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Regional Cooperation towards Multilateral Arrangements on Agriculture, Labour, and Environment in the Context of Globalisation: The Case of Indonesia

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ABSTRACT

This study looks at Indonesia's commitments to multilateral trade agreements, and assesses policies adopted by the government to meet the criteria set by those agreements. Particularly, three sectors are of interest here: agriculture, labour and environment. One crucial question is whether government and private sectors have successfully cooperated to prepare for further liberalisation.

Keywords: *Indonesia, multilateral trade agreements, agriculture, labour, environment, liberalisation*

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REGIONAL COOPERATION TOWARDS MULTILATERAL ARRANGEMENTS ON AGRICULTURE, LABOUR AND ENVIRONMENT IN THE CONTEXT OF GLOBALISATION: THE CASE OF INDONESIA[1]

Titik Anas
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Introduction

Indonesia has been a member of the GATT since 1950 through sponsorship of the Netherlands. In its membership period, Indonesia started to be more actively involved in the GATT/WTO system since the Uruguay Round in the period 1986-1994. This phase coincided with the progressive trade liberalization period. The Uruguay round achieved significant trade liberalization commitments among members, including agriculture.

The change in approach towards GATT/WTO can be explained by at least two interrelated factors (Kartajoemena, 2001). **Firstly**, there were trade policy changes, from an inward-looking to an outward-looking policy regime. In the 1970s to mid 1980s, the government adopted an inward-looking trade regime. During this period, it adopted trade restrictions, tariff and non-tariff barriers to protect domestic producers, particularly manufacturing producers. In later periods, triggered by the oil crisis, the government shifted to an outward looking trade policy, as exports were expected to be the engine of growth. An export-oriented trade regime consequently required better access to foreign markets. On the other hand, the government also had to open its domestic market to imports to obtain more competitive raw materials and capital goods. **Secondly**, the manufacturing sector gained importance in the Indonesian economy. Indonesia was known as an agrarian economy. However, since 1990 the share of manufacturing sector in the GDP has surpassed that of agriculture. The growing importance of the manufacturing sector consequently needed a more open market, for imports as well as exports. This section will look at those two aspects in more detail. However, this paper will not address in detail why the manufacturing sector became more dominant.

With regard to labor issues, there has been a rise in demands for linking labor standards and rights such as minimum wages and workers rights to trade policies at the bilateral, regional and multilateral levels. Indonesia has been a member of ILO and ratified major ILO conventions on labor. However, it is against linking trade with social clause. It considers a lower wage cost as a legitimate advantage. This paper will discuss in a more details Indonesian labor policies and its position in international fora.

Indonesia is also a party to several major international multilateral environmental agreements (MEAs) and has implemented numerous aspects of these agreements

[1] This working paper is based on a paper with the same title, commissioned by the Malaysian Insitute for Economic Research (MIER) and the Sagakawa Peace Foundation SPF).

through regulations and other government actions. It has already ratified major conventions such as the Montreal Protocol and Kyoto Protocol. This paper will further elaborate Indonesia's position in regard to environmental issues.

Apart from a discussion on Indonesian domestic policies with regard to agriculture, labor and environment, this paper will also discuss Indonesia's preparation and its likely position in the next WTO round of negotiations and address the possible regional cooperation within Asia in these areas.

A brief discussion on Indonesia's trade policy changes in the last thirty years is presented in the first section. This discussion is essential to understand the changes in Indonesia's position towards multilateral arrangements, especially with regard to GATT/WTO. Section 3 outlines Indonesia's position in Uruguay Round. Section 4 discusses Indonesia's agriculture sector. It covers the performance, domestic policy and Indonesia position in the Uruguay Round with regard to agriculture. This section also discusses Indonesian two major agriculture exports: natural rubber and fishery product. Section 5 discusses trade related-labor issues, with special emphasis on social clause and Indonesia's position concerning the social clause. Section 6 discusses environmental issues and provides a short case study on the textiles industry's capacity to meet environmental standards. Section 7 discusses the relations between ASEAN regional cooperation and the WTO. This section presents the potential for enhanced regional cooperation among ASEAN member countries in addressing the WTO related issues.

Indonesia's Trade Policy Swings

As briefly mentioned earlier, the change in approach towards GATT/WTO can be explained by trade policy swings in the last thirty years – from a liberal regime in the late 1960s to a more protectionist environment in the 1970s and back to a liberal regime since mid 1980s. The availability of domestic finance partly explained the swing. When the government is financially incapable, it subscribes to a more open trade regime. In contrast, when it becomes financially prosperous, it tends to be more protectionist. In other words, an open trade regime is like a 'good friend for bad times'.

The late 1960s was characterized by a relatively open trade regime to boost exports and ease imports as the economy needed imported capital goods. The New Order government took power in the late 1960s and was left with a totally bankrupt economy. The government adopted an open economic regime to mobilize resources in order to stabilize and rehabilitate the economy.

The liberal trade regime did not last long, as Indonesia experienced huge oil revenues as a result of a sharp increase in oil price in the early 1970s and the late 1970s. Oil revenues enabled the government to finance ambitious capital-intensive investment. The state became directly involved in the production process. Increased nationalist sentiments led to a more protective trade environment. Industrialization process was targeted at import-substitute products, which can be financed by oil revenue windfall. It was backed up with trade protection.

Falling oil prices, gradually in 1982-3 and then abruptly in 1985-6, produced an immediate and effective macroeconomic policy response, resulting in fiscal contraction and devaluation. To ameliorate the balance-of-payments (BOP) deficit due to declining terms of trade, the government took various measures: devaluation, rescheduling of capital-intensive projects, tariff reduction and customs reforms. However, during this period, some restrictive policies, especially in trade and industrial policies were also introduced. For example, in 1982, the government introduced a system called the approved importers system (*Tata Niaga Impor*),[2] which became an instrument for quantitative restrictions on imports.

It took a recession in 1985 and a plunge in oil prices in 1986, to halt the protectionist trends and to begin a substantive trade reform. The Rupiah was again devalued in September 1986 and this was followed by a series of substantive trade reforms in October 1986, January 1987, November 1988, May 1990, and June 1991. These major reforms were followed by a series of other trade and investment reforms in July 1992, June and October 1993, June 1994, May 1995, and June 1996. Table 1 presents the summary of trade reforms during 1986-1996. Post trade liberalization, import tariff decreased from 27 percent on average in 1986 to about 15 percent in 1995 and NTBs which covered 17 percent of traded-commodities in 1990 to about 63 percent in 1995.

Table 1
Summary of Trade Reforms during 1985-1996

Date	▪ **Policy Changes**	▪ **Notes**
1985, March Tariff Rationalization	▪ Range reduction from 0-225% to 0-60% ▪ Number of tariff levels reduced from 25 to 11.	▪ Some reduction in protection.
1985, April Customs Reform (INPRES No. 4)	▪ Removal of Customs Dept in Goods Clearance. ▪ Appointment of Private Surveyor SGS. ▪ Removal of	▪ Reduced subst. average time of imports and exports clearance. ▪ Important psychological effect
1985, May (PAKEM)	▪ Duty drawback and bypass monopoly ▪ Arms length transactions and computerized processing.	▪ Improve duty drawback process and important factor to increase exports.
1986, October	▪ Some change from import licensing to general imports. ▪ Phasing down of NTBs with some increase in tariff to offset ▪ Reduction in tariff needed in production.	▪ Improved investment climate. ▪ Increased investments, especially export oriented.
1987, January	▪ Some change from import licensing to general imports	▪ Reduction in NTB, increase transparency

[2]The system has been discussed at length in Pangestu (1996)

Table 1 (Continued)
Summary of Trade Reforms during 1985-1996

1987, July Simplification of Textile Quota	▪ Transparency of allocation. ▪ Some allocation to newcomers and small scale.	▪ Some improvements although now some complaints.
1988, November (PAKNOP)	▪ Removal of import monopolies: plastic and steel. ▪ Inter-island shipping deregulation.	
1990, May (PAKMEI)	▪ Further removal and simplification of NTBs of 371 industrial items. ▪ Lift export controls of four agricultural commodities. ▪ Deregulation of Pharmaceutical and Animal Husbandry. ▪ Some adjustments in tariffs and reduce a number of surcharges.	▪ Improve investment climate. ▪ Coffee exporters' and joint coffee marketing groups lose monopoly status.
1991, June	▪ Reduce maximum tariff of finished goods to 30%, intermediate goods to 15%	▪ Reduced protection
1992, July	▪ Tariff reduction of some minor items. ▪ Reduce or eliminate about two-thirds of tariff surcharges.	▪ Reduced protection
1994, June	▪ Tariff reductions of 739 items, reductions of 121 tariff surcharges. ▪ Some items on the approved importers list can be imported by general importers.	▪ Reduced protection
1995, May	▪ Reform tariff structure.& restructure import surcharges. ▪ Yet maintain import protection for steel and plastic: ▪ Increase of import surcharge for steel and polypropylene in relation to Krakatau Steel and Chandra Asri. ▪ Reduce coverage of import licensing from 242 items to 189. ▪ General target levels and a schedule of tariff cuts to fulfill international commitments.	▪ Reduced protection in general, but some policy consistencies started to emerge
1996, January	▪ Reduce tariffs for 428 export-related products between 5 – 15%: ▪ …but backtracked on Chandra Asri a month later, raising surcharge for propylene and ethylene by 5-25% ▪ Extend import duty drawback facility to goods supplied to firms in special export processing zones. ▪ Wholly owned foreign trading companies can export manufactured farm, forestry, fish and mining products.	▪ Reduced protection, but the exclusion list continued
1996, June	▪ Reduce groups of products, reducing Indonesia's unweighted tariff average to 12%. ▪ Simplified export procedures.	▪

Source: Feridhanusetyawan (2001)

Not long after the float of the Rupiah on August 14 1997, the financial crisis turned into an economic crisis. In October 1997, Indonesia asked for IMF assistance to rescue the economy. The bailout package was agreed in October 31,

1997. The bailout fund was tied to an economic reform package, which included trade liberalization measures. During the IMF-led trade liberalization, Indonesia undertook substantial tariff and non-tariff reforms, which were relatively more progressive and comprehensive than Indonesian's Uruguay Round commitments. It did not only cover manufacturing but also agricultural products (food and non food agriculture) and other sensitive commodities such as chemical and steels, as shown in Appendix 1. Under the IMF-led trade liberalization, import tariff on food items were already made 5 percent, while import tariff for non-food agriculture products would reach 10 percent by 2003. The abrupt trade liberalization under the IMF package made domestic producers of few agricultural commodities such as rice producers, sugar sugarcane farmers and sugar mills lost their grips in the market[3]. While, productivity is low, allowing cheap imported rice and sugar made domestic producers less competitive in the domestic market. The government responded to the request by granting protection to those commodities. There are few other cases where government policies are highly determined by public/interest group pressures.

Indonesia's Uruguay Commitments

Indonesia became substantially more active in GATT/WTO trade negotiations since the Uruguay Round (UR), which is considered as the longest GATT/WTO negotiation round. It started in 1986 and concluded eight years later in 1994. As briefly described earlier, this coincides with the trade liberalization period in Indonesia which was characterized in the previous section as an export oriented trade policy regime/outward-looking policy.

Kartadjoemena (2001) considers the Uruguay Round as the first serious interface that Indonesia has had with the GATT-WTO system in a comprehensive way. At the beginning, there were problems in dealing with tariff in a multi-sector way due to the lack of a framework and made this round needing eight years to conclude. At the end, the Round was concluded in 1994, achieving significant trade liberalization in goods. Indonesia signed the Uruguay Round Final Act in Marakesh in April 1994.

Indonesia's commitments under the Uruguay Round for both goods and services include the following:

1. The binding majority of tariffs across-the-board at the ceiling of 40 percent. These binding covers 95 percent of the tariff lines, which consist of 7537 tariff lines of manufactured goods and 1341 tariff lines of agriculture. It covers 90 percent of Indonesian imports in 1992.
2. The tariffication and binding of all agriculture items with a reduction in the tariff of at least 10 percent per line item (24 percent overall) within 10 years and a guaranteed access threshold for rice imports of 70,000 tons annually (at a 90 percent tariff).
3. Removal of non-tariff barriers (NTBs) on tariff items included in Indonesian market access offer within 10 years. Upon signing the UR Final Act, this commitment affected 179 tariff lines (out of total of 269 tariff lines with NTBs). Of these NTBs 81 applied to agriculture items and

[3] Low productivity of these two commodities resulted from different factors.

98 applied to industrial items. In June 1994, Indonesia removed NTB measures on bound items, but another 87 NTBs still remain, which must be phased out over the coming 10 years as a result of UR.

4. Removal of all import surcharges on items that are included in the Indonesia's market access offer within 10 years.
5. Exceptions related to items on the list of exceptions to Indonesia's market access offer, for which licenses will not have to be removed, including 504 items (8.4 percent of tariff lines), out of which only 61 items (12 percent of total exception) are subject to applied tariff rates higher than 40 percent.

Table 2
Indonesia's commitment at the Uruguay Round

			TARIFF LINES		Imports 1992	
			No.	**%**	**US$m**	**%**
A.	**TARIFF BINDING**					
	1	Total Bound Manufactures	7537	80.3	22529	82.6
		- Existing bindings	823	8.8	6227	22.8
		- New Bindings	6714	71.6	16302	59.8
	2	Total Agriculture (all bound)	1341	14.3	2464	9
	3	Exceptions	504	5.4	2285	8.4
		TOTAL	**9382**	**100**	27279	**100**
B	**AGRICULTURE**					
	1	Tariffication and binding of all items				
	2	Duty reduction of 10 % by tariff line over 10 years				
	3	Elimination of local content requirement for milk products				
	4	Agreed access of 70000 tons of rice imports annually (at a 90 % tariff)				
C.	**REMOVAL OF NON TARIFF BARRIERS ON BOUND TARIFF ITEMS**					
		NTBs on 98 industrial tariff lines affecting $358 millions of imports to be removed within 10 years				
D	**ELIMINATION OF IMPORT SURCHARGES ON BOUND TARIFF ITEMS**					
		Surcharges varying between 5-25 % on 159 tariff lines affecting $838 million of imports to be removed within 10 years				

Source : adopted from Erwidodo and Feridhanusetyawan (1997)

In June 1994, the Parliament enacted the law to ratify Indonesian commitments under the Uruguay Round. In May 1995, the government introduced a reform package aimed at implementing Uruguay Round commitment of tariff reduction for the 1995-2003 period. Table 2.3 shows that by the year 2003, except those on automotive components and products, tariffs would be set at a maximum of 10 per cent, with most of the tariff lines falling in the 0-5 per cent range. On the other hand, at regional level, Indonesia also signed agreement with other ASEAN countries to establish a free trade area (AFTA) in the preferential tariff frameworks. In this context, 99 percent of Indonesian tariff lines for ASEAN countries were already in a range of 0-5 percent.

Table 3
Schedule of Tariff Reductions under Uruguay Round, 1995-2003

Tariff before 23 May 1995	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*
5	5	5	5	5	5	max 5			
10	5	5	5	5	5	max 5			
15	10	10	5	5	5	max 5			
20	15	15	10	10	5	max 5			
25	20	15	15	10	10	10	10	10	max 10
30	25	20	20	15	15	10	10	10	max 10
35	30	25	25	20	20	15	15	10	max 10
40	30	25	25	20	20	15	15	10	max 10

Source: Minister of Trade and Industry

Agriculture

Indonesia was an agrarian economy. However, in the last thirty years, there was a significant structural change. Firstly, the manufacturing sector has gradually gained prominence in the economy, while the agricultural sector's share was reduced. Secondly, there was a transformation from a domestic oriented economy to a more open economy. Thirdly, the economy shifted from being a primary commodity exporter to become a manufacturing exporter.

In the wake of economic development, the agricultural sector contributed less and less to national income, and was overtaken by the manufacturing sector. Anderson and Pangestu (1995) argued that the decline in the agricultural sector can be attributed to at least 3 factors: 1) demand elasticity for food is low compared to other commodities. 2) More rapid technological changes resulted in a higher yield/land. 3) The growth of use of intermediate inputs in the agricultural sector increased and resulted in lower valued added/farmer.

Table 4 shows the decline in agriculture in contrast to manufacturing. The share of agriculture in the GDP declined from 37 percent in 1970 to 17 percent in the year 2000. On the other hand, manufacturing increased from about 8 percent in 1970 to 26 percent in the year 2000, 85 of which are non-oil and gas commodities.

