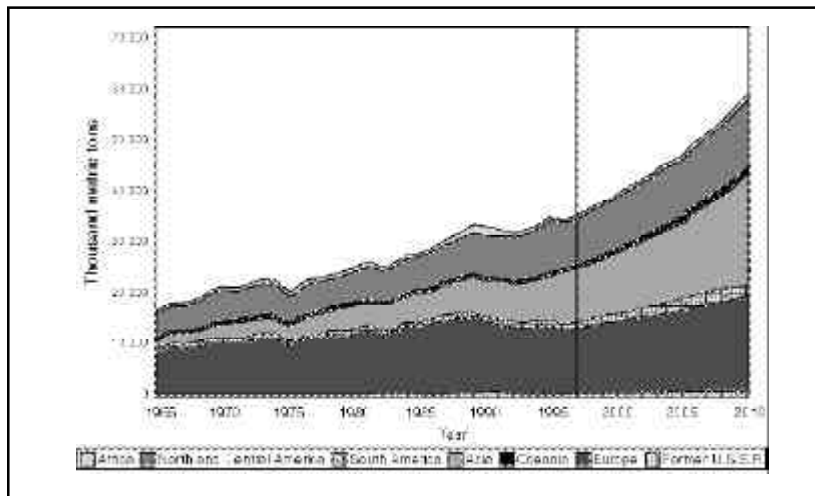


Figure 28—Consumption of newsprint.

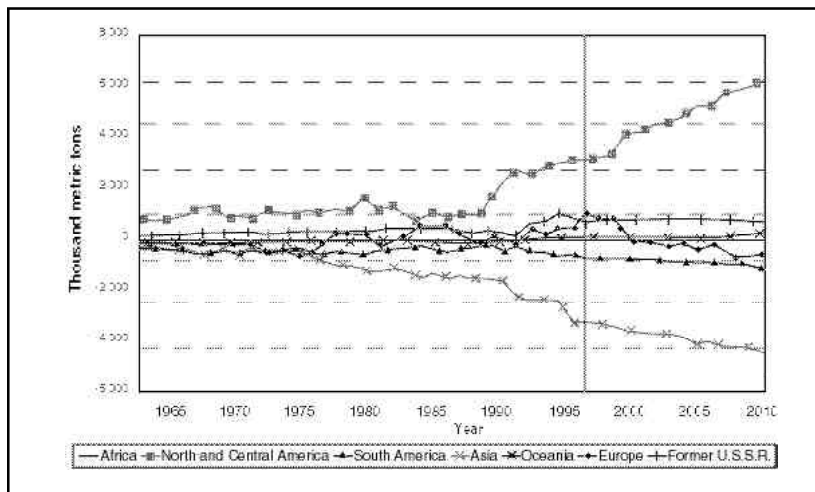


Figure 29—Net trade of newsprint.

Newsprint—The growth of newsprint consumption would be faster than that of the 1990s in all regions, especially in Asia and the former U.S.S.R. (fig. 28). World newsprint consumption would increase from 35 million M.T. in 1997 to 60 million tons in 2010. The largest net exporter would still be North and Central America, followed by the former U.S.S.R. (fig. 29). Asia would remain the largest net importer and is projected to increase its net imports by 37 percent from 1997 to 2010.

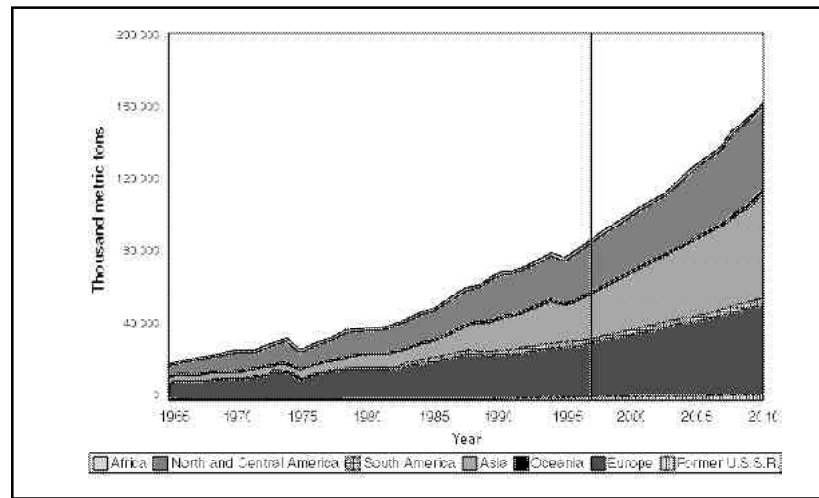


Figure 30—Consumption of printing and writing paper.

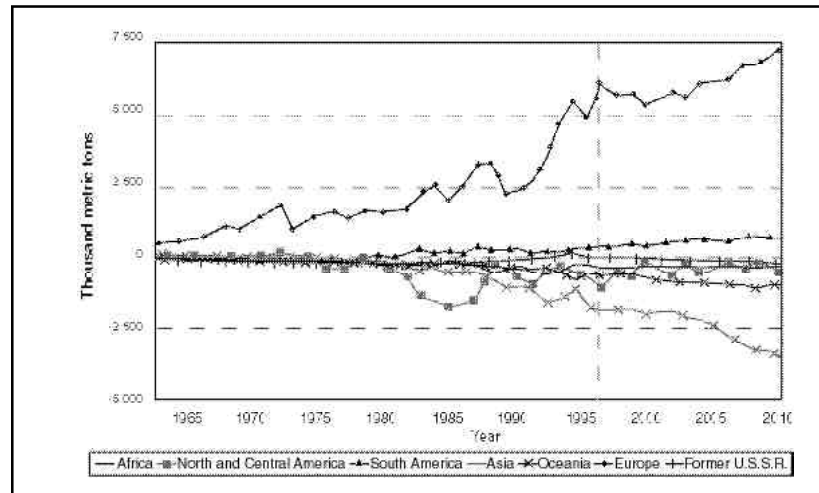


Figure 31—Net trade of printing and writing paper.

Printing and writing paper—Consumption of printing and writing paper is projected to grow fastest in the former U.S.S.R. and Oceania. World printing and writing paper consumption would increase from 88 million M.T. in 1997 to 163 million M.T. in 2010, almost double in 13 years (fig. 30). The positions of Europe and South America as net exporters would strengthen, though net exports would grow at a slower rate. The trade deficit in printing and writing paper in Asia would reach nearly 3.6 million M.T. in 2010 (fig. 31).

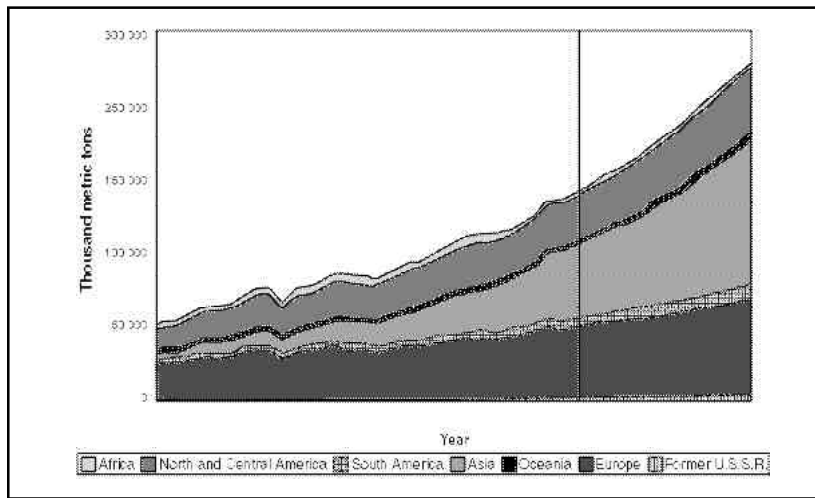


Figure 32—Consumption of other paper and paperboard.

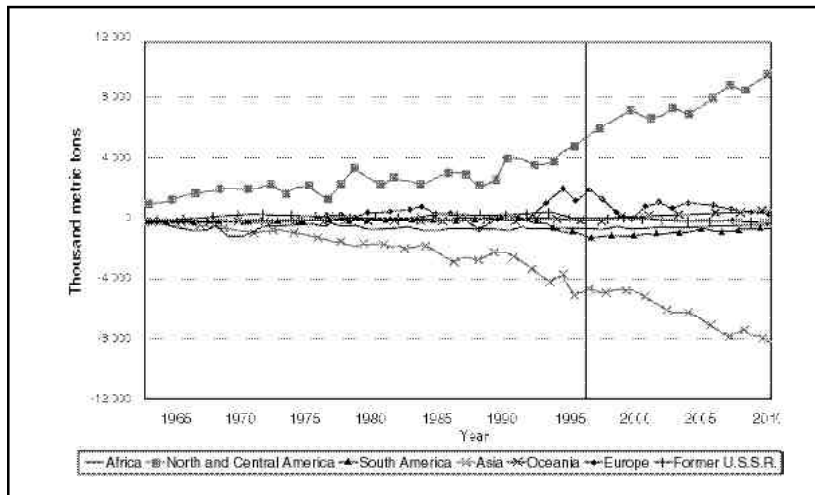


Figure 33—Net trade of other paper and paperboard.

Other paper and paperboard—Other paper and paperboard consumption is projected to grow slower than printing and writing paper and newsprint. Asia would experience the most increase (fig. 32). World consumption other paper and paperboard would increase from 170 million M.T. in 1997 to 277 million M.T. in 2010. Asia would nearly double its net imports by 2010. Net exports from North and Central America would continue to grow almost linearly, whereas net exports from Europe would decrease to one-fifth of their 1997 level (fig. 33).

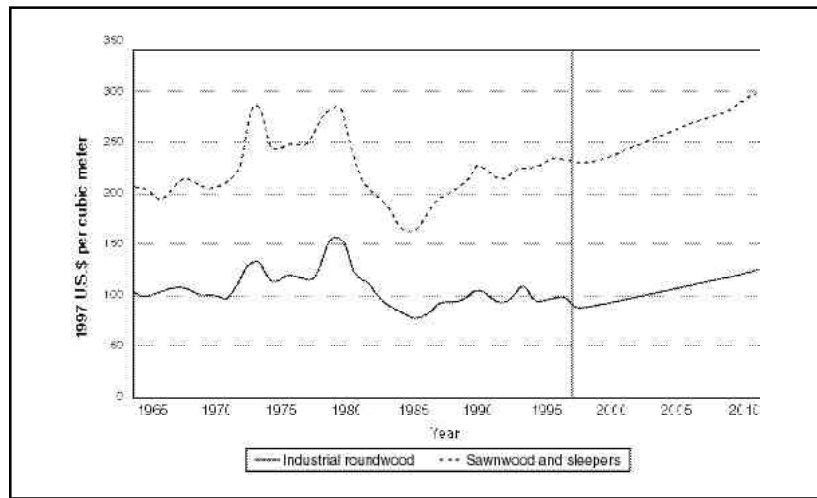


Figure 34—Real world prices of solid wood products.

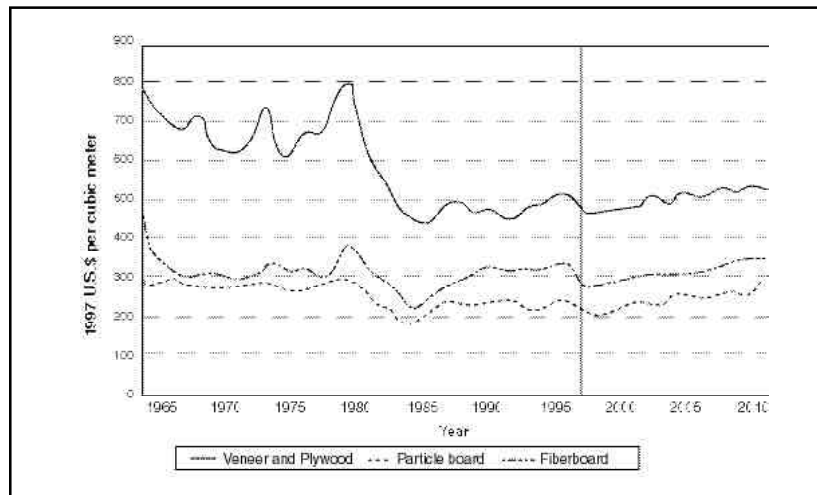


Figure 35—Real world prices of wood-based panels.

Price Trends with Accelerated Tariff Liberalization

In market economies, prices determine, in part, the demand and supply of forest products. Price levels are also critical in determining the feasibility of forestry and industry projects. It is, therefore, useful that the method to predict consumption, production, and trade also gives projections of the market clearing prices.

Industrial roundwood and sawnwood—Figure 34 presents historical trends and projections for industrial roundwood and sawnwood prices in 1997 U.S. \$ at the world level. Historically, the price of sawnwood paralleled the price of industrial roundwood, mainly because roundwood is a major part of the total cost of sawmilling, reaching as high as 60 to 70 percent. The projections show that the relation between the two prices will remain strong over the next 13 years.

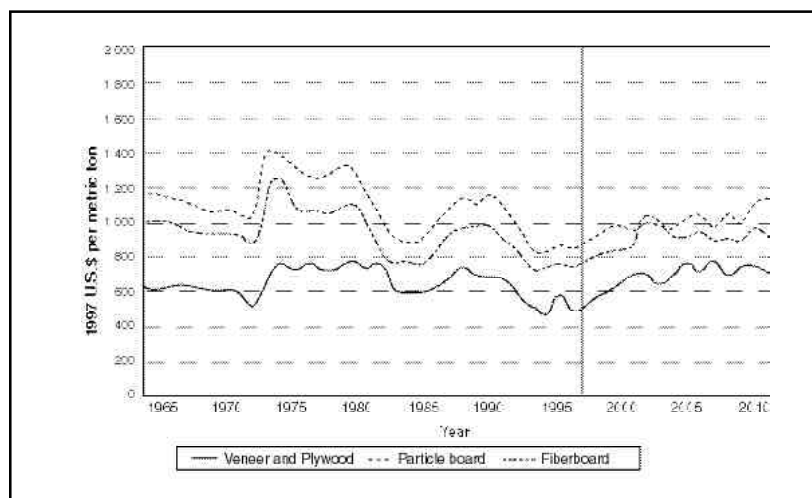


Figure 36—Real world prices of paper and paperboard.

The price projections suggest that the real price of industrial roundwood worldwide would increase by \$27 per m³ over the next decade, and would rise to about \$130 per m³ by 2010. Because of the rising price of raw material, the price of sawnwood would increase by \$50 per m³. The price of sawnwood is projected to reach about \$300 per m³ in 2010.

Wood-based panels—The price for wood-based panels fell between 1965 and 1997, as shown in figure 35. This steady fall in price was made possible mostly by a reduction in costs of production (new processes, economies of scale, cheaper raw material from sawmill residues, for example). Among all panel products, the real price of veneer and plywood declined more than that of particle board or fiberboard.

The projections show that the real prices of veneer and plywood, particle board, and fiberboard should increase slightly during the next 13 years, almost in parallel with the increasing price of industrial roundwood (fig. 34).

Paper and paperboard—For the pulp and paper sector, wood costs account for a smaller share of total costs, notably because of high capital costs. Because the technology is broadly similar throughout the world, however, wood cost is one of the means whereby individual companies seek to gain a comparative advantage. To some extent, therefore, the price trend of paper and paperboard also followed that of industrial roundwood during the last three decades of the 20th century (fig. 36). The strong rise after 1973 was due to high energy costs that declined subsequently.

The prices of paper and paperboard projected with the GFPM and under the ATL agreement remain stable or increase slightly from 1997 to 2010. The price trend corresponds to the raw material price trend, dampened by the increased use of waste paper and other fiber pulp in paper and paperboard production worldwide and in Asia particularly.

**Effects of
Accelerated Tariff
Liberalization
Agreement,
1997-2010**

Table 7—Consumption of industrial roundwood (thousand CUM)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	45 607	59 368	59 645	68 554	59 668	68 240	-0.5
North and Central America	472 122	603 287	668 147	772 411	669 264	776 478	0.5
United States	307 817	399 868	452 820	512 839	452 629	518 406	1.1
South America	84 432	121 134	127 437	151 138	127 444	152 703	1.0
Asia	270 609	333 458	398 565	527 799	398 626	523 054	-0.9
Oceania	18 837	24 205	25 190	31 048	25 201	32 662	5.2
Europe	235 898	317 445	342 345	399 352	341 592	405 281	1.5
Former U.S.S.R.	263 120	77 939	83 565	93 914	83 565	94 934	1.1
Developed, all	1 077 492	1 094 509	1 188 693	1 385 998	1 188 796	1 386 726	0.1
Developing, all	313 133	442 327	516 201	658 217	516 563	666 628	1.3
World	1 390 625	1 536 836	1 704 894	2 044 215	1 705 359	2 053 353	0.4

Table 8—Consumption of sawnwood (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	9 917	12 017	12 646	14 930	12 646	14 940	0.1
North and Central America	123 139	172 833	177 158	192 431	177 159	192 431	0.0
United States	101 196	148 259	151 755	163 692	151 755	163 692	0.0
South America	20 895	27 470	28 897	34 782	28 897	34 858	0.2
Asia	98 201	113 623	122 106	156 728	122 106	158 041	0.8
Oceania	6 104	6 580	6 787	7 550	6 787	7 546	-0.1
Europe	73 465	91 722	94 072	102 956	94 072	102 956	0.0
Former U.S.S.R.	91 314	17 307	17 563	20 941	17 563	20 924	-0.1
Developed, all	332 848	318 180	326 060	356 520	326 060	356 501	0.0
Developing, all	90 187	123 372	133 169	173 798	133 169	175 197	0.8
World	423 035	441 552	459 230	530 318	459 230	531 697	0.3

Table 9—Consumption of wood-based panels (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	1 634	2 081	2 291	3 121	2 287	3 095	-0.8
North and Central America	32 021	49 865	53 470	67 158	53 469	67 258	0.1
United States	27 399	44 121	47 260	58 943	47 260	59 035	0.2
South America	3 239	4 571	4 952	6 708	4 952	6 714	0.1
Asia	17 011	47 830	54 069	81 185	54 070	80 748	-0.5
Oceania	1 148	1 972	2 163	2 940	2 163	3 806	29.5
Europe	23 132	44 318	48 118	64 623	48 118	63 795	-1.3
Former U.S.S.R.	9 849	3 023	3 161	5 272	3 161	5 347	1.4
Developed, all	76 118	112 835	121 653	158 750	121 653	158 911	0.1
Developing, all	11 916	40 825	46 570	72 256	46 567	71 852	-0.6
World	88 034	153 660	168 223	231 006	168 220	230 763	-0.1

Table 10—Consumption of woodpulp (thousand MT)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	932	1 782	1 986	3 086	1 988	3 121	1.1
North and Central America	58 994	74 185	79 960	94 119	79 971	93 884	-0.2
United States	45 539	59 285	61 481	70 800	61 481	70 879	0.1
South America	3 367	5 971	6 620	9 549	6 620	9 635	0.9
Asia	14 935	27 717	31 396	42 145	31 376	41 994	-0.4
Oceania	1 623	1 952	2 117	2 834	2 116	2 999	5.8
Europe	26 840	43 598	47 113	58 954	47 172	59 744	1.3
Former U.S.S.R.	7 463	3 000	3 309	4 890	3 309	4 852	-0.8
Developed, all	106 181	138 070	148 078	180 247	148 146	180 813	0.3
Developing, all	7 973	20 135	24 423	35 330	24 405	35 416	0.2
World	114 154	158 205	172 501	215 578	172 551	216 229	0.3

Table 11—Consumption of total paper and paperboard (thousand MT)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	2 452	4 183	4 661	6 798	4 661	6 862	0.9
North and Central America	68 104	101 423	110 809	147 779	110 809	147 717	0.0
United States	60 706	89 502	97 598	127 786	97 598	127 525	-0.2
South America	6 417	11 382	12 567	18 025	12 567	18 641	3.4
Asia	32 665	95 050	113 190	199 913	113 203	198 634	-0.6
Oceania	2 449	3 853	4 329	6 290	4 329	6 574	4.5
Europe	35 054	74 595	81 706	114 967	81 706	115 305	0.3
Former U.S.S.R.	8 603	3 239	3 375	6 354	3 375	6 289	-1.0
Developed, all	130 307	212 098	232 904	321 481	232 904	321 351	0.0
Developing, all	25 437	81 627	97 733	17 645	97 745	178 671	0.0
World	155 744	293 725	330 637	500 127	330 650	500 022	0.0

Table 12—Production of industrial roundwood (thousand CUM)

	Actual		Projection				
			Base		ATL		Change (%)
Region	1980	1997	2000	2010	2000	2010	2010
Africa	50 801	66 366	67 242	79 230	67 265	78 496	-0.9
North and Central America	492 415	613 534	675 936	772 261	677 053	769 403	-0.4
United States	327 095	416 092	467 872	524 504	467 681	525 018	0.1
South America	85 487	130 085	137 566	166 878	137 572	168 458	0.9
Asia	233 821	277 153	341 261	450 016	341 474	454 992	1.1
Oceania	27 930	41 285	43 665	57 561	43 653	60 874	5.8
Europe	217 168	291 482	314 855	376 814	313 973	383 151	1.7
Former U.S.S.R.	277 700	103 019	110 458	127 544	110 458	124 068	-2.7
Developed, all	1 047 723	1 072 919	1 166 592	1 361 907	1 166 821	1 363 013	0.1
Developing, all	337 599	450 005	524 390	668 396	524 627	676 428	1.2
World	1 385 322	1 522 924	1 690 983	2 030 303	1 691 448	2 039 441	0.5

Table 13—Production of sawnwood (thousand CUM)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	7 650	8 350	8 565	9 364	8 564	9 425	0.7
North and Central America	132 302	181 091	194 210	217 211	195 094	221 358	1.9
United States	84 112	111 425	122 568	131 624	122 568	135 751	3.1
South America	21 993	30 285	31 696	37 098	31 690	36 961	-0.4
Asia	94 718	96 531	101 625	129 154	101 630	124 519	-3.6
Oceania	5 801	6 981	7 238	8 287	7 231	8 283	0.0
Europe	68 433	89 529	87 398	96 829	86 543	98 968	2.2
Former U.S.S.R.	98 200	25 819	25 533	29 410	25 512	29 218	-0.7
Developed, all	339 068	321 426	331 581	371 918	331 583	371 573	-0.1
Developing, all	90 029	117 160	124 683	155 434	124 681	157 158	1.1
World	429 097	438 586	456 264	527 352	456 264	528 731	0.3

Table 14—Production of wood-based panels (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	1 361	1 805	2 006	2 732	2 018	2 793	2.3
North and Central America	31 756	50 756	55 180	72 429	55 039	71 084	-1.9
United States	26 224	38 502	41 608	53 953	41 465	52 649	-2.4
South America	3 574	6 306	6 879	8 134	6 896	8 852	8.8
Asia	19 005	45 837	51 197	75 369	51 197	75 364	0.0
Oceania	1 197	2 607	2 880	3 809	2 888	4 766	25.1
Europe	22 582	43 629	47 126	63 552	47 203	62 273	-2.0
Former U.S.S.R.	10 618	4 783	5 018	7 043	5 041	7 692	9.2
Developed, all	76 190	108 160	116 966	156 071	116 727	153 687	-1.5
Developing, all	13 903	47 563	53 319	76 996	53 555	79 137	2.8
World	90 093	155 723	170 286	233 067	170 283	232 824	-0.1

Table 15—Production of woodpulp (thousand MT)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	1 013	2 253	2 374	3 480	2 374	3 336	-4.1
North and Central America	64 894	84 550	91 507	108 653	91 449	108 218	-0.4
United States	44 819	59 394	62 211	73 278	62 210	73 441	0.2
South America	4 237	9 375	9 493	12 132	9 489	12 203	0.6
Asia	11 893	19 431	21 994	32 581	21 991	32 818	0.7
Oceania	1 819	2 324	2 508	3 581	2 508	3 628	1.3
Europe	25 289	37 458	41 648	50 938	41 763	51 613	1.3
Former U.S.S.R.	8 063	3 879	4 042	5 404	4 041	5 478	1.4
Developed, all	109 727	140 979	152 228	185 884	152 291	186 009	0.1
Developing, all	7 481	18 291	21 338	30 885	21 324	31 285	1.3
World	117 208	159 270	173 565	216 768	173 615	217 294	0.2

Table 16—Production of total paper and paperboard (thousand MT)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	1 713	3 162	3 646	5 942	3 649	6 005	1.1
North and Central America	72 379	109 037	122 216	163 438	122 229	163 144	-0.2
United States	56 839	86 274	97 110	128 219	97 110	128 528	0.2
South America	5 579	9 842	11 156	17 603	11 156	17 705	0.6
Asia	29 651	85 235	102 908	184 263	102 793	182 194	-1.1
Oceania	2 104	3 291	3 766	5 821	3 765	6 291	8.1
Europe	39 001	83 729	87 147	120 751	87 259	122 466	1.4
Former U.S.S.R.	8 733	3 823	4 192	6 704	4 192	6 611	-1.4
Developed, all	139 461	229 718	250 588	344 119	250 713	345 690	0.5
Developing, all	19 699	68 401	84 443	160 402	84 331	158 725	-1.0
World	159 160	298 119	335 031	504 521	335 044	504 415	0.2

Table 17—Import of industrial roundwood (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	793	904	902	903	902	965	6.9
North and Central America	6 297	10 563	11 925	15 816	11 925	16 745	5.9
United States	3 021	2 019	2 214	2 536	2 214	2 543	0.3
South America	99	29	133	163	133	164	0.9
Asia	70 574	69 549	70 648	92 770	70 437	83 058	-10.5
Oceania	8	11	38	49	38	52	7.2
Europe	33 756	52 485	54 912	55 035	54 692	54 605	-0.8
Former U.S.S.R.	255	815	801	662	801	659	-0.4
Developed, all	94 288	111 185	114 762	131 981	114 264	122 759	-7.0
Developing, all	17 494	23 171	24 596	33 417	24 663	33 489	0.2
World	111 782	134 356	139 358	165 397	138 927	156 248	-5.5

Table 18—Import of sawnwood (thousand CUM)

	Actual		Projection				
			Base		ATL		Change (%)
Region	1980	1997	2000	2010	2000	2010	2010
Africa	3 169	4 950	5 286	6 385	5 287	6 387	0.0
North and Central America	26 303	47 814	41 723	48 699	41 723	45 113	-7.4
United States	22 918	43 610	37 093	42 420	37 093	38 846	-8.4
South America	1 453	702	808	1 182	808	1 142	-3.4
Asia	10 727	23 218	26 203	31 625	26 204	37 946	20.0
Oceania	1 075	847	970	1 364	977	1 373	0.7
Europe	27 412	37 498	40 555	39 703	41 447	42 861	8.0
Former U.S.S.R.	356	632	684	888	684	866	-2.5
Developed, all	59 397	97 945	96 738	102 932	97 637	108 856	5.8
Developing, all	11 098	17 716	19 491	26 915	19 493	26 832	-0.3
World	70 495	115 661	116 229	129 847	117 130	135 688	4.5

Table 19—Import of wood-based panels (thousand CUM)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	532	709	754	1 005	741	961	-4.4
North and Central America	2 636	10 472	11 165	11 872	11 307	13 383	12.7
United States	2 145	8 845	9 360	9 762	9 504	11 207	14.8
South America	231	460	490	644	492	644	0.0
Asia	2 034	18 926	21 256	30 210	21 403	31 140	3.1
Oceania	107	254	288	417	280	409	-1.8
Europe	7 429	16 565	18 721	23 860	18 702	25 882	8.5
Former U.S.S.R.	187	469	487	695	486	629	-9.6
Developed, all	10 469	34 968	38 601	46 400	38 922	51 112	10.2
Developing, all	2 687	12 887	14 559	22 302	14 489	21 935	-1.6
World	13 156	47 855	53 160	68 702	53 410	73 047	6.3

Table 20—Import of woodpulp (thousand MT)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	319	306	325	460	327	497	8.1
North and Central America	3 804	6 291	6 840	7 094	6 841	7 015	-1.1
United States	3 414	5 704	6 184	6 188	6 185	6 015	-2.8
South America	437	783	886	1 046	891	1 084	3.6
Asia	3 176	9 786	11 086	11 478	11 079	11 327	-1.3
Oceania	279	214	246	246	246	293	19.1
Europe	8 079	15 169	15 186	18 584	15 155	19 100	2.8
Former U.S.S.R.	221	69	74	82	74	91	11.0
Developed, all	14 256	24 826	25 854	28 676	25 818	29 148	1.6
Developing, all	2 059	7 792	8 789	10 313	8 796	10 260	-0.5
World	16 315	32 618	34 643	38 989	34 614	39 408	1.1

