

**ASIA-PACIFIC FORESTRY SECTOR OUTLOOK STUDY
WORKING PAPER SERIES**

Working Paper No: APFSOS/WP/03

**THE IMPLICATIONS OF THE GATT URUGUAY
ROUND AND OTHER TRADE ARRANGEMENTS FOR
THE ASIA-PACIFIC FOREST PRODUCTS TRADE**

by

**Chris Brown
Consultant
FAO Forestry Planning and Statistics Branch
Rome**



Forestry Policy and Planning Division, Rome
Regional Office for Asia and the Pacific, Bangkok

April 1997

The Asia-Pacific Forestry Sector Outlook Study is being undertaken under the auspices of the Asia-Pacific Forestry Commission.

This report comes under Workplan Number E26.4(i).

TABLE OF CONTENTS

INFORMATION NOTE ON ASIA-PACIFIC FORESTRY SECTOR OUTLOOK STUDY	i
INTRODUCTION	1
PRODUCTION AND TRADE IN THE ASIA PACIFIC REGION	1
URUGUAY ROUND AGREEMENT IN THE ASIA PACIFIC.....	4
IMPACTS ON FOREST PRODUCTS TRADE.....	7
SIGNIFICANCE FOR INDIVIDUAL COUNTRIES	10
Australia.....	10
China	11
Hong Kong	12
India	12
Indonesia	13
Japan	13
The Republic of Korea.....	14
Malaysia	14
New Zealand	15
Papua New Guinea.....	16
Philippines.....	16
Singapore.....	16
Thailand	17
United States	17
European Union	18
SUB-REGIONAL TRADE ARRANGEMENTS.....	18
Asia Pacific Economic Cooperation (APEC).....	18
Association of South East Asian Nations (ASEAN).....	20

South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)	20
Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA).....	21
China/China Taipei Accession to World Trade Organisation.....	21
CONCLUSIONS.....	22
REFERENCES	23
APPENDIX - TARIFF CHANGES UNDER THE URUGUAY ROUND SETTLEMENT	24

INFORMATION NOTE ON ASIA-PACIFIC FORESTRY SECTOR OUTLOOK STUDY

At its sixteenth session held in Yangon, Myanmar, in January 1996, the Asia-Pacific Forestry Commission, which has membership open to all governments in the Asia-Pacific region, decided to carry out an outlook study for forestry with horizon year 2010. The study is being coordinated by FAO through its regional office in Bangkok and its Headquarters in Rome, but is being implemented in close partnership with governments, many of which have nominated national focal points.

The scope of the study is to look at the main external and sectoral developments in policies, programmes and institutions that will affect the forestry sector and to assess from this the likely direction of its evolution and to present its likely situation in 2010. The study involves assessment of current status but also of trends from the past and the main forces which are shaping those trends and then builds on this to explore future prospects.

Working papers have been contributed or commissioned on a wide range of topics. They fall under the following categories: country profiles, selected in-depth country or sub-regional studies and thematic studies. Working papers are prepared by individual authors or groups of authors on their own professional responsibility; therefore, the opinions expressed in them do not necessarily reflect the views of their employers, the governments of the Asia-Pacific Forestry Commission or of the Food and Agriculture Organization. In preparing the substantive report to be presented at the next session of the Asia-Pacific Forestry Commission early in 1998, material from these working papers will be an important element but will be blended and interpreted alongside a lot of other material.

Working papers are being produced and issued as they arrive. Some effort at uniformity of presentation is being attempted but the contents are only minimally edited for style or clarity. FAO welcomes from readers any information which they feel would be useful to the study on the subject of any of the working papers or on any other subject that has importance for the Asia-Pacific forestry sector. Such material can be mailed to the contacts given below from whom further copies of these working papers, as well as more information on the Asia-Pacific Forestry Sector Study, can be obtained:

Rome: Mr. Mafa Chipeta
Senior Forestry Officer
Policy and Planning Division
Forestry Department
Food and Agriculture Organization of the
United Nations
Viale delle Terme di Caracalla
Rome, 00100, ITALY
Tel: (39-6) 5225 3506
Fax: (39-6) 5225 5514
Email: <mafa.chipeta@fao.org>

Bangkok: Mr. Patrick Durst
Regional Forestry Officer
FAO Regional Office for Asia and the
Pacific
Maliwan Mansion
Phra Atit Road
Bangkok 10200
THAILAND
Tel: (66-2) 281 7844
Fax: (66-2) 280 0445
Email: <Patrick.Durst@field.fao.org>

INTRODUCTION¹

The existing pattern of trade in forestry products did not evolve by accident. Rather, it is a result of a combination of productive capacity, profitability and ease of market access. The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) provided an opportunity to address this latter aspect - an opportunity to improve the efficiency of global trade in forest products and thereby both increase volume of trade in forest products (trade creation) and ensure that resources are more efficiently allocated according to their relative market valuation (trade diversion).

While forestry tariffs are at a global scale relatively low, there are significant differences in tariff rates between countries and markets. And changes in market relativities can have significant impacts on inter-country trade flows involving important changes at a regional level, while being relatively insignificant when investigating change at the global level. Of all the world's major regions the Asia-Pacific is probably most susceptible to changing trading patterns in response to the erection or removal of trade barriers. Not only does it have generally a greater profusion of trade controls and barriers, but it has greater differentials in levels of development, wealth, technological capacities and market power. Consequently, the impacts of the Uruguay Round on forestry trade on the microcosm of the Asia-Pacific region is well worth examining as an adjunct to a global level analysis.

This paper attempts to build on a globally oriented analysis by Barbier²(1996) by concentrating on the more limited partial market equilibrium within the Asia-Pacific region. It is written as a supplement to the Barbier paper and consequently will only partially stand alone. It does not address any of the history or theory of market access or Uruguay Round negotiations contained in the parent paper. Rather, it deals exclusively with documenting and assessing the impacts of changes in market access conditions in Asia-Pacific in response to the Uruguay Round and, briefly, describing potential market access developments in a range of regionally based fora. It should be noted, however, that the general analysis contained in the Barbier paper is equally applicable to the Asia-Pacific region. Trade linkages in the forestry sector are complex with the major markets being generally common to all exporters. Consequently, this paper also provides some analysis of the effects of changes in United States and European Union tariffs for Asia-Pacific countries.

PRODUCTION AND TRADE IN THE ASIA PACIFIC REGION

Trade in forestry products in the Asia-Pacific region is dominated by a few major countries. As Table 1 shows, 98 percent of gross trade (total exports plus total imports) involving Asia Pacific countries is participated in by one of 13 nations. A closer examination of Table 1 shows 75 percent of Asia Pacific trade involves the participation of Japan, China, Indonesia, Malaysia or Korea, with Japan alone participating in 34 percent of gross trade. Furthermore, an examination of the Direction of Trade tables in the FAO Yearbook (1994) shows that a minimum of 38 percent of Japan's trade is identifiable as being with other Asia Pacific countries. It can also be calculated, by deducting the portion of trade readily

¹ This report was largely finalized in December 1996.

² Edward B. Barbier; *Impact of the Uruguay Round on International Trade in Forest Products*; FAO; 1996 (Ref. Job No D/W0723).

identifiable as being with countries external to the region, that Japan is a partner in at least 48 percent of the intra-regional forestry trade in the Asia-Pacific region.