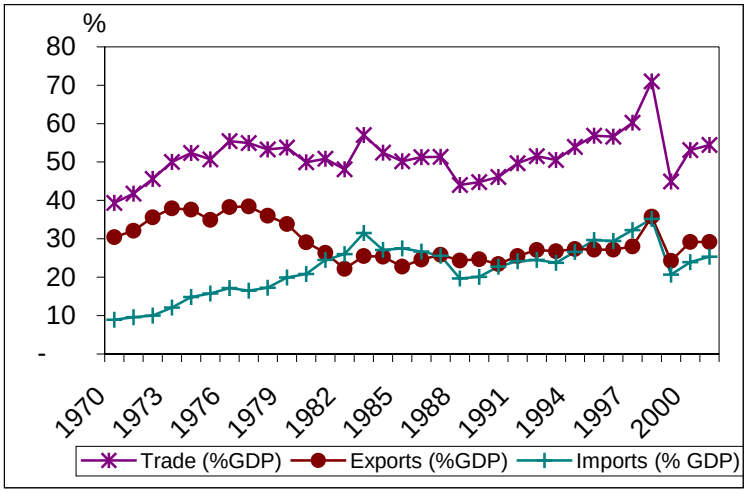
Table 4
Indonesia: Structural Shift

GDP by sector (in percent)	1970	1981	1990	1995	1996	1997	1998	1999	2000
Agriculture	**36.6**	**23.4**	**20.1**	**16.1**	**15.4**	**14.9**	**16.9**	**17.2**	**16.7**
Mining and Quarrying	20.1	17.2	10.5	9.3	9.1	8.9	10.0	9.6	9.4
Manufacturing Industry	7.8	14.0	20.5	23.9	24.7	24.8	25.3	26.1	26.4
Electricity, Gas & Clean Water	0.3	1.0	0.9	1.1	1.2	1.3	1.5	1.6	1.7
Construction	2.8	5.9	6.0	7.6	8.0	8.2	6.0	5.9	6.0
Trade, Hotel & Restaurant	14.9	15.0	16.7	16.7	16.8	17.0	16.0	15.9	16.0
Transportation & Communication	3.5	6.1	6.6	7.1	7.2	7.3	7.2	7.1	7.4
Fin., Leasing & Business Services	3.6	6.5	7.8	8.9	8.8	8.9	7.5	6.9	6.9
Services	10.4	11.0	10.9	9.2	8.8	8.8	9.7	9.8	9.6

Source: Central Board of Statistics

The second structural change was a shift from a less open economy to a more open one, which is clearly shown in Figure 2.1. In 1970, trade, defined as exports plus imports, accounted for about 40 percent of GDP. In the 1980s, trade, on average, accounted for about 50 percent of GDP. Before the crisis, it increased to 52 percent (on average). In 1998, it peaked at 71 percent of GDP. Although, exports had the potential to boost during the crisis, it was restrained by export financing problem during the crisis, due to the collapse of the banking system. Otherwise, export sectors would have benefited greatly from the huge depreciation of the Rupiah.

Figure 1
Trade (% GDP), 1970-2001



Note. Trade is defined as exports plus imports
Source: Central Board of Statistics

In the 1990s, exports clearly played a greater role. Back in the 1970s, apart from oil and gas, Indonesian major export commodities in the 1970s were agricultural crops. However, since the 1980s, manufactured commodities led Indonesian non-oil and gas exports. The share of agricultural crops in total exports declined from 35 percent in 1970 to about 6 percent in 1999, while the share of manufacturing commodities increased from 17 percent to 68 percent in 1999. In the year 2001, the share of agriculture commodities declined further to about 4.4 percent of total

exports, while the share of manufacturing commodities was almost the same, as of 1999.

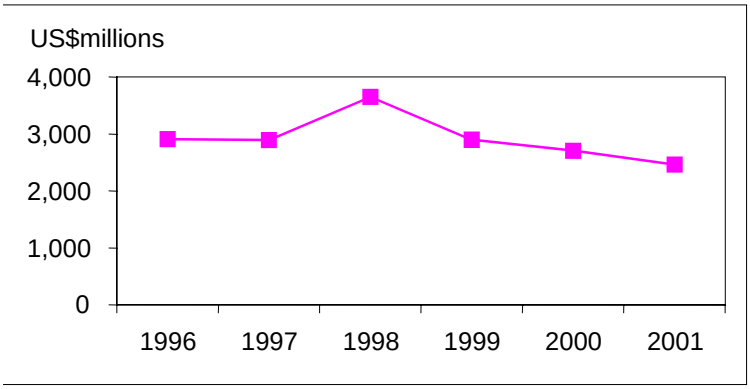
Table 5
Export composition (percent)

Commodities	1970	1981	1990	1999
Agric. Crops	35.23	6.51	8.11	5.96
Manufactures	17.52	10.32	46.26	68.49
Minerals (excluding oil and gas)	0.00	0.81	2.48	5.40
Oil and gas	40.28	82.11	43.12	20.12
Others	6.98	0.25	0.02	0.03
TOTAL	100	100.00	100.00	100.00

Source: Central Board of Statistics

Although agriculture contributes decreasingly to GDP in recent years, its contribution to employment is still large. In 1990, employment absorbed by this sector accounted for about 56 percent, compared with the manufacturing sector's 10 percent. Employment absorbed by the agriculture sector declined to about 41 percent in 1997 compared to 13 percent in the manufacturing. During the crisis, agriculture became a safeguard: it absorbed labor retrenched from other sectors seriously hit by the crisis and boosted export. But, the export boom did not last long. Employment in the agriculture sector increased to 45 percent compared to the manufacturing sector's 11 percent.

Figure 2
Agricultural exports 1996-2001 (millions of US$)



Source: Central Board of Statistics

In agriculture, Indonesia is both an exporting and importing country. Indonesia's leading exports are among others fish, coffee, tea, cocoa, spices, crude rubber, fruit and vegetables. Table 6 shows leading agricultural exports. In the world market, Indonesia is relatively a small player, be it as an exporter or an importer, except for few commodities such as coffee, natural rubber and certain fish products (in export market), rice, wheat and wheat flour, sugar and milk powder (in import market). Consequently, Indonesia would not be able to influence world prices of almost all agricultural products. Indonesia's position in the multilateral negotiation with respect to this sector is generally relatively weak compared to other countries in the region.

Table 6
Indonesia's leading agriculture exports (in US$ millions)

HS code	Descriptions	1975	1980	1990	1996	1997	1998	1999	2000
03	Fish & fish preparations	83	211	971	1,677	1,619	1,614	1,526	1,583
07	Coffee, tea, cocoa, spices	186	876	840	1,276	1,285	1,517	1,289	1,111
23	Crude rubber	361	1,174	855	1,923	1,501	1,110	862	912
24	Wood, lumber & cork	502	1,816	279	326	279	197	309	379
05	Fruit & vegetables	27	59	248	370	245	201	374	301
12	Tobacco & tobacco BFD	36	60	125	219	246	254	212	221
08	Feeding stuff for animals	43	104	93	207	141	112	88	93
21	Hides, skins & fur skins	10	21	1	0	2	4	4	2
	TOTAL EXPORT	7,103	21,909	25,675	49,815	53,444	48,848	48,665	62,124

Source. Central Board of Statistics

Indonesia's Uruguay Round Agriculture Commitments

Indonesia's commitments for agricultural trade liberalization in terms of **market access** are to bind majority of tariffs at a ceiling rate of 40 percent, to reduce tariff by an overall 24 percent (and by 10 percent by line item) over a 10-year period and convert NTBs to tariffs and subject them to tariff reduction.

As a result, the large majority of tariffs on agricultural items (1014 items) would settle at a bound tariff rate of 40 percent; several items (300 or 22 percent of total agricultural items) would be bound at rates higher than 40 percent; following the required reduction, few items (27 in total) would be bound at rates lower than 40 percent. Indonesia also guaranteed access through tariff quotas for:

- milk and cream (quota of 414,700 tons of fresh milk with an import quota tariff of 40 percent)
- rice (quota of 70,000 tons with an import quota tariff rate of 90 percent), exceeding which an import duty of 160 percent would apply.

In terms of **domestic support**, Indonesia did not commit itself to any reduction in domestic support measures except for milk products. All existing measures of domestic support are submitted under the 'Green Box', which means exemption from reduction commitments. The buffer stock operation under BULOG, which meant to stabilize food prices and encourage adequate food supply, is exempted from liberalization as long as the particular commodity does not exceed the 'de minimis' rule of 10 percent of domestic consumption.

In terms of **export subsidies,** rice is the only commodity to benefit from export subsidies. It is likely that the coverage of export subsidies would not increase in the future, as the Agreement on Agriculture prohibits countries to introduce new exports subsidies.

In terms of **special safeguard**, Indonesia applied the Special Safeguard provisions in the Agreement on Agriculture for milk and cream, buttermilk, milk fat and cloves.

How is the progress in the post-Uruguay Round period? In terms of tariffs, 98 percent of Indonesian tariff lines in agriculture items (HS Chapter 1-24) are already below the bound tariff rates[4], as shown in Table 8.

Table 8
Indonesia: The 1996 MFN rates of Agriculture Commodities

Tariff Rate	Number of Tariff Lines	Percent
0	115	11.1
5	241	23.2
10	66	6.4
15	174	16.7
20	242	23.3
25	175	16.8
30	2	0.2
40	1	0.1
90	3	0.3
170	20	1.9
Agriculture items of HS 1-24	**1039**	**100.0**

Source. APEC database

Agricultural Case Studies

Natural rubber and fish products are among Indonesian leading agriculture exports. In 1999, exports of natural rubber accounted about 21.6 percent of Indonesian agriculture exports, while exports of fishery commodities accounted about 38.3 percent.

Natural rubber was a traditional export commodity, whose contribution to agriculture exports declined overtime, from as high as 31.9 percent in 1975 to 21.6 percent in 1999. While fishery's contribution to total exports increased from as little as 7.4 percent in 1975 to as much as 38.3 percent in 1999.

Natural Rubber

Production

Natural rubber is one of Indonesia's traditional export commodities, as the second largest producer after Thailand. Production of natural rubber peaked at 1.7 million tons in 1999. In the year 2001, total production of Indonesia declined slightly to 1.5 million tons, coming from 3.2 million hectares plantation areas, mainly in the islands of Sumatra (about 70 percent).

[4] Notes that the coverage of Agreement on Agriculture covers HS 1-24 plus several other items.

Table 9
Natural Rubber production

	small estates	share	state estates	share	private	share	TOTAL
1990	913,425	72	216,702	17	145,168	11	1,275,295
1991	971,388	73	200,683	15	156,101	12	1,328,172
1992	1,030,380	74	205,396	15	162,672	12	1,398,448
1993	1,102,006	75	207,425	14	166,007	11	1,475,438
1994	1,138,099	76	188,122	13	172,409	12	1,498,630
1995	1,191,143	76	199,943	13	182,217	12	1,573,303
1996	1,193,146	76	202,021	13	178,859	11	1,574,026
1997	1,175,000	74	188,000	12	190,000	12	1,577,900
1998	1,243,000	75	192,000	12	227,000	14	1,662,000
1999	1,295,000	76	196,000	11	224,000	13	1,715,000
2000*	1,165,000	78	na		na		1,501,000
2001*	1,219,000	79	na		na		1,543,000

Source. Directorate General of Estate, Department of Forestry and Estate Crops, 2001

Small estates dominate this sector accounting for about 76 percent of total production, while state-owned plantation produce about 11 percent of total production and private owned plantation produce another 13 percent. In the period of 1990s, production grew at 3 percent per annum. The plantation area grew at 1.7 percent per annum, with small estates covered about 84 percent of natural rubber productive areas. Plantation areas were scattered along Sumatra and Java islands, with an uneven transportation infrastructure. Generally, rubber trees have been grown based on traditional best practices. The harvesting techniques are relatively simple, and farmers hardly pay much attention on the quality of their harvest. Booth (1988) showed that productivity of the sector, measured by yield per worker, in Indonesia is far less than in Malaysia. While in Malaysia rubber yields for smallholder plantations were about 756kg/planted hectare, in Indonesia it was about 331 kg per planted hectare. A recent interview with the rubber producers has indicate that the level of productivity has not changed much, although the respective government institution has provided assistance for a long time.

Table 10
Plantation Area (000 hectares)

	Small-estates		State-estates		Private-estates		TOTAL
	area	share	area	Share	area	share	
1996	2,978	85	246	7	294	8	3,518
1997	2,957	85	227	7	290	8	3,474
1998	3,082	85	230	6	295	8	3,607
1999	2,856	84	234	7	297	9	3,387
2000*	2,823	84	na		na		3,372

Source. Directorate General of Estate, Department of Forestry and Estate Crops, 2001

Exports

The development of rubber plantation was driven by foreign market demand. Currently, the export share in total rubber production was about 80 percent, with the United States as the major export destination.

In the year 2001, foreign exchange earnings from this sector reached US$ 786.6 million (2 percent of total non-oil and gas export earning of the same period). In terms of volume, total exports reached 1.45 million tons. Indonesia's biggest export was TSNR (technically specified natural rubber) category (HS 400122), with a market share of about 50 percent, while exports in other categories were relatively small compared to other exporting countries as indicated in Table 2.11.

Table 11
Indonesia rubber exports and its share in the world market, 2001

Hs Code	Description	Value	Volume	Relative to world market	
		(US$M)	(ton)	Rank	Share (%)
400110	Natural rubber latex, whether or not pre-vulcanized	7.2	10,375	7	2
400121	Natural rubber in other forms: smoked sheets	19.9	32,676	3	3
400122	Technically specified natural rubber (TSNR)	750.2	1,404,353	1	50
400129	Others	8.9	5,979	9	1
400130	Balata, gutta-percha,guayule, chicle and similar nat rubbers	0.4	311	8	4
Total		**786.6**	**1,453,694**		

Source: ITC calculations based on COMTRADE statistics

The main exports destination of smoke-sheets rubber were the US (36 percent), Japan (10 percent), China (9 percent) and Singapore (6 percent). While South Korea, Germany, Canada and Belgium accounted for about 4 % each of them.

In the last 4 years, exports declined significantly, apart from rubber classified as HS 400129 (which represents a small portion of total natural rubber exports), as shown in Table 14. It is partly explained by the declining world price, which characterized the 1990s. Another reason for the decline in exports is the weakening export market due to global economic downturn.

Table 12
Exports trend 1997-2001

Hs Code	Description	Growth p.a	
		Value	Volume
400110	Natural rubber latex, whether or not pre-vulcanized	-28	-19
400121	Natural rubber in other forms: smoked sheets	-22	-11
400122	Technically specified natural rubber (TSNR)	-14	-1
400129	Others	162	134
400130	Balata, gutta-percha,guayule, chicle and similar nat rubbers	-51	-60

Source: ITC calculations based on COMTRADE statistics

Fishery Products

Production

The fishery sector share in Indonesia's GDP is quite low compared to estate crops. However, its share in GDP is increasing over time, from 1.6 percent in 1994 to 1.9 percent in 1998, indicating a significantly high growth. In the period 1994-1998, this sector grew at 3.6 percent per annum, while in the period 1998-1999, it grew at 9.5 percent per annum.

In the year 2000, total production of the fishery sector accounted about 5.33 million tons, a 33 percent increase compared to 1994. Marine capture dominated this sector, with a 70 percent share of total fishery sector production. In the year 2000, total marine capture reached 4.36 million tons, a 28 percent increase from 1994. This is still much below Indonesia's potentials. Indonesia, the biggest archipelago country in the world, consist of 17,508 big and small islands, which means hundreds of bays, seas and straits, and has coastal line of 81,000 km, the second longest after Canada. In total, Indonesia has a marine water area of 5.8 million km^2, 3.1 million km^2 of which is territorial water and 2.7 million km^2 is Exclusive Economic Zone (EEZ). Most of Indonesia water area is still much below Maximum Sustainable Yield (MSY) level.

Aquaculture contributes about 18 percent of total production. In the year 2000, total aquaculture production reached 1 million tons, a 62 percent increase from 1994. Apart from increasing land used for aquaculture, the increase in aquaculture production was also a result of a more intensified farming. However, this is much lower than Indonesia's potential and there are still some big investors interested in aquaculture. Much of aquaculture players small scale and domestic-oriented so that most of them are not exposed to modern technology of farm-fishery and lacking of marketing capacity and channels.

Table13
Production (million ton)

	1994	**1995**	**1996**	**1997**	**1998**	**1999***	**2000****
TOTAL (million ton)	**4.01**	**4.26**	**4.45**	**3.92**	**4.64**	**5.12**	**5.33**
Capture (%)	**85**	**85**	**84**	**83**	**86**	**82**	**82**
Marine (%)	77	77	76		80	76	76
Others (%)	8	8	8		6	6	6
Farming (%)	**15**	**15**	**16**	**17**	**14**	**18**	**18**
Marine (%)						5	6
Bracket-pond (%)	9	8	9	9	8	7	7
Freshwater pond (%)	3	4	4	4	4	3	3
Paddy-cum-fish (%)	2	2	2	2	2	2	2
Cage (%)	1	1	1	1	0	0	0

Source. Ministry of Marine and Fishery, 2002

Exports

It is important to note that the export performance we present here underestimates the true exports of fishery commodities, given the unrecorded exports resulting from illegal fishing.