Table 21—Import of total paper and paperboard (thousand MT)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	897	1 504	1 515	1 515	1 512	1 531	1.1
North and Central America	9 531	18 285	17 415	20 475	17 415	20 395	-0.4
United States	8 054	14 381	13 315	15 682	13 315	15 085	-3.8
South America	1 175	3 382	3 355	3 249	3 355	3 669	12.9
Asia	4 253	18 971	19 136	26 522	19 284	27 644	4.2
Oceania	763	1 390	1 491	1 766	1 492	1 609	-8.9
Europe	11 970	38 681	43 157	59 383	43 304	59 993	1.0
Former U.S.S.R.	905	1 005	979	1 350	979	1 414	4.8
Developed, all	22 867	59 827	63 615	83 095	63 764	83 186	0.1
Developing, all	6 627	23 391	23 433	31 164	23 579	33 070	6.1
World	29 494	83 218	87 048	114 59	87 342	116 256	1.7

Table 22—Export of industrial roundwood (thousand CUM)

Region	Actual		Projection				
	1980	1997	Base		ATL		Change (%)
			2000	2010	2000	2010	2010
Africa	6 182	7 902	8 500	11 579	8 500	11 221	-3.1
North and Central America	26 590	20 810	19 714	15 666	19 714	9 669	-38.3
United States	22 299	18 243	17 266	14 200	17 266	9 155	-35.5
South America	1 154	8 980	10 261	15 903	10 261	15 919	0.1
Asia	33 786	13 244	13 344	14 987	13 286	14 995	0.1
Oceania	9 101	17 091	18 514	26 561	18 490	28 264	6.4
Europe	15 026	26 522	27 422	32 497	27 073	32 475	-0.1
Former U.S.S.R.	14 835	25 895	27 693	34 292	27 693	29 793	-13.1
Developed, all	64 519	89 595	92 661	107 890	92 288	99 047	-8.2
Developing, all	42 155	30 849	32 785	43 595	32 727	43 289	-0.7
World	106 674	120 444	125 446	151 485	125 015	142 336	-6.0

Table 23—Export of sawnwood (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	902	1 283	1 205	819	1 205	872	6.5
North and Central America	35 466	56 072	58 775	73 479	59 659	74 040	0.8
United States	5 834	6 776	7 905	10 353	7 905	10 905	5.3
South America	2 551	3 517	3 607	3 499	3 601	3 244	-7.3
Asia	7 244	6 126	5 721	4 051	5 728	4 424	9.2
Oceania	772	1 248	1 421	2 101	1 421	2 110	0.4
Europe	22 380	35 305	33 880	33 575	33 918	38 873	15.8
Former U.S.S.R.	7 242	9 144	8 654	9 358	8 632	9 160	-2.1
Developed, all	65 617	101 191	102 259	118 330	103 159	123 928	4.7
Developing, all	10 940	11 504	11 004	8 551	11 005	8 794	2.8
World	76 557	112 695	113 263	126 880	114 164	132 722	4.6

Table 24—Export of wood-based panels (thousand CUM)

Region	Actual		Projection				Change (%)
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
Africa	259	433	469	616	471	659	7.0
North and Central America	2 371	11 363	12 876	17 143	12 877	17 208	0.4
United States	970	3 226	3 708	4 772	3 708	4 821	1.0
South America	566	2 195	2 417	2 070	2 437	2 782	34.4
Asia	4 028	16 933	18 383	24 394	18 530	25 757	5.6
Oceania	156	889	1 006	1 286	1 006	1 369	6.5
Europe	6 879	15 876	17 730	22 789	17 787	24 360	6.9
Former U.S.S.R.	956	2 229	2 343	2 466	2 366	2 974	20.6
Developed, all	10 541	30 293	33 915	43 721	33 996	45 888	5.0
Developing, all	4 674	19 625	21 309	27 043	21 477	29 220	8.1
World	15 215	49 918	55 224	70 764	55 473	75 108	6.1

Table 25—Export of woodpulp (thousand MT)

	Actual		Projection				
			Base		ATL		Change (%)
Region	1980	1997	2000	2010	2000	2010	2010
Africa	400	777	712	854	712	712	-16.5
North and Central America	9 704	16 656	18 388	21 627	18 320	21 349	-1.3
United States	2 694	5 813	6 914	8 665	6 914	8 577	-1.0
South America	1 307	4 187	3 759	3 630	3 761	3 652	0.6
Asia	134	1 500	1 684	1 914	1 694	2 152	12.5
Oceania	475	586	637	992	638	921	-7.1
Europe	6 528	9 029	9 721	10 567	9 747	10 969	3.8
Former U.S.S.R.	821	948	807	597	807	717	20.3
Developed, all	17 802	27 735	30 004	34 313	29 963	34 344	0.1
Developing, all	1 567	5 948	5 703	5 867	5 716	6 129	4.5
World	19 369	33 683	35 707	40 180	35 678	40 473	0.7

Table 26—Export of total paper and paperboard (thousand MT)

	Actual		Projection				
			Base		ATL		Change (%)
Region	1980	1997	2000	2010	2000	2010	2010
Africa	158	483	500	658	500	674	2.4
North and Central America	13 806	25 899	28 822	36 134	28 835	35 822	-0.9
United States	4 187	11 153	12 827	16 115	12 827	16 087	-0.2
South America	337	1 842	1 945	2 827	1 945	2 732	-3.3
Asia	1 239	9 156	8 853	10 872	8 874	11 204	3.1
Oceania	418	828	929	1 297	929	1 326	2.3
Europe	15 917	47 815	48 598	65 167	48 857	67 155	3.1
Former U.S.S.R.	1 035	1 589	1 796	1 700	1 796	1 737	2.1
Developed, all	32 021	77 447	81 299	105 733	81 572	107 525	1.7
Developing, all	889	10 165	10 143	12 921	10 164	13 123	1.6
World	32 910	87 612	91 443	118 654	91 736	120 649	1.7

The detailed effects of the ATL agreement, by individual product and country are in the appendixes (see footnote 1). Tables 7 through 26 summarize the effects for the world, its main regions, and the developed and developing group of countries.

Consumption

As shown in tables 7 through 11, the world consumption of forest products would change little because of the ATL agreement. The largest relative change at world level would be in industrial roundwood, a 0.4-percent increase. This would be tied, in part, to an increase of industrial roundwood consumption of about 1 percent in the United States. Changes in the United States would be negligible for all other products.

Production

The effects of the ATL on world production are the same as on world consumption, as they should (see tables 12 through 16). The slight discrepancies between world production and consumption are due to errors in trade statistics, which are maintained constant throughout the projections. In the United States, there would be practically no effect on production. The main changes in the United States would be a 3-percent increase in sawnwood production under ATL, and a decrease of 2 percent in panel production. Production of other products in the United States would be unchanged.

Imports

The effects of the ATL agreement would be much more important on trade, in relative terms than on consumption and production. As shown in tables 17 through 21, world imports of industrial roundwood would decrease by about 5.5 percent under ATL. The main decrease (10 percent) would occur in Asia, mostly in Japan as shown by data in the appendixes. The United States imports of industrial roundwood would be unaffected by the agreement. World imports of all manufacture products would increase under the ATL. World sawnwood and panels imports would rise by 5 to 6 percent, and those of pulp and paper by 1 to 2 percent. United States imports of sawnwood would decrease by about 8 percent, whereas those of pulp and paper would decrease by 3 to 4 percent. The only increase in U.S. imports would be in wood-based panels, but it would be substantial at nearly 15 percent.

Exports

At the world level, the effects of the ATL agreement on exports would be the same as on imports, as they should, after adjustment for the discrepancies in import and export statistics. The distribution of the changes by region, however, considerably differs. In particular, whereas U.S. exports of industrial roundwood were unaffected by the ATL, exports decreased by 35 percent. The major roundwood exporter, the former U.S.S.R., also would see its exports of industrial roundwood decrease by about 13 percent. Instead, exports of sawnwood and panels from the U.S. would increase by 5 percent and 1 percent, respectively. United States exports of wood pulp would drop by 1 percent, whereas exports of paper and paperboard would remain unchanged. The main gains in exports, in relative terms, would occur in Asia, and to a lesser extent in Europe.

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English Equivalents

When you know:	Multiply by:	To find:
Cubic meters (m ³)	35.315	Cubic feet
Metric tons (M.T.)	1.102	Short tons

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Appendixes 1–4

The following tables accompany Research Paper PNW-RP-534 “Global Effects of Accelerated Tariff Liberalization in the Forest Products Sector to 2010” by Zhu and others (2001). Authors are responsible for content and accuracy.

Appendix 1: Consumption Effects of Accelerated Tariff Liberalization Agreement, 1997–2010

Appendix 2: Production Effects of Accelerated Tariff Liberalization Agreement, 1997–2010

Appendix 3: Import Effects of Accelerated Tariff Liberalization Agreement, 1997–2010

Appendix 4: Export Effects of Accelerated Tariff Liberalization Agreement, 1987–2010

Appendix 1: Consumption Effects of Accelerated Tariff Liberalization Agreement, 1997-2010

Tables in the appendixes are reprinted from PNW-RP-534 and do not follow PNW Authors guide style and format.

Table 27--Consumption of roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	334514	582329	609347	722426	609370	722113	0.0%
South Africa	18606	22750	19643	20878	19655	20318	-2.7%
NORTH/CENTRAL AMERICA	605860	741336	798711	888047	799828	892108	0.5%
Canada	157742	197033	205480	245026	206782	243678	-0.6%
Mexico	17558	23142	25864	31530	25864	31295	-0.7%
United States	395878	474500	517938	554232	517748	559798	1.0%
SOUTH AMERICA	242831	315661	330144	389919	330151	391484	0.4%
Brazil	183371	218931	227432	265010	227432	265217	0.1%
Chile	12274	24389	29255	36818	29255	36975	0.4%
ASIA	928721	1240258	1378308	1787727	1378368	1782982	-0.3%
China	241713	317732	355249	466737	355353	468931	0.5%
Hong Kong	642	581	1930	1624	1930	2085	28.4%
Indonesia	129250	201445	220900	303181	220893	306536	1.1%
Japan	88413	70455	72661	91962	72384	80476	-12.5%
Korea, REP	14811	11385	15690	23046	15690	21874	-5.1%
Malaysia	18354	39398	41860	52455	41918	53561	2.1%
Philippines	33517	42122	45126	55555	45126	55454	-0.2%
Singapore	1178	115	877	1184	986	1365	15.3%
Thailand	30508	40054	45587	59056	45654	59334	0.5%
OCEANIA	25744	32958	33747	39333	33759	40947	4.1%
Australia	10262	14986	15153	16578	15176	17201	3.8%
New Zealand	8589	10706	11704	15070	11692	16028	6.4%
EUROPE	276578	368706	387242	427418	386488	433243	1.4%
Austria	17466	20433	24825	29841	25097	29483	-1.2%
Belgium-Luxembourg	5372	6868	8661	11716	8397	10772	-8.1%
Denmark	1739	2747	2681	3565	2543	3053	-14.4%
Finland	49152	58222	57258	60575	57258	66643	10.0%
France	38523	40309	39760	41271	39699	40415	-2.1%
Germany	0	35184	45758	57430	45765	54643	-4.9%
Greece	3070	2101	2588	2633	2523	2485	-5.6%
Ireland	219	1851	2139	3310	2098	3376	2.0%
Italy	15523	15674	15134	17678	14494	15950	-9.8%
Netherlands	1350	1359	1234	1957	1195	1648	-15.8%
Portugal	8133	10566	11534	12837	11752	13278	3.4%
Spain	13722	17758	17624	18220	17624	18740	2.9%
Sweden	52431	67277	66909	66662	66909	71417	7.1%
United Kingdom	4252	8430	9723	13631	9555	13881	1.8%
FORMER U.S.S.R.	342020	105647	109011	105660	109011	106681	1.0%
Russian Fed	n/a	65570	77411	75943	77411	76714	1.0%
DEVELOPED, ALL	1298390	1265073	1339296	1477462	1339399	1478078	0.0%
DEVELOPING, ALL	1457878	2121822	2307214	2883068	2307576	2891479	0.3%
WORLD	2756268	3386895	3646510	4360530	3646975	4369556	0.2%

Table 28--Consumption of fuelwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	288907	522965	549702	653873	549702	653873	0.0%
South Africa	6815	7039	6372	4561	6372	4561	0.0%
NORTH/CENTRAL AMERICA	133738	138047	130564	115636	130564	115630	0.0%
Canada	4662	5333	4683	3010	4683	3003	-0.2%
Mexico	11142	15766	16623	20105	16623	20105	0.0%
United States	88061	74632	65118	41392	65118	41392	0.0%
SOUTH AMERICA	158399	194528	202707	238781	202707	238781	0.0%
Brazil	121625	135635	140952	165038	140952	165038	0.0%
Chile	5125	10773	11618	14685	11618	14685	0.0%
ASIA	658112	906794	979742	1259928	979742	1259928	0.0%
China	154651	204182	224092	297092	224092	297092	0.0%
Hong Kong	144	271	288	357	288	357	0.0%
Indonesia	114642	154661	169249	226355	169249	226355	0.0%
Japan	472	1595	1428	902	1428	902	0.0%
Korea, REP	6474	853	918	1172	918	1172	0.0%
Malaysia	4956	10082	11052	14853	11052	14853	0.0%
Philippines	25554	38007	40440	49782	40440	49782	0.0%
Singapore	87	85	92	118	92	118	0.0%
Thailand	25674	36792	39540	51812	39540	51812	0.0%
OCEANIA	6907	8753	8558	8285	8558	8285	0.0%
Australia	1247	2900	2572	1723	2572	1723	0.0%
New Zealand	50	50	48	42	48	42	0.0%
EUROPE	40680	51283	44896	28067	44896	27961	-0.4%
Austria	1448	3666	3229	2126	3227	2109	-0.8%
Belgium-Luxembourg	412	605	521	312	521	325	4.2%
Denmark	272	635	549	336	549	336	0.0%
Finland	4197	4154	3687	2455	3687	2455	0.0%
France	9877	10163	8838	5420	8838	5385	-0.7%
Germany	0	3228	2951	2113	2951	2102	-0.5%
Greece	1942	1350	1158	693	1158	693	0.0%
Ireland	39	63	47	24	47	24	0.0%
Italy	4452	5749	5037	3250	5037	3250	0.0%
Netherlands	108	229	209	126	211	130	3.2%
Portugal	444	642	565	361	565	360	-0.5%
Spain	1230	3459	3004	1836	3004	1836	0.0%
Sweden	4420	3975	3494	2270	3494	2270	0.0%
United Kingdom	205	507	476	364	476	322	-11.7%
FORMER U.S.S.R.	78900	27708	25446	11746	25446	11746	0.0%
Russian Fed	n/a	20686	18827	8580	18827	8580	0.0%
DEVELOPED, ALL	220898	170586	150602	91464	150602	91352	-0.1%
DEVELOPING, ALL	1144745	1679492	1791013	2224851	1791013	2224851	0.0%
WORLD	1365643	1850078	1941615	2316315	1941615	2316203	0.0%

Table 29--Consumption of industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	45607	59368	59645	68554	59668	68240	-0.5%
South Africa	11791	15712	13271	16317	13282	15757	-3.4%
NORTH/CENTRAL AMERICA	472122	603287	668147	772411	669264	776478	0.5%
Canada	153080	191699	200798	242016	202100	240675	-0.6%
Mexico	6416	7376	9241	11425	9241	11190	-2.1%
United States	307817	399868	452820	512839	452629	518406	1.1%
SOUTH AMERICA	84432	121134	127437	151138	127444	152703	1.0%
Brazil	61746	83296	86480	99972	86480	100180	0.2%
Chile	7149	13616	17637	22133	17637	22290	0.7%
ASIA	270609	333458	398565	527799	398626	523054	-0.9%
China	87062	113549	131158	169644	131261	171839	1.3%
Hong Kong	498	309	1642	1267	1642	1728	36.3%
Indonesia	14608	46784	51652	76826	51644	80181	4.4%
Japan	87941	68860	71234	91060	70956	79574	-12.6%
Korea, REP	8337	10532	14772	21873	14772	20701	-5.4%
Malaysia	13398	29316	30808	37602	30866	38707	2.9%
Philippines	7963	4115	4686	5773	4686	5672	-1.7%
Singapore	1091	29	785	1066	894	1247	17.0%
Thailand	4834	3261	6047	7244	6114	7522	3.8%
OCEANIA	18837	24205	25190	31048	25201	32662	5.2%
Australia	9015	12086	12581	14855	12605	15479	4.2%
New Zealand	8539	10656	11656	15028	11644	15986	6.4%
EUROPE	235898	317445	342345	399352	341592	405281	1.5%
Austria	16018	16767	21596	27715	21870	27375	-1.2%
Belgium-Luxembourg	4960	6263	8140	11404	7876	10447	-8.4%
Denmark	1467	2113	2132	3230	1994	2717	-15.9%
Finland	44955	54068	53571	58120	53571	64187	10.4%
France	28646	30146	30922	35851	30861	35030	-2.3%
Germany	0	31956	42807	55317	42814	52541	-5.0%
Greece	1128	751	1431	1940	1366	1792	-7.6%
Ireland	180	1788	2091	3286	2051	3352	2.0%
Italy	11071	9925	10096	14428	9457	12700	-12.0%
Netherlands	1242	1130	1025	1831	984	1518	-17.1%
Portugal	7689	9924	10969	12476	11187	12918	3.5%
Spain	12492	14299	14620	16384	14620	16904	3.2%
Sweden	48011	63302	63415	64392	63415	69146	7.4%
United Kingdom	4047	7923	9246	13267	9079	13559	2.2%
FORMER U.S.S.R.	263120	77939	83565	93914	83565	94934	1.1%
Russian Fed	n/a	44884	58584	67363	58584	68135	1.1%
DEVELOPED, ALL	1077492	1094509	1188693	1385998	1188796	1386726	0.1%
DEVELOPING, ALL	313133	442327	516201	658217	516563	666628	1.3%
WORLD	1390625	1536836	1704894	2044215	1705359	2053353	0.4%

Table 30--Consumption of other industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	19193	29828	30413	32552	30413	32552	0.0%
South Africa	2409	2578	2444	2054	2444	2054	0.0%
NORTH/CENTRAL AMERICA	14735	19957	19180	16842	19180	16842	0.0%
Canada	2082	3188	3041	2567	3041	2567	0.0%
Mexico	236	175	179	197	179	197	0.0%
United States	11694	15740	15093	13148	15093	13148	0.0%
SOUTH AMERICA	7020	8257	8422	9103	8422	9103	0.0%
Brazil	4605	6181	6295	6783	6295	6783	0.0%
Chile	333	593	615	687	615	687	0.0%
ASIA	48388	70634	73354	82784	73354	82784	0.0%
China	26757	40544	42371	48451	42371	48451	0.0%
Hong Kong	0	0	0	0	0	0	0.0%
Indonesia	1681	3159	3297	3786	3297	3786	0.0%
Japan	1349	397	376	318	376	318	0.0%
Korea, REP	719	365	378	424	378	424	0.0%
Malaysia	508	813	849	978	849	978	0.0%
Philippines	1938	2836	2921	3224	2921	3224	0.0%
Singapore	14	0	0	0	0	0	0.0%
Thailand	2186	2768	2865	3256	2865	3256	0.0%
OCEANIA	1383	1928	1835	1547	1835	1547	0.0%
Australia	745	540	508	416	508	416	0.0%
New Zealand	631	1383	1321	1126	1321	1126	0.0%
EUROPE	15539	12822	12231	10044	12231	10044	0.0%
Austria	1676	600	581	512	581	512	0.0%
Belgium-Luxembourg	215	210	202	176	202	176	0.0%
Denmark	371	351	336	295	336	295	0.0%
Finland	1127	325	306	261	306	261	0.0%
France	870	447	431	373	431	373	0.0%
Germany	0	1363	1309	1123	1309	1123	0.0%
Greece	224	102	97	84	97	84	0.0%
Ireland	0	0	0	0	0	0	0.0%
Italy	1396	1020	986	851	986	851	0.0%
Netherlands	326	59	56	48	56	48	0.0%
Portugal	81	180	171	146	171	146	0.0%
Spain	1160	738	702	588	702	588	0.0%
Sweden	119	500	484	429	484	429	0.0%
United Kingdom	619	418	400	346	400	346	0.0%
FORMER U.S.S.R.	86730	16761	16515	12180	16515	12180	0.0%
Russian Fed	n/a	8890	8678	6256	8678	6256	0.0%
DEVELOPED, ALL	121211	53444	51561	41877	51561	41877	0.0%
DEVELOPING, ALL	71777	106743	110388	123175	110388	123175	0.0%
WORLD	192988	160187	161949	165052	161949	165052	0.0%

Table 31--Consumption of sawnwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	9917	12017	12646	14930	12646	14940	0.1%
South Africa	1821	1992	2052	2257	2052	2257	0.0%
NORTH/CENTRAL AMERICA	123139	172833	177158	192431	177159	192431	0.0%
Canada	16611	17902	18373	20175	18373	20175	0.0%
Mexico	2526	4028	4281	5332	4281	5332	0.0%
United States	101196	148259	151755	163692	151755	163692	0.0%
SOUTH AMERICA	20895	27470	28897	34782	28897	34858	0.2%
Brazil	14534	18037	18855	22385	18855	22460	0.3%
Chile	999	3442	3754	4884	3754	4886	0.0%
ASIA	98201	113623	122106	156728	122106	158041	0.8%
China	21104	29592	32823	44500	32823	46148	3.7%
Hong Kong	386	591	634	811	634	811	0.0%
Indonesia	3601	6853	7564	10999	7564	11056	0.5%
Japan	42471	34275	35303	38766	35303	38766	0.0%
Korea, REP	2667	5724	6224	8072	6224	8102	0.4%
Malaysia	3264	5602	6225	8748	6225	8748	0.0%
Philippines	787	528	567	720	567	720	0.0%
Singapore	274	400	439	584	439	584	0.0%
Thailand	1883	1705	1852	2528	1852	2528	0.0%
OCEANIA	6104	6580	6787	7550	6787	7546	-0.1%
Australia	4299	4152	4296	4797	4296	4797	0.0%
New Zealand	1466	2037	2089	2285	2089	2282	-0.1%
EUROPE	73465	91722	94072	102956	94072	102956	0.0%
Austria	2935	4542	4624	4958	4624	4958	0.0%
Belgium-Luxembourg	2061	2636	2693	2904	2693	2904	0.0%
Denmark	1907	2692	2757	2965	2757	2965	0.0%
Finland	3351	3377	3489	3812	3489	3812	0.0%
France	12360	11242	11466	12417	11466	12417	0.0%
Germany	0	18030	18439	20067	18439	20067	0.0%
Greece	921	1080	1108	1199	1108	1199	0.0%
Ireland	588	822	874	1035	874	1035	0.0%
Italy	8413	8516	8678	9416	8678	9416	0.0%
Netherlands	3304	3413	3507	3806	3507	3805	0.0%
Portugal	1388	1343	1383	1511	1383	1511	0.0%
Spain	3133	5132	5277	5817	5277	5817	0.0%
Sweden	5718	4923	5014	5360	5014	5360	0.0%
United Kingdom	8302	9365	9594	10390	9594	10390	0.0%
FORMER U.S.S.R.	91314	17307	17563	20941	17563	20924	-0.1%
Russian Fed	n/a	14736	14936	17854	14936	17837	-0.1%
DEVELOPED, ALL	332848	318180	326060	356520	326060	356501	0.0%
DEVELOPING, ALL	90187	123372	133169	173798	133169	175197	0.8%
WORLD	423035	441552	459230	530318	459230	531697	0.3%

Table 32--Consumption of wood-based panels (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1634	2081	2291	3121	2287	3095	-0.8%
South Africa	341	741	818	1108	818	1098	-0.9%
NORTH/CENTRAL AMERICA	32021	49865	53470	67158	53469	67258	0.1%
Canada	3691	4432	4786	6290	4786	6290	0.0%
Mexico	655	805	885	1232	885	1239	0.6%
United States	27399	44121	47260	58943	47260	59035	0.2%
SOUTH AMERICA	3239	4571	4952	6708	4952	6714	0.1%
Brazil	2245	2663	2857	3802	2857	3806	0.1%
Chile	83	603	688	1025	688	1024	-0.2%
ASIA	17011	47830	54069	81185	54070	80748	-0.5%
China	1461	18707	21947	36037	21947	35600	-1.2%
Hong Kong	282	611	684	1013	684	1013	0.0%
Indonesia	769	1443	1702	2788	1702	2792	0.1%
Japan	10447	13762	14818	18751	14818	18728	-0.1%
Korea, REP	667	4088	4642	7144	4642	7180	0.5%
Malaysia	504	1854	2187	3705	2187	3711	0.1%
Philippines	324	630	704	1029	705	1003	-2.5%
Singapore	378	796	922	1461	922	1461	0.0%
Thailand	144	384	435	709	435	717	1.1%
OCEANIA	1148	1972	2163	2940	2163	3806	29.5%
Australia	907	1379	1529	2124	1529	2110	-0.7%
New Zealand	207	553	592	755	592	1623	115.0%
EUROPE	23132	44318	48118	64623	48118	63795	-1.3%
Austria	768	961	1021	1287	1021	1157	-10.1%
Belgium-Luxembourg	855	1566	1680	2162	1680	2112	-2.3%
Denmark	612	907	980	1239	980	1239	0.0%
Finland	743	717	795	1051	795	1004	-4.4%
France	3425	3807	4058	5249	4058	5181	-1.3%
Germany	0	11742	12656	16634	12656	16353	-1.7%
Greece	369	494	535	684	535	683	0.0%
Ireland	44	431	515	836	515	846	1.1%
Italy	3177	4893	5193	6644	5193	6610	-0.5%
Netherlands	1234	1287	1393	1773	1393	1773	0.0%
Portugal	302	683	747	982	747	982	-0.1%
Spain	1437	3306	3612	4868	3612	4886	0.4%
Sweden	1480	1148	1216	1503	1216	1501	-0.1%
United Kingdom	3005	5191	5600	7161	5600	7291	1.8%
FORMER U.S.S.R.	9849	3023	3161	5272	3161	5347	1.4%
Russian Fed	n/a	2274	2372	3902	2372	3964	1.6%
DEVELOPED, ALL	76118	112835	121653	158750	121653	158911	0.1%
DEVELOPING, ALL	11916	40825	46570	72256	46567	71852	-0.6%
WORLD	88034	153660	168223	231006	168220	230763	-0.1%

Table 33--Consumption of veneer sheets and plywood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	950	1001	1097	1491	1096	1478	-0.9%
South Africa	92	104	111	138	111	138	0.0%
NORTH/CENTRAL AMERICA	18354	18660	19708	23648	19708	23647	0.0%
Canada	2213	1773	1882	2330	1882	2330	0.0%
Mexico	271	373	412	583	412	583	0.0%
United States	15683	16251	17134	20377	17134	20375	0.0%
SOUTH AMERICA	1359	2175	2340	3127	2340	3136	0.3%
Brazil	991	1481	1590	2123	1590	2127	0.2%
Chile	25	93	107	165	107	165	-0.1%
ASIA	13260	29232	33053	49254	33053	48648	-1.2%
China	775	10559	12487	20650	12487	20092	-2.7%
Hong Kong	259	551	617	917	617	917	0.0%
Indonesia	768	1152	1361	2211	1361	2225	0.6%
Japan	8394	9971	10666	13207	10666	13207	0.0%
Korea, REP	629	2346	2662	4162	2662	4114	-1.1%
Malaysia	499	1382	1638	2832	1638	2832	0.0%
Philippines	256	482	537	780	537	753	-3.4%
Singapore	348	756	876	1391	876	1391	0.0%
Thailand	105	225	252	403	252	410	1.8%
OCEANIA	251	513	549	698	549	709	1.7%
Australia	195	266	287	368	287	368	-0.1%
New Zealand	30	213	226	276	226	276	0.0%
EUROPE	4947	7996	8442	10302	8442	10302	0.0%
Austria	46	136	142	166	142	166	0.0%
Belgium-Luxembourg	184	344	361	430	361	430	0.0%
Denmark	142	188	199	234	199	234	0.0%
Finland	127	159	171	210	171	210	0.0%
France	859	838	877	1052	877	1052	0.0%
Germany	0	1765	1858	2251	1858	2251	0.0%
Greece	61	92	98	117	98	117	-0.1%
Ireland	36	75	86	127	86	127	0.0%
Italy	947	1233	1287	1549	1287	1549	0.0%
Netherlands	545	462	491	593	491	593	0.0%
Portugal	-29	137	146	179	146	178	-0.3%
Spain	126	494	526	657	526	657	0.0%
Sweden	211	232	242	282	242	282	0.0%
United Kingdom	800	981	1037	1243	1037	1243	0.0%
FORMER U.S.S.R.	2364	531	549	821	549	821	0.0%
Russian Fed	n/a	396	408	616	408	616	0.0%
DEVELOPED, ALL	33999	37277	39485	48086	39485	48085	0.0%
DEVELOPING, ALL	7486	22831	26251	41253	26250	40656	-1.4%
WORLD	41485	60108	65736	89339	65735	88741	-0.7%