It can be seen that the five largest exporting countries are Indonesia, Malaysia, Japan, New Zealand and China. These five account for 75 percent of exporting in the Asia Pacific region, with Indonesia and Malaysia together responsible for more than 50 percent of exports. Japan, China, Korea, Hong Kong and Thailand are the five largest importing countries in the region accounting for 86 percent of its gross imports; Japan and China alone account for 63 percent of imports.

It is evident from the table that, in value terms, the Asia-Pacific region runs a major forest products deficit with the rest of the world. Net imports of forest products total more than US\$18 billion for the region.

Table 1: Trade in the Asia Pacific Region (1994)

Country	Roundwood		Sawnwood		Panels		Pulp		Paper		Forest Products			Asia-Pac trade (%)
	Imports (US\$)	Exports (US\$)	Imports (US\$)	Exports (US\$)	Imports (US\$)	Exports (US\$)	Imports (US\$)	Exports (US\$)	Imports (US\$)	Exports (US\$)	Imports (US\$)	Exports (US\$)	Trade (US\$)	
(all figures '000's)														
Japan	6802285	2668	4567400	18137	2390069	35764	1824404	7736	1320050	1426340	16980960	1491974	18472934	34.24
China	496248	135610	622963	272841	1444668	194672	781053	23778	2100412	622461	5466960	1262413	6729373	12.47
Indonesia	30290	22542	9377	353904	21197	3792433	438129	68876	187060	460377	689256	4730688	5419944	10.05
Malaysia	12820	995081	27740	1627137	34015	1593750	41585	0	581599	56275	698068	4280304	4978372	9.22
Korea	1087455	738	462687	18337	735992	50194	825838	779	501053	931610	3631409	1002764	4634173	8.59
Hong Kong	104897	961	183850	2813	588913	18519	12094	2567	1908061	759179	2804335	784330	3588665	6.65
Australia	898	362622	432941	20212	102103	91621	89086	0	934351	157792	1559954	632702	2192656	4.06
Thailand	267377	7909	598779	71225	40497	45243	150315	30659	532157	160724	1630235	319255	1949490	3.61
Singapore	32492	13828	213187	188513	243388	192556	14031	24333	627687	266164	1135073	701231	1836304	3.40
New Zealand	1159	474740	23289	320403	7234	209845	7330	235844	190295	203829	229571	1445325	1674896	3.10
PNG	1	641152	73	1992	343	926	0	0	5964	5	6382	644075	650457	1.21
Philippines	52977	1179	54197	27330	17737	18826	28163	0	200585	2152	354415	90116	444531	0.82
India	48118	1165	2496	4231	7725	17543	80421	186	140430	10721	279889	35376	315265	0.58
TOTAL	8937017	2660195	7198979	2927075	5633881	6261892	4292449	394758	9229704	5057629	35466507	17420553	52887060	98.00

Source: FAO 1996

Table 2: Wood Production in the Asia-Pacific Region (1994)

Country (all figures '000's)	Sawnwood (m ³)	Wood Panels (m ³)	Wood Pulp (tonnes)	Paper (tonnes)	Total Industrial Roundwood volume (m ³)	% of Total Asia- Pacific
China	25162	21590	2704	26903	101902	34.4
Indonesia	8138	10518	1259	3054	38173	12.9
Malaysia	8843	4880	103	574	36435	12.3
Japan	25743	7459	10575	28527	32362	10.9
India	17460	442	1147	2626	24792	8.4
Australia	3514	1094	987	2232	18662	6.3
New Zealand	2834	1042	1363	860	16783	5.7
Vietnam	721	39	59	129	4399	1.5
Philippines	386	308	151	518	3200	1.1
Thailand	746	929	64	97	2784	0.9
Other	70223	2358	696	7427	16485	5.6
TOTAL	100569	50659	19108	72947	295977	100.0

Source: FAO (1996)

Table 2 lists forest products production for the 10 largest roundwood producers in the Asia-Pacific region. Wood production is heavily concentrated in a handful of countries with the four largest producers China, Indonesia, Malaysia and Japan accounting for 70 percent of production and the seven largest producers accounting for 91 percent of production. Vietnam is the only country among the top ten wood producers which is not listed in Table 1 as a major wood products trader. Korea, Hong Kong and Singapore are major wood traders which do not produce large quantities of wood. Processing facilities in these three countries account for the significant production of manufactured wood products from "Other" countries.

Given the dominance of the 13 countries identified in Table 1 and the complexities of trade matrices it seems sufficient to assume the major impacts of the Uruguay Round outcomes, and other trade arrangements, will largely fall among these countries. The bulk of the analysis in this paper will, consequently, concentrate on these 13 countries.

URUGUAY ROUND AGREEMENT IN THE ASIA PACIFIC

While several of the agreements subsidiary to the Uruguay Round settlement are of importance to forestry, most notably the *Agreement on Technical Barriers to Trade* and the *Agreement on the Application of Sanitary and Phytosanitary measures*, the most significant measures for forestry relate to direct improvements in market access, i.e. broadly based reductions in tariffs supplemented by increases in the proportion of bound tariffs.

Barbier (1996) notes five broad implications of the Uruguay Round for the trade in forest products:

1. *Tariff elimination* - The major developed countries committed themselves to phasing out tariffs on pulp and paper products over the next 8-10 years. Several other products, including furniture in the major developed markets, also saw tariffs eliminated.
2. *Tariff reductions* - tariffs on most forest products were reduced with the recommendation of a general tariff reduction of 33 percent on a trade-weighted basis.
3. *Reduction in tariff escalation* - the extent of tariff escalation for forest products will be reduced in most importing markets.
4. *Reduction/elimination of preferential tariff margins* - the tariff distinction between “Most Favoured Nation” (MFN) and “General Scheme of Preferences” (GSP) rates will be reduced and in some cases eliminated.
5. *Tariff binding* - the proportion of bound tariff rates was increased, with developed countries committing themselves to complete binding, largely at reduced tariff rates, and many developing countries opting for bound rates.

Uruguay Round negotiations on forest products took place in a separate sectoral forum. A major part of the discussion focused on the *zero-for-zero* proposals for complete elimination of forest products tariffs. *Zero-for-zero* refers to the bargaining essence of the proposals. That is, a particular country will agree to remove its forest products tariffs if a sufficient number of other countries made a similar commitment. *Zero-for zero* agreements were discussed separately for the tariffs of both wood products (Chapter 44) and pulp and paper (Chapters 47 and 48).

A number of Asia-Pacific countries or territories indicated support or interest in participating in a wood products zero-for-zero agreement including Australia, Hong Kong, Republic of Korea, New Zealand, Singapore, and Thailand. However, after considerable discussion the wood products zero-for-zero proposal was abandoned. The pulp and paper zero-for-zero proposal was more successful with a number of countries agreeing to eliminate tariffs on pulp and paper items. The participants included Japan, Hong Kong, New Zealand, Republic of Korea and Singapore from the Asia-Pacific region.

Largely as a result of the pulp and paper tariff eliminations the proportion of forest products imported duty-free into countries of the Asia-Pacific will increase from around 45 percent to approximately 52 percent (applying 1994 proportionate values of imports). For markets outside the region, Barbier (1996) notes that on a trade-weighted basis forest products have the highest percentage (85 percent) of duty free imports of any class of goods in developed country markets. This is of notable significance for Asia-Pacific exporters.