In the world market, Indonesia is the biggest exporter of tuna and crabs with a market share of 24 percent and 22 percent, respectively. Those two commodities were only about 15 percent of Indonesia's total fishery exports. The largest Indonesian exports were shrimp and prawns, which constituted 60 percent of Indonesia's fishery exports in 2001. The main export destinations were Japan (62 percent), the US (15 percent, UK (4 percent) and Netherlands (4 percent). In the world market, Indonesia's exports share of these two commodities was only 10 percent, Indonesia being the second largest exporter.

In the period 1997-2001, Indonesia's primary fishery exports, shrimps and prawns showed a small positive growth, of 1 percent per annum. A number of other leading fishery commodities, such as crabs, tuna and fish fillet, showed high positive growth. Crabs (HS 30624) even showed 82 percent growth per annum.

On the demand side, the world demand for fishery commodities continued to increase. In the period 1997-2001, world imports of fishery commodities grew by 3 percent on average, while demand for tuna and crabs showed a relatively higher growth of 8 percent and 5 percent respectively. However, the recent declining trend (2000-2001) exports revenue, including those of shrimps and tuna, should cause Indonesia to be on alert to arrest this trend.

Table 14
Main fish products exports, 2001

HS rev. 0	Products	Indonesia's Exports		
		Value (000 US$)	Share in Indo's fishery exports	Growth 1997-2001, % p.a
30613	Shrimps and prawns, frozen, in shell or not, incl boiled in shell	879,318	61	1
30232	Tuna,yellowfin, fresh/chilled, excl. heading No 03.04,livers& roes	66,950	5	26
30624	Crabs, not frozen, in shell or not, including boiled in shell	63,657	4	82
30420	Fish fillets frozen	58,309	4	19
30269	Fish nes, fresh or chilled excl heading No 03.04, livers and roes	30,871	2	-20
30569	Fish nes, salted and in brine, but not dried or smoked	24,242	2	9
30239	Tunas nes,fresh or chilled,excl. heading No 03.04,livers and roes	23,490	2	-5
30559	Fish nes, dried, whether or not salted but not smoked	22,723	2	-3

Table 15
Declining growth: an Early Warning

HS rev. 0	Product	Value (US$000)	Annual growth in value between 2000-2001, %
30613	Shrimps and prawns, frozen, in shell or not, including boiled in shell	879,318	-6
30232	Tunas,yellowfin,fresh or chilled,excl heading No 03.04,livers and roes	66,950	-10
30624	Crabs, not frozen, in shell or not, including boiled in shell	63,657	32
30420	Fish fillets frozen	58,309	33
30269	Fish nes, fresh or chilled excl heading No 03.04, livers and roes	30,871	-25
30569	Fish nes, salted and in brine, but not dried or smoked	24,242	70
30239	Tunas nes,fresh or chilled,excluding heading No 03.04,livers and roes	23,490	-18
30559	Fish nes, dried, whether or not salted but not smoked	22,723	-21
30342	Tunas, yellowfin, frozen excluding heading No 03.04, livers and roes	22,215	92

Trade Liberalization Measures

As mentioned in the earlier section, Indonesia undertook a series of deregulations measures since the mid 1980s. Most of deregulation measures are aimed at improving country's export performance. Trade liberalization was undertaken in the form of tariff reduction, elimination of NTBs, improved administration of remaining NTBs and customs procedures. Deregulation of foreign investment allowed 100 percent foreign ownership and opened up the previously closed sectors including ports and shipping.

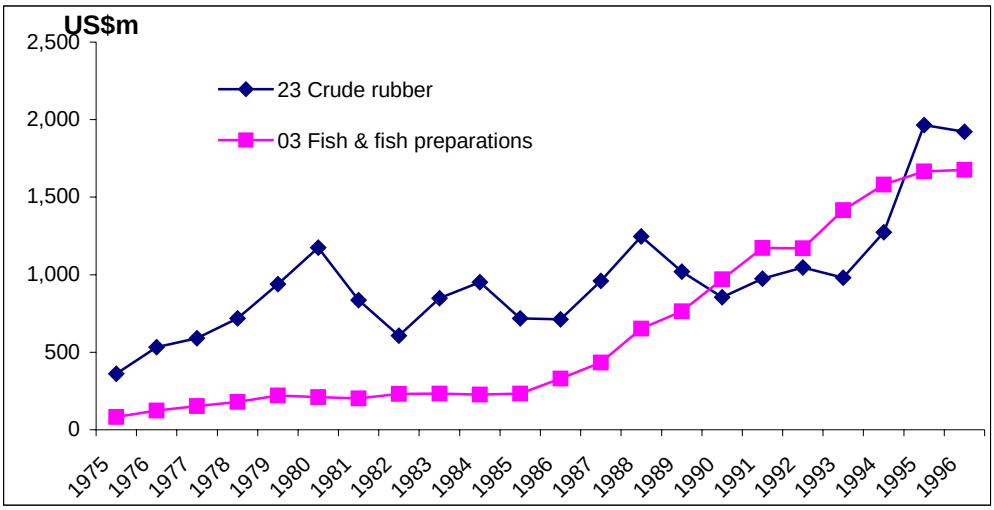
Before Indonesia undertook substantial trade liberalization measures, the average tariff rate was 27 percent. After the 1990 deregulation package, it fell substantially, reaching 15 percent in 1995. Processed fish, which was among those with high protection with a nominal rate of protection (NRP) of 21 percent in 1994 and an effective protection over 600 percent, was granted zero percent tariff, together with fish and shrimp meals, in June 1994 (Pangestu and Stephenson, 1995).

Post-Liberalization Impact

The BOP data clearly show that both exports and imports of goods increased significantly from 1985 to 1997, prior the economic crisis. Reforms that were specifically targeted to promote exports, as well as the sound macroeconomic management produced the export boom. Exports increased from US$ 19 billion in 1988 to more than US$ 56 billion in 1997 before it declined recently due to economic crisis. Similarly, imports had jumped from around $14 billion in 1988 to more than US$ 46 billion in 1997.

Exports of natural rubber and fishery sector also showed consistent improvements in the post-liberalization period, although at a declining rate in the later period. We will discuss the declining growth rate of these sectors in the next section.

Figure 3
Export of Natural Rubber and Fishery commodities



Source. Central Board of Statistics, Exports

Impediments to trade

Indonesia rubber exports faced relatively low trade barriers in its major export destination. Japan and the US, together accounted about 65 percent of Indonesia's natural rubber exports, apply zero tariff barriers, while China, accounting for about 5 percent of total Indonesia rubber exports, imposes a relatively high tariff of 40 percent, as in Table 2.16. The accession of China into WTO resulted in a lowering of tariff and non-tariff barriers. Currently, it applies a tariff of 8-12 percent on natural rubber, with an increased quota.

Although, trade barriers were relatively low, Indonesia's exports of natural rubber declined over time due to increasing competition in recent times, especially from the big new comer Vietnam, which has successfully penetrated into the markets of China and France.

In recent times, world supply of natural rubber increased resulting in over-supplies, which push the price of natural rubber down. Three ASEAN countries, Indonesia, Thailand and Malaysia, once attempted to established cooperation to stabilize rubber price. However, this effort has failed to meet expectations. The question, whether there's room for cooperation to promote exports of ASEAN countries remains.

Table 16
Tariff and Non-tariff Barriers on Natural Rubber

HS Code	Tariff rate	Other Restrictions	HS Code	Tariff rate	Other Restrictions
	MFN			MFN	
United States			**Singapore**		
400110	Free	Free	400110	Free	
400121	Free	Free	400121	Free	
400122	Free	Free	400122	Free	
400129	Free	Free	400129	Free	
400130	Free	Free	400130	Free	
Japan			**South Korea**		
400110	Free	Free	400110	1	Preferential treatments
400121	Free	Free	400121	1	Preferential treatments
400122	Free	Free	400122	1	Preferential treatments
400129	Free	Free	400129	1	Preferential treatments
400130	Free	Free	400130		Preferential treatments
China			**Canada**		
400110	40		400110		Free
400121	40		400121		Free
400122	40		400122		Free
400129	40		400129		Free
400130	40		400130		Free

Source. APEC tariff database

Shrimp and prawn exports faced zero percent tariff, but there are a few non-tariff measures still in place in Japan and the US. In the European markets, these exports face 12 percent tariff on average tariff and strict Sanitary and Phytosanitary (SPS) requirements. Exporters often got their exports returned, as they did not pass SPS control when entering the European market.

Table 17
Tariff and NTBs on Indonesian Fishery Exports

Countries	MFN tariff	Non-tariff measures or product description
Japan	0%	Labelling requirements
United States	0%	The importation of food is governed by the provisions of the Federal Food, Drug and Cosmetic Act administrated by the FDA. That Act prohibits the importation of articles that are adulterated or misbranded, including products thatare defective, unsafe, filthy or produced under unsanitary conditions. Imported products regulated by the FDA are subject to inspection at the time of entry
United Kingdom	12% - on average	SPS inspection
The Netherlands	12% - on average	SPS inspection

Source: National data reported to UNCTAD (TRAINS)

The fishery sector also has some problems domestically. Firstly, productivity is low. Traditional fishermen, who are equipped with traditional fishing equipments, dominate Indonesia's fishery sector. Seventy percent of them did not graduate from elementary school which makes transfer of modern technology extremely difficult. Secondly, there are imbalances of stock of fish across the nation. Highly populated islands are nearly over fished, while low/inhabitant ones are unexploited. Thirdly, some areas are already exposed to changes in the ecosystem. Similar to fishing activities, aquaculture is also characterized by low productivity as a result of low technology of fish breeding and post-harvest activities, high competition for land, and declining water quality. By comparisons, Thailand, whose volume of production is low, exports much more than Indonesia. Last, but certainly not the least problematic one for Indonesian government, is illegal fishing.

Labor

Indonesia's Policies Towards Labour Rights and Standards

During the New Order, Indonesia has pursued an employment policy, which is very much in line with the arguments presented in the previous section. Policies relied heavily on the market mechanism, allowing for the expansion of labor-intensive manufacturing sectors based on cheap wage costs provided by flexible labor market conditions. Consequently, the government did not have a strong record on prioritizing labor rights for a long time. But the era of political reforms brought significant changes in this respect. A look at Table 18 reveals that Indonesia has ratified most important ILO conventions after the fall of Suharto's New Order regime in May 1998.

Table 18
ILO Conventions Ratified by Indonesia

ILO Fundamental Human Rights Conventions	**Indonesian Law**
1.Convention No.29 on Forced Labor	Ratified by Government of Netherlands in 1933
2.Convention No.98 concerning the Application of the Principles of the Rights to Organize and Bargain Collectively	Ratified by Indonesia through Act No.18 in 1956
3.Convention No.100 concerning Equal Remuneration for Men and Women Workers for Work of equal Value -	Ratified by Act No. 80 in 1957
4.Convention No.87 concerning Freedom of Association and Protection of Rights to Organize	Ratified by Presidential Decree No.83 in 1998
5. Convention No. 19 concerning the Abolition of Forced Labor	Ratified by Act No.19 in 1999
6.Convention No.138 concerning Minimum Age for Admission to Employment	Ratified by Act No. 20 in 1999
7.Convention No. 111 concerning Discrimination Respect of Employment and Occupation	Ratified by Act No.21 in 1999
8. Convention No.182 concerning the Prohibition Immediate Action for the Elimination of the Worst forms of Child Labor	Ratified by Act No.1 in 2000

Source: ILO

Labour market trends

Table 19 shows the employment story of the New Order regime. The employment situation experienced a dramatic change during the period of non-oil export boom (1986-1997). Two trends can be detected. First, the labor market transformation followed a move of labor from agriculture to non-agricultural sectors. Manufacturing employment growth tripled from an annual average growth of 3.3 percent in 1980-86 to 9.1 percent in 1986-97. The growth of labor - intensive export-oriented industries, particularly in textiles, footwear, clothing wood products and furniture, was a major factor in contributing to overall economic growth. Agricultural employment fell in absolute terms during the same period. Second, in terms of employment, the Indonesian economy has been rapidly urbanized in recent years. Since the mid-1980s, growth of employment in urban areas has outpaced that of rural areas. Third, the formal sector's share in the economy has increased. In terms of employment, for instance, the formal sector as a whole expanded from 26 percent in 1986 to 37 percent in 1997 (Aswicahyono, Atje and Feridhanusetyawan 1999).

The economic crisis brought about a reversal of several trends. The agricultural sector, which shrank during the non- oil export boom period, expanded by almost 10 percent during the crisis. On the other hand, all other sectors including manufacturing, which had previously expanded, shrank. The growth rate decreased sharply from 9 percent to minus 11 percent (Aswicahyono, Atje and Feridhanusetyawan 1999). The economy‘s formalization process also stopped. Formal sector employment (both in rural and urban sectors) dropped from 31.74 million in 1997 to 30.33 million in 1998.

Table 19
Sectoral share and rate of growth in employment by sector

Sector	Labor force in million and sectoral % of total					Annual growth rate in %			
	1971	1980	1986	1997	1998	1971-80	1980-86	1986-97	1997-98
Agriculture	26.5	28.8	37.6	35.9	39.4	1.0	5.1	-0.4	9.9
	64	*56*	*55*	*41*	*45*				
Manufacturing	2.7	4.7	5.6	11.2	9.9	4.2	3.3	9.1	-11.4
	7	*9*	*8*	*13*	*11*				
Trade	4.3	6.7	9.8	17.2	16.8	6.3	7.7	7.0	-2.4
	10	*13*	*14*	*20*	*19*				
Services	5.2	7.1	10.2	17.4	17.2	4.3	6.7	6.7	-1.5
	13	*14*	*15*	*20*	*20*				
Other	2.7	4.2	5.2	5.4	4.3	6.4	3.8	0.3	-19.0
	7	*8*	*8*	*6*	*5*				
Urban	6.1	9.7	13.5	29.6	30.3	6.7	6.4	10.9	2.4
	15	*19*	*20*	*34*	*35*				
Rural	35.2	41.8	54.7	57.5	57.4	2.1	5.1	0.5	-0.2
	85	*81*	*80*	*66*	*65*				
Wage workers	13.3	14.5	17.5	30.5	28.8	1.1	3.4	6.7	-5.5
	32	*28*	*26*	*35*	*33*				
Non-wage	28.0	37.0	50.7	56.6	58.9	3.6	6.2	1.1	4.0
	68	*72*	*74*	*65*	*67*				
All	***41.3***	***51.5***	***68.2***	***87.1***	***87.7***	***2.8***	***5.4***	***2.5***	***0.7***

Minimum wages and labour relations

The New Order government under Soeharto clearly prioritized economic growth and political stability. This required the political control of the labor force. The trade union was tightly controlled with the state regulating industrial relations through a system of arbitration and conciliation. Restrictions put on union activities had positive impacts on the flexibility of labor markets for a long period. In the 1990s, when signs of labor market tightening emerged, the government increasingly resorted to interventionist measures mainly using minimum wage policies (Feridhanusetyawan 1999).

Minimum wages were introduced in the early 1970s, but the implementation was poor during the early period of economic development. In the 1980s, minimum wages remained rather a symbolic gesture than a reality (Feridhanusetyawan 1999). In the 1990s, the situation changed significantly. Despite the liberalization of the Indonesian economy, the government raised minimum wages by more than three times before the crisis in 1997. From 1988 to 1994, minimum wages increased by around 15 percent annually. After 1992, minimum wages increased by 20 percent annually, and exceeded labor productivity growth.

The impact of the minimum wage on the labor market is considered to be minimal during the New Order. Two reasons account for this judgement. First, up until 1994, the minimum wage was not binding. Generally, minimum wages were set 50 - 60 percent below the market wage. However, after 1994, the increase in minimum wage was sufficient to be at par with the average wages in the lower wage industries and exceeded average wages among younger, less educated female workers (Manning and Sisira 1996). Second, enforcement of the minimum wage standards was poor, especially in the small and medium scale enterprises (Feridhanusetyawan 1999). Low compliance with the regulations was widespread outside Jakarta. Minimum wages were mainly enforced in large firms in Jakarta. In addition, most were willing to work for less than the prescribed minimum wage. Legislation on working hours, rest period, annual pay leave, maternity leave for women were also seldom enforced (Feridhanusetyawan 1999).

Industrial relations were characterized by two policies. On the one hand, the government controlled the only allowed trade union, the SPSI (Serikat Pekerja Seluruh Indonesia, the All Indonesian Workers Union). On the other hand, the government used collective bargaining as the principal tool to set labor standards and to resolve labor disputes.