Table 34--Consumption of particle board (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	479	837	924	1254	924	1244	-0.8%
South Africa	203	591	657	906	657	896	-1.1%
NORTH/CENTRAL AMERICA	6858	23927	26030	34170	26030	34362	0.6%
Canada	777	2143	2353	3294	2353	3294	0.0%
Mexico	351	348	379	517	379	517	0.0%
United States	5672	21320	23175	30204	23175	30396	0.6%
SOUTH AMERICA	1136	1578	1712	2291	1712	2289	-0.1%
Brazil	657	730	777	1004	777	1004	0.0%
Chile	41	378	427	611	427	609	-0.2%
ASIA	2226	10442	11681	17333	11681	17277	-0.3%
China	148	4064	4618	7157	4618	7122	-0.5%
Hong Kong	4	48	53	75	53	75	0.0%
Indonesia	0	205	237	380	237	380	0.0%
Japan	1386	1921	2136	2981	2136	2957	-0.8%
Korea, REP	24	1013	1141	1678	1141	1678	0.0%
Malaysia	0	447	519	818	519	824	0.7%
Philippines	0	44	49	68	49	68	0.0%
Singapore	19	35	40	60	40	60	-0.2%
Thailand	9	53	60	93	60	93	0.1%
OCEANIA	690	828	931	1344	931	1331	-1.0%
Australia	606	703	794	1163	794	1150	-1.2%
New Zealand	81	121	133	176	133	176	0.1%
EUROPE	14818	30679	33615	46532	33615	45805	-1.6%
Austria	661	746	796	1022	796	896	-12.3%
Belgium-Luxembourg	612	1222	1319	1732	1319	1682	-2.9%
Denmark	411	624	680	883	680	883	0.0%
Finland	437	442	497	683	497	638	-6.6%
France	2303	2650	2846	3791	2846	3720	-1.9%
Germany	0	9252	10031	13430	10031	13178	-1.9%
Greece	285	279	306	406	306	406	0.0%
Ireland	0	162	202	360	202	370	2.7%
Italy	1945	3236	3461	4548	3461	4539	-0.2%
Netherlands	542	560	617	830	617	830	0.0%
Portugal	281	377	419	575	419	575	0.0%
Spain	1052	2169	2396	3325	2396	3343	0.5%
Sweden	929	742	792	1006	792	1006	0.0%
United Kingdom	1855	3096	3378	4465	3378	4594	2.9%
FORMER U.S.S.R.	4786	1883	1981	3477	1981	3551	2.1%
Russian Fed	n/a	1418	1488	2548	1488	2607	2.3%
DEVELOPED, ALL	28383	59534	65046	89085	65046	88577	-0.6%
DEVELOPING, ALL	2610	10640	11827	17316	11828	17281	-0.2%
WORLD	30993	70174	76873	106401	76873	105858	-0.5%

Table 35--Consumption of fiberboard (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	205	243	270	376	268	373	-0.9%
South Africa	46	46	50	63	50	63	0.0%
NORTH/CENTRAL AMERICA	6809	7278	7732	9340	7732	9249	-1.0%
Canada	701	516	552	666	552	666	0.0%
Mexico	33	84	94	132	94	138	5.2%
United States	6044	6550	6951	8362	6951	8265	-1.2%
SOUTH AMERICA	744	818	900	1291	900	1289	-0.1%
Brazil	597	452	489	676	489	676	0.0%
Chile	17	132	154	249	154	249	0.0%
ASIA	1525	8156	9336	14597	9337	14823	1.5%
China	538	4084	4841	8231	4841	8386	1.9%
Hong Kong	19	12	14	21	14	21	0.0%
Indonesia	1	86	103	196	104	187	-4.8%
Japan	667	1870	2017	2564	2017	2564	0.0%
Korea, REP	14	729	839	1304	839	1387	6.3%
Malaysia	5	25	30	55	30	55	-0.2%
Philippines	68	104	118	181	119	182	0.6%
Singapore	11	5	6	10	6	10	0.0%
Thailand	30	106	123	214	123	214	0.0%
OCEANIA	207	631	683	899	683	1767	96.6%
Australia	106	410	447	593	447	593	0.0%
New Zealand	96	219	234	303	234	1171	286.4%
EUROPE	3367	5643	6061	7790	6061	7688	-1.3%
Austria	61	79	83	99	83	95	-3.7%
Belgium-Luxembourg	59	0	0	0	0	0	-50.0%
Denmark	59	95	101	122	101	122	0.0%
Finland	179	116	126	158	126	157	-1.0%
France	263	319	336	406	336	409	0.8%
Germany	0	725	768	953	768	924	-3.0%
Greece	23	123	131	161	131	161	0.0%
Ireland	8	194	227	350	227	350	0.0%
Italy	285	424	445	548	445	523	-4.5%
Netherlands	147	265	284	351	284	351	0.0%
Portugal	50	169	182	228	182	228	0.0%
Spain	259	643	690	886	690	886	0.0%
Sweden	340	174	182	216	182	213	-1.0%
United Kingdom	350	1114	1185	1454	1185	1454	0.0%
FORMER U.S.S.R.	2699	609	632	974	632	976	0.2%
Russian Fed	n/a	460	476	737	476	741	0.5%
DEVELOPED, ALL	13736	16024	17122	21579	17122	22250	3.1%
DEVELOPING, ALL	1820	7354	8492	13688	8490	13914	1.7%
WORLD	15556	23378	25614	35266	25612	36164	2.5%

Table 36--Consumption of woodpulp (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	932	1782	1986	3086	1988	3121	1.1%
South Africa	666	1360	1522	2209	1522	2247	1.7%
NORTH/CENTRAL AMERICA	58994	74185	79960	94119	79971	93884	-0.2%
Canada	12710	14238	17016	21021	17027	20727	-1.4%
Mexico	651	617	1335	2107	1335	2089	-0.8%
United States	45539	59285	61481	70800	61481	70879	0.1%
SOUTH AMERICA	3367	5971	6620	9549	6620	9635	0.9%
Brazil	2171	4091	4424	5962	4424	5893	-1.2%
Chile	347	512	562	949	562	1004	5.8%
ASIA	14935	27717	31396	42145	31376	41994	-0.4%
China	1729	4473	5350	5842	5329	5329	-8.8%
Hong Kong	1	4	89	113	89	107	-5.3%
Indonesia	115	2463	2812	4560	2812	4951	8.6%
Japan	11299	14525	15393	19329	15393	19154	-0.9%
Korea, REP	600	2566	3297	4652	3297	4556	-2.1%
Malaysia	5	162	306	681	306	715	5.1%
Philippines	198	218	270	460	270	430	-6.6%
Singapore	4	15	32	36	32	38	5.9%
Thailand	80	699	841	1303	841	1286	-1.3%
OCEANIA	1623	1952	2117	2834	2116	2999	5.8%
Australia	968	1126	1222	1638	1222	1845	12.6%
New Zealand	655	826	895	1196	894	1154	-3.5%
EUROPE	26840	43598	47113	58954	47172	59744	1.3%
Austria	1088	1739	2151	2594	2244	2705	4.3%
Belgium-Luxembourg	604	725	981	1296	955	1342	3.5%
Denmark	98	142	155	215	155	218	1.5%
Finland	5290	9385	10700	13178	10694	13675	3.8%
France	3239	4189	4201	5301	4173	5240	-1.2%
Germany	0	5207	5844	6910	5844	7147	3.4%
Greece	102	149	293	365	291	373	2.2%
Ireland	22	11	0	0	0	0	
Italy	2410	3505	3724	4524	3713	4505	-0.4%
Netherlands	807	968	827	1073	827	1134	5.6%
Portugal	241	705	795	1046	780	1027	-1.8%
Spain	1306	1357	1356	1857	1356	1815	-2.3%
Sweden	5652	7999	8290	9945	8290	9671	-2.8%
United Kingdom	1838	2358	2425	2706	2425	2716	0.4%
FORMER U.S.S.R.	7463	3000	3309	4890	3309	4852	-0.8%
Russian Fed	n/a	2852	3108	4503	3108	4470	-0.7%
DEVELOPED, ALL	106181	138070	148078	180247	148146	180813	0.3%
DEVELOPING, ALL	7973	20135	24423	35330	24405	35416	0.2%
WORLD	114154	158205	172501	215578	172551	216229	0.3%

Table 37--Consumption of mechanical pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	227	468	538	840	538	854	1.7%
South Africa	201	369	407	577	407	591	2.5%
NORTH/CENTRAL AMERICA	11563	16500	19101	24676	19110	24501	-0.7%
Canada	7198	11079	12165	15030	12174	14783	-1.6%
Mexico	73	10	642	1126	642	1167	3.7%
United States	4292	5389	6233	8418	6233	8449	0.4%
SOUTH AMERICA	460	692	791	1171	791	1169	-0.2%
Brazil	267	429	468	639	468	609	-4.8%
Chile	130	209	227	391	227	409	4.4%
ASIA	2948	3369	4884	7661	4883	7875	2.8%
China	348	628	905	1681	905	1803	7.3%
Hong Kong	0	0	40	46	40	44	-5.4%
Indonesia	39	71	116	194	116	203	4.8%
Japan	2145	2098	2330	3510	2330	3427	-2.4%
Korea, REP	168	205	813	1103	813	1236	12.1%
Malaysia	0	0	119	263	119	280	6.4%
Philippines	41	31	59	59	59	58	-1.2%
Singapore	0	0	14	14	14	15	6.3%
Thailand	2	7	107	187	106	173	-7.5%
OCEANIA	524	778	807	1006	807	1018	1.2%
Australia	216	353	361	429	361	451	5.2%
New Zealand	308	425	446	577	446	566	-1.8%
EUROPE	7487	12601	14921	18634	14911	18820	1.0%
Austria	225	382	886	1083	884	1120	3.4%
Belgium-Luxembourg	198	174	308	451	302	464	2.9%
Denmark	12	82	91	138	91	142	3.5%
Finland	2329	3944	4779	6007	4779	6261	4.2%
France	479	788	856	1180	835	1114	-5.6%
Germany	0	1263	2153	2496	2148	2518	0.9%
Greece	36	25	133	185	132	189	1.8%
Ireland	-10	0	0	0	0	0	
Italy	645	531	540	632	533	610	-3.5%
Netherlands	251	178	181	231	181	237	2.6%
Portugal	6	2	10	10	10	10	1.0%
Spain	209	92	78	89	78	94	5.1%
Sweden	1588	2809	2871	3467	2871	3386	-2.3%
United Kingdom	347	628	658	802	658	802	0.0%
FORMER U.S.S.R.	1729	1045	1199	1703	1199	1714	0.6%
Russian Fed	n/a	1025	1127	1557	1127	1567	0.6%
DEVELOPED, ALL	23577	33363	38068	48886	38066	48810	-0.2%
DEVELOPING, ALL	1361	2090	4173	6805	4172	7140	4.9%
WORLD	24938	35453	42241	55691	42238	55950	0.5%

Table 38--Consumption of chemical pulp (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	705	1314	1449	2246	1450	2267	0.9%
South Africa	465	991	1115	1632	1115	1656	1.4%
NORTH/CENTRAL AMERICA	47431	57685	60859	69443	60861	69384	-0.1%
Canada	5512	3159	4850	5991	4852	5943	-0.8%
Mexico	578	607	694	981	694	922	-6.0%
United States	41247	53896	55249	62383	55249	62430	0.1%
SOUTH AMERICA	2907	5279	5829	8378	5829	8466	1.1%
Brazil	1904	3662	3956	5323	3956	5285	-0.7%
Chile	217	303	335	557	335	595	6.8%
ASIA	11987	24348	26512	34484	26493	34119	-1.1%
China	1381	3845	4445	4161	4424	3526	-15.3%
Hong Kong	1	4	49	67	49	64	-5.2%
Indonesia	76	2392	2696	4366	2696	4748	8.7%
Japan	9154	12427	13062	15819	13062	15727	-0.6%
Korea, REP	432	2361	2484	3549	2484	3320	-6.5%
Malaysia	5	162	187	418	187	435	4.2%
Philippines	157	187	211	401	211	371	-7.4%
Singapore	4	15	17	21	17	22	5.7%
Thailand	78	692	734	1117	734	1113	-0.3%
OCEANIA	1099	1174	1310	1829	1310	1982	8.4%
Australia	752	773	861	1209	861	1394	15.3%
New Zealand	347	401	449	620	448	588	-5.1%
EUROPE	19353	30997	32192	40320	32260	40924	1.5%
Austria	863	1357	1265	1512	1361	1585	4.9%
Belgium-Luxembourg	406	551	673	846	653	879	3.9%
Denmark	86	60	64	77	64	76	-2.1%
Finland	2961	5441	5921	7171	5915	7414	3.4%
France	2760	3401	3345	4122	3338	4126	0.1%
Germany	0	3944	3690	4415	3696	4629	4.9%
Greece	66	124	160	180	158	185	2.7%
Ireland	32	11	0	0	0	0	
Italy	1765	2974	3184	3891	3180	3895	0.1%
Netherlands	556	790	646	843	646	897	6.5%
Portugal	235	703	784	1036	770	1017	-1.8%
Spain	1097	1265	1278	1768	1278	1721	-2.7%
Sweden	4064	5190	5419	6478	5419	6285	-3.0%
United Kingdom	1491	1730	1766	1903	1766	1914	0.5%
FORMER U.S.S.R.	5734	1955	2110	3187	2110	3138	-1.5%
Russian Fed	n/a	1827	1981	2946	1981	2903	-1.4%
DEVELOPED, ALL	82604	104707	110010	131361	110080	132003	0.5%
DEVELOPING, ALL	6612	18045	20250	28525	20232	28276	-0.9%
WORLD	89216	122752	130260	159887	130313	160279	0.2%

Table 39--Consumption of other fiber pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	252	213	251	437	252	447	2.1%
South Africa	84	115	127	187	127	191	2.1%
NORTH/CENTRAL AMERICA	930	374	354	607	354	589	-3.0%
Canada	44	18	0	0	0	0	
Mexico	218	147	162	301	162	283	-6.0%
United States	638	148	162	246	162	250	1.6%
SOUTH AMERICA	467	472	564	1009	564	1023	1.4%
Brazil	135	87	93	137	93	133	-2.9%
Chile	0	0	0	0	0	0	
ASIA	4478	17736	19691	38809	19684	38437	-1.0%
China	3459	15994	17778	35073	17737	34573	-1.4%
Hong Kong	0	0	0	0	0	0	
Indonesia	49	80	93	188	93	197	4.7%
Japan	26	49	0	0	38	0	
Korea, REP	54	23	20	36	20	32	-11.0%
Malaysia	1	1	0	0	0	0	
Philippines	14	27	40	93	40	88	-5.9%
Singapore	0	0	0	0	0	0	
Thailand	38	122	153	306	150	277	-9.4%
OCEANIA	7	257	158	241	158	258	7.0%
Australia	7	257	158	241	158	258	7.0%
New Zealand	0	0	0	0	0	0	
EUROPE	687	349	347	522	345	532	2.0%
Austria	5	7	8	10	8	9	-9.0%
Belgium-Luxembourg	3	3	0	0	0	0	
Denmark	40	34	23	35	23	37	6.6%
Finland	-7	0	0	0	0	0	
France	29	36	28	41	27	37	-9.3%
Germany	0	0	0	0	0	0	
Greece	42	2	3	5	3	5	6.0%
Ireland	0	0	0	0	0	0	
Italy	281	144	145	217	145	223	2.6%
Netherlands	12	4	3	5	3	5	4.3%
Portugal	33	0	0	0	0	0	
Spain	119	26	31	63	31	67	7.0%
Sweden	3	21	18	0	18	0	
United Kingdom	28	26	33	43	33	44	0.5%
FORMER U.S.S.R.	355	0	0	0	0	0	
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	1841	937	795	1199	831	1235	2.9%
DEVELOPING, ALL	5335	18464	20568	40426	20525	40051	-0.9%
WORLD	7176	19401	21363	41625	21356	41286	-0.8%

Table 40--Consumption of waste paper (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	504	1006	1333	2293	1333	2311	0.8%
South Africa	335	595	923	1432	923	1459	1.9%
NORTH/CENTRAL AMERICA	16626	31921	38361	63591	38363	63606	0.0%
Canada	1251	2541	3272	5749	3274	5615	-2.3%
Mexico	1265	2022	2294	4412	2294	4268	-3.3%
United States	13964	27131	32596	53079	32596	53364	0.5%
SOUTH AMERICA	1910	2975	3833	6873	3833	6872	0.0%
Brazil	1052	1306	2421	4038	2421	3925	-2.8%
Chile	46	116	215	451	215	478	6.0%
ASIA	12735	40447	50341	100252	50301	99309	-0.9%
China	2116	13789	19279	43614	19234	43025	-1.4%
Hong Kong	3	157	182	324	182	307	-5.2%
Indonesia	122	2194	2683	5744	2683	6000	4.4%
Japan	8283	14891	17802	29103	17802	28842	-0.9%
Korea, REP	1151	5983	5667	10734	5667	10585	-1.4%
Malaysia	65	82	525	1419	525	1414	-0.4%
Philippines	125	276	389	917	389	823	-10.2%
Singapore	54	122	64	102	64	108	5.8%
Thailand	303	949	1505	3155	1510	3003	-4.8%
OCEANIA	624	1537	1589	2898	1589	3192	10.1%
Australia	560	1450	1473	2633	1473	2932	11.4%
New Zealand	64	87	117	265	116	259	-2.2%
EUROPE	11814	32285	35085	54532	35127	55209	1.2%
Austria	542	1453	1387	1993	1425	2079	4.3%
Belgium-Luxembourg	241	0	326	629	326	633	0.7%
Denmark	152	244	221	367	221	380	3.7%
Finland	214	590	1402	2559	1403	2678	4.6%
France	1889	4105	4280	6512	4280	6543	0.5%
Germany	0	9458	8496	12812	8496	13217	3.2%
Greece	120	179	488	716	486	726	1.4%
Ireland	21	122	0	0	0	0	
Italy	2200	3174	4091	6232	4089	6263	0.5%
Netherlands	889	1861	1711	2775	1711	2874	3.6%
Portugal	161	287	348	523	345	522	-0.2%
Spain	1185	2809	2698	4453	2698	4278	-3.9%
Sweden	698	2019	1787	2955	1787	2872	-2.8%
United Kingdom	2119	3264	4179	5721	4179	5728	0.1%
FORMER U.S.S.R.	1934	1095	1061	2034	1061	1979	-2.7%
Russian Fed	n/a	850	768	1433	768	1381	-3.6%
DEVELOPED, ALL	38250	80221	92511	149172	92555	150001	0.6%
DEVELOPING, ALL	7897	31045	39092	83300	39052	82478	-1.0%
WORLD	46147	111266	131602	232472	131607	232478	0.0%

Table 41--Consumption of total paper and paperboard (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	2452	4183	4661	6798	4661	6862	0.9%
South Africa	1233	2240	2516	3623	2516	3643	0.6%
NORTH/CENTRAL AMERICA	68104	101423	110809	147779	110809	147717	0.0%
Canada	4094	6575	7270	10437	7270	10507	0.7%
Mexico	2467	4156	4665	7778	4665	7886	1.4%
United States	60706	89502	97598	127786	97598	127525	-0.2%
SOUTH AMERICA	6417	11382	12567	18025	12567	18641	3.4%
Brazil	3424	6317	6905	9731	6905	10032	3.1%
Chile	323	722	849	1471	849	1586	7.8%
ASIA	32665	95050	113190	199913	113203	198634	-0.6%
China	7342	37096	46401	91392	46414	89927	-1.6%
Hong Kong	558	1660	1872	3117	1872	3164	1.5%
Indonesia	437	3917	4832	9787	4832	10292	5.2%
Japan	17980	31481	35409	50812	35409	50273	-1.1%
Korea, REP	1556	6834	8068	15344	8068	15104	-1.6%
Malaysia	318	1606	1914	4082	1914	4086	0.1%
Philippines	442	974	1127	1970	1127	1960	-0.5%
Singapore	267	626	749	1345	749	1363	1.3%
Thailand	459	2151	2536	5132	2536	4980	-3.0%
OCEANIA	2449	3853	4329	6290	4329	6574	4.5%
Australia	2030	3135	3550	5246	3550	5532	5.5%
New Zealand	394	701	762	1023	762	1021	-0.2%
EUROPE	35054	74595	81706	114967	81706	115305	0.3%
Austria	945	1416	1513	1957	1512	1957	0.0%
Belgium-Luxembourg	1358	2339	2546	3461	2546	3461	0.0%
Denmark	728	1244	1347	1778	1347	1778	0.0%
Finland	1104	2219	2532	3548	2532	3641	2.6%
France	6196	9285	10019	13819	10019	13915	0.7%
Germany	0	15756	17174	23844	17175	23844	0.0%
Greece	424	1260	1384	1865	1384	1855	-0.6%
Ireland	255	447	516	988	516	988	0.0%
Italy	5295	9091	9761	13169	9762	13350	1.4%
Netherlands	2183	3410	3770	5130	3770	5130	0.0%
Portugal	395	952	1064	1467	1064	1497	2.0%
Spain	2700	5697	6305	9320	6305	9039	-3.0%
Sweden	1739	1962	2092	2685	2092	2651	-1.3%
United Kingdom	6833	11880	13048	17832	13048	17833	0.0%
FORMER U.S.S.R.	8603	3239	3375	6354	3375	6289	-1.0%
Russian Fed	n/a	2402	2514	4744	2514	4673	-1.5%
DEVELOPED, ALL	130307	212098	232904	321481	232904	321351	0.0%
DEVELOPING, ALL	25437	81627	97733	178645	97745	178671	0.0%
WORLD	155744	293725	330637	500127	330650	500022	0.0%

Table 42--Consumption of newsprint (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	318	520	572	856	572	847	-1.1%
South Africa	154	270	300	420	300	422	0.4%
NORTH/CENTRAL AMERICA	11932	12954	14093	18608	14093	18842	1.3%
Canada	918	318	349	487	349	487	0.0%
Mexico	226	390	441	701	441	905	29.1%
United States	10673	12079	13122	17171	13122	17195	0.1%
SOUTH AMERICA	924	1418	1567	2195	1567	2377	8.3%
Brazil	271	722	799	1055	799	1147	8.8%
Chile	68	60	70	162	70	165	2.3%
ASIA	4573	10122	11729	20661	11729	21662	4.8%
China	528	1686	2145	4075	2145	4573	12.2%
Hong Kong	76	408	478	827	478	831	0.5%
Indonesia	66	402	491	1265	491	1385	9.5%
Japan	2703	3792	4204	6322	4204	6142	-2.8%
Korea, REP	227	1327	1533	2997	1533	3450	15.1%
Malaysia	66	301	353	729	353	750	2.9%
Philippines	100	119	136	232	136	251	8.4%
Singapore	56	159	187	348	187	352	1.3%
Thailand	92	287	343	738	343	655	-11.2%
OCEANIA	638	799	897	1270	897	1280	0.7%
Australia	557	671	757	1080	757	1089	0.9%
New Zealand	78	123	135	184	135	184	0.1%
EUROPE	4591	9134	9923	13540	9923	13525	-0.1%
Austria	139	197	210	269	210	269	0.0%
Belgium-Luxembourg	197	226	244	319	244	320	0.0%
Denmark	152	262	271	351	271	351	0.0%
Finland	137	298	335	459	335	459	0.0%
France	628	671	720	957	720	957	0.0%
Germany	0	2143	2322	3136	2322	3136	0.0%
Greece	41	104	114	151	114	151	0.0%
Ireland	61	172	199	362	199	362	0.0%
Italy	328	610	652	871	652	871	0.0%
Netherlands	458	526	579	776	579	776	0.0%
Portugal	41	79	88	120	88	120	0.0%
Spain	163	491	542	767	542	767	0.0%
Sweden	296	254	271	344	271	344	0.0%
United Kingdom	1382	2406	2623	3484	2623	3484	0.0%
FORMER U.S.S.R.	1064	517	542	1037	542	1035	-0.3%
Russian Fed	n/a	393	412	781	412	783	0.3%
DEVELOPED, ALL	20776	27037	29478	40497	29478	40335	-0.4%
DEVELOPING, ALL	3264	8427	9844	17671	9844	19232	8.8%
WORLD	24040	35464	39322	58168	39322	59567	2.4%

Table 43--Consumption of printing and writing paper (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	587	1116	1286	1934	1286	1977	2.2%
South Africa	256	697	828	1274	828	1292	1.5%
NORTH/CENTRAL AMERICA	16088	31015	35003	50833	35003	50573	-0.5%
Canada	985	2562	2933	4698	2933	4768	1.5%
Mexico	591	707	779	1543	779	1493	-3.2%
United States	14398	27584	31118	44357	31118	44071	-0.6%
SOUTH AMERICA	1326	2305	2607	3840	2607	4186	9.0%
Brazil	803	1476	1643	2325	1643	2529	8.8%
Chile	46	142	165	288	165	347	20.7%
ASIA	7460	25600	31330	60693	31342	56282	-7.3%
China	1742	8035	10226	25758	10239	20983	-18.5%
Hong Kong	112	563	602	993	602	1036	4.4%
Indonesia	149	1046	1276	2713	1276	3019	11.3%
Japan	3916	11068	13080	19752	13080	19290	-2.3%
Korea, REP	242	1259	1541	3119	1541	2991	-4.1%
Malaysia	63	279	339	879	339	953	8.4%
Philippines	70	238	295	556	295	524	-5.8%
Singapore	53	220	265	470	265	483	2.8%
Thailand	82	522	609	1223	609	1349	10.3%
OCEANIA	434	1032	1213	2000	1213	2283	14.2%
Australia	375	954	1125	1860	1125	2146	15.4%
New Zealand	57	73	83	134	83	132	-1.9%
EUROPE	9598	25882	29287	45887	29287	46419	1.2%
Austria	113	390	428	615	428	615	0.0%
Belgium-Luxembourg	486	1017	1136	1684	1136	1685	0.0%
Denmark	191	378	428	624	428	624	0.0%
Finland	281	987	1169	1757	1169	1849	5.3%
France	2080	3539	3922	6059	3922	6154	1.6%
Germany	0	5587	6277	9721	6277	9721	0.0%
Greece	95	341	390	601	390	579	-3.7%
Ireland	38	119	140	336	140	336	0.0%
Italy	1617	3278	3612	5323	3612	5503	3.4%
Netherlands	681	989	1138	1742	1138	1742	0.0%
Portugal	77	341	397	596	397	626	5.0%
Spain	756	1692	1953	3238	1953	3195	-1.3%
Sweden	521	436	479	711	479	677	-4.8%
United Kingdom	1640	4167	4727	7146	4727	7146	0.0%
FORMER U.S.S.R.	1372	593	631	1488	631	1584	6.4%
Russian Fed	n/a	381	408	983	408	1072	9.0%
DEVELOPED, ALL	31006	69570	79271	119830	79271	120098	0.2%
DEVELOPING, ALL	5859	17973	22085	46843	22098	43205	-7.8%
WORLD	36865	87543	101356	166674	101369	163303	-2.0%