In addition to tariff elimination on certain products, a number of countries in the region made significant reductions (to non-zero levels) on existing tariffs. Japan made a number of adjustments to solid wood tariffs including reductions to its Spruce-Pine-Fir (SPF) planed and sanded sawn timber tariff and reductions to a number of panel products tariffs. Australia implemented a standard five percent tariff to processed solid wood products which involved

substantive reductions to several lines. Thailand implemented wide-ranging reductions, and China and New Zealand also made some smaller adjustments.

Tariff escalation refers to a widespread practice of levying higher tariffs on relatively more-highly processed products. Consequently, escalation favours domestic processors since it enables them to import raw materials at lower rates of duty but provides protection from imported processed products (which pay duty both on their raw material content and their additional "processed values"). Tariff escalation thereby confers a higher rate of effective protection than the nominal tariff rate indicates (since foreign manufacturers' competitive advantage in processing must be sufficient to absorb tariff charges levied both on the raw material and processing components of their product).

For example, in the production of sawn timber the proportion of log costs to final cost is around 50 percent. Consequently an importing country applying no tariffs to log imports but a nominal tariff of 5 percent on sawn timber, in fact, provides an effective rate of protection of 10 percent. Ignoring variation in the prices of non-tradable inputs, an exporting sawmill must be 10 percent more efficient than its protected counterpart to overcome the tariff.

Tariff eliminations and reductions have mitigated, to some extent, tariff escalation in Asia-Pacific countries. Moves by countries such as Australia, Korea and Indonesia to apply equal (or less disparate) tariff rates across all lines of wood products have assisted in ameliorating tariff escalation.

One of the key provisions of the Agreement is the *Most Favoured Nation* (MFN) principle which guarantees that generally all World Trade Organization (WTO) members are given equal market access on all product lines. That is, if a tariff concession is offered to any one GATT member then it must also be offered to all others. Some important exceptions to this principle are customs unions and free trade areas, for example, the ASEAN free-trade area allows its members preferential access to each other's markets. A second important exception, of particular significance to trade in the Asia-Pacific region, is under the *Generalised System of Preferences* (GSP) which allows for preferential treatment of developing countries. That is, a set proportion of a developing country's exports of a particular product may be permitted to enter a developed market at a rate of duty below the prevailing MFN rate.

GSP provisions are of considerable importance in the Asia-Pacific forestry sector, since the region encompasses most of the major GSP beneficiaries with respect to forest products. Only Japan, Australia and New Zealand are ranked as developed countries, consequently all other countries are eligible to receive favourable tariff treatment on their exports. In this regard, the Uruguay Round, which reduced MFN rates while GSP provisions remained effectively constant, may well have been disadvantageous to a number of Asia-Pacific exporters.

The tariff summary tables in Appendix 1 show a number of developing countries apparently increasing tariffs in the Uruguay Round settlement (comparing the pre-Uruguay tariff with the post- Uruguay tariff). This is a very misleading impression requiring explanation of the distinction between applied and bound tariff rates. The pre-Uruguay rate is more appropriately termed the *applied* rate meaning it is the most recent known rate at which a tariff was actually being levied. The post- Uruguay rate is more appropriately known as the

bound rate. The bound rate provides a fixed ceiling which the applied rate may never exceed. Where the applied rate is lower than the bound rate the applied rate will generally continue to operate for the immediate future irrespective of the *bound* rate listing. A country may vary its applied rates (either increasing or decreasing its applied rates) to achieve a desired level of protection. However, a country may never increase its applied rate for a particular item beyond the bound rate. Consequently, although tariff binding does not provide a tangible tariff gain of itself, it constitutes a very real reduction in market risk.

IMPACTS ON FOREST PRODUCTS TRADE

When a tariff is reduced or removed in a market where the quantity of goods traded remains constant then the gains from the change can be distributed in three possible ways. Firstly, if the market price of the good does not change then all gains are captured by suppliers. Secondly, if the market price of the good falls by the full extent of tariff change then all gains are captured by consumers. Most normally, the market price will fall by some proportion (<1) of the tariff change and the benefits of the reduction are shared by buyers and sellers.

The normal and more complicated case with bilateral trade also allows the quantity of goods traded to vary in response to a tariff reduction. Since a tariff reduction means consumers are paying a lower price or suppliers are receiving a higher price, or most usually both, then a greater quantity of goods can be expected to be traded. This is known as the *trade creation effect*.

In the multilateral trade arena where different tariff rates are applied by a single importing country to production from several exporting countries, a tariff reduction in favour of one exporting country may confer sufficient advantage to that country to enable it to capture market share at the expense of a second country's exports. This is termed the *trade diversion effect*. In the context of the Uruguay Round this aspect may be observed in relation to changes in the relative GSP and MFN tariff rates applied respectively to developing and developed country exports.

An assessment of trade creation effects and trade diversion effects resulting from the Uruguay Round was done by Barbier (1996)³. In an analysis covering Australia, China, India, Japan, Republic of Korea, Malaysia, New Zealand and Thailand from the Asia-Pacific region, Barbier estimates the potential effects of the Uruguay Round on selected forest products in a range of importing countries. It should be emphasised that due to data limitations it was possible to estimate only the trade impacts on (at best) imports of logs, sawn timber, veneer, particleboard, plywood, fibreboard, wood pulp and newsprint in major markets. For some countries a much more limited list was estimated. Consequently, the impacts of tariff reductions on other forestry products, most notably other paper products, furniture and builders' joinery, are not included in the analysis (and for a number of countries other substantive items) and thus the full impacts of the Uruguay round on forestry are not represented.

³ Barbier's methodology is detailed in the Annex to Barbier (1996) (pg 45)

Barbier develops two scenarios. *Scenario A* assumes that pre-Uruguay Round tariffs on imports into developed country markets are at GSP rates for developing country exports and MFN rates for developed country exports. *Scenario B* assumes that pre-Uruguay tariffs on all imports are at MFN rates. For both scenarios a medium elasticity of demand for imports is assumed. Consequently, while both scenarios can be expected to yield trade creation effects, only Scenario A, which models tariff differentials between developed and developing countries, will yield trade diversion effects. Barbier notes that, in the real world, because not all imports from developing countries are eligible for GSP rates, the actual post-Uruguay Round outcome is likely to lie between Scenarios A and B.

Table 3 shows the results of Barbier's modelling. The most evident, and expected, impact is that the narrowing of tariff differentials between GSP and MFN countries in Scenario A causes significant trade diversion in favour of developed countries and at the expense of developing countries. Trade diversion effects from tariff changes, particularly in the European Union, dominate the results of Scenario A. Consequently, under Scenario A the value of exports from developing countries is shown to decline as a result of the Uruguay Round settlement.