The ineffective labor representation through the SPSI was clearly felt during the process of labor market tightening in the early 1990s.[5] Rapid growth of the formal sector, especially of low skilled employment, increased workers' bargaining power, at least in economic terms. As result, there was an increased demand for a more effective labor representation and better implementation of labor laws. While the labor market transformed from a labor-surplus to a labor-scarce economy during the booming periods in the early 1990s, the labor relations also transformed from the traditional system dominated by informal rules to a more modern system characterized by workers representation and negotiations. Some NGOs and labor activists set up several independent labor unions in the early 1990s. Because of the strong domestic and international pressures, the government did not ban these independent labor unions, but they were not recognized and their leaders were harassed.

Since 1997, the economic crisis and the ensuing political reform process has changed labor policies significantly. Now workers have the right to organize independent labor unions. A new manpower bill, which sets new and controversial rules on labor union formations and activities, was passed by the parliament in September 1997. However, the newly gained political rights for labor went hand in hand with the adverse impacts of the economic crisis. The return to a labor-surplus economy means that the economic bargaining power of workers has decreased. So far, the increasing number of strikes proved to be not very effective, as replacement workers willing to work for lower than minimum wage rates are now easily found.

Moreover, the newly gained political bargaining power of the labor movement can dramatically decrease Indonesia's competitiveness, especially in the manufacturing sector. For instance, some economists argue that the formal rule on

[5] This section closely follows Feridhanusetyawan (1999).

workers' dismissal is very restrictive and heavily leaning towards workers. Regulations discourage the dismissal of workers and make hiring decisions in the formal sector practically irreversible. Formal contracts, unless established for a fixed term, are regarded as permanent. Edwards (1996) argues that the flexibility of the system could be improved by allowing the termination of contracts by unilateral decision of workers or employers, and made possible by establishing a minimum compensation for dismissals.

International pressure and domestic policy response: The Case of Child Labour

Child labor is arguably the core issue for proponents of linking trade with social clause. In fact, it lies at the heart of the whole debate. Official policies during the New Order regime have always rejected an abolitionist[6] approach to child labor. There was a broad consensus among the government bureaucracy, and even among the activists, that child labor cannot be eliminated within the foreseeable future (Bessell 1999). Thus, for a long time the government resisted any pressure to ratify ILO Convention No.138 on minimum age. However, in the 1990s there was a noticeable shift in the official response. First, in 1992 the government of Indonesia signed a memorandum of understanding with the ILO recognizing the existence of child labor in Indonesia and agreed to undertake action for its elimination. Second, in 1996, a draft of the new industrial relations legislation prohibited the employment of children under the age of fifteen. Third, the sixth official five-year development plan extended the period of basic education from six to nine years. This should be implemented within fifteen years. Fourth, a workshop held by the Coordinating Ministry of People's Welfare, the Department of Manpower and the ILO recommended the ratification of ILO Convention No.138 (Bessel 1999). Finally, in 1999 the ILO convention was ratified.

To some extent, international pressure on Indonesia can explain this shift in official policies. For instance, in 1993, the United Nations Committee on the Rights of the Child, commented on the lack of clarity in Indonesia's child labor legislation. It lamented the lack of protection for working children, the leniency of penalties and the lack of supervision by inspectors of the Department of Manpower. By far the most significant pressure, however, came from the United States. The US exerted pressure on Indonesia by threatening to abolish Indonesia's trading privileges under the General System of Preferences (GSP), unless labor standards were improved (Pangestu 1996). Pressure on Indonesia remained high, as subsequent reports by the US Department of Labor reprimanded the country for using forced labor in the fishing industry and noted widespread employment of children in the tobacco industry (Bessel 1999).

[6] The literature on child labour differs between three schools of thought: First, the 'abolitionist' school which says that child labour, defined as waged employment of children should be eliminated. Second, the 'protectionist' line argues that the total elimination of child labour is not realistic and not necessarily a preferable goal. Proponents of this school argue that child labour constitute a necessity, as long as structural conditions of poverty and inequality persist. Moreover, as long as it occurs in non-exploitative and non-dangerous circumstances, work may be beneficial to children, as it provides income, vocational and social skills. Lastly children do have a right to work. Third, a last school of thought argues vehemently against all forms of child labour and demands immediate elimination of child labour. These voices became very prominent in the 1990s. See Bessel (1999) for a discussion.

The ILO has played a constructive role in Indonesia. Although it has adopted an abolitionist stance on child labor issues, it has shied away from using trade sanctions to achieve its objectives. Instead, since 1992 the ILO has provided technical assistance to three key Ministries: Manpower, Education and the Central Bureau of Statistics. The ILO has also fostered training and funding to a number of NGOs. Gradually, the weaknesses in the national legislation were analyzed and discussed in various workshops and conferences, which in the end led to the ratification of important ILO Conventions.

The continued economic crisis renders the long–term objective to bring the children under the age of fifteen from the working place into the classroom rather difficult to achieve. Instead, the reality of increased economic hardship should make it imperative to refine the domestic legislation[7] and to find approaches that supports and protects working children from exploitative conditions and provide them with non-formal education. But this is likely to depend on external and international finance. Recent policies clearly attempt to placate the international pressure to ban all forms of child labor, as the ratification of ILO No.182 Convention on the Elimination of the Worst Forms of Child Labor in 2000 shows.

Protection of Indonesian migrant workers

Government policies

Indonesian Government has embarked on an overseas employment programme since 1970's. This step was taken mainly to address the growing problem of unemployment and dwindling foreign currency reserves by establishing a government institution which would play an active role in promoting labor migration flows. This institution,AKAN (or Center for Overseas Employment), is under the Department of Manpower. Recently the AKAN has been decentralized and has been replaced by the Directorate of Overseas Labour. Indonesian women have been inclined to be employed in Western Asia, especially in Saudi Arabia, although a substantial number also go to Malaysia. In the 1980's Hong Kong, Taiwan and Singapore have become major destinations for female migrant workers from Indonesia. According to the Minister of Manpower, 206,036 women Indonesian workers were employed in Saudi Arabia, while 155,399 are in Malaysia as of 2002.[8]

The Indonesian Government recognises the economic opportunities in exporting excess labour. When the employment situation in Indonesia is gloomy, labour migration is viewed as the solution to the deteriorating unemployment. [9] The flows of remittances also become a big resource of Indonesian foreign exchange. From this perspective it seems that although number of reported abuses grows, the

[7] By refining and enforcing Article 96 of the 1997 manpower bill. This article attempts to regulate employment for children and states various occupations from which children are barred from undertaking on the ground of health and safety (Bessell 1999).

[8] Kompas Daily, 23 December 2002

[9] According to the Minister of Manpower the number of unemployed people in Indonesia reached 40 million people in 2002, including the category of 'under-employed' people.

Government will continue sending worker overseas, given the severity of the domestic economic situation.

In order to improve the migrant workers' protection, the Government is now also drafting a bill on migrant workers protection. This bill was proposed by the House of Representatives specifically to establish a legal basis for the protection of Indonesian workers abroad, since the existing laws on labour protection and development does not provide such protection. The draft of the bill includes, among other things, a maximum protection for IDHs which extends from the recruitment process to the return at the end of the working period. It also regulates the placement of Indonesian officials abroad to be in charge of the Indonesian workers.

Recruitment practices in Indonesia

The recruitment of IDHs in Indonesia is plagued with deception, inhumane treatment and exorbitant recruitment fees charged by employment agencies. In 1999, for instance, reports in some Indonesian newspapers claimed that 2,213 domestic helpers were cheated by intermediaries, brokers or agents in a time span of only six months. In Indonesia there are currently 390 employment agencies (PJTKI) that are authorized to send workers abroad. The Labor Department issued in a new rule in 1989 that required each employment agency to deposit 50 million rupiah before sending a worker abroad. Anecdotal evidence suggests that the amount has increased to 250 million rupiah. This amount is required on top of the capital that the agency needs to recruit workers. The deposit is credited to the Labour Department's account at the bank appointed by the department in order that the money be used as a safety net in case the worker faces problems overseas. The full amount should be refunded to the agency if no problems with the worker occur. However, it is unclear as to who gets the interest earned from the deposit, whether the agency would keep the interest, or if it should be kept in the account in case the agency is at fault. In order to find workers to send abroad, employment agencies hire brokers called *Calo*, *PR* or *Perantara* (an intermediary). The intermediaries go to the villages with overseas job offers for the (mostly) women workers. The average broker commission given by employment agencies is estimated at around 1 million Rupiah. Reports suggest that some brokers would also charge prospective women workers 400-700,000 Rupiah of non - refundable broker or agency fees before they receive training in Jakarta or Surabaya. Data from the Asian Migrant yearbook suggest that fees imposed on workers as compensation for recruitment and training seem excessively high. The amount levied is set by the Director General of *Binapenta* (advisory and service) (Asian Migrant Yearbook 2000).

Table 20
Approximate breakdown of Indonesian labor agents' charges

Service	Fees in Rupah
Marketing expenses and transport costs	2,500,000
Recruitment fees	2,450,000
Training fees	6,000,000
Departure costs	1,250,000
Gross income of employment agency	4,850,000
Total	18,050,000

Source: Asian Migrant Yearbook 2000, p.158

Recent trends: Industrial relations and investment climate [10]

Since 1997, the economic crisis and the ensuing political reform process has changed labour policies significantly. Now workers have the right to organize independent labour unions and they have asserted their rights more forcefully to improve their positions when facing employers. Currently, unions are in a process in which they have to define their new role as conflict-mediating institutions. Currently, more than 60 unions compete nationally to represent workers. In addition, there are 140 labour unions and some 11,000 enterprise–based unions. The fragmented labour movement makes it difficult to establish coherent wage–setting mechanisms, as unions are frequently divided amongst themselves.

As a result, there is the perception that labour conflicts are on the rise, but this is not confirmed in the statistics. Conflicts – disputes, strikes, demonstrations – may have been more vocal in recent years, but overall, there are no more industrial actions or lost working hours than in the mid–1990s. In part, the surprising lack of evidence may be deteriorating statistics, but labour conflicts hardly seem rampant.

Table 21
Labour Conflicts, 1991 – 2002

Year	No. of industrial actions	No. of workers involved	Lost working hours
1991	130	64,474	534,610
1993	185	103,490	966,931
1995	276	128,855	1,300,001
1997	161	100,440	875,512
1999	125	49,232	915,105
2000	273	126,045	1,281,242
2001	174	109,845	1,165,032
2002 (until April)	89	46,174	259,553

Source: Department of Manpower

However, the rapid increase in minimum wages is undeniable. For instance, minimum wages for industrial workers was increased from 172,500 rupiah in 1997 to 591,000 IDR in 2002. The increase in minimum wages, combined with the recent appreciation of the IDR is seen to become a competitive threat. But Indonesia's minimum wage is still below that of the Philippines and Thailand and

[10] The following section draws heavily from the author's contribution to the World Bank's CGI Brief " Maintaining stability, deepening reforms ", January 2003.

barely higher than that of Vietnam. Compared to GNP per capita (a rough indicator of productivity) Indonesia's minimum wage does not seem out of line with its competitors, although Thailand is more competitive. Before the rapid rise in Indonesian minimum wages, value added per worker was 6 times the minimum wage, comparable to that of the Philippines, but much less competitive than Thailand's 17 times (World Development Indicators 2002).

Table 22:
Comparison of nominal minimum wages in major urban industrial centers in Asia, April 2002

Major industrial centers	Minimum Wages $ per year	Minimum Wages $ per month	GNP per capita $ in 2001 *
Manila	1,793	149	939
Bangkok	1,128	94	1,797
Jakarta	755	63	669
Hanoi	692	58	395

Source: Chris Manning, PEG Project, Bappenas
*Calculated based on CEIC data, Vietnam figure is GDP per capita for 2000

The rapid increase in minimum wages, the perception of rising labour conflicts and the resulting threat of reduced employment growth can be blamed on the absence of an efficient industrial relations system. Two factors account for this. First, an effective labour legislation is not in place yet. Second, a wage – setting mechanism needs time to develop in Indonesia, particularly within a new decentralized system of governance.

Currently, the industrial relations system is governed by the manpower bill of 1997. It has been controversial since it was passed by the parliament and efforts have been made to amend the bill in the past years. Recently the government has proposed two new bills to the House of Representatives (DPR): one on Labour Protection and one on Labour Dispute Settlement. But both drafts have met with heavy resistance from unions and employers, resulting in the Parliament's decision to postpone the passing of the bills for an indefinite period.

Meanwhile, the Parliament also decided to annul the existing Law No.25/1997 on manpower in order to prevent it from becoming effective by October 1, 2002. Effectively, this means that Indonesia's industrial relations system is now governed by outdated laws and regulations: the 1957 law on labor dispute settlement, the 1964 law on labor dismissal by private companies and the Ministerial Decree No. 150/2000 on dispute settlement (Jakarta Post, 24 and 25 September 2002).

The stalemate between labour and business centres around several issues (see Table 23) Labour representatives deem the bills as hurting their basic rights. Specifically, they point to the regulation on strikes, which requires workers to notify the management prior to any strike actions. This, according to labour activists, limits the basic right to strike freely. In addition, they demand that employers pay striking workers, also in cases where the dispute has been delegated to an Industrial Relations Dispute Settlement Court.

Employers, on the other side, complain that the bills are too forthcoming to workers' demands. For example, they point to employers' obligation not to replace striking workers and to reduce basic hours for nightshift workers from 40 to 35 hours a week. In addition, the bills put too much emphasis on criminal penalties for employers in cases where they do violate regulations, leaving them open to extortions by third parties. The continued impasse between labor and business results in the absence of clear rules for handling industrial relations and increases legal uncertainty for businesses.

Indonesia needs an integrated approach to determine minimum wage increases. The government needs to find a way to balance the need to improve the position of lowest paid workers and minimizing the costs of minimum wages in terms of reduced employment or increased inflation. Decentralization has made the decision–making process to set minimum wages more complex. The central government is not responsible anymore, leaving it now to the provinces and districts to set the minimum wage levels. Provinces set the floor to wages and then districts decide on the level of the minimum wages within their jurisdictions. Currently, minimum wages differ between provinces and between districts. In several provinces, districts have set their wages above the existing floor, and minimum wages do also vary within industries in a given district. For example, only one minimum wage was set for Jakarta in 2001 and 2002, whereas minimum wages were set for every district in West Java. In West Java the floor provincial level is 280,000 rupiah/month in 2002. Industrialized districts like Bogor and Bekasi have set the minimum wage at 576,000 rupiah, double the floor. Jakarta has the highest minimum wage with 591,000 rupiah, followed by Papua with 530,000 rupiah and East Kalimantan with 500,000 rupiah. Economic factors such as proximity to regions with higher wages explain some of the differences. But political factors also play a role in determining wage levels, as many regional administrations and parliaments are not free from pressure to implement populist measures.

An efficient industrial relations system also needs well-organized unions and a professional system collecting data on wage costs. After having been sidelined and suppressed under the New Order regime for a long time, workers and trade unions now fully assert their rights to improve their positions. But the current uncoordinated wage–setting mechanisms can have negative effects on wage negotiations, which need to be based on accurate data information on true living costs for workers. Currently, wages research councils adjust minimum wages to price changes in the minimum living needs (KHM – Kebutuhan Hidup Minimum).[11] But KHM estimates, submitted both by unions and employers to the regional wage research council, differ widely from changes in the CPI (Consumer Price Index). In 2001, for instance, unions in West and East Java reported increases in KHM in the range of 30-70 percent, while CPI actually increased by 10 – 15 percent. Those differences frustrate the attempt to craft a balanced approach for determining minimum wages. Thus, a more professional and de-politicized system of collecting data and estimating changes in the KHM would be a good first step to establish an efficient wage – setting mechanism.

[11] The following is based on a paper by Chris Manning (2002), " Minimum Wage Policy: Is Indonesia going the Latin American Route?" BAPPENAS – PEG Working Paper, unpublished.

Table 23
Contentious articles in the labour protection bill

Article	Issues	Position of employers	Position of Unions
76	Night working hours	40 hrs/week	35 hrs/week
81	Breastfeeding babies	Against	Agree
86	Government sets minimum wages	Against	Agree
91	Payment for sick workers	Against	Agree
134	Strikes No replacement of striking workers Striking workers paid	Must be notified Against Against	At any time Agree Agree
150	Service payments for resigning workers	Against	Agree
152	Conditions for dismissal	Against	Agree

Source: Draft Bill on Settlement of Industrial Disputes, Draft Bill on Manpower Development and Protection; Jakarta Post, 31 July 2002

Environment

Trade, environment and development in Indonesia

For developing countries like Indonesia, the principle of *common, but differentiated responsibilities* is the key phrase in negotiating fair trade rules. Countries share a common responsibility for the global environment, but they have different capabilities to contribute to environmental protection measures. Therefore, Indonesia has a vital interest to pursue two objectives. First, to keep markets open for its exports, liberalize its own economy and thus insist on upholding the basic principles of the WTO regime. And second, as a commitment to Multilateral Environmental Agreements (MEAs), it has to uphold obligations to safeguard environmentally sustainable development. How did it fare on these two issues?