Table 44--Consumption of other paper and board (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1547	2547	2804	4008	2804	4039	0.8%
South Africa	823	1273	1388	1929	1388	1929	0.0%
NORTH/CENTRAL AMERICA	40084	57454	61713	78339	61713	78301	0.0%
Canada	2191	3695	3988	5252	3988	5252	0.0%
Mexico	1650	3059	3444	5535	3444	5488	-0.8%
United States	35635	49839	53358	66259	53358	66259	0.0%
SOUTH AMERICA	4167	7659	8393	11991	8393	12079	0.7%
Brazil	2350	4119	4464	6352	4464	6356	0.1%
Chile	209	520	615	1022	615	1073	5.0%
ASIA	20632	59328	70131	118559	70131	120690	1.8%
China	5072	27375	34030	61559	34030	64371	4.6%
Hong Kong	370	689	793	1298	793	1298	0.0%
Indonesia	222	2469	3065	5809	3065	5888	1.4%
Japan	11361	16621	18125	24738	18125	24841	0.4%
Korea, REP	1087	4248	4993	9228	4993	8663	-6.1%
Malaysia	189	1026	1223	2474	1223	2383	-3.7%
Philippines	272	617	696	1182	696	1185	0.2%
Singapore	158	247	297	527	297	527	0.0%
Thailand	285	1342	1584	3171	1584	2975	-6.2%
OCEANIA	1377	2022	2219	3020	2219	3011	-0.3%
Australia	1098	1510	1668	2306	1668	2297	-0.4%
New Zealand	259	505	544	705	544	705	0.0%
EUROPE	20865	39579	42497	55540	42497	55361	-0.3%
Austria	693	829	874	1073	874	1073	0.0%
Belgium-Luxembourg	675	1096	1167	1457	1167	1457	0.0%
Denmark	385	604	648	802	648	802	0.0%
Finland	686	934	1028	1333	1028	1333	0.0%
France	3488	5075	5378	6804	5378	6804	0.0%
Germany	0	8026	8575	10987	8575	10987	0.0%
Greece	288	815	880	1113	880	1125	1.0%
Ireland	156	156	178	291	178	291	0.0%
Italy	3350	5203	5497	6975	5497	6975	0.0%
Netherlands	1044	1895	2052	2612	2052	2612	0.0%
Portugal	277	532	580	751	580	751	0.0%
Spain	1781	3514	3811	5314	3811	5077	-4.5%
Sweden	922	1272	1342	1631	1342	1631	0.0%
United Kingdom	3811	5307	5698	7202	5698	7202	0.0%
FORMER U.S.S.R.	6167	2129	2202	3828	2202	3671	-4.1%
Russian Fed	n/a	1628	1693	2980	1693	2818	-5.4%
DEVELOPED, ALL	78525	115491	124155	161154	124155	160917	-0.1%
DEVELOPING, ALL	16314	55227	65804	114131	65804	116234	1.8%
WORLD	94839	170718	189959	275285	189959	277152	0.7%

Appendix 2: Production Effects of Accelerated Tariff Liberalization Agreement, 1997-2010

Table 45--Production of roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	339897	589618	617214	733385	617237	732652	-0.1%
South Africa	18782	25332	22640	25476	22651	24908	-2.2%
NORTH/CENTRAL AMERICA	625956	751662	806584	887278	807701	884625	-0.3%
Canada	158842	191178	198303	233345	199605	230131	-1.4%
Mexico	17496	23213	25932	30901	25932	30873	-0.1%
United States	414995	490692	532990	565896	532800	566410	0.1%
SOUTH AMERICA	244041	325003	340583	405919	340590	407499	0.4%
Brazil	183488	220313	228966	267647	228966	267863	0.1%
Chile	13326	30561	36321	47751	36321	47922	0.4%
ASIA	892348	1184028	1321280	1709866	1321493	1714494	0.3%
China	233853	313017	348960	454098	349064	456247	0.5%
Hong Kong	16	206	1773	2221	1773	2221	0.0%
Indonesia	145822	202989	222633	305751	222625	309185	1.1%
Japan	34412	22516	25115	31423	25115	29647	-5.7%
Korea, REP	8670	1461	5432	8221	5432	7343	-10.7%
Malaysia	33934	46031	48534	60526	48534	61386	1.4%
Philippines	34968	41548	44522	54937	44522	54983	0.1%
Singapore	0	210	923	1120	1032	1299	16.1%
Thailand	30630	39561	45132	58414	45132	58498	0.1%
OCEANIA	34836	50041	52225	65846	52212	69159	5.0%
Australia	16897	23059	23322	26897	23322	29203	8.6%
New Zealand	9995	16531	18398	25589	18385	26554	3.8%
EUROPE	256921	341872	358864	404757	357981	411120	1.6%
Austria	14386	15325	18873	22357	18887	22620	1.2%
Belgium-Luxembourg	2663	3985	5447	6790	5218	5869	-13.6%
Denmark	2110	2288	2330	2860	2255	2567	-10.3%
Finland	47119	51281	50137	58097	50137	64205	10.5%
France	38766	41109	40276	42872	40215	40511	-5.5%
Germany	0	38207	47650	55189	47657	54074	-2.0%
Greece	2706	2024	2508	2523	2448	2389	-5.3%
Ireland	379	2180	2494	4017	2402	3567	-11.2%
Italy	8989	9212	8801	8224	8647	7533	-8.4%
Netherlands	890	1117	1154	1727	1113	1532	-11.3%
Portugal	8530	9076	10017	12380	10017	12075	-2.5%
Spain	12484	16021	15658	17396	15658	18081	3.9%
Sweden	49195	60224	60523	65545	60523	70366	7.4%
United Kingdom	3951	7512	8899	13146	8732	13250	0.8%
FORMER U.S.S.R.	356600	131955	137044	140762	137044	137291	-2.5%
Russian Fed	n/a	83968	96547	97061	96547	93395	-3.8%
DEVELOPED, ALL	1267562	1243259	1316952	1454511	1317180	1455648	0.1%
DEVELOPING, ALL	1483037	2130920	2316841	2893302	2317077	2901192	0.3%
WORLD	2750599	3374179	3633793	4347813	3634258	4356840	0.2%

Table 46--Production of fuelwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	289096	523252	549972	654156	549972	654156	0.0%
South Africa	7000	7156	6515	4764	6515	4764	0.0%
NORTH/CENTRAL AMERICA	133541	138128	130648	115017	130648	115222	0.2%
Canada	4618	5319	4643	2951	4643	2951	0.0%
Mexico	11151	15900	16755	19553	16755	19759	1.0%
United States	87900	74600	65118	41392	65118	41392	0.0%
SOUTH AMERICA	158554	194918	203018	239042	203018	239042	0.0%
Brazil	121780	135652	140952	165038	140952	165038	0.0%
Chile	5125	10773	11618	14685	11618	14685	0.0%
ASIA	658527	906875	980018	1259850	980018	1259502	0.0%
China	154651	204299	224092	297092	224092	297092	0.0%
Hong Kong	16	206	209	226	209	226	0.0%
Indonesia	114900	155700	170406	227904	170406	227904	0.0%
Japan	361	971	858	567	858	567	0.0%
Korea, REP	6474	399	393	416	393	416	0.0%
Malaysia	4861	10243	11172	14403	11172	14047	-2.5%
Philippines	25860	38218	40679	50076	40679	50076	0.0%
Singapore	0	210	180	154	180	162	5.3%
Thailand	25900	36733	39501	51762	39501	51762	0.0%
OCEANIA	6906	8756	8559	8285	8559	8285	0.0%
Australia	1246	2904	2574	1725	2574	1725	0.0%
New Zealand	50	50	48	42	48	42	0.0%
EUROPE	39753	50408	44009	27943	44009	27968	0.1%
Austria	1413	3423	2982	1882	2982	1882	0.0%
Belgium-Luxembourg	332	500	429	278	429	278	0.0%
Denmark	260	491	429	274	429	274	0.0%
Finland	4099	4094	3610	2373	3610	2373	0.0%
France	9800	10466	9185	5944	9185	5944	0.0%
Germany	0	2719	2342	1423	2342	1423	0.0%
Greece	1939	1350	1158	693	1158	693	0.0%
Ireland	39	63	49	29	49	29	0.0%
Italy	3880	5288	4567	2801	4567	2801	0.0%
Netherlands	85	131	109	76	109	76	0.8%
Portugal	500	648	565	356	565	356	0.0%
Spain	1269	3588	3172	2104	3172	2104	0.0%
Sweden	4400	3824	3341	2130	3341	2130	0.0%
United Kingdom	110	262	228	170	228	170	0.0%
FORMER U.S.S.R.	78900	28936	26586	13218	26586	13223	0.0%
Russian Fed	n/a	20778	18905	8617	18905	8617	0.0%
DEVELOPED, ALL	219839	170358	150360	92604	150360	92635	0.0%
DEVELOPING, ALL	1145438	1680915	1792451	2224906	1792451	2224764	0.0%
WORLD	1365277	1851273	1942810	2317510	1942810	2317399	0.0%

Table 47--Production of industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	50801	66366	67242	79230	67265	78496	-0.9%
South Africa	11782	18176	16125	20712	16136	20144	-2.7%
NORTH/CENTRAL AMERICA	492415	613534	675936	772261	677053	769403	-0.4%
Canada	154224	185859	193660	230394	194962	227180	-1.4%
Mexico	6345	7313	9177	11348	9177	11115	-2.1%
United States	327095	416092	467872	524504	467681	525018	0.1%
SOUTH AMERICA	85487	130085	137566	166878	137572	168458	0.9%
Brazil	61708	84661	88014	102609	88014	102826	0.2%
Chile	8201	19788	24703	33066	24703	33238	0.5%
ASIA	233821	277153	341261	450016	341474	454992	1.1%
China	79202	108718	124869	157006	124972	159154	1.4%
Hong Kong	0	0	1564	1996	1564	1996	0.0%
Indonesia	30922	47289	52227	77847	52219	81280	4.4%
Japan	34051	21545	24257	30855	24257	29080	-5.8%
Korea, REP	2196	1062	5039	7805	5039	6927	-11.2%
Malaysia	29073	35788	37362	46123	37362	47339	2.6%
Philippines	9108	3330	3843	4861	3843	4907	0.9%
Singapore	0	0	743	966	852	1138	17.8%
Thailand	4730	2828	5631	6652	5631	6737	1.3%
OCEANIA	27930	41285	43665	57561	43653	60874	5.8%
Australia	15651	20155	20747	25172	20747	27478	9.2%
New Zealand	9945	16481	18350	25548	18337	26513	3.8%
EUROPE	217168	291482	314855	376814	313973	383151	1.7%
Austria	12973	11902	15891	20475	15905	20738	1.3%
Belgium-Luxembourg	2331	3485	5018	6512	4789	5591	-14.1%
Denmark	1850	1797	1901	2586	1826	2293	-11.4%
Finland	43020	47187	46527	55723	46527	61831	11.0%
France	28966	30643	31091	36929	31030	34567	-6.4%
Germany	0	35488	45308	53765	45315	52651	-2.1%
Greece	767	674	1350	1830	1291	1696	-7.3%
Ireland	340	2117	2445	3989	2353	3538	-11.3%
Italy	5109	3924	4235	5423	4080	4733	-12.7%
Netherlands	805	986	1046	1651	1005	1456	-11.9%
Portugal	8030	8428	9452	12024	9452	11719	-2.5%
Spain	11215	12433	12485	15292	12485	15977	4.5%
Sweden	44795	56400	57182	63415	57182	68236	7.6%
United Kingdom	3841	7250	8671	12976	8503	13079	0.8%
FORMER U.S.S.R.	277700	103019	110458	127544	110458	124068	-2.7%
Russian Fed	n/a	63190	77642	88444	77642	84778	-4.1%
DEVELOPED, ALL	1047723	1072919	1166592	1361907	1166821	1363013	0.1%
DEVELOPING, ALL	337599	450005	524390	668396	524627	676428	1.2%
WORLD	1385322	1522924	1690983	2030303	1691448	2039441	0.5%

Table 48--Production of other industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	20319	29828	30413	32552	30413	32552	0.0%
South Africa	2425	2578	2444	2054	2444	2054	0.0%
NORTH/CENTRAL AMERICA	14186	19957	19180	16842	19180	16842	0.0%
Canada	1789	3188	3041	2567	3041	2567	0.0%
Mexico	236	175	179	197	179	197	0.0%
United States	11469	15740	15093	13148	15093	13148	0.0%
SOUTH AMERICA	7053	8257	8422	9103	8422	9103	0.0%
Brazil	4596	6181	6295	6783	6295	6783	0.0%
Chile	333	593	615	687	615	687	0.0%
ASIA	48775	70634	73354	82784	73354	82784	0.0%
China	26757	40544	42371	48451	42371	48451	0.0%
Hong Kong	0	0	0	0	0	0	0.0%
Indonesia	2345	3159	3297	3786	3297	3786	0.0%
Japan	1301	397	376	318	376	318	0.0%
Korea, REP	719	365	378	424	378	424	0.0%
Malaysia	532	813	849	978	849	978	0.0%
Philippines	1937	2836	2921	3224	2921	3224	0.0%
Singapore	0	0	0	0	0	0	0.0%
Thailand	2186	2768	2865	3256	2865	3256	0.0%
OCEANIA	1388	1928	1835	1547	1835	1547	0.0%
Australia	753	540	508	416	508	416	0.0%
New Zealand	629	1383	1321	1126	1321	1126	0.0%
EUROPE	14153	12822	12231	10044	12231	10044	0.0%
Austria	799	600	581	512	581	512	0.0%
Belgium-Luxembourg	310	210	202	176	202	176	0.0%
Denmark	369	351	336	295	336	295	0.0%
Finland	1410	325	306	261	306	261	0.0%
France	859	447	431	373	431	373	0.0%
Germany	0	1363	1309	1123	1309	1123	0.0%
Greece	210	102	97	84	97	84	0.0%
Ireland	0	0	0	0	0	0	0.0%
Italy	1300	1020	986	851	986	851	0.0%
Netherlands	223	59	56	48	56	48	0.0%
Portugal	100	180	171	146	171	146	0.0%
Spain	1167	738	702	588	702	588	0.0%
Sweden	170	500	484	429	484	429	0.0%
United Kingdom	440	418	400	346	400	346	0.0%
FORMER U.S.S.R.	87900	16761	16515	12180	16515	12180	0.0%
Russian Fed	n/a	8890	8678	6256	8678	6256	0.0%
DEVELOPED, ALL	120451	53444	51561	41877	51561	41877	0.0%
DEVELOPING, ALL	73323	106743	110388	123175	110388	123175	0.0%
WORLD	193774	160187	161949	165052	161949	165052	0.0%

Table 49--Production of sawnwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	7650	8350	8565	9364	8564	9425	0.7%
South Africa	1593	1574	1598	1782	1598	1731	-2.8%
NORTH/CENTRAL AMERICA	132302	181091	194210	217211	195094	221358	1.9%
Canada	44324	64764	66738	80414	67622	80366	-0.1%
Mexico	1991	2961	2919	2886	2919	2939	1.9%
United States	84112	111425	122568	131624	122568	135751	3.1%
SOUTH AMERICA	21993	30285	31696	37098	31690	36961	-0.4%
Brazil	14881	19091	19894	23108	19894	22899	-0.9%
Chile	2297	4661	5048	6259	5042	6238	-0.3%
ASIA	94718	96531	101625	129154	101630	124519	-3.6%
China	21010	26969	29666	39223	29666	40938	4.4%
Hong Kong	235	441	695	454	695	699	53.8%
Indonesia	4815	7238	7962	11668	7962	11715	0.4%
Japan	36955	21698	20887	24018	20887	17699	-26.3%
Korea, REP	3043	4759	5101	6506	5101	6354	-2.3%
Malaysia	6371	8382	8470	9141	8470	9162	0.2%
Philippines	1529	258	256	173	256	241	39.4%
Singapore	336	25	0	0	0	0	
Thailand	1543	322	248	0	255	17	
OCEANIA	5801	6981	7238	8287	7231	8283	0.0%
Australia	3389	3455	3479	3628	3479	3628	0.0%
New Zealand	2062	3162	3382	4213	3376	4211	0.0%
EUROPE	68433	89529	87398	96829	86543	98968	2.2%
Austria	6736	8307	8958	11709	8958	11452	-2.2%
Belgium-Luxembourg	686	1100	1106	1961	934	1392	-29.0%
Denmark	800	583	565	1128	471	754	-33.2%
Finland	10258	10670	9712	8144	9721	10069	23.6%
France	9719	10000	10036	11000	10036	10567	-3.9%
Germany	0	14849	14588	18870	14588	17835	-5.5%
Greece	380	337	325	538	267	382	-29.0%
Ireland	143	642	763	1381	763	1381	0.0%
Italy	2721	1751	1317	3249	890	1966	-39.5%
Netherlands	337	400	440	836	412	617	-26.2%
Portugal	2270	1731	1765	1884	1831	1996	5.9%
Spain	2136	3080	2874	2262	2874	2549	12.7%
Sweden	11299	15619	14141	12253	14141	15423	25.9%
United Kingdom	1721	2356	2592	3981	2478	4556	14.5%
FORMER U.S.S.R.	98200	25819	25533	29410	25512	29218	-0.7%
Russian Fed	n/a	19500	19008	22041	19008	22028	-0.1%
DEVELOPED, ALL	339068	321426	331581	371918	331583	371573	-0.1%
DEVELOPING, ALL	90029	117160	124683	155434	124681	157158	1.1%
WORLD	429097	438586	456264	527352	456264	528731	0.3%

Table 50--Production of wood-based panels (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1361	1805	2006	2732	2018	2793	2.3%
South Africa	380	653	736	1015	742	1011	-0.4%
NORTH/CENTRAL AMERICA	31756	50756	55180	72429	55039	71084	-1.9%
Canada	4802	11339	12634	17371	12634	17256	-0.7%
Mexico	604	606	621	720	621	776	7.8%
United States	26224	38502	41608	53953	41465	52649	-2.4%
SOUTH AMERICA	3574	6306	6879	8134	6896	8852	8.8%
Brazil	2482	3558	3892	4585	3888	4889	6.6%
Chile	115	1066	1168	1406	1175	1614	14.8%
ASIA	19005	45837	51197	75369	51197	75364	0.0%
China	2296	14499	16788	26595	16888	26679	0.3%
Hong Kong	12	41	87	78	87	109	39.8%
Indonesia	1012	10163	11369	17227	11365	17490	1.5%
Japan	10280	6435	6713	8967	6503	7677	-14.4%
Korea, REP	1634	2485	2775	4089	2775	4286	4.8%
Malaysia	1079	7000	7723	10264	7756	10754	4.8%
Philippines	759	435	477	675	477	634	-6.2%
Singapore	669	355	430	591	493	694	17.4%
Thailand	151	548	601	758	612	836	10.4%
OCEANIA	1197	2607	2880	3809	2888	4766	25.1%
Australia	847	1434	1571	1920	1581	1943	1.2%
New Zealand	319	1141	1274	1834	1273	2755	50.2%
EUROPE	22582	43629	47126	63552	47203	62273	-2.0%
Austria	1463	2068	2298	3025	2298	2955	-2.3%
Belgium-Luxembourg	1789	3300	3679	4923	3679	4764	-3.2%
Denmark	355	432	430	508	430	569	12.0%
Finland	1764	1784	1979	2739	1979	2723	-0.6%
France	3140	4588	4953	6243	4953	6300	0.9%
Germany	0	10874	11578	15560	11578	14685	-5.6%
Greece	387	363	384	452	384	481	6.5%
Ireland	2	530	617	827	594	868	5.0%
Italy	2550	4364	4576	5837	4576	5726	-1.9%
Netherlands	153	101	27	115	27	114	-1.3%
Portugal	472	1215	1325	1422	1365	1687	18.6%
Spain	1894	2970	3227	4758	3227	4412	-7.3%
Sweden	1903	930	968	1405	968	1280	-8.9%
United Kingdom	702	2640	2746	4008	2746	3688	-8.0%
FORMER U.S.S.R.	10618	4783	5018	7043	5041	7692	9.2%
Russian Fed	n/a	3114	3233	4711	3233	5016	6.5%
DEVELOPED, ALL	76190	108160	116966	156071	116727	153687	-1.5%
DEVELOPING, ALL	13903	47563	53319	76996	53555	79137	2.8%
WORLD	90093	155723	170286	233067	170283	232824	-0.1%

Table 51--Production of veneer sheets and plywood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	875	950	1055	1422	1063	1496	5.2%
South Africa	100	60	67	71	67	89	24.7%
NORTH/CENTRAL AMERICA	18014	18613	19975	25268	19978	24824	-1.8%
Canada	2812	2329	2562	3720	2562	3671	-1.3%
Mexico	262	181	186	220	186	227	3.4%
United States	14857	15977	17096	21167	17096	20749	-2.0%
SOUTH AMERICA	1506	3232	3565	4006	3568	4441	10.9%
Brazil	1042	2200	2420	2697	2420	2990	10.8%
Chile	27	162	181	257	181	251	-2.6%
ASIA	15515	30557	34117	49575	34075	49406	-0.3%
China	1637	8179	9460	14801	9560	14753	-0.3%
Hong Kong	12	1	2	3	2	4	24.2%
Indonesia	1011	9650	10768	16212	10768	16504	1.8%
Japan	8300	4072	4211	4911	4001	4161	-15.3%
Korea, REP	1575	1014	1115	1658	1115	1634	-1.4%
Malaysia	1076	5900	6585	9079	6585	9318	2.6%
Philippines	686	429	472	675	472	634	-6.2%
Singapore	669	345	426	591	488	694	17.4%
Thailand	112	162	178	283	178	289	1.9%
OCEANIA	203	523	563	716	573	742	3.6%
Australia	115	180	188	210	198	223	5.8%
New Zealand	57	311	341	451	341	451	0.0%
EUROPE	3564	5335	5472	6951	5489	6295	-9.4%
Austria	27	177	189	259	189	222	-14.2%
Belgium-Luxembourg	94	110	92	113	92	22	-80.9%
Denmark	38	25	11	14	11	0	-100%
Finland	657	1061	1167	1603	1167	1652	3.0%
France	585	715	736	911	736	841	-7.6%
Germany	0	784	726	886	726	529	-40.3%
Greece	82	78	81	93	81	91	-1.6%
Ireland	2	0	0	0	0	0	
Italy	850	914	916	1140	916	982	-13.9%
Netherlands	45	32	0	19	0	0	-100%
Portugal	32	133	142	170	142	166	-2.2%
Spain	188	410	430	582	430	510	-12.4%
Sweden	100	126	121	161	121	125	-22.1%
United Kingdom	37	5	0	6	0	0	-100%
FORMER U.S.S.R.	2498	1343	1435	1846	1435	1981	7.3%
Russian Fed	n/a	1001	1044	1319	1044	1424	8.0%
DEVELOPED, ALL	32374	29716	31493	39481	31310	37777	-4.3%
DEVELOPING, ALL	9801	30837	34689	50303	34871	51408	2.2%
WORLD	42175	60553	66182	89784	66180	89185	-0.7%

Table 52--Production of particle board (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	386	777	864	1186	872	1173	-1.1%
South Africa	202	551	621	872	627	850	-2.6%
NORTH/CENTRAL AMERICA	6987	24712	27025	36449	26881	35453	-2.7%
Canada	1267	7954	8881	11809	8881	11719	-0.8%
Mexico	316	397	410	489	410	529	8.2%
United States	5361	16263	17636	24045	17492	23095	-3.9%
SOUTH AMERICA	1116	1637	1741	2237	1759	2270	1.5%
Brazil	660	660	696	883	696	868	-1.7%
Chile	43	425	469	633	475	655	3.6%
ASIA	2035	9097	10148	15110	10161	15053	-0.4%
China	121	3643	4139	6400	4139	6365	-0.5%
Hong Kong	0	40	85	75	85	105	40.5%
Indonesia	0	440	510	796	509	794	-0.3%
Japan	1312	1249	1358	2193	1358	1950	-11.1%
Korea, REP	45	721	805	1154	805	1241	7.5%
Malaysia	3	500	554	742	554	798	7.6%
Philippines	5	6	5	0	5	0	
Singapore	0	10	5	0	5	0	
Thailand	9	155	166	179	177	205	14.5%
OCEANIA	769	1006	1117	1538	1117	1524	-0.9%
Australia	622	790	875	1186	875	1172	-1.1%
New Zealand	147	216	243	352	242	352	0.0%
EUROPE	15437	32275	35238	47771	35321	48010	0.5%
Austria	1309	1771	1980	2547	1980	2563	0.6%
Belgium-Luxembourg	1665	3087	3467	4583	3467	4556	-0.6%
Denmark	317	328	336	388	336	475	22.4%
Finland	809	603	682	931	682	907	-2.5%
France	2289	3289	3577	4378	3577	4588	4.8%
Germany	0	9190	9884	13309	9884	12921	-2.9%
Greece	288	250	273	354	273	385	8.7%
Ireland	0	200	259	441	259	455	3.3%
Italy	1500	2750	2896	3661	2896	3738	2.1%
Netherlands	75	44	20	85	20	114	34.5%
Portugal	364	695	748	872	789	924	6.0%
Spain	1330	1970	2165	3063	2165	3100	1.2%
Sweden	1193	612	643	952	643	905	-4.9%
United Kingdom	616	2175	2315	3299	2315	3363	1.9%
FORMER U.S.S.R.	5118	2505	2574	3945	2597	4211	6.7%
Russian Fed	n/a	1483	1515	2503	1515	2594	3.6%
DEVELOPED, ALL	29523	61861	67493	92311	67462	91507	-0.9%
DEVELOPING, ALL	2325	10148	11215	15924	11246	16186	1.6%
WORLD	31848	72009	78708	108235	78708	107693	-0.5%

Table 53--Production of fiberboard (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	100	78	86	124	84	124	0.4%
South Africa	78	42	48	72	48	73	0.7%
NORTH/CENTRAL AMERICA	6755	7431	8181	10711	8181	10807	0.9%
Canada	723	1056	1191	1842	1191	1866	1.3%
Mexico	26	28	24	11	24	20	71.9%
United States	6006	6262	6876	8741	6876	8805	0.7%
SOUTH AMERICA	952	1437	1573	1891	1569	2141	13.2%
Brazil	780	698	777	1005	772	1032	2.7%
Chile	45	479	519	516	519	708	37.4%
ASIA	1455	6183	6932	10685	6962	10905	2.1%
China	538	2677	3188	5394	3188	5561	3.1%
Hong Kong	0	0	0	0	0	0	
Indonesia	1	73	92	218	89	193	-11.7%
Japan	668	1114	1144	1863	1144	1567	-15.9%
Korea, REP	14	750	855	1277	855	1412	10.5%
Malaysia	0	600	584	443	617	637	43.8%
Philippines	68	0	0	0	0	0	
Singapore	0	0	0	0	0	0	
Thailand	30	231	257	296	257	343	16.0%
OCEANIA	225	1078	1200	1555	1198	2500	60.7%
Australia	110	464	509	524	509	548	4.6%
New Zealand	115	614	691	1032	690	1952	89.2%
EUROPE	3581	6019	6416	8831	6393	7968	-9.8%
Austria	127	120	130	219	130	169	-22.6%
Belgium-Luxembourg	30	103	120	227	120	186	-18.0%
Denmark	0	79	83	106	83	94	-11.2%
Finland	298	120	131	205	131	164	-20.1%
France	266	584	640	954	640	871	-8.7%
Germany	0	900	969	1364	969	1235	-9.5%
Greece	17	35	30	6	30	6	0.0%
Ireland	0	330	358	386	335	413	6.9%
Italy	200	700	764	1036	764	1007	-2.9%
Netherlands	33	25	7	12	7	0	-100%
Portugal	76	387	435	380	435	596	56.8%
Spain	376	590	632	1114	632	803	-27.9%
Sweden	610	192	204	292	204	250	-14.5%
United Kingdom	49	460	431	703	431	325	-53.8%
FORMER U.S.S.R.	3002	935	1009	1251	1009	1501	19.9%
Russian Fed	n/a	630	674	889	674	998	12.3%
DEVELOPED, ALL	14293	16583	17980	24279	17956	24403	0.5%
DEVELOPING, ALL	1777	6578	7416	10770	7439	11543	7.2%
WORLD	16070	23161	25396	35049	25395	35946	2.6%

Table 54--Production of woodpulp (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1013	2253	2374	3480	2374	3336	-4.1%
South Africa	632	1730	1807	2540	1807	2419	-4.7%
NORTH/CENTRAL AMERICA	64894	84550	91507	108653	91449	108218	-0.4%
Canada	19632	24834	28221	33532	28164	33052	-1.4%
Mexico	443	319	988	1719	988	1595	-7.2%
United States	44819	59394	62211	73278	62210	73441	0.2%
SOUTH AMERICA	4237	9375	9493	12132	9489	12203	0.6%
Brazil	3009	6265	6376	7447	6379	7399	-0.6%
Chile	763	2077	1898	2505	1898	2456	-1.9%
ASIA	11893	19431	21994	32581	21991	32818	0.7%
China	1343	2195	2804	2689	2784	2410	-10.4%
Hong Kong	0	0	86	110	86	100	-8.6%
Indonesia	46	2900	3221	5051	3221	5887	16.6%
Japan	9473	11360	11789	16601	11796	16369	-1.4%
Korea, REP	167	591	1018	2077	1018	1704	-18.0%
Malaysia	0	91	221	559	221	629	12.6%
Philippines	144	122	159	341	159	294	-13.7%
Singapore	0	0	14	14	14	15	6.3%
Thailand	0	465	547	864	557	895	3.6%
OCEANIA	1819	2324	2508	3581	2508	3628	1.3%
Australia	697	923	988	1401	988	1560	11.3%
New Zealand	1122	1401	1521	2180	1521	2068	-5.1%
EUROPE	25289	37458	41648	50938	41763	51613	1.3%
Austria	1161	1475	1962	2437	2055	2496	2.4%
Belgium-Luxembourg	358	382	616	804	610	841	4.7%
Denmark	64	146	167	255	167	243	-4.7%
Finland	7037	11089	12485	15155	12479	16054	5.9%
France	1721	2515	2645	3309	2617	3245	-1.9%
Germany	0	1958	2761	3398	2762	3355	-1.3%
Greece	28	25	163	222	169	237	7.0%
Ireland	19	0	0	0	0	0	
Italy	655	423	508	531	501	629	18.3%
Netherlands	201	138	148	208	148	214	3.1%
Portugal	645	1703	1672	2032	1682	1965	-3.3%
Spain	1209	1535	1659	1973	1659	2146	8.8%
Sweden	8577	10494	11226	12692	11226	12299	-3.1%
United Kingdom	286	623	692	873	692	827	-5.2%
FORMER U.S.S.R.	8063	3879	4042	5404	4041	5478	1.4%
Russian Fed	n/a	3765	3881	5063	3881	5152	1.7%
DEVELOPED, ALL	109727	140979	152228	185884	152291	186009	0.1%
DEVELOPING, ALL	7481	18291	21338	30885	21324	31285	1.3%
WORLD	117208	159270	173565	216768	173615	217294	0.2%