For the Asia-Pacific region, where 80 percent of exports are sourced from developing countries, a real world situation reflective of Scenario A would suggest the Uruguay Round outcome on balance to have been detrimental to the region's exporters. Conversely Scenario B suggests trade gains of a similar magnitude to the losses sustained under Scenario A. Bearing in mind the suggestion that the actual Uruguay Round result is likely to lie between Scenarios A and B, and that trade creation effects in developing country markets in Table 3 total only around US\$25 million, the net benefits of the forestry outcome of Uruguay Round for the Asia-Pacific region appear modest at best. This is particularly evident in examining the final two columns which suggest the value of total trade creation gains from the Uruguay Round settlement on forestry is around 0.4 percent of the value of the global forestry trade. This result does, of course, ignore the obvious benefits to exporters and consumers of the reallocation of tariff revenues previously accruing to Governments.

Table 3: Estimated Trade Effects on Selected Forest Products of Uruguay Round Tariff Changes in the Asia Pacific and other key Markets (US\$1000)

Importer	IMPORTS FROM DEVELOPING COUNTRIES						IMPORTS FROM DEVELOPED COUNTRIES						TOTAL CHANGE			
	Trade Creation		Trade Diversion		Total Effect		Trade Creation		Trade Diversion		Total Effect		Nominal Change		% of Forestry Imports	
Scenario	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Australia	2042	5073	(256)	0	1786	5073	10871	10871	256	0	11127	10871	12913	15944	1.1%	1.3%
China	4402	4402	0	0	4402	4402	3570	3570	0	0	3570	3570	7972	7972	0.2%	0.2%
India	303	303	0	0	303	303	651	651	0	0	651	651	954	954	0.2%	0.2%
Rep. of Korea	1402	1402	0	0	1402	1402	8486	8486	0	0	8486	8486	9889	9889	0.4%	0.4%
Japan	36701	74759	(16383)	0	20318	74759	37783	37783	16383	0	54166	37783	74484	112543	0.6%	0.9%
Malaysia	569	569	0	0	569	569	146	146	0	0	146	146	715	715	0.1%	0.1%
New Zealand	0	128	(3)	0	(3)	128	560	560	3	0	563	560	560	689	0.3%	0.4%
Thailand	5337	5337	0	0	5337	5337	827	827	0	0	827	827	6164	6164	0.5%	0.5%
United States	0	24472	(604)	0	(604)	24472	24317	24317	604	0	24921	24317	24317	48788	0.2%	0.4%
EU	0	65746	(201756)	0	(201756)	65746	198591	198591	201756	0	400346	198591	198591	264336	0.4%	0.6%

Source: Barbier (1996)

SIGNIFICANCE FOR INDIVIDUAL COUNTRIES

New export opportunities for forest products producers are an obvious outcome of the Uruguay Round. Perhaps less obvious are the additional opportunities the Settlement will create in countries' domestic markets. An increase in domestic demand for wood products, strongly correlated with the increase in economic activity as a result of the overall Uruguay Round outcomes, should be anticipated. For example, the Uruguay Round agricultural settlement will result in an expansion of production and exports of agricultural goods from a number of Asia-Pacific countries. In turn this should increase the demand for packaging materials and stimulate farm investment in terms of, for instance, fencing, stock handling facilities, storage sheds and new processing plants. Increased export revenues will result in higher domestic spending thereby creating downstream effects in such areas as housing construction, industrial development and household items. These multiplier effects in a range of industries will impact on forest products usage particularly for packaging but also construction purposes.

Changes in tariff relativities across countries will create new opportunities in some markets and also act to increase competition in some countries' domestic markets. This section attempts a brief assessment of the impacts of tariff changes in the major countries involved in the forest products trade in the Asia-Pacific region - and the potential impacts for Asia-Pacific countries of changes in the two largest related markets - the European Union and the United States. A quantitative listing of tariff changes is provided in Appendix 1.

Australia

Australia is presently a net importer of forestry products, but moving rapidly toward a net export position. By 2010 Australia is expected to be a net exporter of forestry products. Table 4 details Australia's largest forest products export suppliers by product.

Table 4: Australian Imports of Forest Products - Major Suppliers (Year to June 1995) (Aust\$'000)

Country	Sawn Timber	Panels	Woodpulp	Paper	Miscell. Remanufacts.
New Zealand	222 732	84 027	73 870	192 000	20 850
United States	90 383	4 767	30 460	238 100	16 577
Canada	101 137	-	39 200	47 900	-
Malaysia	80 239	6 146	-	-	61 587
Indonesia	16 968	29 160	-	34 700	25 909
Finland	5 876	-	1 400	264 200	-
Germany	-	3 199	-	143 400	1 763

Source: Abare 1996

In the year to June 1995 Australian forest products imports totalled A\$2 642 million, of which 58 percent was comprised paper and paperboard imports. The value of products listed in Table 4 totals around 60 percent of Australia's imports, with the remainder being mainly paper imports from European countries and Japan.

The Australian forestry offer under the Uruguay Round is to bind most Chapter 44 items at 5 percent, although less-processed products, such as logs, are bound at zero. All pulp tariffs and newsprint are bound at zero. Paper tariffs are bound at 5-12 percent. For most products this equates to a modest tariff reduction. For example, pre-Uruguay Australian sawn timber tariffs were 5-9 percent, panel products tariffs ranged 5-12 percent, and paper products tariffs were 0-12 percent

New Zealand is easily the largest forest products exporter to Australia, supplying around 23 percent of Australia's forestry imports. New Zealand exports enter Australia duty free under the ANZCER Trade Agreement. Consequently, Australia and New Zealand can be regarded almost as a single market. New Zealand exporters under ANZCERTA provisions, similarly to Australian producers, retain a margin of preference over third country suppliers though given the tariff reductions noted above obviously this margin is reduced for most products. Tariff reductions will enhance the competitiveness of third country producers, thereby reducing any above-normal profits earned by the most efficient Australasian producers and eliminating the most marginal firms. In terms of Barbier's analysis, the difficulties of modelling the ANZCERTA provisions means the trade effects are probably overstated since the gains accruing to New Zealand would partially have been realised at the time of ANZCERTA's implementation. Barbier estimates trade creation impacts in Australia to be worth between US\$13 million and US\$16 million.

Australia's Uruguay Round forestry tariff commitments are not large and, with additional natural trade protection in the form of freighting costs and increasing Australian production, there are unlikely to be significant substitution opportunities into the Australian market. Countries such as Indonesia and Malaysia may, for example, seek to capture plywood and non-coniferous sawn timber market share at the margins; however, the opportunities are not substantial.

Australia is expected to be a net beneficiary from Uruguay Round trade liberalisations and the general stimulus this applies to the Australian economy should also provide some scope for forestry trade creation and particularly opportunities for Australasian producers of wood-based packaging products.

China

China is not a contracting party to the GATT. It was, however, a participant in the Uruguay Round. The Chinese offer bound forest products tariff rates at levels which generally range from 20 percent to 40 percent although there are a few items, most notably logs and woodpulp, at rates below 10 percent. The new Chinese bound rates are generally in the vicinity of the pre-existing applied rates, with tariff bindings on particleboard (20 percent) and some types of fibreboard (20-35 percent) being set marginally lower than the pre-existing applied rates, while tariffs on plywood (35 percent), veneer (9-35 percent) and many paper products (20-35 percent) are bound at levels slightly above the applied rates.