Linkages between economic growth, trade liberalization and the environment

One common way to assess the linkages between growth and the environment is the environmental Kuznets curve. It describes the correlation between income and pollution levels. Lower income levels are certainly associated with lower pollution intensity. With higher income growth, pollution levels increase, but with increased income levels efforts to clean up the environment also increase and pollution levels stabilize. Thus, a clean environment is assumed to be a 'luxury good' and environmental expenditures should increase in the wake of development.

Higher growth is supposed to translate into better environmental management via various channels. First, as income goes up, population growth declines and additional pressure on the ecosystem decreases. Second, higher levels of education should be reflected in better and efficient resource management. Third, technological innovation is also supposed to be correlated with better environmental management, as costs for abatement decrease. Fourth, on an aggregate level, a deregulated open economy contributes to a diversification of

product and export base and thus reduces the dependence on natural resources as the main source of income.

While detailed studies do not exist for Indonesia, the record for the environmental Kuznets curve seems to be at best mixed. Lower income levels are certainly associated with low pollution levels. Higher growth certainly translated into higher incomes, better education, declining population growth, technology transfer and a more diversified economy.[12] Table 4 in the first part of the paper showed that the composition of output has diversified and reduced the share of natural resources and agriculture. Prior to the crisis, non-oil export growth was carried by an increasing role of the manufacturing sector with textiles, garments and plywood leading the way. Before the crisis, Indonesia was on the verge of entering a period of expansion in pollution- and capital-intensive industries, such as petrochemical, basic metals and chemical products. Higher growth rates have also increased pollution levels, particularly in urban areas where there is a high increase in human and solid waste and air pollution caused by vehicle emissions (World Bank 1994).

While the correlation between advanced economic development and increasing pollution intensity seems to be straightforward, equating higher income levels with increasing pollution mitigation efforts and thus a better quality of the environment is questionable. A World Bank study (2001) argues that public expenditures on environmental activities were already low in Indonesia before the crisis. Table 24 shows that in terms of per capita expenditure level, percentage of GDP and percentage of government expenditure, Indonesia fared badly compared to other Asian countries. Moreover, cuts in environmental expenditures were also deeper than in other countries, once the economic crisis hit the country.

Table 24
Environmental expenditures in Asian countries affected by the crisis

Country	Year	Per capita (current prices, US $)	Percent of GDP	Percent of government expenditure	Total (constant prices, 1997=1)
Indonesia	1997	$0.36	0.030%	0.163%	1.00
	1998	$0.08	0.017%	0.079%	0.47
Malaysia	1997	$0.67	0.015%	0.067%	1.00
	1998	$0.53	0.016%	0.070%	1.06
Thailand	1997	$5.47	0.22%	1.19%	1.00
	1998	$3.25	0.18%	0.98%	0.72
Korea	1997	$28.09	0.27%	1.560%	1.00
	1998	$19.78	0.29%	1.380%	0.99

Source: World Bank 2001

FDI and environment

[12] The literature on Indonesian economic development during the 30 years of New Order regime is wide and need not be discussed in detail here. See for instance Hill (1996).

What is the role of trade liberalization and foreign direct investment in impacting on the environment? Most economists argue that the links between trade policies and environmental impacts are indirect. As open trade regimes have a positive impact on growth performance, the physical scale of economic activities also increases. Thus, pollution and resource degradation levels increase.

In Indonesia, the high rates of foreign and domestic investment prior to the crisis have certainly created industrial areas with high rates of pollution. The expansion of manufacturing industries since the late 1980s has resulted in pollution disputes around the country, with the highly polluted Jabotabek region as the prominent example. Water pollution is perhaps the most acute environmental problem caused by industries. For instance, high pollution levels in 1990 caused health costs of more than US$ 1 billion in Jakarta alone (World Bank 1994). In particular, the rapid expansion of pulp and paper industries since the latter half of the 1980s has triggered widely publicized disputes (Japan Environment Council 2000).

On the other side, there is also evidence that deregulation could actually bring about better resource management. First, prior to the financial crisis in 1997, high levels of protection in manufacturing have favored the export of raw or nearly raw materials, thus exacerbating the rate of non-renewable natural resource use. Further liberalization of the economy would have helped to spread foreign direct investment more broadly across non-natural-resource-based sectors (NRMP 1995). Second, deregulation policies have also brought more sophisticated technologies into the country. A survey among representatives from the textile, leather, refrigerator, wood and shrimp industries in 1996 suggested that an increasing number of multinational corporations applied constant levels of environmental standards in all of their global operations (CSIS 1996). Third, investment decisions seem not to be exclusively concerned with environmental factors, but more with labor costs (CSIS 1996). In addition, pollution abatement costs of industries in Indonesia seem to be relatively low, estimated by the World Bank to be in the range of between 3 and 5 percent of total investment costs (Low 1992).

There is plenty of evidence that environmental problems are also a result of domestic policy failures and protectionist policies. Distorted price regimes such as subsidies for fuel and pesticides have for a long time prevented efficient resource use. The World Bank, in 1994, estimated that the elimination of pesticide subsidies – initiated by end of the 1980s – have brought savings of US$ 150 million per year and reduced agricultural pollution. Under the IMF’s structural adjustment program since 1997, Indonesia has committed itself to a series of reductions in subsidies, a move that could help increase efficiency.

The biggest current environmental problem is the rapid degradation of forest resources. Indonesia's forests are disappearing at an alarming rate: current estimates suggest that between 1985 and 1997 1.8 million hectares per year have been deforested. At these rates, there is now a strong possibility that forests will cease to function as a viable resource base in the foreseeable future. For instance, dry lowland forests in Sumatra will cease to exist as economically viable production forests by 2005. Overall, the nationwide gross forest area is now

estimated to be at 96 million ha, compared to a 120 million ha in 1985 (World Bank, 2001).

Increased worldwide demand for Indonesia's forest products have undoubtedly provided the stimulus for the rapid expansion of wood-based industries. But the rapid deforestation rate – especially in the 1990s and since the onset of the crisis in 1997 – have more to do with massive governance problems rather than liberalization *per se*. In the past three decades, state-led resource management has led to the deterioration of forest resources. Two policies were important. First, state policies and business interests colluded to rapidly expand domestic timber processing industries. This was achieved by restrictions on log exports and tax concessions to build up processing industries. Effectively logs were subsidized. The resulting over-capacity of plywood mills increased the industries' demand for timber.[13] In addition, ambitious plans to make Indonesia a major pulp and paper producer also increase the pressures on forests.[14]

Second, large-scale land conversion for commercial purposes, such as the development of oil palm plantations, were mainly responsible for accelerating deforestation in the 1990s. Land conversion was a significant factor in causing the forest fires in 1997-98, resulting in the destruction of 5 million ha of forest and an estimated economic loss of about US$ 8 billion to Indonesia.[15]

As a result of both policies, demand for wood vastly exceeds supply. Estimations suggest that demand is four times greater than what can be legally supplied. This gap is filled by illegal logging (UK Tropical Forest Management Program 1999). Incidence of illegal logging has increased dramatically since 1998. A contributing factor is that the current decentralization process has also encouraged newly empowered districts to use forests as short-term revenue earners. Head of forest–rich districts issue clear felling permits (IPKs) which cover concession areas of up to 100 ha. The issuance of those small-scale logging concessions is undermining the central government's adoption of a moratorium on the conversion of natural forest. In addition, since 8 October 2001, the central government has declared a ban on log exports for a trial period of six months.

Indonesia's Policies Towards Integrating Trade and Multilateral Environmental Agreements

Indonesia is a party to several major international multilateral environmental agreements (MEAs) and has implemented numerous aspects of these agreements through regulations and other government actions (see *Table 25*). In the following, some selected MEAs will be discussed.

[13] Brown, David W. (1999), " Addicted to Rent " , DFID/ITFMP Report, 7 September 1999.

[14] Barber, Charles Victor (1997). " The Case Study of Indonesia." Occasional Paper. Project on Environmental Scarcities, State Capacity, and Civil Violence. Cambridge: American Academy of Arts and Sciences and the University of Toronto.

[15] World Bank (2001), pp.6-28

Table 25
Indonesia's implementation of Multilateral Environmental Agreements

	Multilateral Environmental Agreement	*Legal Instrument*
1	United Nations Convention on Biological Diversity	Law No. 5 / 1994
2	UNEP Convention on International Trade	
	Endangered Species of Wild Fauna and Flora (CITES)	Presidential Decree No.43 / 1978
3	United Nations Framework Convention on Climate Change	Law no.6 / 1994
4	International Plant Protection Convention	Presidential Decree No.2 / 1977
5	Convention of the High Sea	Law No. 19 / 1961
6	Convention of the Prohibition of Development, Production	Presidential Decree No.58 / 1991
	and Stockpiling of Bactewriological and Toxic Weapons and	
	on their Destruction	
7	Convention Concerning the Protection of the World Cultural	Presidential Decree No. 17 / 1989
	and Natural Heritage	
8	Convention of the Physical Protection of Nuclear Material	Presidential Decree No. 49 / 1986
9	United Nations Convention on the Law of the Sea	Presidential Decree No. 82 / 1993
10	Internationa Tropical Timber Agreement	Presidential Decree no.4 / 1995
11	ASEAN Agreement on the Conservation of Namture	
	and Natural Resources	Presidential Decree No. 26 /
12	Conveention on Early Notification of a Nuclear Accident	Presidential Decree No. 81 / 1993
13	Vienna Convention for the Protection of the Ozone Layer	Presdential Decree No. 23 / 1992
	and Montreal Protocol on Substances that Deplete Ozone	
	Layer as adjusted and amended by the Second Meeting of the	
	parties London 27-29 June 1990	
14	Convention on the Prevention of pollution from Ships	Presidential decree No.46 / 1986
15	Protocol of 1992 to Amend the International Convention on	Presidential Decree No. 52 / 1999
	Civii liability for opil pollution damage 1969	
16	Basel Convention on the control of transboundary	
	movements of hazardous waste and their disposal	Presidential Decree No. 61 / 1993
17	Revocation of Presidential Decree no. 19 / 1978 on	Presidential Decree No. 41/ No. 1998
	Ratification of the International Convention on the Establishment	
	of an International Fund for Compensation for Compensation of	
	Oil Pollution Damages 1971	
18	Convention of Wetlands of International Importance	Presidential Decree No.48 / 1991
19	United Nations Convedntion to Combat Desertification	Keppres No.135/1998
20	International Plant Protection Convention	Presidential Decree No.2/1977

Source: Environment Impact Management Agency

Multilateral Environmental Agreements

Montreal Protocol

The Montreal Protocol was signed in September 1987 and became effective in 1989. Its objective is to protect the ozone layer by controlling the production and consumption of ozone depleting substances (ODS). Indonesia ratified the Montreal Protocol by Presidential Decree No.23 , issued on May 1992 and then developed a National Strategy for Ozone Layer Protection and ODS – Phase Out in January 1993. The plan aimed at phasing out all ODS consumption and production in Indonesia by end of 1997. Overall, the industries affected most by the Protocol – refrigerators and air – conditioner producers – managed well to

cope with increased production costs. A CSIS study (1996) found that cost increases amounting to 10-15 percent of total production costs did not impair production. There was good co-operation between the government and the private sector to follow a well-defined action plan. Policies included financial assistance such as tax exemptions from import duties for environment- friendly equipment, World Bank funding to firms, awareness campaigns and prohibition of imports of new technologies using or containing ODS. Regulations were enforced and closely monitored. The relatively successful implementation of the requirements of the Protocol can be explained by the structure of the market. There are only a limited number of producers in Indonesia and they are mainly multinational corporations with access to latest environment-friendly technologies. There was active collaboration with Indonesian joint ventures. In addition, most CFCs and ODS could be substituted relatively cheaply (CSIS 1996).

Kyoto Protocol and Clean Development Mechanism

The Kyoto Protocol commits the industrialized countries (listed in Annex B of the Protocol) to reducing their collective greenhouse gas (GHG) emissions to about 5 percent below 1the 990 levels during the period between 2008 and 2012 on average. The protocol was ratified in Bonn in 2001. Generally, it is viewed only as a symbolic first step towards a more effective framework to combat climate change. It is generally regarded as a ‘toothless’ agreement, since the United States as the biggest net contributor to GHG emissions did not sign the treaty.

Nevertheless, Indonesia has a vital interest to participate in any effort to combat climate change. As a country with one of the world’s longest coastlines, it can expect significant damages, if sea levels rise. Further negative effects could arise for the agricultural sector in the form of changing and prolonged drought and flood patterns. The severity of the El Nino and La Nina phenomena at the end of 1997 and early 1998 were a first foretaste for worse things to come.

Indonesia is a party to the Kyoto Protocol, but has not yet put any commitments into domestic legislation. The Kyoto Protocol has exempted developing countries from any commitments to reduce their emissions to a quantified ceiling, but are obliged to formulate and implement policies to mitigate climate change. Thus, the principle of "common, but differentiated responsibilities" is carried to the extreme here by recognizing the developed countries’ explicit responsibilities to take the lead in reducing emissions. The argument is simple: since most of past and current emissions originate from Western countries, they should clean up first. Developing countries have the right to prioritize economic development, while getting financial and technical assistance to combat climate change.

This principle is captured in Article 12 of the Kyoto Protocol under the " Clean Development Mechanism " (CDM). It allows Annex B countries (developed countries) to assist developing countries in achieving sustainable development. Investment by an Annex B country in a project in a developing country that leads to reduction in emissions will be certified. Those "certified emission reductions" (CERs) can be credited to the investing country. The mechanism should allow for transfer of resources and technology to developing countries (NSS 2001).

Indonesia has basically two main options under the CDM. First, it could include its vast forest resources as sinks to absorb emissions. The majority of Indonesia's CO2 emissions – 64 percent in 1990 and 74 percent in 1994 – came from forestry and land use change (Pelangi Indonesia 2000). Efforts to reduce emissions must mean halting rapid deforestation. But this would involve significant reduction in incomes derived from wood–based industries. Second, abatement strategies must be adopted in the energy sector. Overall, Indonesia's GHG emissions are projected to increase rapidly after the economic crisis has been overcome. Predictions estimate that CO2 from energy demand sectors will triple between 2000 and 2002 as the share of coal in energy supply is expected to increase by a factor of ten (NSS 2001).

Indonesia has recently completed a National Strategy Study (NSS). Its main recommendation called for a strengthening of the capacity of the private sector and non–governmental organizations (NGOs) in implementing CDM. In addition, the study recommends the creation of a Designated National Authority (DNA) which should be established by a Presidential Decree. It should consist of two units. First, a national CDM Board representing a wide range of stakeholders. Second, a CDM Clearinghouse which would be in charge of day-to-day operations in capacity–building. Currently, 10 CDM projects are in operation in Indonesia with a potential reduction of about 3,5 MT CO2 equivalent (NSS 2001).

Basel Convention

Indonesia ratified the Basel Convention in July 1993. The traffic of hazardous waste is regulated by Government Regulation No. 19/1994. With regard to hazardous waste imports, Article 27 of the Regulation states that i) any person or enterprise shall be prohibited from importing hazardous and toxic waste materials (B3 waste) and ii) the transportation of B3 waste by third countries through the jurisdiction of the Republic of Indonesia must be reported in writing to the Indonesian government. On a regional level, an ASEAN Ministerial Resolution in April 1994 agreed to strengthen regional cooperation to ensure the effective implementation to reduce hazardous waste generation and enforcing regulations covering the trans-boundary movements of hazardous waste within ASEAN borders (CSIS 1996).

However, the importation of hazardous waste continued to be a business, as domestic firms such as battery manufacturers still rely on used batteries as raw material inputs. In May 1995, the government issued a supplement to Regulation no.19 which allowed for temporary imports of used batteries. In 1997, regulation no.23 completely prohibits hazardous waste imports.[16] Recent cases of hazardous waste imports include imports of toxic sand material from Singapore to Riau in early 2000. These were permitted by the provincial governor. As environmentalists argue, this violates existing national regulations and also requires agreements between the two national governments. [17]

Convention of Biological Diversity

[16] Interview with representative from BAPEDAL
[17] Various media reports, for instance Suara Karya, 13 January 2000, Republika 18 January 2000)

In 1994, Indonesia ratified the UN Convention on Biological Diversity. It was also among the first countries to adopt a National Biodiversity Strategy and Action Plan. It has implemented many priorities set out in the plan. For instance, many priority protected areas were financed by the government and external donors. Several new conservation areas such as the Bukit Tigapuluh National Park in Riau were created. Still, less than 10 percent of Indonesia's land area is allocated to conservation purposes and only one out of 40 national parks has been fully gazetted. Since the onset of the economic crisis, protected areas and remaining forests have been under increasing pressure. Decentralization of natural resource management activities and illegal logging result in increased loss of habitats, over-exploitation and extinction of plant and wildlife species. In the forest fires of 1997-1998 alone 5 million ha forest was lost (World Bank 2001).