Table 55--Production of mechanical pulp (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	220	402	474	714	474	720	0.7%
South Africa	200	370	408	577	408	591	2.5%
NORTH/CENTRAL AMERICA	11725	16766	19415	24907	19423	24796	-0.4%
Canada	7510	11355	12492	15405	12501	15116	-1.9%
Mexico	46	10	642	1126	642	1167	3.7%
United States	4169	5398	6240	8312	6239	8446	1.6%
SOUTH AMERICA	432	699	791	1171	791	1167	-0.3%
Brazil	270	443	479	649	479	620	-4.5%
Chile	131	209	227	391	227	409	4.4%
ASIA	2469	2638	4022	6798	4022	6893	1.4%
China	345	440	638	1341	638	1421	6.0%
Hong Kong	0	0	40	46	40	44	-5.4%
Indonesia	0	0	37	99	37	95	-4.0%
Japan	1770	1674	1883	3194	1883	3083	-3.5%
Korea, REP	137	197	804	1080	804	1211	12.1%
Malaysia	0	0	119	263	119	280	6.4%
Philippines	39	28	55	56	55	55	-1.8%
Singapore	0	0	14	14	14	15	6.3%
Thailand	0	0	96	175	96	155	-11.5%
OCEANIA	778	1072	1131	1518	1131	1479	-2.5%
Australia	212	351	359	427	359	449	5.1%
New Zealand	566	721	772	1091	772	1031	-5.5%
EUROPE	7623	12564	14942	18739	14932	18915	0.9%
Austria	221	378	882	1079	880	1115	3.4%
Belgium-Luxembourg	140	173	308	454	302	465	2.5%
Denmark	0	75	84	132	84	138	4.3%
Finland	2349	3940	4774	5978	4774	6255	4.6%
France	419	757	823	1117	802	1083	-3.1%
Germany	0	1220	2106	2461	2100	2485	1.0%
Greece	28	25	133	185	132	189	1.8%
Ireland	19	0	0	0	0	0	
Italy	533	385	402	527	396	488	-7.4%
Netherlands	201	138	145	204	145	211	3.0%
Portugal	0	0	7	9	7	8	-5.6%
Spain	208	103	91	109	91	116	5.7%
Sweden	1960	2959	3039	3660	3039	3574	-2.4%
United Kingdom	164	537	582	734	582	729	-0.7%
FORMER U.S.S.R.	1729	1046	1200	1703	1200	1714	0.7%
Russian Fed	n/a	1025	1127	1557	1127	1567	0.6%
DEVELOPED, ALL	23779	33479	38297	49447	38295	49344	-0.2%
DEVELOPING, ALL	1197	1708	3678	6104	3677	6340	3.9%
WORLD	24976	35187	41974	55550	41972	55684	0.2%

Table 56--Production of chemical pulp (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	793	1851	1900	2766	1900	2617	-5.4%
South Africa	432	1360	1399	1963	1399	1828	-6.9%
NORTH/CENTRAL AMERICA	53169	67784	72092	83745	72026	83422	-0.4%
Canada	12122	13479	15729	18127	15663	17936	-1.1%
Mexico	397	309	346	593	346	429	-27.8%
United States	40650	53996	55971	64966	55971	64995	0.0%
SOUTH AMERICA	3805	8676	8702	10962	8698	11036	0.7%
Brazil	2739	5822	5897	6798	5899	6779	-0.3%
Chile	632	1868	1671	2114	1671	2048	-3.1%
ASIA	9424	16793	17972	25783	17969	25926	0.6%
China	998	1755	2167	1348	2146	988	-26.7%
Hong Kong	0	0	46	64	46	57	-10.8%
Indonesia	46	2900	3184	4952	3184	5792	17.0%
Japan	7703	9686	9906	13408	9913	13286	-0.9%
Korea, REP	30	394	214	997	214	493	-50.6%
Malaysia	0	91	102	296	102	349	18.2%
Philippines	105	94	103	285	103	239	-16.0%
Singapore	0	0	0	0	0	0	
Thailand	0	465	451	689	461	740	7.5%
OCEANIA	1041	1252	1377	2063	1377	2149	4.1%
Australia	485	572	629	974	629	1111	14.0%
New Zealand	556	680	748	1089	748	1037	-4.7%
EUROPE	17666	24894	26706	32199	26831	32698	1.6%
Austria	940	1097	1079	1358	1175	1380	1.6%
Belgium-Luxembourg	218	209	308	350	308	376	7.5%
Denmark	64	71	82	122	82	105	-14.5%
Finland	4688	7149	7711	9178	7705	9799	6.8%
France	1302	1758	1822	2192	1815	2162	-1.4%
Germany	0	738	656	938	661	870	-7.2%
Greece	0	0	30	37	37	49	33.7%
Ireland	0	0	0	0	0	0	
Italy	122	38	105	4	105	141	3250%
Netherlands	0	0	3	4	3	4	8.3%
Portugal	645	1703	1665	2023	1675	1957	-3.3%
Spain	1001	1432	1568	1864	1568	2031	9.0%
Sweden	6617	7535	8187	9032	8187	8725	-3.4%
United Kingdom	122	86	110	139	110	98	-29.1%
FORMER U.S.S.R.	6334	2833	2842	3701	2841	3764	1.7%
Russian Fed	n/a	2740	2754	3506	2754	3585	2.3%
DEVELOPED, ALL	85948	107500	113931	136437	113996	136665	0.2%
DEVELOPING, ALL	6284	16583	17660	24781	17647	24946	0.7%
WORLD	92232	124083	131591	161218	131643	161610	0.2%

Table 57--Production of other fiber pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	230	219	257	446	258	456	2.4%
South Africa	84	115	127	187	127	191	2.1%
NORTH/CENTRAL AMERICA	1050	496	487	876	486	859	-2.0%
Canada	40	40	26	49	26	46	-6.4%
Mexico	230	134	148	280	147	263	-6.2%
United States	750	263	285	490	285	497	1.5%
SOUTH AMERICA	465	460	551	1002	551	1017	1.5%
Brazil	134	77	83	132	83	129	-2.4%
Chile	0	0	0	0	0	0	
ASIA	4450	17627	19636	38545	19591	38163	-1.0%
China	3466	15986	17778	34904	17737	34389	-1.5%
Hong Kong	0	0	0	0	0	0	
Indonesia	31	79	91	184	91	193	4.9%
Japan	15	5	0	0	0	0	
Korea, REP	50	0	0	1	0	1	0.0%
Malaysia	1	1	0	0	0	0	
Philippines	19	27	40	93	40	88	-5.9%
Singapore	0	0	0	0	0	0	
Thailand	37	108	137	280	134	251	-10.3%
OCEANIA	5	254	155	239	155	256	7.2%
Australia	5	254	155	239	155	256	7.2%
New Zealand	0	0	0	0	0	0	
EUROPE	644	230	237	403	237	420	4.3%
Austria	0	1	2	5	2	5	2.2%
Belgium-Luxembourg	0	0	0	0	0	0	
Denmark	45	34	23	34	23	37	8.5%
Finland	0	1	1	2	1	2	0.0%
France	15	2	0	0	0	0	
Germany	0	0	0	0	0	0	
Greece	38	2	3	5	3	5	6.0%
Ireland	0	0	0	0	0	0	
Italy	285	125	123	192	123	207	8.2%
Netherlands	6	3	3	7	3	5	-25.0%
Portugal	33	0	0	0	0	0	
Spain	120	35	40	67	40	72	6.4%
Sweden	0	0	0	0	0	0	
United Kingdom	15	0	8	18	8	14	-20.6%
FORMER U.S.S.R.	355	0	0	0	0	0	
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	1893	907	829	1368	829	1411	3.1%
DEVELOPING, ALL	5306	18379	20493	40142	20448	39760	-1.0%
WORLD	7199	19286	21323	41510	21278	41171	-0.8%

Table 58--Production of waste paper (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	479	936	1274	2259	1274	2275	0.7%
South Africa	340	590	891	1400	891	1427	1.9%
NORTH/CENTRAL AMERICA	18081	37109	44499	74574	44499	74701	0.2%
Canada	854	2694	3195	5430	3195	5510	1.5%
Mexico	779	920	1258	3485	1258	3390	-2.7%
United States	16303	33310	39863	65277	39863	65418	0.2%
SOUTH AMERICA	1763	2778	3921	7037	3921	7029	-0.1%
Brazil	1052	1287	2409	4042	2409	3921	-3.0%
Chile	47	136	238	492	238	519	5.5%
ASIA	11627	34168	41612	86904	41612	85978	-1.1%
China	1557	10853	15222	37029	15222	36529	-1.3%
Hong Kong	402	500	601	1067	601	1046	-2.0%
Indonesia	110	1163	1392	3484	1392	3618	3.9%
Japan	8079	14841	16995	28676	16995	28388	-1.0%
Korea, REP	582	4531	3772	6900	3772	6994	1.4%
Malaysia	58	102	550	1536	550	1513	-1.5%
Philippines	78	54	174	555	174	491	-11.5%
Singapore	102	275	261	493	261	488	-0.9%
Thailand	148	327	803	1985	803	1834	-7.6%
OCEANIA	621	1638	1717	3153	1717	3411	8.2%
Australia	553	1488	1531	2782	1531	3045	9.5%
New Zealand	68	149	185	370	185	365	-1.5%
EUROPE	11233	32913	37152	56518	37145	56473	-0.1%
Austria	263	932	883	1133	883	1133	0.0%
Belgium-Luxembourg	390	780	1227	1659	1227	1659	0.0%
Denmark	205	466	509	857	509	857	0.0%
Finland	244	607	1182	1682	1182	1725	2.6%
France	1927	3857	4285	7036	4285	7171	1.9%
Germany	0	11279	10701	14728	10701	14728	0.0%
Greece	103	175	487	724	485	735	1.5%
Ireland	40	180	71	127	71	123	-3.2%
Italy	1551	2351	3512	6333	3510	6231	-1.6%
Netherlands	982	1977	2151	2941	2151	2941	0.0%
Portugal	168	300	366	581	363	573	-1.3%
Spain	974	2117	2122	4303	2122	4105	-4.6%
Sweden	575	1652	1203	1536	1203	1517	-1.2%
United Kingdom	2303	3675	4686	6587	4686	6577	-0.2%
FORMER U.S.S.R.	2087	1059	1037	2007	1037	1947	-3.0%
Russian Fed	n/a	850	768	1433	768	1381	-3.6%
DEVELOPED, ALL	39562	87157	101007	162810	101000	162902	0.1%
DEVELOPING, ALL	6329	23444	30205	69641	30205	68912	-1.0%
WORLD	45891	110601	131211	232452	131205	231814	-0.3%

Table 59--Production of total paper and paperboard (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1713	3162	3646	5942	3649	6005	1.1%
South Africa	1197	2341	2649	3961	2649	4030	1.7%
NORTH/CENTRAL AMERICA	72379	109037	122216	163438	122229	163144	-0.2%
Canada	13390	18969	20894	27659	20908	27245	-1.5%
Mexico	1979	3491	3855	6957	3855	6765	-2.8%
United States	56839	86274	97110	128219	97110	128528	0.2%
SOUTH AMERICA	5579	9842	11156	17603	11156	17705	0.6%
Brazil	3361	6475	7166	10465	7166	10287	-1.7%
Chile	356	697	788	1424	788	1508	5.9%
ASIA	29651	85235	102908	184263	102793	182194	-1.1%
China	6867	31583	41953	84445	41836	82222	-2.6%
Hong Kong	17	280	272	438	272	415	-5.3%
Indonesia	231	4930	5775	10826	5775	11524	6.4%
Japan	18088	31016	34507	50421	34507	49940	-1.0%
Korea, REP	1680	8363	9183	15781	9183	15493	-1.8%
Malaysia	71	711	846	2148	846	2188	1.8%
Philippines	323	613	720	1518	720	1386	-8.7%
Singapore	43	87	96	137	96	145	5.8%
Thailand	338	2271	2559	4884	2560	4694	-3.9%
OCEANIA	2104	3291	3766	5821	3765	6291	8.1%
Australia	1430	2418	2774	4386	2774	4906	11.9%
New Zealand	674	873	992	1435	991	1385	-3.5%
EUROPE	39001	83729	87147	120751	87259	122466	1.4%
Austria	1616	3816	3706	4815	3856	5021	4.3%
Belgium-Luxembourg	864	1432	1427	2084	1398	2141	2.8%
Denmark	225	345	391	604	391	622	2.9%
Finland	5919	12148	13562	17752	13551	18405	3.7%
France	5152	8556	8723	12189	8698	12165	-0.2%
Germany	0	15953	15584	21465	15586	22186	3.4%
Greece	307	750	798	1110	794	1129	1.8%
Ireland	55	0	0	0	0	0	
Italy	4934	7533	8294	11514	8281	11556	0.4%
Netherlands	1701	3159	2717	4126	2717	4307	4.4%
Portugal	463	1080	1207	1665	1188	1642	-1.4%
Spain	2566	3968	4165	6551	4165	6356	-3.0%
Sweden	6182	9779	10397	13356	10397	12984	-2.8%
United Kingdom	3788	6455	6828	8722	6828	8744	0.3%
FORMER U.S.S.R.	8733	3823	4192	6704	4192	6611	-1.4%
Russian Fed	n/a	3332	3692	5693	3692	5606	-1.5%
DEVELOPED, ALL	139461	229718	250588	344119	250713	345690	0.5%
DEVELOPING, ALL	19699	68401	84443	160402	84331	158725	-1.0%
WORLD	159160	298119	335031	504521	335044	504415	0.0%

Table 60--Production of newsprint (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	244	424	453	658	453	651	-1.0%
South Africa	224	370	395	516	395	524	1.4%
NORTH/CENTRAL AMERICA	12979	16079	18252	24863	18266	25137	1.1%
Canada	8625	9205	9814	11957	9827	11850	-0.9%
Mexico	116	305	336	547	336	730	33.4%
United States	4238	6544	8075	12313	8075	12510	1.6%
SOUTH AMERICA	363	617	764	1224	764	1248	1.9%
Brazil	105	265	335	483	335	421	-12.7%
Chile	131	184	194	313	194	313	0.1%
ASIA	3543	6796	8095	16236	8076	17087	5.2%
China	373	825	1262	3120	1262	3479	11.5%
Hong Kong	0	0	0	0	0	0	
Indonesia	0	422	497	1262	497	1367	8.3%
Japan	2674	3192	3511	5811	3511	5670	-2.4%
Korea, REP	249	1592	1751	3101	1751	3602	16.2%
Malaysia	0	3	7	129	7	147	14.2%
Philippines	80	138	145	236	145	260	10.3%
Singapore	0	0	0	0	0	0	
Thailand	0	118	196	471	177	403	-14.6%
OCEANIA	540	804	901	1387	901	1465	5.6%
Australia	221	421	479	832	479	867	4.2%
New Zealand	319	383	421	555	421	598	7.7%
EUROPE	5563	10118	10117	12745	10122	12835	0.7%
Austria	176	397	377	496	377	461	-7.1%
Belgium-Luxembourg	102	104	69	124	69	130	4.9%
Denmark	0	0	0	0	0	0	
Finland	1569	1470	1562	1727	1562	1819	5.3%
France	261	783	937	1367	895	1237	-9.5%
Germany	0	1618	1528	1891	1528	2034	7.6%
Greece	9	9	4	13	4	12	-4.8%
Ireland	0	0	0	0	0	0	
Italy	277	180	205	239	193	214	-10.4%
Netherlands	171	373	315	463	315	481	4.0%
Portugal	0	0	0	0	0	0	
Spain	108	143	124	181	124	197	9.1%
Sweden	1534	2411	2388	2780	2388	2779	-0.1%
United Kingdom	363	1030	1105	1445	1105	1451	0.4%
FORMER U.S.S.R.	1354	1209	1325	1637	1325	1727	5.5%
Russian Fed	n/a	1198	1318	1578	1318	1676	6.2%
DEVELOPED, ALL	23222	31442	34136	46366	34155	46580	0.5%
DEVELOPING, ALL	1364	4605	5770	12385	5751	13571	9.6%
WORLD	24586	36047	39906	58751	39906	60150	2.4%

Table 61--Production of printing and writing paper (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	342	738	919	1617	922	1623	0.4%
South Africa	177	546	687	1183	687	1181	-0.2%
NORTH/CENTRAL AMERICA	15915	29957	34895	50526	34895	49981	-1.1%
Canada	1511	4966	5803	8535	5803	8674	1.6%
Mexico	526	623	700	1492	700	1388	-7.0%
United States	13829	24328	28341	40407	28341	39822	-1.4%
SOUTH AMERICA	1298	2690	3045	4685	3045	4894	4.5%
Brazil	870	1996	2196	3146	2196	3234	2.8%
Chile	48	83	100	222	100	243	9.7%
ASIA	7228	23729	29437	58025	29319	52701	-9.2%
China	1769	6711	9115	24591	8998	19055	-22.5%
Hong Kong	0	0	0	0	0	0	
Indonesia	121	1587	1868	3337	1868	3753	12.5%
Japan	4137	11112	13055	19772	13055	19329	-2.2%
Korea, REP	293	1813	1978	3558	1978	3165	-11.0%
Malaysia	1	126	145	476	145	576	21.0%
Philippines	58	154	222	517	222	486	-6.0%
Singapore	0	0	0	0	0	0	
Thailand	73	529	597	1195	597	1279	7.0%
OCEANIA	243	376	443	855	442	1288	50.6%
Australia	210	364	428	811	428	1260	55.3%
New Zealand	33	12	15	44	14	28	-35.6%
EUROPE	11529	31987	34474	52124	34601	53868	3.3%
Austria	618	1826	1729	2347	1930	2456	4.6%
Belgium-Luxembourg	436	991	1183	1560	1143	1629	4.5%
Denmark	113	93	103	191	103	165	-13.9%
Finland	2027	7317	8374	11845	8327	11921	0.6%
France	2011	3141	3278	5046	3278	5014	-0.6%
Germany	0	6390	6093	8899	6128	9616	8.1%
Greece	80	125	147	249	143	264	5.8%
Ireland	23	0	0	0	0	0	
Italy	1799	2930	3223	5236	3223	5483	4.7%
Netherlands	571	878	709	1152	709	1327	15.2%
Portugal	87	533	635	950	617	920	-3.2%
Spain	717	901	1038	2100	1038	2246	6.9%
Sweden	998	2459	2830	4158	2830	4027	-3.2%
United Kingdom	937	1779	2020	2677	2020	2728	1.9%
FORMER U.S.S.R.	1141	490	568	1266	568	1371	8.3%
Russian Fed	n/a	440	511	1042	511	1142	9.5%
DEVELOPED, ALL	32608	73900	83487	124409	83613	125809	1.1%
DEVELOPING, ALL	5088	16067	20293	44689	20179	39917	-10.7%
WORLD	37696	89967	103780	169098	103792	165726	-2.0%

Table 62--Production of other paper and board (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	1127	2000	2274	3667	2274	3731	1.7%
South Africa	796	1425	1568	2263	1568	2326	2.8%
NORTH/CENTRAL AMERICA	43485	63001	69068	88048	69068	88026	0.0%
Canada	3254	4798	5278	7168	5278	6721	-6.2%
Mexico	1337	2563	2819	4918	2819	4648	-5.5%
United States	38772	55402	60694	75500	60694	76196	0.9%
SOUTH AMERICA	3918	6535	7348	11695	7348	11563	-1.1%
Brazil	2386	4214	4635	6836	4635	6632	-3.0%
Chile	177	430	493	889	493	952	7.0%
ASIA	18880	54710	65376	110001	65397	112406	2.2%
China	4725	24047	31576	56735	31576	59689	5.2%
Hong Kong	17	280	272	438	272	415	-5.3%
Indonesia	110	2921	3410	6227	3410	6403	2.8%
Japan	11277	16712	17941	24838	17941	24941	0.4%
Korea, REP	1138	4958	5454	9122	5454	8726	-4.3%
Malaysia	70	582	694	1544	694	1465	-5.1%
Philippines	185	321	353	765	353	639	-16.5%
Singapore	43	87	96	137	96	145	5.8%
Thailand	265	1624	1766	3218	1786	3013	-6.4%
OCEANIA	1321	2111	2423	3579	2423	3538	-1.1%
Australia	999	1633	1867	2743	1867	2779	1.3%
New Zealand	322	478	556	836	556	759	-9.2%
EUROPE	21909	41624	42557	55882	42536	55762	-0.2%
Austria	822	1593	1600	1972	1549	2104	6.7%
Belgium-Luxembourg	326	337	176	400	186	382	-4.6%
Denmark	112	252	288	413	288	457	10.8%
Finland	2323	3361	3626	4181	3662	4665	11.6%
France	2880	4632	4508	5775	4524	5914	2.4%
Germany	0	7945	7963	10675	7931	10535	-1.3%
Greece	218	616	647	848	647	854	0.7%
Ireland	32	0	0	0	0	0	
Italy	2858	4423	4865	6040	4865	5859	-3.0%
Netherlands	959	1908	1692	2511	1692	2499	-0.5%
Portugal	376	547	572	716	571	723	0.9%
Spain	1741	2924	3003	4270	3003	3913	-8.4%
Sweden	3650	4909	5179	6417	5179	6179	-3.7%
United Kingdom	2488	3646	3703	4600	3703	4565	-0.8%
FORMER U.S.S.R.	6238	2124	2300	3801	2300	3512	-7.6%
Russian Fed	n/a	1694	1863	3072	1863	2789	-9.2%
DEVELOPED, ALL	83631	124376	132965	173344	132945	173301	0.0%
DEVELOPING, ALL	13247	47729	58380	103329	58401	105237	1.8%
WORLD	96878	172105	191346	276672	191346	278538	0.7%

Appendix 3: Import Effects of Accelerated Tariff Liberalization Agreement, 1997-2010

Table 63--Import of roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	794	981	1035	1038	1035	1100	6.0%
South Africa	51	136	135	150	135	147	-1.9%
NORTH/CENTRAL AMERICA	6569	11027	12365	16883	12365	17607	4.3%
Canada	3149	8447	9651	13192	9651	14114	7.0%
Mexico	73	78	89	819	89	611	-25.4%
United States	3245	2350	2487	2710	2487	2717	0.3%
SOUTH AMERICA	99	95	299	358	299	359	0.4%
Brazil	45	52	220	257	220	257	0.1%
Chile	0	2	24	32	24	32	1.0%
ASIA	71372	71671	72892	95915	72681	86560	-9.8%
China	7920	8119	9164	13400	9164	13561	1.2%
Hong Kong	710	962	835	398	835	710	78.4%
Indonesia	0	178	192	292	192	293	0.5%
Japan	54022	47951	47623	60633	47345	50912	-16.0%
Korea, REP	6141	9924	10258	14825	10258	14531	-2.0%
Malaysia	257	361	381	940	381	1307	39.0%
Philippines	9	785	844	912	844	766	-16.0%
Singapore	1285	133	154	230	154	237	3.0%
Thailand	117	984	1024	1468	1091	1471	0.2%
OCEANIA	9	13	41	52	41	55	6.8%
Australia	2	7	23	26	23	28	6.8%
New Zealand	4	3	17	24	17	25	3.8%
EUROPE	35430	55560	58100	57941	57880	57428	-0.9%
Austria	4031	7630	8703	11436	8701	10811	-5.5%
Belgium-Luxembourg	3550	4258	4763	7037	4729	6590	-6.4%
Denmark	150	843	789	1130	726	969	-14.2%
Finland	4100	7747	8101	4117	8101	3969	-3.6%
France	3171	3320	3836	4441	3836	5616	26.5%
Germany	0	2988	3376	4422	3376	4499	1.7%
Greece	364	84	87	116	81	102	-11.7%
Ireland	28	83	78	15	87	151	911.4%
Italy	6542	6479	6346	9471	5861	8432	-11.0%
Netherlands	1133	833	745	961	747	963	0.2%
Portugal	362	2206	2328	1642	2546	2405	46.5%
Spain	1627	2397	2731	1961	2731	1818	-7.3%
Sweden	4546	8731	8280	3662	8280	3510	-4.2%
United Kingdom	455	1006	912	600	912	760	26.6%
FORMER U.S.S.R.	255	821	806	665	806	662	-0.4%
Russian Fed	n/a	325	346	410	346	384	-6.4%
DEVELOPED, ALL	96342	115441	119027	135610	118529	126306	-6.9%
DEVELOPING, ALL	18186	24727	26511	37242	26578	37466	0.6%
WORLD	114528	140168	145538	172852	145107	163772	-5.3%

Table 64--Import of fuelwood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	1	78	133	135	133	135	0.0%
South Africa	0	59	54	40	54	40	0.0%
NORTH/CENTRAL AMERICA	272	463	439	1067	439	862	-19.2%
Canada	44	122	135	146	135	146	0.0%
Mexico	2	2	17	731	17	526	-28.1%
United States	224	331	274	174	274	174	0.0%
SOUTH AMERICA	0	67	167	195	167	195	0.0%
Brazil	0	46	139	163	139	163	0.0%
Chile	0	0	0	0	0	0	
ASIA	798	2119	2244	3145	2244	3502	11.3%
China	0	181	218	289	218	289	0.0%
Hong Kong	137	78	90	136	90	136	0.0%
Indonesia	0	0	0	0	0	0	
Japan	111	630	576	339	576	339	0.0%
Korea, REP	0	454	525	757	525	757	0.0%
Malaysia	215	50	55	537	55	893	66.2%
Philippines	0	0	0	0	0	0	
Singapore	152	78	90	127	90	127	0.6%
Thailand	12	90	77	101	77	101	0.0%
OCEANIA	1	2	4	3	4	3	0.0%
Australia	1	1	3	2	3	2	0.0%
New Zealand	0	0	0	0	0	0	
EUROPE	1674	3078	3188	2906	3188	2823	-2.8%
Austria	68	265	268	257	266	240	-6.8%
Belgium-Luxembourg	85	170	166	134	166	147	9.8%
Denmark	26	157	135	80	135	80	0.0%
Finland	102	65	81	85	81	85	0.0%
France	218	181	191	173	191	140	-19.0%
Germany	0	555	643	710	643	703	-0.9%
Greece	3	4	4	2	4	2	0.0%
Ireland	0	6	5	3	5	3	0.0%
Italy	576	466	476	453	476	453	0.0%
Netherlands	65	136	140	105	142	109	3.9%
Portugal	0	17	19	20	19	20	0.0%
Spain	205	64	57	38	57	38	0.0%
Sweden	35	162	164	148	164	148	0.0%
United Kingdom	96	281	286	245	286	202	-17.6%
FORMER U.S.S.R.	0	5	5	3	5	3	0.0%
Russian Fed	0	0	0	0	0	0	
DEVELOPED, ALL	2054	4258	4265	3629	4265	3547	-2.3%
DEVELOPING, ALL	692	1554	1915	3825	1915	3977	4.0%
WORLD	2746	5812	6180	7455	6180	7524	0.9%