Barbier's analysis shows changes in China's tariffs will create an additional US\$8 million in trade each year. More significant is likely to be the resolution of current negotiations for China and China-Taipei to become members of the WTO. In addition to delivering further significant tariff reductions such membership could also be expected to assist in removing a number of non-tariff barriers to trade such as statutory inspection, state pricing measures, import licensing and quota restrictions. The impacts of China's potential accession to the WTO are discussed later.

Hong Kong

Even prior to the Uruguay Round settlement Hong Kong applied no tariffs to forestry products. Under the settlement Hong Kong agreed to bind tariffs at zero meaning the risk of tariff increases is removed in the medium term. The major unpredictable elements in terms of the Hong Kong market are in terms of its reversion to Chinese sovereignty. In 1997, Hong Kong will become a Special Administrative Region of China. While this will undoubtedly strengthen trade ties between Hong Kong and China, there should be little evident change to Hong Kong's institutional trade structures as a result of the change. It appears that under the terms of the agreement the main features of the Hong Kong economy are to be preserved for 50 years including the free-port system, the independent taxation system, and financial structures.

Most of the opportunities in terms of expanding exports to Hong Kong relate to its 1997 change of status, particularly as a gateway to China. Hong Kong itself presently operates mainly as a re-exporter of sawn timber with re-exports of wood panels also growing substantially since 1988. There may be some potential to increase exports of panel products and the Hong Kong paper and paperboard market has grown strongly over the past decade. However, in the interim the unchanged tariff structure means the Uruguay Round outcome will have little impact on this market.

India

Until recently India applied extremely high tariffs to forest products. For example, the 1986 base tariff rates for panel products ranges from 105 percent to 145 percent. Actual rates applied immediately pre-Uruguay round were considerably lower though escalatory, reaching 35 percent for some carpentry and furniture, 30 percent for fine papers and plywood, and 20 percent for other panel products.

The essence of the Indian tariff offer is to bind tariffs at slightly above the pre-Uruguay applied rates. Consequently most tariffs are bound at either 25 percent (including logs, woodpulp and newsprint) or 40 percent (including sawn timber, panel products and other paper and paperboard). Similarly to most of the other developing countries there are no immediate tangible benefits to this higher binding, but the historically high levels of Indian tariffs lend the bindings significant importance in market risk alleviation. The tariff bindings limit the degree to which India will be able to use tariffs to protect its domestic industry in the future. The relatively recent reductions in Indian applied tariffs also give evidence to the potential gains which can be achieved through the removal of trade barriers. For example,

Barbier's analysis, based on 1991 tariff rates on sawn timber, show trade creation totalling almost US\$1 million on a sawn timber trade valued at only US\$11 million. These gains have actually been realised prior to the Uruguay settlement.

Indonesia

Indonesia, as a developing country, made few immediately tangible concessions on forestry under the Uruguay Round settlement. The Round is, therefore, unlikely to substantially alter forestry trade with Indonesia. The essence of the Indonesian offer is a ceiling binding of 40 percent on solid wood products and paper items (with the exception of newsprint). This is generally higher than the current applied rate. Pulp products and newsprint are bound at 30 percent (their present applied rate). As noted earlier, the major gain from tariff binding is a reduction of market risk. Indonesia was not included in Barbier's analysis.

Indonesia has a large, and rapidly developing forestry sector. There will be very limited opportunities to expand sales of forestry products into Indonesia in the foreseeable future. As Table 1 shows, 63 percent of Indonesia's 1994 forestry exports by value were in wood pulp. Rapid expansion of Indonesia's pulp and paper sector, including the 1995 start-up of the Riau Andalan BHKP mill, the world's largest single line pulp mill, suggests opportunities to export forestry products to Indonesia are diminishing rather than expanding.

Japan

Japan, the world's second largest single-country forest products importer and the dominant tariff-levying destination in the Asia-Pacific region was a focal target for forest products tariff reductions in the Uruguay Round negotiations. Japan resisted considerable pressure in forest products negotiations to accede to a zero-for-zero agreement on solid-wood products which would have meant substantive additional liberalisation of global trade in wood products. The non-participation of such an important player in the forest products trade may have led to most other countries withdrawing their support for zero-for-zero.

Japan's own solid wood tariff offer comprised a reduction in forestry tariffs by an average of 33 percent on a trade weighted basis. That is, Japan reduced its tariffs by one-third on the value of imports but retained discretion as to where the cuts were applied. Japan was also a signatory to the zero-for-zero agreement on pulp and paper products.

The importance of the Japanese market to a number of major forestry producing countries has placed the Japanese schedule of tariffs under considerable scrutiny. The structure of Japan's sawn timber tariff with variable rates dependent on timber species has been heavily criticised by several producers of Spruce-Pine-Fir (SPF) timber including Canada and New Zealand. The tariff is structured so that major tropical hardwood species and softwood species, with the exception of Larch and SPF timbers, do not attract tariffs. A narrow range of species held to be in direct competition with Japanese-grown species attract a tariff. In the late-1980's Canada brought an unsuccessful case against these tariffs to a GATT Panel.

Japan's Uruguay Round agreement on sawn timber reduces tariffs on planed and sanded SPF timber from 8 percent to 4.8 percent and from 10 percent to 6 percent for planed

and sanded Larch timber. Rough sawn timber rates remain constant but are bound. This will have the impact of making exporters of these species more competitive in the export of more highly processed sawn timber relative to other producers. Countries which should benefit include Russia, Canada and New Zealand.

Japan's panel products reductions were quite substantive in terms of the proportionate elimination. The tariff applied to fibreboard was reduced from 5.2 percent for high density fibreboard and 3.5 percent for medium density fibreboard, to 2.6 percent for each. The applied tariff on particleboard was reduced from 8 percent to 6 percent, while tariffs on plywood and laminated veneer lumber were reduced from 10-15 percent to 8.5-10 percent for non-coniferous plywood; and 10 percent to 6 percent for coniferous plywood. Japan also made modest reductions to tariffs levied on processed solid wood items including mouldings, joinery and furniture.

Japan has applied a temporary zero tariff to all imports of woodpulp and newsprint since the late-1980's. However, agreement to sign the pulp and paper zero-for-zero meant some significant tariff reductions on other paper and paperboard products for which some tariff lines exceeded 4 percent.

Barbier's analysis is limited to assessing the impact of tariff changes on sawn timber and panel products. Trade creation effects for these products are estimated to be between US\$74-US\$112 million while trade diversion impacts amount to approximately US\$16 million.

The Republic of Korea

The Republic of Korea's status as the third largest forest products importer in the Asia-Pacific region confers considerable importance to its Uruguay Round tariff offer, and programme of tariff reductions. In terms of solid wood products Korea has been implementing a steady programme of tariff reductions which has resulted in single-figure tariffs at a largely uniform level (8 percent in 1993 reducing to 5 percent by 1996). Korea's Uruguay round offer bound solid wood tariffs at levels slightly higher than existing applied rates and was, consequently, of little immediate benefit to exporters to Korea.

Korea is, however, a participant in the pulp and paper zero-for-zero agreement and will consequently eliminate its pulp and paper tariffs by 2004 under the terms of this agreement. Prior to the Uruguay round settlement Korea applied a 2 percent tariff to woodpulp and an 8 percent tariff to paper.

Barbier's analysis shows trade creation effects of almost US\$10 million arising from Korea's Uruguay Round tariff commitments on woodpulp and newsprint compared with 1991 levels.