Trade – related environmental measures

Ecolabelling / Forest Certification / ISO 14000

Indonesia's economy is vulnerable to trade-related environmental measures such as eco-labelling schemes. Table 26 shows the distribution of exports going into eco-sensitive markets. The numbers show that a significant proportion of Indonesia’s exports go to eco-sensitive markets. Prior to the crisis those exports were close to one-third of overall exports before dropping to 23 percent in the midst of the economic crisis. With the depreciation of the rupiah, exports rebounded and were strong in 1999 before dropping again the following year. The share of eco-sensitive products in non–oil exports is even higher and shows the significance of trade–related environmental measures for Indonesia. With global economic prospects declining, it is even more imperative for Indonesian policymakers in adjusting to developments in eco-labelling and other voluntary schemes in export markets.

As a response to growing international pressure on timber-exporting countries to adopt sustainable forest management criteria, Indonesia decided to adopt a system of forest certification. In 1990, the ITTO (International Tropical Timber Organization) member countries agreed to work towards implementing sustainable forest management by the year 2000. Member states like Indonesia made non-binding commitments to develop national guidelines based on an approved set of ITTO's Guidelines for the Sustainable Management of Natural Tropical Forests (Elliott 2000). In 1993, the Ministry of Forestry issued decrees on criteria and indicators, based on proposals set forth by the Association of Indonesian Concession Holders (APHI). In 1997, the Indonesian Eco-labelling Institute, then still acting as a working group, finalized criteria and certification system and reached an agreement with APHI, the Ministry of Forestry and the national standards body (DSN). Finally, in early 1998, the Indonesian eco-labelling foundation (LEI) was set up to implement the certification program (Elliott 2000).

Table 26
Indonesia's exports to eco-sensitive markets

Product Category	1995	1996	1997	1998	1999	2000
Wood products*	5026	5,168.95	4,733.89	2,932.99	3,647.66	3,638.73
Pulp and paper*	931.65	942.12	925.92	1,415.03	1,938.78	2,261.12
Textiles	2,713.40	2,834.11	2,254.74	2,359.20	3,018.91	3,505.05
Clothing	3,376.38	3,591.47	2,903.53	2,630.26	3,856.90	4,734.04
Leather	44.97	36.89	36.41	76.49	65.12	96.13
Plastics/Packaging*	88.47	86.61	77.16	82.04	162.70	261.80
Rubber*	235.05	298.92	269.11	251.02	313.70	371.16
Footwear	2,055.23	2,195.07	1,531.01	1,206.06	1,601.77	1,672.11
Total	14471.1493	15154.143	12731.773	10953.091	14605.544	16540.152
Total Exports	45417.984	49814.754	53443.602	48847.639	48665.453	62124.016
Total Non-Oil Exports	34953.572	38091.951	41918.643	40975.200	38873.164	47754.295
Percentage of products going to eco-sensitive markets to Total Exports	31.86	30.42	23.82	22.42	30.01	26.62
Percentage of products going to eco-sensitive markets to total Non-Oil Exports	41.40	39.78	30.37	26.73	37.57	34.64

*manufactured products, not including primary products
Source: Central Board of Statistics, Exports and Imports

LEI acts as an independent, non-profit, third-party certification body. It implements certification for concessionaires on a voluntary basis and aims for mutual recognition of certification schemes internationally. Since 1999, LEI collaborates closely with the Forest Stewardship Council (FSC) to issue joint certifications. Accordingly, Indonesian forest concessions are to be inspected and evaluated by certifiers accredited by both organizations (Elliott 2000). In addition, LEI seeks compatibility with the system under the International Organization for Standardization (ISO).

The agreed domestic eco-labelling/forest certification scheme also reflects two principal objectives: to improve forest management and to ensure market access. NGOs and international organizations mainly focus on the first objective, while the private sector sees eco-labelling as a marketing tool. The Ministry of Forestry's role is not clear. Previously it was mainly regarded as a playing ground for industry lobbying to pursue the short-term objective of maximizing revenues by keeping logging rates high. On the other hand, the bureaucracy itself consists of groups aligning themselves with the conservationist goals of NGOs. One clear sign for the growing influence of the 'green' interest groups within the Ministry, is the decision to give LEI the right to certify concessions rather than to APHI.

As of December 2001, out of 375 concessionaires in Indonesia, only one firm managed to be awarded with the eco-label. Given the objective that every concession holder has to obtain a certificate by 2003, this is not a particular optimistic situation. There are indications that obtaining the label is also a cost issue. The more distant a concession, the more costly it is for concessions to

arrange for evaluation teams to check the site. Currently, costs are estimated to be about 500 million rupiah (around US$ 50,000) per 100,000 ha.[18] A serious obstacle for many concessionaires is the incidence of illegal logging within the managed site. LEI has already announced that it would not issue eco-label certificates to firms suspected of having obtained illegal logs.

While LEI develops criteria for wood products, BAPEDAL (Environmental Impact Management Agency) [19]and the Standardization Body (DSN) are responsible for developing criteria for eco-labelling certificates for all other product groups. ISO 14000 standards provide the guidelines for BAPEDAL and DSN. The adoption of ISO standards in Indonesia has been discussed since 1995. Six working groups deal with the following areas: Environmental Management System, Environmental Auditing, Environmental Labeling, Environmental Performance Evaluation Life Cycle Analysis and Terms and Definition. In April 1996, a report and recommendations were submitted to the ISO Secretariat in Geneva. So far, about 300 firms have been awarded with the ISO certificate. This is very small number, especially when compared to Malaysia, where around 3,000 firms have been awarded with ISO 14000.[20] Table 27 shows the ISO standards, which are already adopted by the Indonesian Standardization Body (BSN).

[18] Koran Tempo, 4 December 2001. Cost estimate prior to the crisis were estimated to be in the order of between 0.50 US$ and 14.50 US$/m3. WALHI, an environmental NGO, suggested that given a concessionaires profit of US$ 78/m3, forest certification cannot be a cost issue for concessionaires (Elliott 2000,p.108).

[19] BAPEDAL is currently in the process of being abolished and its functions will be absorbed by the Ministry of the Environment.

[20] Interview with BAPEDAL representative

Table 27
ISO Standards in Indonesia

ISO 14001*	Environmental Management Systems - Specification with guidance for use
ISO 14004*	Environmental Management Systems - General Guidelines on Principles, Systems and Supporting Techniques
ISO 14010*	Guidelines for Environmental Auditing - General Principles on Environmental Auditing
ISO 14011*	Guidelines for Environmental Auditing - Audit Procedures - Auditing of Environmental Management Systems
ISO 14012*	Guidelines for Environmental Auditing - Qualification Criteria for Environmental Auditors
ISO 14015	Environmental Assessment of Sites and Organizations
ISO 14020	Environmental Labels and Declarations - General Principles
ISO 14021	Environmental Labels and Declarations - Self Declaration and Environmental Claims Terms and Definitions
ISO 14024	Environmental Labels and Declarations - Type 1 Environmental Labeling
ISO 14025	Environmental Labels and Declarations - Type III Environmental Declaration
ISO 14031	Environmental Performance Evaluation - Guidelines
ISO/TR 14032	Environmental Performance Evaluation - Case Studies Illustrating the Use of ISO 14031
ISO 14040	Life Cycle Assessment - Principles and Framework
ISO 14041	Life Cycle Assessment - Goal and Scope Definition and Inventory Analysis
ISO 14042	Life Cycle Assessment - Life Cycle Impact Assessment
ISO 14043	Life Cycle Assessment - Life Cycle Interpretation
ISO 14047	Life Cycled Assessment – Examples of Application of ISO 14042
ISO 14048	Life Cycle Assessment - LCA Data Format
ISO 14049	Life Cycle Assessment - Examples of Application of ISO 14041
ISO 14050	Environmental Management – Vocabulary

Note: * already adopted by National Standardization Board
Source: BAPEDAL (Environmental Impact Management Agency)

Trade, environment and labor: case studies from the textiles industry

The economic importance of the textiles industry

Textiles have been produced in Indonesia since the 1930s and the industry receives particular attention by the government of Indonesia (GOI) as an important base for industrial development due to its simple technology and a big domestic market. Automatization occurred in the mid-1960s replacing hand loom completely and thus increased production. Until the end of the 1970s, the government pursued a strategy of import substitution. With the saturation of the local market and the decrease in oil prices, non-oil exports became increasingly important for the Indonesian economy. An outward- looking strategy combined with the diversification of the export base has been adopted since the mid-1980s, with the textile industry as one main beneficiary.

Export Performance

Until the early 1980s Indonesia's manufacturing sector was very inward-oriented with exports of textile products playing only an insignificant role. However, this changed by the mid-1980s. Textiles and textile products (TTP) play an important

role in the overall export performance of Indonesia and have been consistently the largest foreign exchange earner since the 1980s outside the oil and gas industries. Almost 48 percent of Indonesia's TTP is exported, with the largest foreign exchange earner being garments, followed by fabric, yarn and synthetic fibers (GTZ 2001) Before the crisis in 1997, TTP exports already started to decline. This affected the overall growth of non-oil exports, since textiles constitute around 17 % of total exports. The main reasons for this negative development are to be found in the decline of polyester fibre prices in 1993, sluggish international markets in general, rising competition from China , India, Bangladesh and Vietnam and the increased problems with government procedures to clear goods through customs and to process duty drawbacks (Pangestu and Azis 1994). The financial and ensuing economic crisis in Indonesia has aggravated these problems further.

Table 28: Foreign Exchange Earnings from Indonesia's Five Major Non-Oil and Gas Commodities, 1998

Commodity	Export Value (US$ billion)	Share of total Non-Oil and Gas Exports (%)
Textile and Textile Products	7,390	18.03
Timber Products	4,389	10.71
Agriculture Products	3,289	8.05
Electronics	3,259	7.95
Mining Products	2,667	6.51

Source: Department of Industry and Trade

In 1999, TTP exports from Indonesia reached 130 countries. Indonesia had to agree on a quota system for its exports of textile and textile products and signed the Multi-Fibre Agreement in 1975. The quota is a fixing level, limiting the exports of textiles classified in certain categories. So-called quota countries are the United States, the European Union, Canada and Norway. According to GATT/WTO regulations, those quota systems will have to disappear by 2005, meaning that TTP exports will be quota-free. Exports to quota countries constitute around 44 % and exports to non-quota countries around 56 percent of overall exports of textiles and textile products.

Production and exports by main textiles and textiles product categories

Fiber

Indonesia's main textile fibers consist of polyester, cotton, viscose rayon staple, acrylic and nylon. Polyester accounted for an estimated 51% of the total consumption in 1999 (GTZ 2001). All textile fibers are locally produced, except for cotton, which is almost entirely imported mainly from Australia and the US. The 1990s saw an impressive growth rate of synthetic fiber production and Indonesia was also part of this growth. In 1997, there were 24 fiber manufacturers in Indonesia, 19 of which produce polyester, 5 nylon, 3 viscose rayon and 2 acrylic fiber. Main production areas are in West Java.

In 1994-1998, exports of fiber have almost tripled in volume before dropping during the 1997-1998 economic crisis. In 1999, Taiwan was the biggest export

market for Indonesian textile fiber, followed by South Korea and the US. The number of factories reached 27 in 1999.

Yarn

The Indonesian yarn industry supplies 90% of the domestic demand. The primary consumers of yarn are the weaving and knitting industries. Secondary consumers include sewing thread, carpet, upholstery, fishing net, rope, shoes and leather industries. Indonesia produces single spun, mixed spun - and filament yarns. According to the Department of Trade and Industry, 166 spinning mills with a total capacity of 7.2 million spindles are operating in the country, with the vast majority located in West Java, the country's center of textile manufacturing. Production levels increased continuously by an average 13 percent annually before the crisis. The crisis brought a sharp downturn in production.

Table 29
Indonesia's Production of Textile Yarns, 1995-1998

Year	Production (in tons)	Growth
1994	1,004,275	-
1995	1,142,217	13.7
1996	1,290,401	13.0
1997	1,263,231	(2.1)
1998	1,167,790	(7.6)

Source: Central Bureau of Statistics

The main export markets are South Korea, Japan, and Hong Kong. For the first ten months of 1999, exports to these countries amounted to 184,157 tons valued at US$ 374 million, accounting for 35.5 percent and 38.5 percent of the total yarn exports by weight and value respectively (GTZ 2001).

Table 30
Indonesia's Export of Yarns

Year	Volume (Tons)	Value (US$ '000)	Export Share by volume (%)
1994	228,554	678,548	22.8
1995	254,469	813,090	22.3
1996	323,165	921,149	25.0
1997	280,624	778,123	22.2
1998	436,283	873,581	37.4
1999	519,230	977,531	n.a.

Source: Central Bureau of Statistics

Fabrics

The fabric industry is the second largest contributor to the country's foreign exchange earnings in TTP exports. Quality improvements of domestically produced fabric have allowed Indonesia to reduce imports of fabrics, which were previously required to meet the needs of export-oriented garment producers. Currently, there are 767 woven fabrics, 252 knitted and 12 non-woven fabrics factories in the country. Similarly to yarn, a decade-long increase in fabrics production came to a halt with the onset of the crisis in 1997. In addition,

increased smuggling of cheap fabrics from India and China, sold 20 percent under the market price, constitute a major problem for the domestic industry. According to the Textiles Association (API), capacity utilization of the weaving industry dropped from 70 percent in 1997 to 60 percent in 1998, affecting mostly small- and medium-scale enterprises (GTZ 2001).

Table 31
Indonesia's Fabric Production (in tons)

Year	Woven Fabrics (in tons)	Knitted Fabrics	Non-Woven	Total
1994	914,119	161,316	4,571	1,080,006
1995	939,230	214,688	6,559	1,160,477
1996	1,027,144	204,425	11,819	1,242,388
1997	1,093,841	172,261	15,191	1,281,293
1998	941,928	151,374	13,048	1,106,350

Source: CBS

In terms of exports, quantity of fabrics grew substantially until 1998, but export value dropped sharply in the aftermath of the financial crisis. The devaluation of the Rupiah has not benefited the domestic textiles industry, as other countries in the region have also dropped their prices to become more competitive. Reportedly, foreign buyers demanded a 20-30 percent price cut from TTP exporters in Southeast Asia (GTZ 2001). In 1999, the United Arab Emirates was the primary destination of Indonesian fabrics (most of it for transit), absorbing 13 percent of the country's exports in value and 9.8 percent by volume, followed by the US, UK and Hong Kong.

Table 32
Indonesia's Exports of Fabrics

Year	Volume (tons)	Value (US$ '000)	Export share by volume (%)
1994	244,219	1,629,543	22.6
1995	243,470	1,707,609	21
1996	265,630	1,706,941	21.4
1997	221,893	1,348,139	17.3
1998	381,441	1,362,857	34.5
1999*	342,774	1,339,540	na

* Jan-Oct; Source: Central Bureau of Statistics

Garments

Garments exporters contribute the largest share in TTP exports from Indonesia. There are currently 2,368 garment factories operating in the country, with a total production capacity of 583,1 million dozen pieces per year. West Java has the largest number of factories, accounting for 908 units with a total capacity of 242.9 million dozens or 41.6 % of the country's total capacity. Until the 1997 Asian financial crisis, domestic garment production showed a constant increase, but production dropped in 1998 due to reduced exports and domestic demand.

Table 33
Indonesia's Production of Garments, 1994 - 1998, in tons

Year	Production	Growth
1994	251,295	
1995	311,504	24
1996	331,071	6.3
1997	370,806	12
1998	350,406	-5.5

Source: Department of Industry and Trade, CBS

Exports by both quantity and quality fell after the start of the crisis. Value of exports shrunk by 28 percent from 1996-1998. Problems in trade financing, rejection of Indonesian L/Cs in a number of countries and political uncertainties have hit the domestic industry. The main importers of Indonesia garments are the US, Germany, UK, Japan and the Netherlands.