Table 65--Import of industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	793	904	902	903	902	965	6.9%
South Africa	51	77	81	110	81	107	-2.6%
NORTH/CENTRAL AMERICA	6297	10563	11925	15816	11925	16745	5.9%
Canada	3105	8325	9517	13046	9517	13968	7.1%
Mexico	71	76	73	88	73	86	-3.1%
United States	3021	2019	2214	2536	2214	2543	0.3%
SOUTH AMERICA	99	29	133	163	133	164	0.9%
Brazil	45	6	81	94	81	95	0.3%
Chile	0	2	24	32	24	32	1.0%
ASIA	70574	69549	70648	92770	70437	83058	-10.5%
China	7920	7938	8946	13111	8946	13272	1.2%
Hong Kong	573	884	745	262	745	574	119.1%
Indonesia	0	178	192	292	192	293	0.5%
Japan	53911	47321	47047	60294	46769	50573	-16.1%
Korea, REP	6141	9470	9733	14068	9733	13774	-2.1%
Malaysia	42	311	326	403	326	414	2.7%
Philippines	9	785	844	912	844	766	-16.0%
Singapore	1133	55	64	103	64	109	6.0%
Thailand	105	894	947	1367	1014	1370	0.2%
OCEANIA	8	11	38	49	38	52	7.2%
Australia	1	6	20	25	20	26	7.3%
New Zealand	4	3	17	24	17	25	3.8%
EUROPE	33756	52485	54912	55035	54692	54605	-0.8%
Austria	3963	7365	8435	11179	8435	10571	-5.4%
Belgium-Luxembourg	3465	4088	4597	6903	4563	6443	-6.7%
Denmark	124	687	654	1049	591	889	-15.3%
Finland	3998	7682	8020	4033	8020	3884	-3.7%
France	2953	3139	3645	4269	3645	5476	28.3%
Germany	0	2433	2733	3712	2733	3796	2.3%
Greece	361	80	83	113	78	100	-11.9%
Ireland	28	77	73	12	82	147	1181%
Italy	5966	6013	5870	9018	5385	7979	-11.5%
Netherlands	1068	697	605	856	605	854	-0.2%
Portugal	362	2189	2309	1622	2527	2385	47.0%
Spain	1422	2333	2674	1923	2674	1780	-7.4%
Sweden	4511	8569	8116	3514	8116	3362	-4.3%
United Kingdom	359	725	627	355	627	558	57.1%
FORMER U.S.S.R.	255	815	801	662	801	659	-0.4%
Russian Fed	n/a	325	346	410	346	384	-6.4%
DEVELOPED, ALL	94288	111185	114762	131981	114264	122759	-7.0%
DEVELOPING, ALL	17494	23171	24596	33417	24663	33489	0.2%
WORLD	111782	134356	139358	165397	138927	156248	-5.5%

Table 66--Import of other industrial roundwood (thousand CUM)

Country	Actual		Projection				Change 2010
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	245	0	0	0	0	0	
South Africa	1	0	0	0	0	0	
NORTH/CENTRAL AMERICA	1295	0	0	0	0	0	
Canada	400	0	0	0	0	0	
Mexico	0	0	0	0	0	0	
United States	860	0	0	0	0	0	
SOUTH AMERICA	15	0	0	0	0	0	
Brazil	9	0	0	0	0	0	
Chile	0	0	0	0	0	0	
ASIA	320	0	0	0	0	0	
China	0	0	0	0	0	0	
Hong Kong	0	0	0	0	0	0	
Indonesia	0	0	0	0	0	0	
Japan	56	0	0	0	0	0	
Korea, REP	0	0	0	0	0	0	
Malaysia	10	0	0	0	0	0	
Philippines	1	0	0	0	0	0	
Singapore	14	0	0	0	0	0	
Thailand	0	0	0	0	0	0	
OCEANIA	4	0	0	0	0	0	
Australia	0	0	0	0	0	0	
New Zealand	3	0	0	0	0	0	
EUROPE	2394	0	0	0	0	0	
Austria	1094	0	0	0	0	0	
Belgium-Luxembourg	12	0	0	0	0	0	
Denmark	10	0	0	0	0	0	
Finland	2	0	0	0	0	0	
France	52	0	0	0	0	0	
Germany	0	0	0	0	0	0	
Greece	14	0	0	0	0	0	
Ireland	0	0	0	0	0	0	
Italy	96	0	0	0	0	0	
Netherlands	220	0	0	0	0	0	
Portugal	13	0	0	0	0	0	
Spain	1	0	0	0	0	0	
Sweden	5	0	0	0	0	0	
United Kingdom	196	0	0	0	0	0	
FORMER U.S.S.R.	0	0	0	0	0	0	
Russian Fed	0	0	0	0	0	0	
DEVELOPED, ALL	3714	0	0	0	0	0	
DEVELOPING, ALL	559	0	0	0	0	0	
WORLD	4273	0	0	0	0	0	

Table 67--Import of sawnwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	3169	4950	5286	6385	5287	6387	0.0%
South Africa	302	466	502	538	502	579	7.6%
NORTH/CENTRAL AMERICA	26303	47814	41723	48699	41723	45113	-7.4%
Canada	1613	1824	1985	2650	1985	2644	-0.2%
Mexico	535	1485	1713	2559	1713	2559	0.0%
United States	22918	43610	37093	42420	37093	38846	-8.4%
SOUTH AMERICA	1453	702	808	1182	808	1142	-3.4%
Brazil	462	379	439	700	439	717	2.5%
Chile	0	24	25	30	25	30	-0.3%
ASIA	10727	23218	26203	31625	26204	37946	20.0%
China	139	3146	3576	5407	3576	5427	0.4%
Hong Kong	176	931	840	1284	840	1093	-14.9%
Indonesia	0	33	39	57	39	57	0.5%
Japan	5573	12590	14452	14787	14452	21105	42.7%
Korea, REP	0	985	1141	1590	1141	1772	11.4%
Malaysia	213	329	387	576	387	576	0.0%
Philippines	0	412	476	732	476	737	0.7%
Singapore	1130	602	681	972	681	972	0.0%
Thailand	342	1463	1690	2606	1690	2608	0.1%
OCEANIA	1075	847	970	1364	977	1373	0.7%
Australia	993	757	873	1280	873	1280	0.0%
New Zealand	25	32	37	12	44	21	66.9%
EUROPE	27412	37498	40555	39703	41447	42861	8.0%
Austria	583	1033	1217	1438	1217	1491	3.7%
Belgium-Luxembourg	1604	2007	2136	1763	2308	2332	32.3%
Denmark	1317	2230	2333	2038	2426	2412	18.4%
Finland	32	242	276	369	276	393	6.6%
France	3429	2381	2759	3428	2759	3828	11.7%
Germany	0	5245	6031	4446	6031	5481	23.3%
Greece	545	775	820	714	878	869	21.8%
Ireland	466	462	437	154	437	154	0.0%
Italy	5774	6905	7528	6446	7955	7730	19.9%
Netherlands	3179	3376	3490	3596	3518	3815	6.1%
Portugal	18	245	281	414	281	417	0.9%
Spain	1218	2175	2509	3696	2509	3446	-6.8%
Sweden	334	224	282	403	282	428	6.4%
United Kingdom	6632	7102	7128	6652	7242	6076	-8.7%
FORMER U.S.S.R.	356	632	684	888	684	866	-2.5%
Russian Fed	n/a	36	38	43	38	43	-0.2%
DEVELOPED, ALL	59397	97945	96738	102932	97637	108856	5.8%
DEVELOPING, ALL	11098	17716	19491	26915	19493	26832	-0.3%
WORLD	70495	115661	116229	129847	117130	135688	4.5%

Table 68--Import of wood-based panels (thousand CUM)

Country	Actual		Projection				Change 2010
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	532	709	754	1005	741	961	-4.4%
South Africa	23	112	110	126	105	125	-1.1%
NORTH/CENTRAL AMERICA	2636	10472	11165	11872	11307	13383	12.7%
Canada	232	1086	1197	1236	1197	1303	5.5%
Mexico	74	309	358	553	358	557	0.9%
United States	2145	8845	9360	9762	9504	11207	14.8%
SOUTH AMERICA	231	460	490	644	492	644	0.0%
Brazil	88	190	216	319	221	351	10.0%
Chile	0	21	24	37	24	38	1.3%
ASIA	2034	18926	21256	30210	21403	31140	3.1%
China	49	5089	5890	9616	5890	9552	-0.7%
Hong Kong	274	1705	1911	2955	1911	2939	-0.6%
Indonesia	2	44	51	33	56	50	52.1%
Japan	316	7379	8157	9849	8367	11116	12.9%
Korea, REP	0	1728	1998	3200	1998	3084	-3.6%
Malaysia	29	139	156	227	156	230	1.6%
Philippines	0	244	279	431	280	430	-0.1%
Singapore	361	676	758	1165	696	1060	-9.0%
Thailand	8	88	101	160	101	160	-0.3%
OCEANIA	107	254	288	417	280	409	-1.8%
Australia	83	215	249	380	239	372	-2.3%
New Zealand	6	18	17	8	19	9	13.0%
EUROPE	7429	16565	18721	23860	18702	25882	8.5%
Austria	67	415	482	676	482	764	13.1%
Belgium-Luxembourg	427	772	891	1247	891	1385	11.0%
Denmark	355	650	751	1008	751	975	-3.3%
Finland	20	132	154	167	154	234	40.1%
France	993	1294	1497	2120	1497	2313	9.1%
Germany	0	3374	3887	5057	3887	5766	14.0%
Greece	11	200	231	332	231	325	-2.1%
Ireland	43	181	191	259	196	268	3.4%
Italy	791	1409	1631	2235	1631	2383	6.6%
Netherlands	1216	1415	1630	2037	1630	2070	1.6%
Portugal	1	115	131	193	131	200	3.7%
Spain	10	966	1112	1139	1112	1519	33.4%
Sweden	167	603	695	764	695	890	16.5%
United Kingdom	2445	2872	3224	3666	3224	4119	12.4%
FORMER U.S.S.R.	187	469	487	695	486	629	-9.6%
Russian Fed	n/a	115	127	160	127	147	-8.2%
DEVELOPED, ALL	10469	34968	38601	46400	38922	51112	10.2%
DEVELOPING, ALL	2687	12887	14559	22302	14489	21935	-1.6%
WORLD	13156	47855	53160	68702	53410	73047	6.3%

Table 69--Import of veneer sheets and plywood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	299	455	479	643	471	599	-6.8%
South Africa	20	55	57	79	57	68	-14.1%
NORTH/CENTRAL AMERICA	1636	3545	3749	3716	3748	4234	13.9%
Canada	111	621	680	589	680	669	13.6%
Mexico	32	204	236	369	236	371	0.5%
United States	1369	2568	2671	2556	2671	2997	17.3%
SOUTH AMERICA	156	156	151	165	150	154	-6.5%
Brazil	88	32	38	63	38	67	6.2%
Chile	0	2	2	5	2	5	2.2%
ASIA	1678	13894	15543	22386	15686	22915	2.4%
China	13	3186	3690	5987	3690	5926	-1.0%
Hong Kong	250	1431	1636	2561	1636	2560	0.0%
Indonesia	2	5	11	16	11	16	-3.7%
Japan	224	5942	6496	8347	6706	9098	9.0%
Korea, REP	0	1377	1594	2561	1594	2532	-1.1%
Malaysia	24	54	59	79	59	81	3.6%
Philippines	0	98	113	176	113	174	-1.1%
Singapore	315	613	686	1053	623	954	-9.4%
Thailand	2	71	82	131	82	130	-0.7%
OCEANIA	95	113	128	186	118	176	-5.3%
Australia	81	91	105	161	95	151	-6.1%
New Zealand	4	7	6	4	6	4	0.0%
EUROPE	2982	5414	6058	7554	6051	8434	11.7%
Austria	34	134	155	209	155	243	16.2%
Belgium-Luxembourg	241	367	423	551	423	643	16.6%
Denmark	160	201	231	285	231	299	4.9%
Finland	17	36	42	47	42	64	35.0%
France	482	408	470	629	470	714	13.5%
Germany	0	1285	1482	1889	1482	2246	18.9%
Greece	3	22	25	36	25	38	5.2%
Ireland	35	79	91	135	91	135	0.0%
Italy	207	467	539	651	539	811	24.7%
Netherlands	555	487	558	678	558	696	2.7%
Portugal	1	17	20	29	20	31	6.3%
Spain	6	178	206	227	206	305	34.4%
Sweden	126	213	245	311	245	346	11.5%
United Kingdom	849	998	1063	1272	1063	1278	0.5%
FORMER U.S.S.R.	187	103	98	152	98	140	-8.1%
Russian Fed	n/a	10	9	15	9	14	-7.9%
DEVELOPED, ALL	5026	14879	16256	19569	16449	21684	10.8%
DEVELOPING, ALL	2007	8801	9949	15233	9872	14969	-1.7%
WORLD	7033	23680	26205	34802	26321	36652	5.3%

Table 70--Import of particle board (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	96	82	83	97	78	100	3.5%
South Africa	3	46	44	43	39	54	23.5%
NORTH/CENTRAL AMERICA	653	5741	6354	7372	6498	8449	14.6%
Canada	50	261	323	531	323	523	-1.5%
Mexico	35	33	39	58	39	58	0.7%
United States	538	5410	5952	6728	6096	7813	16.1%
SOUTH AMERICA	50	192	217	301	216	311	3.4%
Brazil	0	121	140	194	140	214	10.2%
Chile	0	16	19	30	19	29	-2.4%
ASIA	249	2025	2267	3004	2267	3099	3.2%
China	36	440	501	792	501	792	0.0%
Hong Kong	4	133	113	129	113	114	-12.1%
Indonesia	0	10	10	7	11	9	33.3%
Japan	75	673	780	790	780	1010	27.8%
Korea, REP	0	293	337	526	337	439	-16.6%
Malaysia	0	70	81	125	81	125	0.3%
Philippines	0	42	49	74	49	74	0.7%
Singapore	25	49	57	86	57	80	-7.1%
Thailand	0	5	6	10	6	10	3.0%
OCEANIA	5	20	22	28	22	28	1.4%
Australia	0	13	15	22	15	22	0.5%
New Zealand	2	3	3	1	3	1	42.9%
EUROPE	3393	7469	8491	11281	8474	11313	0.3%
Austria	27	179	209	336	209	337	0.3%
Belgium-Luxembourg	111	200	231	356	231	359	0.9%
Denmark	135	401	464	649	464	590	-9.1%
Finland	2	35	42	50	42	60	19.2%
France	386	613	711	1100	711	1102	0.2%
Germany	0	1546	1776	2296	1776	2535	10.4%
Greece	2	71	82	107	82	98	-8.3%
Ireland	0	54	50	52	50	61	17.0%
Italy	483	644	747	1076	747	1032	-4.1%
Netherlands	529	618	715	900	715	901	0.1%
Portugal	0	51	58	85	58	87	2.7%
Spain	3	446	512	617	512	608	-1.5%
Sweden	31	287	331	313	331	362	15.9%
United Kingdom	1280	1119	1291	1467	1291	1535	4.7%
FORMER U.S.S.R.	0	282	307	430	306	382	-11.0%
Russian Fed	0	105	118	145	118	133	-8.2%
DEVELOPED, ALL	4061	14273	16048	20042	16170	21325	6.4%
DEVELOPING, ALL	385	1538	1693	2471	1691	2359	-4.5%
WORLD	4446	15811	17741	22513	17860	23684	5.2%

Table 71--Import of fiberboard (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	137	172	192	265	192	261	-1.4%
South Africa	0	11	9	4	9	4	-11.9%
NORTH/CENTRAL AMERICA	347	1186	1062	783	1062	699	-10.7%
Canada	71	204	195	116	195	112	-3.9%
Mexico	7	72	83	126	83	128	1.8%
United States	238	867	737	478	737	396	-17.1%
SOUTH AMERICA	25	112	122	178	127	179	0.2%
Brazil	0	37	39	62	43	70	13.7%
Chile	0	3	3	3	3	4	34.4%
ASIA	107	3007	3446	4819	3450	5126	6.4%
China	0	1463	1699	2837	1699	2834	-0.1%
Hong Kong	20	141	163	265	163	265	0.0%
Indonesia	0	29	30	10	34	25	156.6%
Japan	17	764	881	711	881	1008	41.7%
Korea, REP	0	58	68	113	68	113	0.0%
Malaysia	5	15	17	23	17	24	2.1%
Philippines	0	104	118	181	119	182	0.6%
Singapore	21	14	16	26	16	26	0.0%
Thailand	6	12	13	19	13	20	0.5%
OCEANIA	7	121	139	203	140	205	0.9%
Australia	2	111	129	197	129	198	0.6%
New Zealand	0	8	8	3	9	4	23.3%
EUROPE	1054	3682	4172	5025	4177	6134	22.1%
Austria	6	102	118	131	118	185	40.7%
Belgium-Luxembourg	75	205	237	340	237	383	12.6%
Denmark	60	48	56	73	56	85	16.2%
Finland	1	61	71	69	71	110	58.8%
France	125	273	316	391	316	497	27.2%
Germany	0	543	629	872	629	985	12.9%
Greece	6	107	124	189	124	189	0.0%
Ireland	8	48	50	72	55	72	0.0%
Italy	101	298	345	508	345	540	6.3%
Netherlands	132	310	357	460	357	473	2.8%
Portugal	0	47	54	79	54	82	3.9%
Spain	1	342	394	295	394	607	105.6%
Sweden	10	103	118	141	118	181	28.8%
United Kingdom	316	755	870	928	870	1306	40.8%
FORMER U.S.S.R.	0	84	82	113	82	106	-6.1%
Russian Fed	0	0	0	0	0	0	
DEVELOPED, ALL	1382	5816	6297	6789	6303	8103	19.4%
DEVELOPING, ALL	295	2548	2917	4598	2926	4607	0.2%
WORLD	1677	8364	9215	11387	9229	12710	11.6%

Table 72--Import of woodpulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	319	306	325	460	327	497	8.1%
South Africa	209	95	109	126	109	141	11.9%
NORTH/CENTRAL AMERICA	3804	6291	6840	7094	6841	7015	-1.1%
Canada	88	238	262	445	262	442	-0.7%
Mexico	208	307	355	393	355	498	26.6%
United States	3414	5704	6184	6188	6185	6015	-2.8%
SOUTH AMERICA	437	783	886	1046	891	1084	3.6%
Brazil	53	236	268	349	268	394	12.9%
Chile	0	11	11	13	11	13	0.0%
ASIA	3176	9786	11086	11478	11079	11327	-1.3%
China	419	2305	2572	3174	2572	2945	-7.2%
Hong Kong	1	7	6	7	6	10	44.8%
Indonesia	69	847	971	1111	971	877	-21.0%
Japan	1925	3225	3667	2806	3661	2864	2.1%
Korea, REP	433	1977	2281	2578	2281	2856	10.8%
Malaysia	5	71	85	122	85	86	-29.5%
Philippines	55	96	111	119	111	135	13.8%
Singapore	5	31	34	43	34	45	5.1%
Thailand	80	337	393	527	392	500	-5.2%
OCEANIA	279	214	246	246	246	293	19.1%
Australia	271	203	234	237	234	285	20.4%
New Zealand	8	11	11	8	11	7	-15.5%
EUROPE	8079	15169	15186	18584	15155	19100	2.8%
Austria	175	555	525	571	525	675	18.3%
Belgium-Luxembourg	389	528	579	788	561	810	2.8%
Denmark	96	78	79	70	79	92	31.6%
Finland	8	47	51	85	51	64	-24.7%
France	1688	2123	2075	2644	2075	2729	3.2%
Germany	0	3631	3517	4131	3517	4413	6.8%
Greece	74	124	130	143	121	136	-5.2%
Ireland	33	11	0	0	0	0	
Italy	1756	3094	3230	4014	3226	3896	-2.9%
Netherlands	615	1108	998	1314	998	1353	3.0%
Portugal	39	89	100	103	100	115	11.3%
Spain	281	556	543	796	543	736	-7.6%
Sweden	46	249	240	307	240	328	7.0%
United Kingdom	1576	1743	1741	1843	1741	1899	3.0%
FORMER U.S.S.R.	221	69	74	82	74	91	11.0%
Russian Fed	n/a	23	22	24	22	25	1.7%
DEVELOPED, ALL	14256	24826	25854	28676	25818	29148	1.6%
DEVELOPING, ALL	2059	7792	8789	10313	8796	10260	-0.5%
WORLD	16315	32618	34643	38989	34614	39408	1.1%

Table 73--Import of mechanical pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	7	67	65	126	65	135	7.1%
South Africa	1	0	0	0	0	0	
NORTH/CENTRAL AMERICA	162	132	149	320	151	215	-32.8%
Canada	0	18	24	30	24	30	0.7%
Mexico	27	0	0	0	0	0	
United States	135	95	106	253	107	151	-40.4%
SOUTH AMERICA	32	10	14	15	14	17	13.6%
Brazil	0	3	3	5	3	4	-6.5%
Chile	0	0	0	0	0	0	
ASIA	479	732	864	865	863	984	13.7%
China	3	188	268	340	268	381	12.1%
Hong Kong	0	0	0	0	0	0	
Indonesia	39	71	79	95	79	108	14.0%
Japan	375	424	447	317	447	344	8.5%
Korea, REP	31	8	8	22	8	25	11.2%
Malaysia	0	0	0	0	0	0	
Philippines	2	3	4	3	4	3	10.7%
Singapore	0	0	0	0	0	0	
Thailand	2	7	11	12	11	18	53.0%
OCEANIA	4	2	2	3	2	3	8.0%
Australia	4	2	2	3	2	3	8.0%
New Zealand	0	0	0	0	0	0	
EUROPE	524	424	406	413	406	368	-11.0%
Austria	4	4	4	4	4	4	2.4%
Belgium-Luxembourg	59	3	3	1	3	2	61.5%
Denmark	12	7	7	5	7	4	-17.3%
Finland	3	4	5	30	5	6	-79.1%
France	61	31	33	62	33	31	-49.7%
Germany	0	54	59	48	59	45	-5.1%
Greece	8	0	0	0	0	0	
Ireland	1	0	0	0	0	0	
Italy	112	153	145	119	145	134	13.1%
Netherlands	53	44	40	32	40	32	0.9%
Portugal	6	4	5	3	5	4	11.8%
Spain	9	7	7	5	7	5	1.9%
Sweden	1	9	9	11	9	11	-1.9%
United Kingdom	183	96	82	74	82	80	7.4%
FORMER U.S.S.R.	0	0	0	0	0	0	
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	1040	967	989	1023	990	903	-11.7%
DEVELOPING, ALL	168	400	511	718	511	818	13.9%
WORLD	1208	1367	1501	1741	1501	1721	-1.2%

Table 74--Import of chemical pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	312	239	260	334	261	363	8.5%
South Africa	208	95	109	126	109	141	11.9%
NORTH/CENTRAL AMERICA	3642	6159	6691	6774	6691	6801	0.4%
Canada	88	220	238	415	238	412	-0.8%
Mexico	181	307	355	393	355	498	26.6%
United States	3279	5609	6078	5935	6078	5864	-1.2%
SOUTH AMERICA	405	773	871	1032	877	1068	3.5%
Brazil	53	233	265	344	265	390	13.2%
Chile	0	11	11	13	11	13	0.0%
ASIA	2697	9054	10223	10613	10216	10343	-2.5%
China	416	2117	2304	2834	2304	2564	-9.5%
Hong Kong	1	7	6	7	6	10	44.8%
Indonesia	30	776	892	1016	892	769	-24.3%
Japan	1550	2801	3220	2490	3214	2521	1.2%
Korea, REP	402	1969	2273	2556	2273	2831	10.8%
Malaysia	5	71	85	122	85	86	-29.5%
Philippines	53	93	108	116	108	132	13.9%
Singapore	5	31	34	43	34	45	5.1%
Thailand	78	330	381	516	381	482	-6.5%
OCEANIA	275	212	244	243	244	290	19.3%
Australia	267	201	232	235	232	283	20.5%
New Zealand	8	11	11	8	11	7	-15.5%
EUROPE	7555	14745	14780	18171	14750	18733	3.1%
Austria	171	551	522	566	522	671	18.4%
Belgium-Luxembourg	330	525	577	786	559	808	2.7%
Denmark	84	71	72	64	72	87	35.6%
Finland	5	43	46	55	46	58	4.5%
France	1627	2092	2042	2582	2042	2697	4.5%
Germany	0	3577	3458	4083	3458	4368	7.0%
Greece	66	124	130	143	121	136	-5.2%
Ireland	32	11	0	0	0	0	
Italy	1644	2941	3085	3895	3081	3762	-3.4%
Netherlands	562	1064	958	1282	958	1321	3.1%
Portugal	33	85	96	100	96	111	11.3%
Spain	272	549	536	791	536	730	-7.6%
Sweden	45	240	231	296	231	318	7.3%
United Kingdom	1393	1647	1660	1769	1660	1819	2.9%
FORMER U.S.S.R.	221	69	74	82	74	91	11.0%
Russian Fed	n/a	23	22	24	22	25	1.7%
DEVELOPED, ALL	13216	23859	24865	27653	24828	28245	2.1%
DEVELOPING, ALL	1891	7392	8277	9595	8285	9442	-1.6%
WORLD	15107	31251	33142	37248	33113	37687	1.2%

Table 75--Import of other fiber pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	36	4	5	9	5	8	-3.5%
South Africa	0	0	0	0	0	0	
NORTH/CENTRAL AMERICA	27	53	61	88	62	88	-0.1%
Canada	4	30	35	49	35	52	6.3%
Mexico	0	13	14	21	15	21	-3.3%
United States	23	8	10	16	10	14	-15.4%
SOUTH AMERICA	2	12	12	8	12	7	-13.3%
Brazil	1	10	10	4	10	4	-18.6%
Chile	0	0	0	0	0	0	
ASIA	49	121	114	337	114	345	2.4%
China	9	14	16	202	16	216	7.1%
Hong Kong	0	0	0	0	0	0	
Indonesia	18	2	2	4	2	3	-2.9%
Japan	11	45	39	39	39	37	-4.9%
Korea, REP	4	23	20	35	20	31	-11.3%
Malaysia	0	0	0	0	0	0	
Philippines	0	0	0	0	0	0	
Singapore	0	0	0	0	0	0	
Thailand	1	14	16	26	16	26	-0.4%
OCEANIA	2	3	3	3	3	3	-3.6%
Australia	2	3	3	3	3	3	-3.6%
New Zealand	0	0	0	0	0	0	
EUROPE	74	172	177	203	176	198	-2.8%
Austria	5	7	7	7	7	6	-15.5%
Belgium-Luxembourg	3	5	5	6	5	6	0.0%
Denmark	0	1	1	1	1	1	-23.1%
Finland	0	1	1	2	1	2	6.2%
France	15	39	39	54	39	52	-3.6%
Germany	0	12	14	23	14	23	0.0%
Greece	4	0	0	0	0	0	
Ireland	0	0	0	0	0	0	
Italy	6	19	22	26	22	16	-38.8%
Netherlands	6	10	11	16	11	18	12.8%
Portugal	0	0	0	0	0	0	
Spain	1	5	6	7	6	7	1.4%
Sweden	3	21	18	0	18	0	
United Kingdom	13	27	27	27	27	31	13.6%
FORMER U.S.S.R.	0	0	0	0	0	0	
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	114	259	264	312	264	305	-2.3%
DEVELOPING, ALL	76	106	107	336	108	344	2.4%
WORLD	190	365	371	647	372	648	0.1%

Table 76--Import of waste paper (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	31	77	86	65	86	67	3.4%
South Africa	1	6	33	33	33	34	0.9%
NORTH/CENTRAL AMERICA	1106	2383	2362	2182	2362	2092	-4.1%
Canada	510	535	686	894	686	856	-4.3%
Mexico	486	1152	1093	1011	1093	952	-5.9%
United States	78	628	533	250	533	250	-0.2%
SOUTH AMERICA	148	254	217	178	217	184	3.4%
Brazil	0	22	14	0	14	8	
Chile	0	0	0	0	0	0	
ASIA	1593	7714	10322	15916	10282	15777	-0.9%
China	559	2941	4075	6625	4030	6535	-1.4%
Hong Kong	3	97	83	54	83	59	9.1%
Indonesia	12	1382	1628	2780	1628	2778	-0.1%
Japan	224	362	1099	940	1099	965	2.7%
Korea, REP	569	1452	1895	3835	1895	3591	-6.4%
Malaysia	13	36	34	0	34	17	
Philippines	47	231	226	377	226	348	-7.7%
Singapore	3	63	53	15	53	27	74.7%
Thailand	155	622	702	1170	707	1169	-0.1%
OCEANIA	11	77	39	8	39	32	307.7%
Australia	11	5	39	8	39	32	307.7%
New Zealand	0	0	0	0	0	0	
EUROPE	2254	6956	6696	8638	6735	8916	3.2%
Austria	318	614	610	957	647	1016	6.1%
Belgium-Luxembourg	111	242	250	367	250	367	0.0%
Denmark	23	85	71	103	71	91	-11.7%
Finland	1	32	261	881	262	955	8.3%
France	323	998	865	767	865	695	-9.4%
Germany	0	918	871	1386	871	1403	1.2%
Greece	17	9	8	4	8	3	-17.1%
Ireland	1	11	9	3	9	7	136.7%
Italy	650	876	736	107	736	245	128.9%
Netherlands	247	1111	964	1552	964	1615	4.0%
Portugal	0	29	27	16	27	22	37.8%
Spain	229	731	624	238	624	252	5.8%
Sweden	206	553	745	1465	745	1423	-2.9%
United Kingdom	27	79	65	32	65	58	84.5%
FORMER U.S.S.R.	0	59	51	70	51	74	6.6%
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	3078	8591	9169	10840	9208	11151	2.9%
DEVELOPING, ALL	2065	8929	10603	16216	10563	15991	-1.4%
WORLD	5143	17520	19772	27056	19771	27141	0.3%