Malaysia

Forest products imports by Malaysia are dominated by paper products. As Table 1 shows, in 1994 paper and paperboard comprised 83 percent of Malaysia's forest products

imports. There is seemingly little potential to expand exports into Malaysia outside of this sphere.

Malaysia, like Indonesia, is a major producer of hardwood forest products. Malaysia's Uruguay Round offer varies considerably across forest products with most products being bound at the pre-Uruguay applied rate or slightly below. For solid wood products most tariffs are bound at 20 percent, with a notable exception being plywood which is bound at 35 percent. This is doubtless deemed necessary to protect Malaysian industry from an influx of Indonesian products. The impact of ASEAN-generated liberalisation on this sector could be significant if Malaysia is willing to expose its plywood manufacturers to a greater degree of competition. Wood pulp tariffs are bound at 5 percent while paper products are bound at a variety of rates ranging from zero to 25 percent.

The Uruguay Round concessions probably confer few realisable benefits to foreign exporters to Malaysia and are unlikely to provide many new opportunities. However, the Malaysian offer does provide tangible tariff reductions on a number of products which will assist market efficiency in Malaysia. Barbier estimates the trade creation effects of Malaysia's Uruguay Round commitments to be less than US\$1 million.

New Zealand

New Zealand presently harvests 15 million cubic metres of wood each year. Over the next 15 years the annual harvest is expected to increase to almost 30 million cubic metres per annum. A large proportion of this additional production will need to be exported. Consequently the Uruguay Round Settlement, and its trade liberalisation implications, are of considerable importance to New Zealand processors. The Settlement provides opportunities to increase the range and value of New Zealand exports by improving New Zealand's international competitiveness and ensuring continued market access.

New Zealand's tariff offer on wood products will have a negligible effect for overseas suppliers to the New Zealand market. New Zealand's on-going programme of tariff reform means that for all Chapter 44 (wood products) items all of the reductions agreed to under the Settlement will be achieved by 1996, in line with scheduled reductions. Most of the rates in Chapter 44 are already below their bound offer levels.

For pulp and paper items New Zealand is committed to halving its 1986 applied rates by 2000 and eliminating all pulp and paper tariffs by 2004. The on-going reduction programme has already achieved the tariff halving. However, complete elimination will require further reductions in the period 2000-2004. These reductions will have no impact on pulp or newsprint production where the present tariffs are all effectively zero (hardwood pulp enters New Zealand duty free under a specific concession although formally the tariff is listed at 12 percent). However, there may be a need for some rationalisations in other paper and paperboard production where the tariff reductions will be substantive, with pre-Uruguay tariffs as high as 16 percent on some paper products.

The bulk of New Zealand's paper and paperboard production is sold competitively on export markets and consequently new opportunities for overseas suppliers are likely to be

limited to a narrow range of speciality paper products, particularly fine papers for printing and writing which are presently produced in very limited quantities in New Zealand.

Barbier's analysis estimates trade creation effects from New Zealand's tariff reductions to be well below US\$1 million.

Papua New Guinea

Papua New Guinea was not a Uruguay Round participant and consequently its tariffs are unchanged as a result of the round. The major impacts for Papua New Guinea as a small supplier of processed products are likely to be detrimental, with its GSP advantages diminished in some markets. Given the current dominance of log exporting from Papua New Guinea, these impacts are likely to be minimal except to reduce at the margins the attractiveness of Papua New Guinea as a site for the establishment of processing facilities.

Philippines

Prior to the Uruguay settlement tariffs in the Philippines were at relatively high levels. Sawn wood, veneer, moulded wood, and paper products had a 20 percent tariff applied in 1994, particleboard and fibreboard had 30 percent tariffs and plywood a 50 percent tariff. In common, again, with most developing countries the Philippines has bound tariffs at levels slightly above applied rates. However, the Philippines offer is less comprehensive than many of the other Asia-Pacific countries with no offer made on panel products, wooden furniture, or a range of paper products. The effects of the Uruguay Round on the Philippines were not examined by Barbier.

In the post-Uruguay period the Philippines has shown considerable willingness to liberalise tariffs with a number of Presidential Executive Orders detailing significant tariff reductions. While the Uruguay Round settlement will change little as far as exporters to the Philippines are concerned, these later tariff reductions may well provide substantive gains in the market.

Singapore

Prior to the Uruguay Round settlement Singapore applied no tariffs on forestry products with the exception of furniture products which attract a 5 percent levy. Under the Uruguay Round Settlement Singapore has agreed to zero-for zero binding on pulp and paper products and has imposed a ceiling binding of 10 percent on all solid wood products except medium and high density fibreboard which will be bound at zero. However, Singapore is expected to continue to apply zero tariffs on all products and consequently there will be no direct trade diversion as a result of Singaporean tariff offers. Other countries tariff reductions, which make their own markets more attractive, could potentially divert small quantities of trade away from Singapore.

Opportunities for expansion of the Singaporean market appear limited. Singapore imports moderate quantities of logs, sawn timber and panel products but re-exports similar

volumes, indicating solid wood consumption on the island is extremely modest. Hardwood imports (mainly from Malaysia) dominate. Apparent consumption of paper and paperboard in Singapore is around 3.5 million tonnes per annum while Singaporean imports of wood pulp are virtually non-existent. However, the Uruguay Round settlement is unlikely to create many new opportunities in Singaporean markets.

Thailand

The magnitude of Thailand's Uruguay round commitments appear to be quite substantial. The most recent available Thai tariff schedule (1989) indicates substantial tariffs being applied to a range of products. Panel products were incurring rates of duty ranging from 40-70 percent, wood pulp had a 10 percent tariff levied on it, and tariffs on paper products ranged from 30-50 percent. Sawn timber tariffs ranged from 20-40 percent while manufactured wooden furniture had an 80 percent tariff applied. Although the best available information suggests it is likely Thailand had already commenced a programme of tariff reform between 1989 and 1994, nonetheless the Uruguay offer is a substantive improvement on the recent past.

Under the Uruguay settlement Thailand has bound sawn timber and veneer tariffs at 10 percent, panel products and wooden furniture tariffs at 20 percent, and paper tariffs at between 30-50 percent. Thailand is also listed in reports as expressing interest in participating in a solid wood products zero-for-zero agreement.

Barbier estimates the trade creation effects of the Uruguay Round forestry tariff reductions in Thailand to be valued at US\$6.2 million.

United States

The United States comprises the world's largest single country importer of forestry products and changes to its terms of trade are consequently of major interest to all exporting countries. Prior to the Uruguay Round the United States had very low tariffs on most forestry products so there existed generally only minor scope for improvement. The United States levied no tariff on logs, sawn timber, woodpulp, newsprint and a number of other paper types. Small tariffs were applied to moulded timber (0 - 4.5 percent), particleboard (4 percent), fibreboard (3 percent), other paper products (to 5.3 percent), and wooden furniture (2.5-6.6 percent). All of these tariffs were eliminated under the Uruguay Round settlement. The United States was also a major proponent of both the solid wood and pulp and paper zero-for-zero proposals.

The United States most notably retains tariff protection on plywood and laminated wood which for most types produced in Asia-Pacific the tariff is bound at the pre-Uruguay applied rate of 8 percent, and on a range of products grouped as builders' joinery and carpentry, with a maximum tariff of 4.8 percent.