Table 34
Indonesia's Exports of Garments

Year	Volume (tons)	Value (US$ '000)	Export share by volume (%)
1994	205,624	3,226,106	81.8
1995	221,299	3,388,120	71.1
1996	235,020	3,575,799	71
1997	267,670	3,394,742	72.2
1998	205,430	2,587,928	58.6
1999*	339,807	3,246,392	na

* Jan-Oct; Source: CBS

Employment

The employment effects of the textiles industry are significant, as it offers employment to some 3,5 million workers directly and an additional 2.5 million people indirectly in distribution. This constitutes around 7 percent of the country's total 87 million workforce. The Indonesian Textiles Association (API) estimates that currently around 8,000 manufacturers of TTP operate in Indonesia, 73 percent (or 5,580) of which are located in West Java and Jakarta (GTZ 2001).

Pollution and environmental regulations affecting Indonesia's textiles industry

External environmental labelling schemes affecting Indonesian Textile and Textile Products[21]

Since a significant proportion of the Indonesian textile exports goes to the European markets, the discussion will focus on the eco-labelling schemes established in selected European countries. Specifically, four schemes are of relevance : the Swedish Good Environmental Choice (BM), the Dutch scheme, the Nordic Countries' programme and the EU labelling scheme .

[21] The following section relies heavily on UNEP (1995)

The criteria set by the different eco-labeling schemes for textile products affect the production of fiber and the textile manufacturing process. There seems to be an agreement on the need to encourage organic cultivation methods for the production of natural fibres. The Swedish scheme (BM) , for instance , awards the A - Label to products made of natural fibres only if the fibre has been produced following the principles of organic agriculture. The content of pesticides in fiber has to be limited as well under the Nordic and the EU schemes. With regard to synthetic fibres, the EU establishes requirements for certain emissions and heavy metal residues, while the Nordic scheme only requires the manufacturer to provide information about the emissions.

In short, all schemes use as reference the international and national lists for harmful chemicals. There is a consensus over the need to ban the use of chlorinated bleaching agents. The Nordic and the Swedish programmes emphasise more the biodegradability capability of the chemicals compared to the other two schemes.

One of the environmentally most problematic parts of textile production is the use of certain harmful dyes and pigments. The Swedish and the EU schemes explicitly ban the use of certain dyes and pigments , and demand a declaration from the manufacturer, while the Dutch and the Nordic schemes rely on the indirect measurement of the composition of the final product. Proponents of less stricter standards concerning heavy metal residues base their arguments on the difficulties in the testing methods for measuring heavy metal residues in final products.

The most comprehensive and detailed water emissions limits apply under the Swedish scheme, which considers, among others, the dye discharges into water - a parameter not included in the other schemes.

Regarding energy consumption criteria, the EU and the Nordic countries' schemes require detailed information on the consumption of energy and water during the different production phases, with the aim of incorporating the resource consumption requirements in the future criteria.

A further review of the different schemes reveals that the Dutch scheme allows by far the highest levels of formaldehyde concentration. The Nordic scheme sets more detailed criteria concerning the consumer health effects. The EU includes several criteria for occupational exposure and the Dutch scheme intends to include them in the future (on the condition that agreements over the minimum requirements are reached in the bodies working on that particular issue).

In terms of how to control and verify the compliance of the applicants with the eco-labelling criteria, the EU scheme relies in several issues on manufacturer's own declarations, whereas the Nordic and the Dutch schemes prefer to use clearly measurable criteria.

Another important market for Indonesian textile products is Germany. The Oeko-Tex standard 101 defines special conditions for granting the authorisation to use the mark " Oeko-Tex " for textile fabrics (woven fabrics, knitted fabrics,

nonwovens) for clothing, with the exception of baby clothing. The Oeko-Tex-Standard 101 and 115 define the requirements for textile fabrics (woven fabrics, knitted fabrics, nonwovens) for clothing (with the exception of baby clothing) , spun fibres (yarn, ply - yarns) and initial products (loose stock, staple fibres) used for manufacturing of textile fabrics in industry and trade.

Apart from the internationally recognised Oeko-Tex Standard there are two other schemes in Germany of which foreign producers have to be aware of, namely the " Toxproof " certification and the " Eco-Tex " scheme. The former is generally established for garments , whereas the latter requires participation in the Eco - Tex consortium. Membership in the Eco-Tex consortium is advisable for big export companies, that can afford the membership fees. One advantage of the scheme is that information about environmentally optimised production processes are distributed to all members and are also under frequent revision.

It is also important to be aware of the German legislation applying to textiles. The most dangerous substances - pentachlorophenole (PCP) and formaldehyde - fall under strict regulations. Use of PCP is banned; compulsory labelling is required for the use of formaldehyde in excess of 1500 mg / kg since 1986; the use of carcinogenic substances is banned to reduce the flammability of fabrics ; and the use of asbestos yarns for protective clothing is banned. .The EU has also launched a PCP regulation, but the standard is still high at 1g/kg (1000 ppm) (Neitzel, Landtmann 1994, p.109).

With regard to markets outside Europe, Japan constitutes a major market for Indonesian textile exports. Criteria to obtain an " Eco-Mark " exist for unbleached towels, cloth diapers, cloth shopping bags and for textiles made of waste fibres. The established criteria are also based on an impact assessment for the entire product life cycle.

Domestic regulations

Like many other industries, the textile sector is controlled under the Industrial Act, the Environmental Management Act , regulations based on both these Acts and the Nuisance Act. Two regulations are of specific importance for the textile industry. First, the Decree of the Minister for Population and the Environment Number 03 / 1991 states effluent quality standards for existing operations. The second important legislation is the Decree of the Ministry of Industry, No. 134 / M / SK / 1988 which lists all industrial activities requiring Preliminary Environmental Impact Studies (PIL) or an Environmental Impact Analysis. These EIAs contain a detailed explanation of the process of production, the chemicals used and a prediction of the impact of the particular factory on the environment and the firm’s measures to counteract those likely impacts. Effluent standards for the textiles industry is regulated by the Ministerial decree No. KEP - 51/MenLH/10/1995. This decree sets maximum levels of pollution loads of liquid waste allowed to be discharged into the environment by 21 kinds of industries.

In 1989, the government launched a water pollution control program, known as the "Clean River program' (Prokasih). The initial focus was on the major industrial polluters (including textiles factories) along the 24 most highly polluted rivers,

with the stated goal of reducing their pollution loads by 59 percent within two years. Firms in highly polluting industries were required to sign a letter of commitment to reduce pollution loads accordingly within an agreed time frame. Some progress has been reported in reducing industrial pollution, as more than 1,000 firms had signed the letter and pollution loads were reduced in 6 Prokasih rivers (Utami 1994). However, monitoring and controlling by the government has reduced significantly since the economic crisis hit in 1997 (see interviews further below). Data provided by the PROKASIH program suggest that the textile industry contributes about 70 percent of the total load of pollution into the West Java rivers covered under the Clean River Programme (CSIS 1996).

A survey among textile firms: some insights

Interviews with 2 textile firms give some insights on the response of the Indonesian textile industry towards internal and external environmental regulations and labor standards.

Firm 1 is producing viscose staples fibers. It is a large-scale firm, with more than 1,500employers. The majority of shares is owned by a foreign firm. Annual sales in 2002 amounted to US$ 170 million. Exports are 35 percent of total revenues and the firm is among the leading firms in the product market, with a 48 percent market share in 2002.

Firm 2 is has two owned subsidiaries and is an integrated manufacturer of yarns, fabrics and garments. The speciality is in the production of nylon filament, nylon twist, polyester texturized yarns and polyester or nylon spun-like yarns. This private firm is a leading player in domestic market for fabrics in nylon.

General competitiveness issues: Both firms regard environmental issues as not detrimental to their competitiveness, but have more concerns about increasing labor cost, corruption costs and the uncertain political conditions in Indonesia. Firm 1 argues that environmental technology adopted in their operations is already world-class and chemicals used in their production process are disposed of properly adhering to existing environmental standards. Firm 2 cites labor issue as a more severe problem, and argues that currently it does not face external and internal pressures to comply with strict environmental standards, but is ready to do so, as this is also a question of market access.

Access to information and the role of association of textile industry and government: Firm2 complained about the lack of information available for Indonesian exporters on the latest developments in overseas markets. There are clearly research disadvantages in this regard for Indonesian exporters. Information is generally obtained through magazines, articles in specific journals and sometimes through seminars which are quite costly. Generally, Indonesian exporters do not have sufficient access to information on environmental policies which may affect exports to OECD countries. The firm received information from its European buyers and through the garment manufacturers who wanted a written guarantee. The association is considered not to be an effective in developing a strategy to addressing trade-related environmental issues, and Firm 2 does not have the time to commit to the association's activities.

Firm 1 stated that information is not easily available and if, they are not up-to-date. However, it gets all the relevant information on regulations and technology developments from the parent company in Europe. The trade association needs to influence the government in formulating a strategy, a role, which it is currently not fulfilling. According to this firm, the government does not have a clear strategy for the textile industry and should push for more quotas in export markets, as other countries also do not adhere to same trade rules. In addition, it should undertake measures to prevent the increased smuggling of textiles into Indonesia.

Labor standards and costs: Firm 1 depends largely of high- skilled labor such as chemical and maintenance engineers. Hiring from domestic education system is a problem, as the education level is not considered good enough. Therefore it has a substantial amount of expatriate labor, for instance from India. Firm 1 provides formal in-house employee training programs and regards this as the most effective way to enhance skills among the workforce. Labor issues are not affecting the competitiveness of the firm, as wages are already higher than minimum wages and the firm follows government regulations. Wages for higher skilled labor are higher than industry average anyway. The firm identifies the lack of domestic skilled workers as a big problem. Currently it negotiates with 2 labor unions on labor and wage issues. The firm objects to the severance pay policies set by the latest drafted labor bill. In 2000-2002 labor costs have increased by around 17 percent per annum.

Firm 2 relates high labor costs to low productivity. During 1999-2002, there were three increases in minimum wages, but they did not correspond to a significant rise in productivity. It was worsened by the implementation of the current bills on Labor Ministerial Decree No.150, particularly where the wage remains to be paid under the terms of dispute settlement. It faces only one union in negotiations, the main national trade union SBSI.

Testing facilities : Firm 1 said that all textile process houses are obliged to install an effluent treatment plant by government decree and the maximum parameters for effluent discharge has been stipulated for each type of industry. The testing facilities are adequate to evaluate effluent parameters. Co-operation with international certificate bodies is needed, once certain dyes are banned. It is also reported that the transfer of environmental technology cannot be confirmed in Indonesia. There is a need for foreign help, but this involves higher costs for Indonesian firms.
Firm 2 said that there are compulsory testing facilities to test for pollution loads, and samples are taken once a month from rivers affected by its operations. Products must be accredited to follow US (AAEETCC), European (DIN) and Japanese (JIS) quality standards.

Waste treatment : Firm 2 argues that textile firms in Indonesia have already started to invest in implementing effluent treatment facilities. It has already introduced wastewater treatment facilities since the 1970s. Treatment is required by the government, but generally it is a question of economies of scale to invest in effluent treatment. The bigger the economies of scale, the cheaper it becomes for

the firm to invest in upgraded technology. Firm 1 states that it already has invested in wastewater treatment facilities since the beginning of its operations in Indonesia, as it has adopted advanced pollution abatement technologies from the parent firm in Europe. Viscose products in Europe already require eco-certificates to be allowed into the market. Both firms did not receive government or other external public assistance for investing in wastewater treatment.

Government regulations, ISO 14001 and eco-labelling: As far as the adoption of environmental management systems like ISO 9000 or ISO 14000 is concerned , Firm 1 stated that it has obtained the ISO 9002 certificate. The firm also intends to adopt ISO 14000 standards to improve its efficiency and hopes to reap high indirect benefits like cost savings and a better image. Firm1 hopes to have completed the requirements by 2004. However, there will be higher ongoing operational costs involved because of additional personnel needed for training and a change in the production process. The firm has, so far, not received any specific request from its trading partners regarding the adoption of ISO 14001 system. Firm 1 states that domestic eco-labelling should not be made mandatory, not because of cost issues, but because it believes that the implementation will not be fair. Unclear government regulation in measuring pollution loads also contributes to higher costs for business. Current corruption costs involving police using environmental legislation as a pretext to extract fees are already high.

Firm 2 said that customers have not yet requested ISO 14001, but it has already obtained ISO 9002. Improvements in efficiency are the main reasons for doing so.

Potential trade effects of eco-labelling: Both Firm 1 and Firm 2 stated that eco-labelling will not raise their production costs significantly, should it be also made mandatory in Indonesia. Both firms estimated cost increases to be at well below 10 percent, if eco-labelling is made compulsory. But both raise concerns about the capacity of the authorities to implement fair monitoring procedures in Indonesia. Firm 2 stated that environmental investments are positive investments for exports; but not for those producing only for the domestic market. Since a large 44.7 percent of total garment revenues comes from exports, environmental adjustment costs are necessary to meet competitive challenges.

General economic conditions faced by the Indonesian textiles industry

Despite its impressive growth rate in the 1980s and 1990s, the textile industry faces several 'structural' problems, which were aggravated during the economic crisis. These include inefficiency of machinery, excessive capacity utilization, lack of capital due to prevailing high interest rates, tighter competition in international markets, and problems associated with red tape.

Aging machinery is one of the main problems faced by textile manufacturers. According to the GTZ (2001), the majority of the machinery in Indonesia is more than 20 years old and this causes a low productivity level. This affects the quality of produced export goods and constitutes a major problem in the tighter international markets, particularly when exporters face no import and export quotas through ASEAN and WTO agreements.

The necessary restructuring of the industry is made difficult by the current financial constraints in the Indonesian economy. The banking crisis has seen a lack of credits and soaring interest rates during the past 5 years, making it difficult for textile producers to undertake investments and expand capacities. Production costs have also soared as a result of rising energy prices (between 15-25 percent in the past three years), increasing labor costs due to a rise in minimum wages (with lower productivity) and increased harbor handling fees. The low Rupiah has made the import of raw materials also expensive. Other obstacles include shortages in qualified human resources, irregular supplies of basic materials, inadequate marketing networks and general uncertainties due to exchange rate fluctuations. Environmental costs do not seem to constitute a major problem for the industry, at least among the large-scale manufacturers. Cost increases are not expected to be significant and upgrading environmental management systems are generally regarded as an investment towards achieving efficiency. Adherence to internationally acknowledged and voluntary certificates such as the ISO 14001 is the preferred method of environmental regulation in the industry compared to domestic eco-labelling initiatives.

ASEAN, AFTA and WTO: regional cooperation towards multilateral arrangements

Regional Cooperation and Initiatives

Agriculture

To date, AFTA has been successful as a training ground for trade liberalization among ASEAN countries in achieving their APEC and WTO commitments. In the year 2002, ASEAN Free Trade Area, which was planned in 1992, by six ASEAN countries - Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand, was finally effective. As ASEAN extended to Vietnam, Laos, Cambodia and Myanmar, those countries also became member of AFTA with different timeline of tariff reductions, which are 2006 for Vietnam, 2008 for Laos and Myanmar and 2010 for Cambodia.

AFTA was set up on a voluntary basis, in which member countries are free to choose commodities they wanted to include in tariff reductions schedule, called Inclusion List (IL). Products submitted in IL are subject to preferential tariff reduction to reach 0-5 percent in 2002[22]. When the CEPT scheme was initiated, agricultural products and services were excluded but in 1994, the 26th AEM agreed to include all unprocessed agricultural products. In general, within ASEAN, tariff rates were already lower than WTO commitments.
In WTO, trade liberalization is decided through negotiation based on offer and request mechanism, so that individual member country's success is highly determined by negotiators capabilities. In contrast to developed countries, developing countries have limited representatives at the WTO, not only in terms

[22] Apart from IL, there are three other category lists of products, which are Temporary Exclusion List (TEL) including products temporarily excluded from tariff reductions schedule and should be phased into the IL in five installments, Sensitive List (SL), which includes products declared sensitive to the particular country[22] and General Exception (GE) which products excluded from AFTA.

of number of people but also capacity and capabilities, mostly due to limited budget. The imbalance in negotiation capacity between member countries within WTO might lead to imbalanced negotiations.