Table 77--Import of total paper and paperboard (thousand MT)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	897	1504	1515	1515	1512	1531	1.1%
South Africa	173	354	337	275	337	243	-11.7%
NORTH/CENTRAL AMERICA	9531	18285	17415	20475	17415	20395	-0.4%
Canada	260	2049	2084	2390	2084	2624	9.8%
Mexico	497	940	1067	1183	1067	1450	22.6%
United States	8054	14381	13315	15682	13315	15085	-3.8%
SOUTH AMERICA	1175	3382	3355	3249	3355	3669	12.9%
Brazil	261	1171	1142	1357	1142	1708	25.9%
Chile	54	256	292	332	292	378	13.7%
ASIA	4253	18971	19136	26522	19284	27644	4.2%
China	624	6583	5733	8470	5863	9431	11.4%
Hong Kong	585	4056	4420	7069	4420	7124	0.8%
Indonesia	213	199	229	355	229	327	-7.9%
Japan	656	1614	1858	1610	1858	1554	-3.5%
Korea, REP	31	548	628	974	628	982	0.9%
Malaysia	252	993	1151	1997	1151	2003	0.3%
Philippines	120	406	446	496	446	623	25.8%
Singapore	273	750	862	1429	862	1449	1.4%
Thailand	135	405	422	713	441	707	-0.8%
OCEANIA	763	1390	1491	1766	1492	1609	-8.9%
Australia	695	1136	1246	1534	1246	1297	-15.5%
New Zealand	43	237	228	211	229	292	38.3%
EUROPE	11970	38681	43157	59383	43304	59993	1.0%
Austria	215	1043	1152	1519	1152	1692	11.4%
Belgium-Luxembourg	975	2655	2962	4105	3002	4157	1.3%
Denmark	625	1132	1215	1586	1215	1569	-1.1%
Finland	53	232	236	315	236	309	-1.8%
France	2109	3556	4010	5289	4051	5705	7.9%
Germany	0	7230	8277	11694	8310	11578	-1.0%
Greece	161	540	617	801	622	769	-4.1%
Ireland	222	506	578	1078	578	1078	0.0%
Italy	861	3564	3675	4989	3687	5014	0.5%
Netherlands	1435	3075	3533	4752	3533	4786	0.7%
Portugal	76	569	616	814	635	897	10.3%
Spain	294	2770	3168	4006	3168	4092	2.2%
Sweden	182	489	550	786	550	831	5.7%
United Kingdom	3511	7098	7956	11652	7956	11563	-0.8%
FORMER U.S.S.R.	905	1005	979	1350	979	1414	4.8%
Russian Fed	n/a	504	455	564	455	615	9.0%
DEVELOPED, ALL	22867	59827	63615	83095	63764	83186	0.1%
DEVELOPING, ALL	6627	23391	23433	31164	23579	33070	6.1%
WORLD	29494	83218	87048	114259	87342	116256	1.7%

Table 78--Import of newsprint (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	144	200	217	299	217	303	1.1%
South Africa	0	3	3	4	3	4	2.5%
NORTH/CENTRAL AMERICA	6819	6780	6489	7033	6489	6875	-2.2%
Canada	0	19	19	24	19	24	-0.8%
Mexico	110	108	125	168	125	192	14.4%
United States	6594	6502	6182	6624	6182	6435	-2.8%
SOUTH AMERICA	625	961	970	1174	970	1326	12.9%
Brazil	167	471	480	590	480	738	25.2%
Chile	0	22	25	34	25	37	7.0%
ASIA	1187	3794	4049	4763	4068	4936	3.6%
China	156	886	915	1013	915	1141	12.7%
Hong Kong	90	424	491	828	491	831	0.4%
Indonesia	66	38	44	58	44	55	-4.3%
Japan	127	629	725	554	725	514	-7.2%
Korea, REP	0	14	16	21	16	20	-2.4%
Malaysia	66	299	347	602	347	605	0.4%
Philippines	20	24	28	36	28	36	0.6%
Singapore	60	170	197	350	197	354	1.3%
Thailand	92	172	151	274	170	260	-5.2%
OCEANIA	340	255	283	254	283	229	-10.1%
Australia	337	250	278	248	278	222	-10.4%
New Zealand	0	0	0	0	0	0	
EUROPE	2512	6214	6824	9280	6878	9385	1.1%
Austria	2	106	123	174	123	134	-22.8%
Belgium-Luxembourg	126	234	270	327	270	322	-1.6%
Denmark	153	263	272	353	272	353	0.0%
Finland	0	39	41	50	41	48	-2.6%
France	371	493	467	549	509	757	37.9%
Germany	0	1162	1339	1802	1339	1752	-2.8%
Greece	40	97	112	141	112	142	0.4%
Ireland	61	173	200	364	200	364	0.0%
Italy	64	438	457	647	470	673	4.0%
Netherlands	332	449	515	670	515	665	-0.8%
Portugal	41	84	94	130	94	130	0.0%
Spain	58	397	458	646	458	638	-1.3%
Sweden	0	38	46	59	46	62	5.6%
United Kingdom	1077	1628	1756	2439	1756	2433	-0.2%
FORMER U.S.S.R.	30	129	141	220	141	223	1.2%
Russian Fed	n/a	1	1	2	1	2	0.0%
DEVELOPED, ALL	9634	13879	14319	17210	14373	17064	-0.8%
DEVELOPING, ALL	2023	4454	4654	5813	4672	6211	6.9%
WORLD	11657	18333	18973	23023	19046	23275	1.1%

Table 79--Import of printing and writing paper (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	267	402	392	355	389	386	8.8%
South Africa	93	173	164	125	164	140	11.9%
NORTH/CENTRAL AMERICA	1120	5732	5466	7129	5466	6838	-4.1%
Canada	127	738	700	848	700	761	-10.2%
Mexico	65	101	96	74	96	131	77.1%
United States	848	4768	4543	6060	4543	5799	-4.3%
SOUTH AMERICA	200	305	293	231	293	267	15.7%
Brazil	68	41	38	53	38	61	15.2%
Chile	13	60	66	67	66	105	56.1%
ASIA	603	3832	3798	4830	3927	5631	16.6%
China	7	1441	1251	1396	1381	2191	56.9%
Hong Kong	117	802	874	1308	874	1345	2.9%
Indonesia	35	37	41	67	41	60	-10.6%
Japan	26	151	173	157	173	136	-13.2%
Korea, REP	0	112	129	171	129	205	19.7%
Malaysia	62	206	238	431	238	432	0.3%
Philippines	12	84	73	39	73	38	-3.6%
Singapore	71	252	292	475	292	488	2.8%
Thailand	9	54	64	109	64	113	3.5%
OCEANIA	209	696	804	1204	805	1047	-13.0%
Australia	181	625	725	1099	725	930	-15.4%
New Zealand	26	66	74	99	75	112	12.7%
EUROPE	2973	15182	16863	24095	16924	24425	1.4%
Austria	57	544	574	750	574	914	22.0%
Belgium-Luxembourg	338	1289	1387	2187	1427	2213	1.2%
Denmark	136	375	419	589	419	616	4.5%
Finland	4	44	49	68	49	69	0.6%
France	597	957	1111	1490	1111	1762	18.2%
Germany	0	3167	3650	5527	3650	5509	-0.3%
Greece	43	218	246	355	250	318	-10.4%
Ireland	22	126	146	336	146	336	0.0%
Italy	148	1247	1310	1554	1310	1458	-6.1%
Netherlands	394	1128	1296	1775	1296	1831	3.1%
Portugal	4	175	166	168	184	256	52.3%
Spain	82	1130	1279	1582	1279	1468	-7.2%
Sweden	33	130	139	185	139	225	21.7%
United Kingdom	815	3059	3415	5463	3415	5363	-1.8%
FORMER U.S.S.R.	279	319	311	455	311	463	1.8%
Russian Fed	n/a	134	121	154	121	163	6.0%
DEVELOPED, ALL	4563	22086	23627	33050	23689	32886	-0.5%
DEVELOPING, ALL	1088	4382	4300	5248	4426	6171	17.6%
WORLD	5651	26468	27926	38298	28115	39057	2.0%

Table 80--Import of other paper and board (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	486	902	906	861	906	843	-2.1%
South Africa	80	178	169	146	169	99	-32.4%
NORTH/CENTRAL AMERICA	1592	5773	5461	6314	5461	6683	5.8%
Canada	133	1292	1365	1519	1365	1839	21.1%
Mexico	322	731	845	941	845	1127	19.8%
United States	612	3111	2589	2998	2589	2850	-4.9%
SOUTH AMERICA	350	2116	2092	1844	2092	2077	12.6%
Brazil	26	659	625	714	625	909	27.2%
Chile	41	174	201	231	201	236	2.3%
ASIA	2463	11345	11289	16929	11289	17076	0.9%
China	461	4256	3567	6061	3567	6099	0.6%
Hong Kong	378	2830	3055	4934	3055	4948	0.3%
Indonesia	112	124	144	231	144	212	-8.1%
Japan	503	834	959	900	959	903	0.4%
Korea, REP	31	422	484	782	484	757	-3.2%
Malaysia	124	488	566	964	566	967	0.3%
Philippines	88	298	345	421	345	549	30.7%
Singapore	142	328	373	605	373	606	0.3%
Thailand	34	179	207	330	207	335	1.3%
OCEANIA	214	439	404	308	404	334	8.4%
Australia	177	261	243	186	243	144	-22.7%
New Zealand	17	171	154	112	154	181	60.9%
EUROPE	6485	17285	19470	26009	19502	26184	0.7%
Austria	156	393	455	595	455	643	8.1%
Belgium-Luxembourg	511	1132	1306	1591	1306	1623	2.0%
Denmark	336	494	525	645	525	600	-6.9%
Finland	49	149	146	197	146	192	-2.5%
France	1141	2106	2432	3250	2432	3186	-2.0%
Germany	0	2901	3288	4365	3321	4317	-1.1%
Greece	78	225	260	305	260	309	1.2%
Ireland	139	207	232	379	232	379	0.0%
Italy	649	1879	1908	2789	1908	2883	3.4%
Netherlands	709	1498	1721	2306	1721	2290	-0.7%
Portugal	31	310	357	516	357	512	-0.8%
Spain	154	1243	1431	1778	1431	1987	11.7%
Sweden	149	321	365	543	365	544	0.3%
United Kingdom	1619	2411	2785	3750	2785	3767	0.5%
FORMER U.S.S.R.	596	557	527	675	527	729	8.0%
Russian Fed	n/a	369	333	408	333	450	10.2%
DEVELOPED, ALL	8670	23862	25669	32835	25701	33237	1.2%
DEVELOPING, ALL	3516	14555	14480	20103	14480	20687	2.9%
WORLD	12186	38417	40150	52939	40182	53924	1.9%

Appendix 4: Export Effects of Accelerated Tariff Liberalization Agreement, 1997-2010

Table 81--Export of roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	6372	8270	8902	11997	8902	11639	-3.0%
South Africa	227	2718	3131	4747	3131	4737	-0.2%
NORTH/CENTRAL AMERICA	26665	21353	20237	16114	20237	10124	-37.2%
Canada	4249	2592	2474	1511	2474	567	-62.4%
Mexico	11	149	157	190	157	190	-0.2%
United States	22362	18542	17539	14374	17539	9329	-35.1%
SOUTH AMERICA	1309	9437	10739	16358	10739	16374	0.1%
Brazil	162	1434	1754	2894	1754	2903	0.3%
Chile	1052	6174	7090	10965	7090	10980	0.1%
ASIA	34999	15441	15864	18054	15806	18071	0.1%
China	60	3404	2875	762	2875	876	15.1%
Hong Kong	84	587	678	995	678	846	-15.0%
Indonesia	16572	1722	1924	2862	1924	2942	2.8%
Japan	21	12	76	93	76	83	-11.0%
Korea, REP	0	0	0	0	0	0	
Malaysia	15837	6994	7055	9012	6997	9133	1.3%
Philippines	1460	211	239	294	239	294	0.0%
Singapore	107	228	199	165	199	171	3.4%
Thailand	239	491	569	826	569	636	-23.0%
OCEANIA	9101	17096	18519	26565	18495	28268	6.4%
Australia	6637	8080	8192	10345	8168	12029	16.3%
New Zealand	1410	5828	6710	10543	6710	10551	0.1%
EUROPE	15773	28726	29722	35279	29373	35306	0.1%
Austria	951	2522	2750	3952	2490	3947	-0.1%
Belgium-Luxembourg	841	1375	1550	2111	1550	1688	-20.0%
Denmark	521	384	438	425	438	483	13.7%
Finland	2067	806	979	1639	979	1531	-6.6%
France	3414	4120	4352	6042	4352	5713	-5.5%
Germany	0	6011	5267	2181	5267	3931	80.2%
Greece	0	7	6	6	6	6	-3.5%
Ireland	188	412	433	722	391	342	-52.7%
Italy	8	17	14	16	14	15	-9.1%
Netherlands	673	591	665	731	665	847	15.9%
Portugal	759	716	811	1185	811	1202	1.5%
Spain	389	660	765	1137	765	1159	1.9%
Sweden	1310	1678	1894	2545	1894	2459	-3.4%
United Kingdom	154	88	89	115	89	129	11.9%
FORMER U.S.S.R.	14835	27129	28838	35766	28838	31273	-12.6%
Russian Fed	n/a	18723	19482	21529	19482	17064	-20.7%
DEVELOPED, ALL	65514	93627	96684	112658	96311	103876	-7.8%
DEVELOPING, ALL	43540	33825	36138	47476	36079	47179	-0.6%
WORLD	109054	127452	132821	160135	132390	151055	-5.7%

Table 82--Export of fuelwood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	190	365	402	419	402	419	0.0%
South Africa	185	176	197	243	197	243	0.0%
NORTH/CENTRAL AMERICA	75	544	523	448	523	455	1.5%
Canada	0	108	95	87	95	94	7.4%
Mexico	11	136	148	179	148	179	0.0%
United States	63	299	274	174	274	174	0.0%
SOUTH AMERICA	155	457	478	455	478	455	0.0%
Brazil	155	63	139	163	139	163	0.0%
Chile	0	0	0	0	0	0	
ASIA	1213	2200	2520	3067	2520	3076	0.3%
China	0	298	218	289	218	289	0.0%
Hong Kong	9	13	11	5	11	5	0.0%
Indonesia	258	1039	1158	1550	1158	1550	0.0%
Japan	0	6	6	4	6	4	0.0%
Korea, REP	0	0	0	0	0	0	
Malaysia	120	211	174	87	174	87	0.0%
Philippines	306	211	239	294	239	294	0.0%
Singapore	65	203	178	162	178	171	5.5%
Thailand	238	31	39	51	39	51	0.0%
OCEANIA	0	5	5	4	5	4	0.0%
Australia	0	5	5	4	5	4	0.0%
New Zealand	0	0	0	0	0	0	
EUROPE	747	2203	2301	2783	2301	2831	1.7%
Austria	33	22	20	13	20	13	-0.7%
Belgium-Luxembourg	5	65	74	100	74	100	0.2%
Denmark	14	13	15	19	15	19	0.0%
Finland	4	5	4	3	4	3	0.0%
France	141	484	538	696	538	699	0.4%
Germany	0	46	34	20	34	24	22.0%
Greece	0	4	4	2	4	2	0.0%
Ireland	0	6	7	9	7	9	0.0%
Italy	4	5	5	3	5	3	0.0%
Netherlands	42	38	40	55	40	56	1.3%
Portugal	56	23	19	15	19	17	12.7%
Spain	244	193	225	306	225	306	0.0%
Sweden	15	11	11	7	11	7	0.0%
United Kingdom	1	36	37	51	37	51	-1.4%
FORMER U.S.S.R.	0	1233	1146	1475	1146	1480	0.4%
Russian Fed	0	92	78	37	78	37	0.0%
DEVELOPED, ALL	995	4030	4023	4769	4023	4829	1.3%
DEVELOPING, ALL	1385	2977	3352	3881	3352	3890	0.2%
WORLD	2380	7007	7375	8650	7375	8719	0.8%

Table 83--Export of industrial roundwood (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	6182	7902	8500	11579	8500	11221	-3.1%
South Africa	42	2541	2935	4504	2935	4494	-0.2%
NORTH/CENTRAL AMERICA	26590	20810	19714	15666	19714	9669	-38.3%
Canada	4249	2485	2379	1423	2379	474	-66.7%
Mexico	0	13	9	11	9	11	-2.7%
United States	22299	18243	17266	14200	17266	9155	-35.5%
SOUTH AMERICA	1154	8980	10261	15903	10261	15919	0.1%
Brazil	7	1371	1614	2731	1614	2741	0.4%
Chile	1052	6174	7090	10965	7090	10980	0.1%
ASIA	33786	13244	13344	14987	13286	14995	0.1%
China	60	3107	2657	473	2657	587	24.3%
Hong Kong	75	575	667	990	667	841	-15.0%
Indonesia	16314	683	766	1313	766	1392	6.1%
Japan	21	6	70	89	70	79	-11.5%
Korea, REP	0	0	0	0	0	0	
Malaysia	15717	6783	6881	8924	6822	9046	1.4%
Philippines	1154	0	0	0	0	0	
Singapore	42	26	22	3	22	0	-100%
Thailand	1	461	531	775	531	585	-24.5%
OCEANIA	9101	17091	18514	26561	18490	28264	6.4%
Australia	6637	8075	8187	10341	8163	12026	16.3%
New Zealand	1410	5828	6710	10543	6710	10551	0.1%
EUROPE	15026	26522	27422	32497	27073	32475	-0.1%
Austria	918	2500	2730	3938	2470	3934	-0.1%
Belgium-Luxembourg	836	1310	1475	2011	1475	1588	-21.0%
Denmark	507	371	423	406	423	464	14.3%
Finland	2063	801	975	1636	975	1528	-6.6%
France	3273	3636	3814	5346	3814	5014	-6.2%
Germany	0	5965	5234	2161	5234	3906	80.8%
Greece	0	3	3	4	3	3	-5.7%
Ireland	188	406	426	714	384	333	-53.3%
Italy	4	12	9	13	9	12	-11.5%
Netherlands	631	553	625	676	625	792	17.1%
Portugal	703	693	792	1170	792	1185	1.3%
Spain	145	467	540	831	540	853	2.6%
Sweden	1295	1667	1883	2538	1883	2452	-3.4%
United Kingdom	153	52	52	63	52	78	22.7%
FORMER U.S.S.R.	14835	25895	27693	34292	27693	29793	-13.1%
Russian Fed	n/a	18631	19404	21491	19404	17027	-20.8%
DEVELOPED, ALL	64519	89595	92661	107890	92288	99047	-8.2%
DEVELOPING, ALL	42155	30849	32785	43595	32727	43289	-0.7%
WORLD	106674	120444	125446	151485	125015	142336	-6.0%

Table 84--Export of other industrial roundwood (thousand CUM)

Country	Actual		Projection				Change 2010
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	101	0	0	0	0	0	
South Africa	17	0	0	0	0	0	
NORTH/CENTRAL AMERICA	746	0	0	0	0	0	
Canada	107	0	0	0	0	0	
Mexico	0	0	0	0	0	0	
United States	635	0	0	0	0	0	
SOUTH AMERICA	48	0	0	0	0	0	
Brazil	0	0	0	0	0	0	
Chile	0	0	0	0	0	0	
ASIA	707	0	0	0	0	0	
China	0	0	0	0	0	0	
Hong Kong	0	0	0	0	0	0	
Indonesia	664	0	0	0	0	0	
Japan	8	0	0	0	0	0	
Korea, REP	0	0	0	0	0	0	
Malaysia	34	0	0	0	0	0	
Philippines	0	0	0	0	0	0	
Singapore	0	0	0	0	0	0	
Thailand	0	0	0	0	0	0	
OCEANIA	9	0	0	0	0	0	
Australia	8	0	0	0	0	0	
New Zealand	1	0	0	0	0	0	
EUROPE	1008	0	0	0	0	0	
Austria	217	0	0	0	0	0	
Belgium-Luxembourg	107	0	0	0	0	0	
Denmark	8	0	0	0	0	0	
Finland	285	0	0	0	0	0	
France	41	0	0	0	0	0	
Germany	0	0	0	0	0	0	
Greece	0	0	0	0	0	0	
Ireland	0	0	0	0	0	0	
Italy	0	0	0	0	0	0	
Netherlands	117	0	0	0	0	0	
Portugal	32	0	0	0	0	0	
Spain	8	0	0	0	0	0	
Sweden	56	0	0	0	0	0	
United Kingdom	17	0	0	0	0	0	
FORMER U.S.S.R.	1170	0	0	0	0	0	
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	2954	0	0	0	0	0	
DEVELOPING, ALL	835	0	0	0	0	0	
WORLD	3789	0	0	0	0	0	

Table 85--Export of sawnwood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	902	1283	1205	819	1205	872	6.5%
South Africa	74	48	48	62	48	53	-15.2%
NORTH/CENTRAL AMERICA	35466	56072	58775	73479	59659	74040	0.8%
Canada	29326	48686	50349	62889	51233	62835	-0.1%
Mexico	0	418	352	112	352	166	47.6%
United States	5834	6776	7905	10353	7905	10905	5.3%
SOUTH AMERICA	2551	3517	3607	3499	3601	3244	-7.3%
Brazil	809	1433	1478	1422	1478	1157	-18.7%
Chile	1298	1243	1320	1405	1314	1382	-1.6%
ASIA	7244	6126	5721	4051	5728	4424	9.2%
China	45	523	419	130	419	217	67.3%
Hong Kong	25	781	900	927	900	980	5.7%
Indonesia	1214	418	437	725	437	717	-1.2%
Japan	57	13	35	38	35	38	0.0%
Korea, REP	376	20	18	24	18	24	0.0%
Malaysia	3320	3109	2632	969	2632	990	2.2%
Philippines	742	142	165	184	165	257	39.6%
Singapore	1192	227	243	387	243	387	0.0%
Thailand	2	80	85	77	93	97	25.1%
OCEANIA	772	1248	1421	2101	1421	2110	0.4%
Australia	83	60	56	112	56	112	0.0%
New Zealand	621	1157	1330	1941	1330	1950	0.5%
EUROPE	22380	35305	33880	33575	33918	38873	15.8%
Austria	4384	4798	5550	8189	5550	7984	-2.5%
Belgium-Luxembourg	229	471	550	819	550	819	0.0%
Denmark	210	121	141	201	141	201	0.0%
Finland	6939	7535	6499	4700	6509	6650	41.5%
France	788	1139	1329	2011	1329	1978	-1.6%
Germany	0	2064	2180	3249	2180	3249	0.0%
Greece	4	32	36	52	36	52	0.0%
Ireland	21	282	326	501	326	501	0.0%
Italy	82	140	167	279	167	279	0.0%
Netherlands	212	363	423	626	423	627	0.0%
Portugal	900	633	663	787	729	902	14.7%
Spain	221	123	107	142	107	178	25.7%
Sweden	5915	10920	9409	7296	9409	10491	43.8%
United Kingdom	51	93	125	242	125	242	0.0%
FORMER U.S.S.R.	7242	9144	8654	9358	8632	9160	-2.1%
Russian Fed	n/a	4800	4111	4230	4111	4234	0.1%
DEVELOPED, ALL	65617	101191	102259	118330	103159	123928	4.7%
DEVELOPING, ALL	10940	11504	11004	8551	11005	8794	2.8%
WORLD	76557	112695	113263	126880	114164	132722	4.6%

Table 86--Export of wood-based panels (thousand CUM)

Country	Actual		Projection				
	1980	1997	Base		ATL		Change 2010
			2000	2010	2000	2010	
AFRICA	259	433	469	616	471	659	7.0%
South Africa	62	24	28	34	29	38	11.2%
NORTH/CENTRAL AMERICA	2371	11363	12876	17143	12877	17208	0.4%
Canada	1343	7993	9045	12317	9045	12269	-0.4%
Mexico	23	110	94	41	94	95	131.1%
United States	970	3226	3708	4772	3708	4821	1.0%
SOUTH AMERICA	566	2195	2417	2070	2437	2782	34.4%
Brazil	325	1085	1252	1102	1252	1434	30.2%
Chile	32	484	503	418	510	628	50.4%
ASIA	4028	16933	18383	24394	18530	25757	5.6%
China	884	881	731	174	832	630	262.3%
Hong Kong	4	1135	1315	2020	1315	2035	0.7%
Indonesia	245	8764	9719	14472	9719	14749	1.9%
Japan	149	52	52	65	52	65	0.0%
Korea, REP	967	125	131	144	131	191	32.5%
Malaysia	604	5285	5692	6786	5726	7273	7.2%
Philippines	435	49	52	77	52	60	-21.4%
Singapore	652	235	267	295	267	293	-0.7%
Thailand	15	252	268	209	279	279	33.8%
OCEANIA	156	889	1006	1286	1006	1369	6.5%
Australia	23	270	291	176	291	204	16.2%
New Zealand	118	606	700	1087	700	1141	4.9%
EUROPE	6879	15876	17730	22789	17787	24360	6.9%
Austria	762	1522	1759	2413	1759	2561	6.1%
Belgium-Luxembourg	1361	2506	2890	4008	2890	4037	0.7%
Denmark	98	175	201	277	201	305	10.1%
Finland	1041	1199	1339	1854	1339	1952	5.3%
France	708	2075	2393	3114	2393	3432	10.2%
Germany	0	2506	2809	3982	2809	4098	2.9%
Greece	29	69	80	101	80	123	22.3%
Ireland	1	280	293	249	274	290	16.3%
Italy	164	880	1014	1428	1014	1499	4.9%
Netherlands	135	229	265	380	265	410	8.0%
Portugal	171	647	709	633	750	905	43.1%
Spain	467	630	727	1029	727	1045	1.6%
Sweden	590	385	446	666	446	669	0.5%
United Kingdom	142	321	369	513	369	516	0.7%
FORMER U.S.S.R.	956	2229	2343	2466	2366	2974	20.6%
Russian Fed	n/a	955	988	970	988	1200	23.7%
DEVELOPED, ALL	10541	30293	33915	43721	33996	45888	5.0%
DEVELOPING, ALL	4674	19625	21309	27043	21477	29220	8.1%
WORLD	15215	49918	55224	70764	55473	75108	6.1%

Table 87--Export of veneer sheets and plywood (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	224	404	437	574	438	617	7.5%
South Africa	28	11	13	11	13	18	57.0%
NORTH/CENTRAL AMERICA	1296	3498	4016	5337	4018	5411	1.4%
Canada	710	1177	1360	1979	1360	2010	1.5%
Mexico	23	12	11	6	11	15	163.2%
United States	543	2294	2632	3346	2632	3371	0.8%
SOUTH AMERICA	303	1213	1376	1044	1378	1459	39.8%
Brazil	139	751	868	637	868	930	45.9%
Chile	2	71	76	97	76	90	-6.8%
ASIA	3933	15219	16607	22707	16708	23674	4.3%
China	875	806	663	139	763	587	322.7%
Hong Kong	3	881	1021	1648	1021	1648	0.0%
Indonesia	245	8503	9417	14017	9417	14295	2.0%
Japan	130	43	42	52	42	52	0.0%
Korea, REP	946	45	47	57	47	52	-8.3%
Malaysia	601	4572	5006	6326	5006	6567	3.8%
Philippines	430	45	47	71	47	54	-23.7%
Singapore	636	202	235	252	235	256	1.6%
Thailand	9	8	8	11	8	9	-24.6%
OCEANIA	47	123	142	205	142	209	2.1%
Australia	1	5	6	3	6	6	87.9%
New Zealand	31	105	122	178	122	178	0.0%
EUROPE	1599	2753	3088	4203	3098	4427	5.3%
Austria	15	175	202	302	202	299	-1.0%
Belgium-Luxembourg	151	133	154	234	154	235	0.0%
Denmark	56	38	44	65	44	65	0.0%
Finland	547	938	1038	1441	1038	1506	4.5%
France	208	285	330	488	330	503	3.1%
Germany	0	304	350	523	350	523	0.0%
Greece	24	8	9	13	9	13	4.0%
Ireland	1	4	5	8	5	8	0.0%
Italy	110	148	169	242	169	244	0.8%
Netherlands	55	57	67	104	67	104	0.0%
Portugal	62	13	15	20	15	19	-7.5%
Spain	68	94	109	151	109	157	4.0%
Sweden	15	107	124	190	124	190	0.0%
United Kingdom	86	22	26	35	26	35	0.0%
FORMER U.S.S.R.	321	915	985	1178	985	1300	10.3%
Russian Fed	n/a	615	645	718	645	822	14.6%
DEVELOPED, ALL	3401	7318	8264	10963	8274	11376	3.8%
DEVELOPING, ALL	4322	16807	18387	24284	18493	25721	5.9%
WORLD	7723	24125	26651	35247	26766	37097	5.2%