The very modest US tariffs on wood products means trade creation effects resulting from their removal or reduction are relatively small. Barbier estimates trade creation effects to be valued at between US\$24 million and US\$49 million with very minor (less than

US\$1 million) trade diversion effects. A significant proportion (based on the relative volume of trade with Canada and Mexico) of the trade creation estimated in Barbier's analysis would already have been realised from the signing of NAFTA.

European Union

Forestry products imports by the countries of the European Union in 1994 totalled almost US\$50 billion. Although much of the trade is between countries of the EU, the region still comprises 41 percent of global forestry imports and changes to its terms of trade are similarly important to those of the United States for exporting countries.

European Union forestry tariffs were at moderate levels prior to the Uruguay Round settlement. Tariffs on logs, rough sawn timber and wood pulp were at zero. Moderate tariffs were applied to planed (4 percent) and sanded (4.9 percent) sawn timber, moulded wood (3 percent), veneer (3-6 percent, other panel products (10 percent), newsprint (4.9 percent) and paper products (0-9 percent). The European Union was a party to the pulp and paper zero-for-zero agreement and also eliminated tariffs on sawn timber and moulded wood. Other panel tariffs were reduced to 7 percent and veneer to 2 - 4 percent.

The size of the European market and the extent of tariff reductions means there are considerable trade creation effects associated with tariff reductions. Barbier's methodology, however, is inclusive of intra-European Union trade and consequently includes trade creation and diversion effects already captured with the formation of the European Union.

SUB-REGIONAL TRADE ARRANGEMENTS

Asia Pacific Economic Cooperation (APEC)

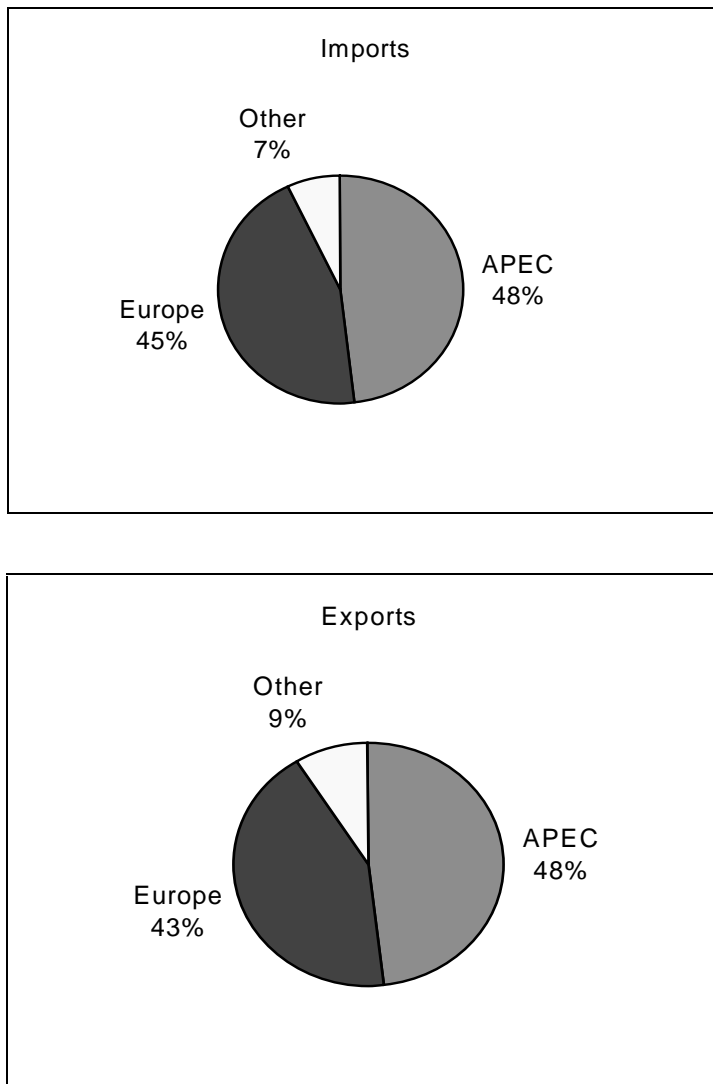
Asia Pacific Economic Cooperation (APEC) was initiated in 1989 and initially comprised the (then) six ASEAN members and six countries deemed as their "official Pacific dialogue partners", Australia, Canada, Korea, Japan, New Zealand and the United States. More latterly membership has been granted to China, Hong Kong, China-Taipei, Papua New Guinea, Mexico and Chile. APEC was established as an informal consultative forum particularly to promote trade liberalisation. Most particularly, the organisation supports the concept of "open regionalism". That is, the promotion of regional growth and development without discriminating against the rest of the world.

The centre of APEC's influence on trade over the coming decades is the *Bogor Declaration of Resolve* signed in 1994 which proposes a timetable for the liberalisation of trade across the region. According to the Bogor timetable negotiations to achieve free trade will commence in 2000 and be completed within 10 years for the developed nations, 15 years for the newly industrialised countries and 20 years for the developing countries. In keeping with the concept of "open regionalism" trade concessions would then be extended to non-members on a reciprocal basis to promote world-wide trade liberalisation. It is envisaged that tariff reductions will commence from their Uruguay Round bound levels, or for non-WTO

members (Brunei, China, China-Taipei, Papua New Guinea, Vietnam) according to a mutually agreed path.

For the Asia-Pacific region then, APEC may well provide a short-cut to future trade liberalisation under the GATT and may well form the basis of a non-European trade bloc. In terms of forestry trade the eighteen members of APEC control a substantive portion. In 1994 APEC members accounted for 48 percent of forest products exports and also 48 percent of imports.

Figure 1: Share of World Trade by Region (1994)



Assuming the terms of the Bogor Declaration are adhered to, then by 2010 a substantive framework for free-trade within the region is likely to be in place. Although APEC is not designed to become an economic and customs union like the European Union, nor a free-trade area like that covered by the North American Free Trade Agreement, it provides a smaller, and hence more flexible, forum than the WTO or GATT, to facilitate progress in trade liberalisation. Given the relatively strong support by APEC members for the

zero-for-zero agreement on wood products (USA, Canada and New Zealand were proponents), the variety of free-trade relationships between the various members (NAFTA, ASEAN, ANZCER, Hong Kong and Singaporean free-ports), and the already generally low tariffs in the forest products sector, APEC probably provides the best path toward creating a largely free-market bloc for trade in forest products. Given the importance of the Japanese, Korean and Chinese markets in the region, the extent to which these countries are prepared to undertake further liberalisation, and the extent to which the ASEAN countries are prepared to offer concessions will be primary determinants of APEC's influence on the forestry trade.

Association of South East Asian Nations (ASEAN)

ASEAN was established in 1967 as a means of promoting economic growth, regional peace and stability, and collaboration and assistance in, and between, the countries of South-East Asia. The original membership comprised Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei joined in the 1970's and Vietnam in July 1995.