Table 88--Export of particle board (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	3	22	24	29	25	29	0.3%
South Africa	2	6	7	10	8	7	-27.8%
NORTH/CENTRAL AMERICA	782	6526	7349	9652	7349	9540	-1.2%
Canada	540	6072	6850	9046	6850	8948	-1.1%
Mexico	0	82	69	30	69	70	138.0%
United States	227	353	413	569	413	513	-9.9%
SOUTH AMERICA	30	251	246	247	263	292	18.3%
Brazil	3	51	58	73	58	78	6.1%
Chile	2	63	60	52	66	75	45.4%
ASIA	58	680	735	781	747	875	12.1%
China	9	19	23	35	23	35	0.0%
Hong Kong	0	125	145	129	145	144	11.4%
Indonesia	0	245	283	423	283	423	0.0%
Japan	1	1	2	3	2	3	0.0%
Korea, REP	21	1	1	2	1	2	0.0%
Malaysia	3	123	116	49	116	100	105.1%
Philippines	5	4	5	6	5	6	8.9%
Singapore	6	24	22	26	22	20	-23.1%
Thailand	0	107	112	96	124	122	27.2%
OCEANIA	84	198	208	222	208	222	0.1%
Australia	16	100	95	44	95	45	0.5%
New Zealand	68	98	113	177	113	177	0.1%
EUROPE	4012	9065	10114	12520	10180	13519	8.0%
Austria	675	1204	1392	1861	1392	2004	7.7%
Belgium-Luxembourg	1164	2065	2379	3207	2379	3233	0.8%
Denmark	41	105	120	154	120	182	18.1%
Finland	374	196	226	298	226	329	10.6%
France	372	1252	1442	1686	1442	1970	16.8%
Germany	0	1484	1629	2175	1629	2279	4.8%
Greece	5	42	49	55	49	77	40.1%
Ireland	0	92	107	133	107	147	10.4%
Italy	38	158	182	189	182	231	22.2%
Netherlands	62	102	118	155	118	185	19.3%
Portugal	83	369	387	381	428	436	14.3%
Spain	281	247	282	355	282	365	2.9%
Sweden	295	157	182	258	182	261	1.1%
United Kingdom	41	198	227	301	227	304	1.2%
FORMER U.S.S.R.	332	904	900	898	923	1043	16.1%
Russian Fed	n/a	170	146	100	146	120	19.8%
DEVELOPED, ALL	5201	16600	18496	23269	18586	24256	4.2%
DEVELOPING, ALL	100	1046	1080	1079	1109	1263	17.1%
WORLD	5301	17646	19575	24347	19695	25519	4.8%

Table 89--Export of fiberboard (thousand CUM)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	32	7	8	13	8	13	0.0%
South Africa	32	7	8	13	8	13	0.0%
NORTH/CENTRAL AMERICA	293	1339	1511	2154	1511	2257	4.8%
Canada	93	744	834	1291	834	1311	1.5%
Mexico	0	16	14	6	14	9	63.2%
United States	200	579	663	857	663	936	9.2%
SOUTH AMERICA	233	731	796	779	796	1031	32.3%
Brazil	183	283	326	391	326	426	9.0%
Chile	28	350	367	269	367	463	71.9%
ASIA	37	1034	1041	907	1075	1208	33.2%
China	0	56	46	0	46	8	
Hong Kong	1	129	150	244	150	244	0.0%
Indonesia	0	16	19	32	19	31	-1.9%
Japan	18	8	8	10	8	10	0.0%
Korea, REP	0	79	83	86	83	138	59.9%
Malaysia	0	590	570	411	603	606	47.4%
Philippines	0	0	0	0	0	0	
Singapore	10	9	10	17	10	17	0.0%
Thailand	6	137	147	101	147	149	46.6%
OCEANIA	25	568	656	860	656	938	9.1%
Australia	6	165	190	128	190	153	19.8%
New Zealand	19	403	465	732	465	785	7.3%
EUROPE	1268	4058	4527	6066	4509	6415	5.7%
Austria	72	143	165	251	165	259	3.1%
Belgium-Luxembourg	46	308	357	567	357	569	0.4%
Denmark	1	32	37	57	37	57	0.0%
Finland	120	65	75	116	75	117	1.0%
France	128	538	621	939	621	959	2.1%
Germany	0	718	830	1284	830	1296	0.9%
Greece	0	19	22	34	22	34	0.0%
Ireland	0	184	181	108	163	135	24.8%
Italy	16	574	664	997	664	1024	2.7%
Netherlands	18	70	80	122	80	122	0.5%
Portugal	26	265	307	231	307	451	94.9%
Spain	118	289	336	523	336	523	0.0%
Sweden	280	121	140	217	140	218	0.1%
United Kingdom	15	101	116	177	116	177	0.0%
FORMER U.S.S.R.	303	410	459	390	459	631	61.8%
Russian Fed	n/a	170	198	152	198	258	69.7%
DEVELOPED, ALL	1939	6375	7156	9489	7137	10256	8.1%
DEVELOPING, ALL	252	1772	1842	1680	1875	2236	33.1%
WORLD	2191	8147	8997	11169	9012	12493	11.8%

Table 90-- Export of woodpulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	400	777	712	854	712	712	-16.5%
South Africa	175	465	395	457	395	313	-31.4%
NORTH/CENTRAL AMERICA	9704	16656	18388	21627	18320	21349	-1.3%
Canada	7010	10834	11467	12956	11399	12768	-1.5%
Mexico	0	9	7	6	7	5	-19.3%
United States	2694	5813	6914	8665	6914	8577	-1.0%
SOUTH AMERICA	1307	4187	3759	3630	3761	3652	0.6%
Brazil	891	2410	2221	1833	2223	1899	3.6%
Chile	416	1576	1347	1569	1347	1465	-6.6%
ASIA	134	1500	1684	1914	1694	2152	12.5%
China	33	27	26	21	26	26	22.4%
Hong Kong	0	3	3	3	3	3	-12.1%
Indonesia	0	1284	1380	1602	1380	1813	13.2%
Japan	99	60	64	79	64	79	0.0%
Korea, REP	0	2	3	3	3	3	0.0%
Malaysia	0	0	0	0	0	0	
Philippines	1	0	0	0	0	0	
Singapore	1	16	17	22	17	23	4.5%
Thailand	0	103	98	88	108	109	24.3%
OCEANIA	475	586	637	992	638	921	-7.1%
Australia	0	0	0	0	0	0	
New Zealand	475	586	637	992	638	921	-7.1%
EUROPE	6528	9029	9721	10567	9747	10969	3.8%
Austria	248	291	336	413	336	466	12.9%
Belgium-Luxembourg	143	185	214	295	216	309	4.6%
Denmark	62	82	91	110	91	116	6.2%
Finland	1755	1751	1836	2062	1836	2442	18.4%
France	170	449	518	653	518	734	12.4%
Germany	0	382	434	619	434	621	0.4%
Greece	0	0	0	0	0	0	
Ireland	30	0	0	0	0	0	
Italy	1	12	14	21	14	20	-8.0%
Netherlands	9	278	319	448	319	434	-3.3%
Portugal	443	1087	978	1089	1003	1053	-3.3%
Spain	184	734	846	912	846	1068	17.1%
Sweden	2971	2744	3176	3053	3176	2956	-3.2%
United Kingdom	24	8	9	10	9	10	2.0%
FORMER U.S.S.R.	821	948	807	597	807	717	20.3%
Russian Fed	n/a	936	796	585	796	707	20.9%
DEVELOPED, ALL	17802	27735	30004	34313	29963	34344	0.1%
DEVELOPING, ALL	1567	5948	5703	5867	5716	6129	4.5%
WORLD	19369	33683	35707	40180	35678	40473	0.7%

Table 91--Export of mechanical pulp (thousand MT)

Country	Actual		Projection				Change 2010
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	0	1	1	0	1	0	
South Africa	0	1	1	0	1	0	
NORTH/CENTRAL AMERICA	324	398	464	551	464	510	-7.5%
Canada	312	294	350	405	350	363	-10.4%
Mexico	0	0	0	0	0	0	
United States	12	104	114	147	114	147	0.4%
SOUTH AMERICA	4	17	15	14	15	15	5.6%
Brazil	3	17	15	14	15	15	5.6%
Chile	1	0	0	0	0	0	
ASIA	0	1	1	2	1	2	0.0%
China	0	0	0	0	0	0	
Hong Kong	0	0	0	0	0	0	
Indonesia	0	0	0	0	0	0	
Japan	0	0	0	0	0	0	
Korea, REP	0	0	0	0	0	0	
Malaysia	0	0	0	0	0	0	
Philippines	0	0	0	0	0	0	
Singapore	0	0	0	0	0	0	
Thailand	0	0	0	0	0	0	
OCEANIA	258	296	326	515	326	465	-9.7%
Australia	0	0	0	0	0	0	
New Zealand	258	296	326	515	326	465	-9.7%
EUROPE	660	387	426	518	426	462	-10.7%
Austria	0	0	0	0	0	0	
Belgium-Luxembourg	1	2	3	5	3	4	-18.8%
Denmark	0	0	0	0	0	0	
Finland	23	0	0	0	0	0	
France	1	0	0	0	0	0	
Germany	0	11	11	13	11	13	0.0%
Greece	0	0	0	0	0	0	
Ireland	30	0	0	0	0	0	
Italy	0	7	8	14	8	12	-11.9%
Netherlands	3	4	5	6	5	6	5.2%
Portugal	0	2	2	2	2	2	-8.7%
Spain	8	18	21	26	21	28	7.0%
Sweden	373	159	178	204	178	198	-3.0%
United Kingdom	0	5	5	6	5	7	3.2%
FORMER U.S.S.R.	0	1	1	1	1	1	14.3%
Russian Fed	0	0	0	0	0	0	
DEVELOPED, ALL	1242	1083	1219	1584	1219	1438	-9.2%
DEVELOPING, ALL	4	18	16	16	16	17	4.9%
WORLD	1246	1101	1234	1600	1235	1455	-9.1%

Table 92--Export of chemical pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	400	776	711	854	711	712	-16.5%
South Africa	175	464	394	457	394	313	-31.4%
NORTH/CENTRAL AMERICA	9380	16258	17924	21076	17856	20839	-1.1%
Canada	6698	10540	11117	12552	11049	12405	-1.2%
Mexico	0	9	7	6	7	5	-19.3%
United States	2682	5709	6800	8518	6800	8430	-1.0%
SOUTH AMERICA	1303	4170	3744	3616	3747	3637	0.6%
Brazil	888	2393	2206	1819	2209	1884	3.6%
Chile	415	1576	1347	1569	1347	1465	-6.6%
ASIA	134	1499	1683	1912	1693	2150	12.5%
China	33	27	26	21	26	26	22.4%
Hong Kong	0	3	3	3	3	3	-12.1%
Indonesia	0	1284	1380	1602	1380	1813	13.2%
Japan	99	60	64	79	64	79	0.0%
Korea, REP	0	2	3	3	3	3	0.0%
Malaysia	0	0	0	0	0	0	
Philippines	1	0	0	0	0	0	
Singapore	1	16	17	22	17	23	4.5%
Thailand	0	103	98	88	108	109	24.3%
OCEANIA	217	290	311	477	311	456	-4.4%
Australia	0	0	0	0	0	0	
New Zealand	217	290	311	477	311	456	-4.4%
EUROPE	5868	8642	9295	10050	9321	10507	4.5%
Austria	248	291	336	413	336	466	12.9%
Belgium-Luxembourg	142	183	211	290	213	305	5.0%
Denmark	62	82	91	110	91	116	6.2%
Finland	1732	1751	1836	2062	1836	2442	18.4%
France	169	449	518	653	518	734	12.4%
Germany	0	371	424	606	424	609	0.4%
Greece	0	0	0	0	0	0	
Ireland	0	0	0	0	0	0	
Italy	1	5	6	8	6	8	-1.3%
Netherlands	6	274	314	443	314	427	-3.4%
Portugal	443	1085	976	1087	1001	1051	-3.3%
Spain	176	716	825	886	825	1040	17.4%
Sweden	2598	2585	2999	2849	2999	2758	-3.2%
United Kingdom	24	3	4	4	4	4	0.0%
FORMER U.S.S.R.	821	947	806	596	806	717	20.3%
Russian Fed	n/a	936	796	585	796	707	20.9%
DEVELOPED, ALL	16560	26652	28786	32729	28744	32906	0.5%
DEVELOPING, ALL	1563	5930	5687	5851	5700	6112	4.5%
WORLD	18123	32582	34473	38580	34444	39018	1.1%

Table 93--Export of other fiber pulp (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	14	10	11	17	11	18	4.7%
South Africa	0	0	0	0	0	0	
NORTH/CENTRAL AMERICA	147	175	194	357	194	359	0.3%
Canada	0	52	60	98	60	98	0.0%
Mexico	12	0	0	0	0	0	
United States	135	123	134	260	134	261	0.4%
SOUTH AMERICA	0	0	0	0	0	0	
Brazil	0	0	0	0	0	0	
Chile	0	0	0	0	0	0	
ASIA	21	12	59	73	22	71	-2.7%
China	16	6	16	32	16	32	-0.9%
Hong Kong	0	0	0	0	0	0	
Indonesia	0	1	1	0	1	0	
Japan	0	1	39	39	1	37	-4.9%
Korea, REP	0	0	0	0	0	0	
Malaysia	0	0	0	0	0	0	
Philippines	5	0	0	0	0	0	
Singapore	0	0	0	0	0	0	
Thailand	0	0	0	0	0	0	
OCEANIA	0	0	0	0	0	0	
Australia	0	0	0	0	0	0	
New Zealand	0	0	0	0	0	0	
EUROPE	31	53	67	84	67	85	1.2%
Austria	0	1	1	2	1	2	-5.9%
Belgium-Luxembourg	0	2	5	6	5	6	0.0%
Denmark	5	1	1	1	1	1	37.5%
Finland	7	2	2	4	2	4	0.0%
France	1	5	11	13	12	14	15.2%
Germany	0	12	14	23	14	23	0.0%
Greece	0	0	0	0	0	0	
Ireland	0	0	0	0	0	0	
Italy	10	0	0	0	0	0	
Netherlands	0	9	11	18	11	18	0.0%
Portugal	0	0	0	0	0	0	
Spain	2	14	14	12	14	12	0.0%
Sweden	0	0	0	0	0	0	
United Kingdom	0	1	1	2	1	2	-10.5%
FORMER U.S.S.R.	0	0	0	0	0	0	
Russian Fed	0	0	0	0	0	0	
DEVELOPED, ALL	166	229	299	481	262	481	0.0%
DEVELOPING, ALL	47	21	32	51	32	52	1.4%
WORLD	213	250	331	532	294	533	0.2%

Table 94--Export of waste paper (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	6	7	27	32	27	32	0.0%
South Africa	6	1	1	1	1	1	0.0%
NORTH/CENTRAL AMERICA	2561	7571	8500	13164	8498	13186	0.2%
Canada	113	688	609	575	607	751	30.7%
Mexico	0	50	57	84	57	74	-11.6%
United States	2417	6807	7799	12448	7799	12304	-1.2%
SOUTH AMERICA	1	57	305	342	305	341	-0.3%
Brazil	0	3	2	4	2	4	-2.6%
Chile	1	20	23	41	23	41	-0.5%
ASIA	485	1435	1592	2568	1592	2445	-4.8%
China	0	5	18	40	18	39	-0.8%
Hong Kong	402	440	502	796	502	797	0.1%
Indonesia	0	351	337	520	337	397	-23.7%
Japan	20	312	292	513	292	511	-0.3%
Korea, REP	0	0	0	0	0	0	
Malaysia	6	56	60	117	60	116	-0.6%
Philippines	0	9	10	14	10	15	6.3%
Singapore	51	216	250	406	250	407	0.3%
Thailand	0	0	0	0	0	0	
OCEANIA	8	148	166	263	166	251	-4.6%
Australia	4	85	97	157	97	145	-7.9%
New Zealand	4	62	69	105	69	105	0.2%
EUROPE	1673	7584	8763	10624	8753	10179	-4.2%
Austria	39	93	105	97	105	71	-27.5%
Belgium-Luxembourg	260	1022	1150	1397	1150	1393	-0.3%
Denmark	76	307	359	594	359	568	-4.3%
Finland	31	49	41	5	41	3	-46.9%
France	361	750	870	1291	870	1323	2.4%
Germany	0	2739	3077	3302	3077	2914	-11.8%
Greece	0	5	7	12	7	13	4.8%
Ireland	20	69	80	130	80	130	0.0%
Italy	1	53	157	208	157	213	2.8%
Netherlands	340	1227	1404	1718	1404	1681	-2.2%
Portugal	7	42	45	74	45	73	-1.1%
Spain	18	39	48	88	48	79	-11.0%
Sweden	83	186	161	46	161	68	48.5%
United Kingdom	211	490	572	898	572	907	0.9%
FORMER U.S.S.R.	153	23	27	43	27	43	0.5%
Russian Fed	n/a	0	0	0	0	0	
DEVELOPED, ALL	4390	15569	17665	24479	17653	24052	-1.7%
DEVELOPING, ALL	497	1256	1716	2557	1716	2425	-5.2%
WORLD	4887	16825	19381	27036	19369	26477	-2.1%

Table 95--Export of total paper and paperboard (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	158	483	500	658	500	674	2.4%
South Africa	137	455	470	613	470	630	2.7%
NORTH/CENTRAL AMERICA	13806	25899	28822	36134	28835	35822	-0.9%
Canada	9556	14443	15708	19613	15722	19361	-1.3%
Mexico	9	275	257	362	257	330	-9.0%
United States	4187	11153	12827	16115	12827	16087	-0.2%
SOUTH AMERICA	337	1842	1945	2827	1945	2732	-3.3%
Brazil	198	1329	1403	2091	1403	1964	-6.1%
Chile	87	231	230	285	230	300	5.4%
ASIA	1239	9156	8853	10872	8874	11204	3.1%
China	149	1070	1285	1522	1285	1726	13.4%
Hong Kong	44	2676	2819	4390	2819	4375	-0.4%
Indonesia	7	1212	1173	1395	1173	1559	11.8%
Japan	764	1149	956	1219	956	1220	0.1%
Korea, REP	155	2077	1743	1410	1743	1371	-2.8%
Malaysia	5	98	83	64	83	105	65.5%
Philippines	1	45	39	44	39	49	11.9%
Singapore	49	211	209	222	209	231	4.4%
Thailand	14	525	444	466	465	422	-9.5%
OCEANIA	418	828	929	1297	929	1326	2.3%
Australia	95	419	470	674	470	670	-0.5%
New Zealand	323	409	459	623	459	656	5.3%
EUROPE	15917	47815	48598	65167	48857	67155	3.1%
Austria	886	3443	3346	4377	3496	4756	8.6%
Belgium-Luxembourg	481	1748	1844	2728	1854	2837	4.0%
Denmark	122	233	259	413	259	413	0.0%
Finland	4868	10161	11265	14519	11255	15073	3.8%
France	1065	2827	2714	3658	2730	3955	8.1%
Germany	0	7427	6687	9315	6722	9920	6.5%
Greece	44	30	32	46	32	44	-4.8%
Ireland	22	59	62	90	62	90	0.0%
Italy	500	2006	2207	3334	2207	3220	-3.4%
Netherlands	953	2824	2480	3747	2480	3963	5.8%
Portugal	144	697	760	1012	760	1043	3.1%
Spain	160	1041	1029	1237	1029	1409	13.9%
Sweden	4625	8306	8854	11456	8854	11164	-2.6%
United Kingdom	466	1673	1735	2541	1735	2475	-2.6%
FORMER U.S.S.R.	1035	1589	1796	1700	1796	1737	2.1%
Russian Fed	n/a	1434	1634	1513	1634	1548	2.3%
DEVELOPED, ALL	32021	77447	81299	105733	81572	107525	1.7%
DEVELOPING, ALL	889	10165	10143	12921	10164	13123	1.6%
WORLD	32910	87612	91443	118654	91736	120649	1.7%

Table 96--Export of newsprint (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	70	104	99	101	99	107	6.0%
South Africa	70	103	98	100	98	106	6.0%
NORTH/CENTRAL AMERICA	7866	9905	10648	13288	10662	13169	-0.9%
Canada	7707	8906	9484	11494	9497	11386	-0.9%
Mexico	0	23	19	13	19	17	24.6%
United States	159	967	1135	1766	1135	1750	-0.9%
SOUTH AMERICA	64	160	166	203	166	197	-3.3%
Brazil	1	14	16	18	16	12	-32.0%
Chile	63	146	150	185	150	184	-0.5%
ASIA	157	468	415	338	415	361	6.9%
China	1	25	32	58	32	47	-18.1%
Hong Kong	14	16	13	2	13	1	-50.0%
Indonesia	0	58	50	55	50	38	-32.0%
Japan	98	29	33	43	33	42	-2.8%
Korea, REP	22	279	234	125	234	172	38.2%
Malaysia	0	1	1	2	1	2	0.0%
Philippines	0	43	37	40	37	45	12.7%
Singapore	4	11	9	2	9	2	6.2%
Thailand	0	3	4	7	4	7	-2.7%
OCEANIA	242	260	287	371	287	413	11.4%
Australia	1	0	0	0	0	0	
New Zealand	241	260	287	371	287	413	11.4%
EUROPE	3484	7198	7018	8484	7077	8696	2.5%
Austria	39	306	290	400	290	326	-18.7%
Belgium-Luxembourg	31	112	95	132	95	133	0.5%
Denmark	1	1	1	1	1	1	0.0%
Finland	1432	1211	1269	1318	1269	1408	6.9%
France	4	605	684	959	684	1037	8.1%
Germany	0	637	545	557	545	650	16.8%
Greece	8	2	2	3	2	3	-3.6%
Ireland	0	1	1	2	1	2	0.0%
Italy	13	8	10	15	10	16	6.2%
Netherlands	45	296	252	357	252	370	3.6%
Portugal	0	5	6	9	6	9	0.0%
Spain	3	49	41	60	41	68	13.2%
Sweden	1238	2195	2163	2495	2163	2497	0.1%
United Kingdom	58	252	238	399	238	399	0.0%
FORMER U.S.S.R.	320	821	924	820	924	915	11.6%
Russian Fed	n/a	806	907	799	907	895	12.0%
DEVELOPED, ALL	12080	18284	18977	23078	19050	23308	1.0%
DEVELOPING, ALL	123	632	579	527	579	550	4.3%
WORLD	12203	18916	19556	23606	19629	23858	1.1%

Table 97--Export of printing and writing paper (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	22	24	26	37	26	32	-14.7%
South Africa	14	22	23	34	23	28	-16.3%
NORTH/CENTRAL AMERICA	947	4674	5358	6822	5358	6246	-8.5%
Canada	653	3142	3570	4685	3570	4667	-0.4%
Mexico	0	17	17	24	17	26	8.0%
United States	279	1512	1767	2110	1767	1549	-26.6%
SOUTH AMERICA	172	690	731	1076	731	975	-9.3%
Brazil	135	561	590	874	590	767	-12.3%
Chile	15	1	1	1	1	1	-14.3%
ASIA	371	1961	1904	2162	1904	2050	-5.2%
China	34	117	140	229	140	262	14.5%
Hong Kong	5	239	272	315	272	309	-2.0%
Indonesia	7	578	634	691	634	795	15.0%
Japan	247	195	149	176	149	175	-0.9%
Korea, REP	51	666	565	610	565	379	-37.9%
Malaysia	0	53	45	28	45	55	99.3%
Philippines	0	0	0	0	0	0	
Singapore	18	32	27	5	27	5	0.0%
Thailand	0	61	52	81	52	43	-47.1%
OCEANIA	18	40	34	60	34	52	-12.9%
Australia	16	35	28	51	28	43	-14.1%
New Zealand	2	5	6	9	6	8	-6.7%
EUROPE	4904	21287	22050	30332	22239	31874	5.1%
Austria	562	1980	1875	2482	2075	2755	11.0%
Belgium-Luxembourg	288	1263	1434	2062	1434	2157	4.6%
Denmark	58	90	94	156	94	156	0.0%
Finland	1750	6374	7253	10157	7206	10140	-0.2%
France	528	559	467	478	467	622	30.2%
Germany	0	3970	3466	4706	3501	5405	14.8%
Greece	28	2	2	4	2	3	-2.9%
Ireland	7	7	6	0	6	0	
Italy	330	899	921	1466	921	1438	-1.9%
Netherlands	284	1017	868	1185	868	1416	19.5%
Portugal	14	367	405	522	405	550	5.4%
Spain	43	339	365	444	365	519	16.9%
Sweden	510	2153	2489	3632	2489	3575	-1.6%
United Kingdom	112	671	708	994	708	946	-4.9%
FORMER U.S.S.R.	48	216	248	233	248	251	8.0%
Russian Fed	n/a	193	223	214	223	233	9.1%
DEVELOPED, ALL	6165	26416	27842	37629	28031	38597	2.6%
DEVELOPING, ALL	317	2476	2508	3093	2508	2883	-6.8%
WORLD	6482	28892	30350	40722	30539	41480	1.9%

Table 98--Export of other paper and board (thousand MT)

Country	Actual		Projection				Change
	1980	1997	Base		ATL		
			2000	2010	2000	2010	
AFRICA	66	355	376	520	376	535	2.9%
South Africa	53	330	349	479	349	495	3.3%
NORTH/CENTRAL AMERICA	4993	11320	12816	16023	12816	16407	2.4%
Canada	1196	2395	2654	3434	2654	3308	-3.7%
Mexico	9	235	220	325	220	287	-11.6%
United States	3749	8674	9925	12239	9925	12788	4.5%
SOUTH AMERICA	101	992	1047	1548	1047	1560	0.8%
Brazil	62	754	797	1199	797	1185	-1.2%
Chile	9	84	79	98	79	115	16.9%
ASIA	711	6727	6534	8372	6555	8792	5.0%
China	114	928	1113	1236	1113	1417	14.7%
Hong Kong	25	2421	2534	4074	2534	4065	-0.2%
Indonesia	0	576	489	649	489	727	12.1%
Japan	419	925	774	1000	774	1004	0.4%
Korea, REP	82	1132	944	675	944	820	21.4%
Malaysia	5	44	38	34	38	48	42.2%
Philippines	1	2	2	3	2	4	2.9%
Singapore	27	168	172	215	172	225	4.5%
Thailand	14	461	388	378	409	372	-1.5%
OCEANIA	158	528	608	866	608	861	-0.6%
Australia	78	384	442	623	442	627	0.5%
New Zealand	80	144	166	243	166	234	-3.6%
EUROPE	7529	19330	19530	26350	19541	26585	0.9%
Austria	285	1157	1181	1494	1130	1675	12.1%
Belgium-Luxembourg	162	373	315	534	325	547	2.5%
Denmark	63	142	164	256	164	256	0.0%
Finland	1686	2576	2743	3045	2780	3525	15.8%
France	533	1663	1563	2221	1579	2296	3.4%
Germany	0	2820	2676	4052	2676	3865	-4.6%
Greece	8	26	27	39	27	37	-5.1%
Ireland	15	51	55	88	55	88	0.0%
Italy	157	1099	1276	1853	1276	1766	-4.7%
Netherlands	624	1511	1361	2205	1361	2177	-1.3%
Portugal	130	325	349	481	349	483	0.5%
Spain	114	653	623	734	623	823	12.1%
Sweden	2877	3958	4202	5329	4202	5092	-4.4%
United Kingdom	296	750	789	1148	789	1130	-1.5%
FORMER U.S.S.R.	715	552	625	648	625	570	-12.0%
Russian Fed	n/a	435	504	500	504	420	-16.0%
DEVELOPED, ALL	13824	32747	34480	45026	34491	45621	1.3%
DEVELOPING, ALL	401	7057	7057	9301	7077	9690	4.2%
WORLD	14273	39804	41536	54326	41568	55311	1.8%