In 1977 the ASEAN nations reached an agreement on the establishment of ASEAN preferential trade arrangements. However, by 1987 only 5 percent of trade between member states was covered by the arrangements due to provisions allowing "sensitive" products to be excluded. In 1987 an agreement to restrict the levels of "sensitive" products to 50 percent of the value of trade was reached. In 1992 an agreement establishing a Common Effective Preferential Tariff (CEPT) scheme was initiated. At the same time agreement to establish an ASEAN Free-Trade Area (AFTA) in 2008 was reached. The AFTA agreement proposed tariffs on manufactured and processed agricultural goods be reduced to a maximum of 20 percent over the subsequent eight years, and further reduced to a maximum of five percent in the following years leading to the implementation of a free-trade area in 2008. In 1995 an agreement to accelerate AFTA implementation to 2000 was reached.

For forestry, the major implications of ASEAN and AFTA are to confer preferential advantages to the large producers (Malaysia and Indonesia) in, particularly the Thai market, but also in the Philippines and Brunei. The importance of sectors such as plywood to Indonesia and Malaysia are likely to cause some competitive tensions between the two while the relative strength of forestry in these two countries may serve to dampen development prospects particularly for Vietnam and the other emerging Mekong countries in the absence of protective measures.

South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)

The South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA) was established in 1981. The Agreement is a non-reciprocal arrangement under which Australia and New Zealand offer preferential trade access to the developing nation members of the South Pacific Forum. For most products this entails duty-free access. The agreement is designed to ameliorate the large deficits run by the island countries in their trade with Australia and New Zealand.

The relative strength of the Australasian forestry sectors and the already relatively low tariffs for forestry products mean SPARTECA has very limited and insignificant implications for forestry trade.

Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA)

In 1982 Australia and New Zealand signed a Closer Economic Relations Trade Agreement (ANZCERTA) aimed at phasing out tariffs between the two countries and the progressive elimination of import licensing and trade quotas. The Agreement is now fully implemented and has probably had quite a significant impact on the development of the Australasian forestry trade, particularly given New Zealand's concurrent expansion in forestry production.

A significant change over the past decade has been New Zealand radiata pine's superior competitiveness in the Australian market over North American sawn timber, due in part, at least, to the tariff advantages. New Zealand has substantially eroded particularly Canadian market share in the Australian market during this period. Australia's tariff reductions in the GATT round will have reduced New Zealand's advantage and, given the onset of Australia's own increased production, its markets are likely to become increasingly competitive.

China/China Taipei Accession to World Trade Organisation

As noted earlier, at the time of preparing this paper neither China nor China-Taipei are formal contracting parties to the GATT nor foundation members of the World Trade Organisation (WTO). However, both countries have expressed a desire to join the WTO and have entered into market access negotiations designed to reduce trade barriers in each to acceptable levels. Negotiations have presently deadlocked over the extent of reform required, however, negotiations on forest products tariffs appear to be close to settlement with some relatively substantive tariff reductions likely to be agreed. Early reports of Chinese negotiations suggest tariffs on wood and pulp products are likely to halve (on average) while paper products are likely to reduce by even slightly more (on average). Table 5 provides a summary of likely wood product tariff changes in response to China's accession to the WTO.

Table 5: Estimated Chinese Tariff Reductions to Meet WTO Criteria

Product	Average post-Uruguay Applied Tariff	Anticipated Average WTO Accession Settlement
Wood Products (Ch 44)	20 %	10 %
Wood Pulp (Ch 47)	2%	1 %
Paper and Paper Products (Ch 48)	31 %	14 %

Source: Author (Anecdotal)

Although there are presently few indications of when China and China-Taipei's Accession might take place, and consequently when such tariff reductions might be implemented, the present impasse allied with the length of the Uruguay Round implementation phase suggests that the bulk of tariff gains from such accessions will not be realised until well into the next decade.

CONCLUSIONS

Barbier notes that although proportionately a high level of reduction in forestry tariffs was achieved in the Uruguay round, in nominal terms, since forestry tariffs were already low, the reductions were relatively small. Across all forest products in developed countries the average import tariff rate is to be reduced from 3.5 percent to 1.1 percent, a reduction of almost 70 percent.

The situation is relatively similar in the Asia-Pacific. Much of the trade in forestry products was already not subject to tariffs, and where substantive tariffs existed, gains have largely been in terms of achieving bindings rather than actual reductions. It is fair to say that both Barbier's technical analysis and a mere qualitative assessment of the tariff changes suggest that the gains from the Uruguay Round for the Asia-Pacific forestry sector, while valuable, are likely to be outweighed in determining trade patterns by more significant factors including processing efficiency, relative currency value changes, depletion of forest stocks and other environmental factors.

For the Asia-Pacific region specifically, given the proportion of developing as opposed to developed countries, the results of the Uruguay Round are likely to be largely neutral in any event. The narrowing of the GSP-MFN differential is likely to disadvantage exporters in some developing countries, while overall trade creation effects may offset this diversion effect. The developed country exporters in the region could be the biggest winners, though all three (Japan, Australia and New Zealand) will face increased competition in key markets.

The most likely path into the future is for a pattern of continuing tariff reductions and improved market access through the regional trade agreements, notably APEC and ASEAN. If these two organisations implement planned tariff reductions then the bulk of the region should be part of a Pacific rim free trade region by around 2020. Again, given the already high proportion of forestry trade carried out duty free the overall gains from such an outcome, while substantial in their own right, are unlikely have an enormous impact on trade patterns.

The initial focus of the WTO is on addressing the trade-environment nexus. The conflicts between trade and environmental issues were deemed too difficult for resolution under the Uruguay Round and rapid progress in this new forum in achieving any sort of settlement should certainly not be expected in anything except the very long run. Within the horizon of the Outlook study (2010) agreement on appropriate environmental protection roles for market access instruments may be the most that can be expected. Actual implementation of these roles is likely to fall outside the forecasting horizon.

REFERENCES

- Barbier, E B; *Impact of the Uruguay Round on International Trade in Forest Products*; FAO; 1996.
- Elliot, D; *Contribution for Study - "The Implications of the Uruguay Round for Commodity Trade, Prices and the Diversification Prospects of Developing Countries"*; 1995.
- Europa; *The Far East and Australasia 1996*; 27th Edition; 1996.
- FAO; *FAO Yearbook of Forest Products 1994*; 1996.
- FAO Committee on Commodity Problems; *Impact of the Uruguay Round on Agriculture*; CCP 95/13; 1995.
- GATT Secretariat; *The Results of the Uruguay Round of Multilateral Trade Negotiations*; 1994.
- Leitch, J; *Measures Affecting Trade in Forest Products*; Unpublished Report to FAO; 1994.
- New Zealand Ministry of Foreign Affairs and Trade - Asia 2000 Programme; *Asia: Trade and Economic Prospects*; 1994.
- UNCTAD Secretariat; *Implications of the Uruguay Round for Trade in Wood and Wood Products*; UNCTAD/COM/75; 1996.

APPENDIX 1. TARIFF CHANGES UNDER THE URUGUAY ROUND SETTLEMENT

List of Working Papers already printed

APFSOS/WP/01	Regional Study - The South Pacific
APFSOS/WP/02	Pacific Rim Demand and Supply Situation, Trends and Prospects: Implications for Forest Products Trade in the Asia-Pacific Region
APFSOS/WP/03	The Implications of the GATT Uruguay Round and other Trade Arrangements for the Asia-Pacific Forest Products Trade