Given this situation, a coalition among ASEAN countries might boost ASEAN member countries bargaining positions at the WTO. However, the questions then is whether ASEAN member countries have common interest worth to fight for? There are at least four issues regarding agricultural commodities in which ASEAN member countries might have similar positions. **Firstly** and might be the most important one is market access to developed countries. Most of ASEAN countries exports are to developed countries, where trade protection remains relatively high. Concerted requests upon developed countries to accelerate opening up of its market would be more powerful than individual requests. **Secondly**, related to market access, developed countries tend to impose new forms of trade barriers, such as Sanitary and Phytosanitary (SPS) and other standards. If this is not treated wisely might turn to be "trade harassment". Indonesia, together with Vietnam and Myanmar had experienced huge losses with their shrimp exports being rejected in EU for failing to meet the SPS standard. ASEAN cooperation in addressing this issue would also be effective rather than individually fighting with importing countries: transparency of standards and mutual recognition of inspections and standards. ASEAN, joint forces could demand pre-shipment inspections, including transfer of technology and training of personnel (HRD). Else, EU can choose a private run inspection laboratories operated in ASEAN if required. **Thirdly**, S&D treatment might be common interest of ASEAN member countries. Unequal capacity and level of development between the developed and developing countries is a reasonable ground for S&D treatment. Developing countries should be granted longer time to adjust to new trade environment, not the other way around. Concerted actions demanding S&D treatments are another room for such coalition to fight for. **Fourthly**, non-trade concerns of developing countries such as rural development, poverty alleviation and food security. While farmers in the developing countries are always associated with poverty, ASEAN member countries should join forces pursuing multi-functionality of agricultural sector so as to protect its farmers, temporarily while domestic policies should be developed to enhance farmers' position. This request should be put under S&D treatment.

While China has become a member of WTO and agreed to establish a free trade area with ASEAN it would be beneficial to include China in ASEAN regional coalitions for WTO negotiations purposes. Especially as China offered liberalizing its agricultural sector in the early phase of ASEAN-China free trade initiatives.

Will coalitions among ASEAN member countries at WTO bring different results compared to CAIRNS, which failed to echo developing countries interest? ASEAN countries differ from CAIRNS members. Firstly, ASEAN member countries are exporters of similar commodities. Secondly, ASEAN member countries are more or less in the same stage of development – developing countries, with Singapore as an exception. Those similarities would make ASEAN coalitions performed better than CAIRNS in member countries perspectives.

Environment

Indonesia's efforts to deal with integration of environmental and trade objectives have always prioritized the principles of "common, but differentiated responsibilities" and the "right to development". This stance has permeated its negotiations and position in WTO rounds and ASEAN as a regional cooperation mechanism was actively used to push this stance. Overall the government has always maintained a "free-trade-approach" in international trade negotiations. But this did not prevent domestic policies to ratify international agreements on the environment, as the preceding discussion has shown.

Indonesia has been active in formulating ASEAN's stance on environmental issues, particularly since the launch of the ASEAN Senior Officials on the Environment (ASOEN) as a consultation mechanism. The ASEAN Plan of Action on the Environment for the period 1994-1998 was approved by the Sixth ASEAN Ministerial Meeting in Bandar Seri Begawan. It builds on the global strategies and issues formulated in Agenda 21 and the Singapore Resolution on environment and Development in 1992. A number of issues have pre-occupied ASEAN policymakers since then. These include: (1) tropical timber trade regulation, (2) green aid and transfer of environmentally sound technology, (3) biodiversity conservation, (4) greenhouse gas emissions, (5) harmonization of environmental quality standards, (6) eco-labelling, (7) trans-boundary movement of hazardous waste, (8) coastal and marine resource management, (9) watershed management, (10) energy conservation and management, and (11) pollution generated by commodity production (Montes and Magno 1999).

In their trade negotiating positions, ASEAN and Indonesia have consistently pursued a free trade approach in trade-environment issues. The most important trade-environment issue is, of course, tropical timber trade regulation and eco-labelling. Indonesia and ASEAN have responded negatively to efforts by industrialized countries to link domestic logging practices to determining timber trade quotas. In 1990, an ASEAN delegation headed by the Indonesian Minister of Forestry was sent to the European Community. This resulted in a Joint Communique on ASEAN-EC Cooperation on Forestry Development. It endorsed the principle that the conservation of the world's forests is a shared responsibility and that forest development activities should be pursued in an environmentally, socially and economically sustainable manner (Montes and Magno 1999). In essence, ASEAN engaged other countries and regional organizations in constructive negotiations on environmental issues in order to prevent unilateral actions against their exports. However, as discussed above, this did not prevent Indonesia to recognize eco-labelling as a potentially beneficially trade instrument to achieve 'green' consumerism and trade domestically.

The forest fires in Indonesia and the subsequent haze besetting the region in 1997-1998 have added a new dimension to the trade-environment debate within ASEAN. Overall costs of the haze are estimated to be in the order of US$ 4.5 billion (Cotton 1999). Environmentally sustainable logging practices and poor environmental governance have now direct *and* trans-boundary impacts which are felt by Indonesia ' s neighbors. Although a " Regional Haze Action Plan" was formulated in December 1997, ASEAN's dealing with the haze problem was

widely considered as ineffective. It also challenged the "ASEAN way" of non-interference with each member states' domestic affairs, as Indonesia's failure to police its own regulations is a main cause of the problem (Cotton 1999).

Position towards the WTO

Agriculture

Empirical studies on the impact of trade liberalization showed that trade liberalization would bring higher income and welfare gains to the Indonesian economy. Table 35 shows the result of previous studies using computable general equilibrium model[23]. The main message is that it is in Indonesia's interest to press on with greater liberalization in the next round. However, sectoral impacts of the CGE model also suggest that trade liberalization would cause the agricultural sector to shrink, as resource reallocation takes place from the inefficient agricultural sector to more efficient sectors such as manufacturing. However, a one percent increase in productivity in the agricultural sector would bring better results as indicated by Stephenson and Pangestu (1996). Productivity improvement becomes a necessary condition for the development of the agriculture sector in the near future. However, this is a domestic policy issue rather than a WTO - related one.

Table 35
The Impact of Trade Liberalization, A Summary of Previous Studies

	Change in GDP	Agriculture sector	Notes
Feridhanusetyawan and Erwidodo (1997)	increase in GDP and welfare gain	decline in output, increase in domestic price	resource reallocation took place from relatvely less efficient sector to a more efficient sector
Pangestu and Feridhanusetyawan (1996)	increase in GDP and welfare gain	decline in output, increase in domestic price	resource reallocation took place from relatvely less efficient sector to a more efficient sector
Hertel et.al (1995 quoted from Anderson and Pangestu (1995)	increase in GDP and welfare gain	output would grow slightly lower than without UR trade lib	
Stephenson and Pangestu (1996)	increase in GDP and welfare gain	decline in output, increase in domestic price	adding a 10 percent productivity improvement the result is an increase in output of the agriculture

The calculation of the Revealed Comparative Advantage (RCA) for Indonesian agricultural products indicated that Indonesia has comparative advantages in several commodities: fish and fish products, eggs, coffee, cocoa, tea and mate, spices, margarine, shortening, tobacco, rubber crude and synthetic, vegetable and animal oil as shown in Table 36 Consequently, an improved market access would benefit Indonesian exports, including those of agricultural commodities.

[23] Most studies show the impact under different scenarios: liberalization under UR, AFTA and APEC

Table 36
Indonesia, RCA for Selected Agriculture Commodities

Commodities	1970	1980	1990	1995	1996	1997	1998	1999
053 - FRUIT PRESERVED,PREPARED	.01	.09	.41	.59	.97	.57	.31	1.01
032 - FISH ETC TINNED,PREPARED	.35	.02	1.21	1.15	1.09	.84	1.39	1.19
062 - SUGAR PREPS NON-CHOCLATE		.01	.40	1.15	.98	.76	.50	1.54
121 - TOBACCO UNMFD	1.07	1.50	1.55	1.30	1.35	1.46	2.45	1.61
025 – EGGS		.04	.92	.83	1.05	1.11	1.49	2.42
031 - FISH FRESH,SIMPLY PRESVD	.78	1.76	4.31	4.12	4.19	3.92	4.19	4.07
071 – COFFEE	5.82	4.37	5.62	4.06	4.39	3.04	4.12	4.12
074 - TEA AND MATE	7.98	5.22	8.72	4.70	5.57	3.73	4.82	4.27
431 - PROCESD ANML VEG OIL,ETC	.22	.32	5.18	7.64	6.26	2.52	10.15	4.92
091 -MARGARINE,SHORTENING	.11	.01	.61	.35	.42	2.17	3.58	7.69
072 – COCOA	.02	.57	3.86	6.21	6.29	7.01	8.34	7.81
231 - RUBBER CRUDE, SYNTHETIC	32.41	11.23	12.46	15.47	14.35	13.14	12.49	10.88
075 – SPICES	10.32	7.01	14.85	14.06	9.50	10.48	12.43	12.04
422 - FIXED VEG OIL NONSOFT	16.76	6.44	11.23	13.63	16.84	23.78	13.41	21.62

Source. Author's calculations based on trade data

As previously mentioned, in terms of market access to the Indonesian market, 98 percent of domestic tariff lines are already binding. In practice, tariff rates for agricultural items are already well below the GATT/WTO bound tariffs. In other words, the degree of trade liberalization in agriculture for Indonesia is already beyond current GATT/WTO commitments. Tariff on food items has been reduced by 5 percentage points, while non-food agriculture will be gradually reduced to reach maximum 10 percent by 2003. Nearly all import restrictions and other non-tariff barriers have been eliminated[24].

Recently, the relevant issue in the agricultural sector for Indonesia is not trade negotiation in international forum, but domestic issues. Feridhanusetyawan (2001) argues that Indonesia currently lacks a clear domestic agricultural policy. The government never stated a clear objective of agriculture policy, or its way to improve productivity of this sector. In the 1980s, the objective was very clear: rice-self-sufficiency at all cost. All inputs were subsidized: fertilizer, seed, irrigation and pesticide. The government also introduced high-yield rice. To stabilize the price, the government granted BULOG import monopoly licenses and control of domestic prices. Currently, the government does not have a budget to support subsidies (in addition to IMF commitments); domestic market is relatively more open; and no specific strategies are being taken to improve productivity. These, in the long run, would result in losing competitiveness of agricultural commodities. To some extent, Indonesia was too early in liberalizing, as the

[24] . These are undertaken under the Indonesian-IMF Letter of Intent trade reform package in 1998.

institutional setup needed to facilitate the structural changes, including access to information and access to credits for farmers, was not yet well-developed. In contrast, developed countries, which are more advanced in those terms, still exercise high tariff barriers and provide relatively high subsidies.

The two case studies show that both rubber and fishery, although contributing significantly to Indonesia economy, have received inadequate attentions so far. Farmers in rubber plantations face inadequate transportations infrastructure, while, fishermen receive little attention in terms of weather and market information, which would make differences to their take-home income. Inadequate infrastructure does not entice the private sector to enter those sectors. Hence, the very low private participation in those two sectors.

In agriculture, Indonesia's main concern is not about international negotiations but rather on improving productivity. In terms of trade liberalization commitments, Indonesia has already offered substantial trade liberalization commitments. Indonesia should demand equal commitments from other countries. However, there's not much left to offer in return, which might leave Indonesia in a weak bargaining position. A further reduction of tariff rates, converting the remaining NTBs to tariffs are among the limited options.

In the coming negotiation round, Indonesia's objective is relatively clear: a substantial improvement in market access opportunities for Indonesian exports of agricultural products to ensure fair trade. It would be in Indonesia's interest to ask developed countries to accelerate tariff reduction, phase out non-tariff barriers and remove all forms of export subsidies and domestic subsidies.

Indonesian Ministerial Declaration ((WTO/ WT/MIN(01)/ST/39 1 November 2001) did emphasize Indonesia's commitment to a comprehensive negotiation aimed at significantly improving market access, scaling down all forms of export subsidies to be phased out eventually and reducing trade- distorting domestic support.

Apart from market access, there are other issues that need to be put forward in the next round. The issues, among others, are:

- Implementation-related issues and concerns that need to be addressed fully before stepping into a new package of commitments. In this regard, Indonesia finds it difficult to comply with the existing substantive and procedural obligations. Due to inadequate capacity, Indonesia might need technical assistance to improve their capacity to meet the WTO standards and procedures.
- SPS regulation. Indonesia is one of the exporting countries facing barriers in developed markets in the form of SPS standards. Indonesia, farmers in particular, experiences huge losses when exports of fish, shrimps and other fishery products were rejected in the importing countries for failing to meet the SPS standards. If the quality inspection (by importers) is undertaken in Indonesia rather than in importing countries, then losses would be minimized. The availability of technical assistance from developed countries for quality control infrastructure (including soft infrastructure) is an urgent issue.

- Regarding non-trade concerns of developing countries such as rural development, poverty alleviation and food security, those issues should be fully accommodated in the ongoing negotiations. For Indonesia, food security means self-sufficiency. Food security is about accessibility, availability and stability of supplies, employment creation, farmers' well-being, human rights (rights to have food/freedom of hunger) etc. Food security more or less means rice self-sufficiency for Indonesia as the majority of Indonesian population eat rice. It would be politically risky for Indonesia to rely on world market for rice, as domestic demand is much higher than world supply (Saragih, 2001). To this extent, rice would be unlikely to be out of 'green box'. Indonesia would also be interested in collaboration, to pursue multi-functionality of agriculture so as to protect its farmers.
- In recognition of the unequal capacity and level of development of developed and developing countries, the special and differential (S&P) treatment for developing countries should be an integral element of the negotiations.

Environment

On a general level, the government is committed to enhance the mutual supportiveness of trade and environment.[25] It calls for:

- negotiations on the relationship between existing WTO rules and specific trade obligations set out in MEAs.
- negotiations should be limited in scope to the applicability of existing WTO rules as among parties to the WTO in question.
- establishing procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for granting of observer status.
- reductions or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

More specifically, the Indonesian government asks the Committee on Trade and Environment (CTE) to pay particular attention to effects of environmental measures on trade; the relevant provisions of the Agreement on Trade-Related Intellectual Property rights and labelling for environmental purposes. The government also emphasizes the importance of technical assistance and capacity-building to developing countries to reconcile trade and environmental objectives. Overall, the government is adamant in insisting that negotiations carried out should be compatible with the open and non-discriminatory nature of the multilateral trading system. Proposals to prepare negotiation positions emphasize the importance of fishery subsides to developing countries.

Concerns have been raised on the issue of genetical engineering within the context of Trade-Related Intellectual Property Rights (TRIPs). Indonesia challenges efforts to enforce property rights on living creatures, as this would contradict domestic legislation. Trade in genetically engineered products should be discussed within the agreements made under the Convention of Biological Diversity which states nations' and indigenous communities' rights on natural resources. Currently,

[25] The following is based on a summary of the Ministerial Declaration of 14th of November 2001.

the government is preparing Government Regulation on Biosafety and Biotechnological Products Based on Genetically Engineering (Makarim 2001).

Labour

Recent political and economic reforms have initiated a change in Indonesian industrial relations policies. Most fundamental ILO Conventions have been implemented and currently the labor movement is undoubtedly in a stronger position than compared to the period under the New Order regime. International pressure on linking trade and the social clause will therefore shift from unilateral threats in adopting international norms towards monitoring the commitments Indonesia made by ratifying the ILO Conventions. However, the reality of the economic crisis makes it difficult for Indonesia to maintain its competitiveness in face of rising demand from labor unions to raise wages. This will undoubtedly make it difficult for the Indonesian government to maintain its past policies to reject any linkages between trade and social standards. Nevertheless, Indonesia's policies in the WTO should aim at fostering cooperation and technical assistance provided by the ILO rather than bringing the labor issue within the WTO forum.

Like many other developing countries, Indonesia has always taken a stance against the inclusion of social clause into the WTO mandate. Economic policies relied heavily on flexible labour markets and cheap labour. The government of Indonesia fully supported ASEAN's final statement of the 1996 Ministerial Meeting in Singapore to the trade-labor debate. The final statement recognized the reality of lower wage costs in the developing countries as a legitimate advantage. In addition, it views the ILO as the competent body to deal with labor standards (Tay 1999).

Conclusion

Indonesia has undertaken substantial trade liberalization since mid-1980s, which brought positive impact on economic growth and welfare improvements. Indonesia has been actively engaged in multilateral and regional economic cooperation. During the WTO negotiations, Indonesia has offered substantial trade liberalization, not only in the manufacturing but also in the agricultural sector. In terms of market access, Indonesia offered the majority of tariffs to be bound at a ceiling rate of 40 percent and converted NTBs to tariffs and subjected them to tariff reduction. Post UR, 98 percent of tariff lines of agriculture commodities are already below the bound tariff rates.

AFTA, which was finally effective in 2002 was considered as a training ground for trade liberalization among ASEAN countries in achieving their APEC and WTO commitments. ASEAN countries, through the implementation of AFTA have been successful in bringing down tariff barriers. In general, within ASEAN, tariff rates were already lower than WTO commitments.

Indonesia believes that the accession to the WTO will grant greater access to the world market. Although on paper all WTO members have committed to reduce their trade barriers, domestic supports and export subsidies over time, the reality is that the progress is very slow and imbalanced. Post UR, Indonesian agricultural

exports including fishery products are still facing relatively high barriers in the foreign market, not only in terms of tariffs but also in terms of NTBs.

Given that developed countries take a slower pace in liberalizing their agricultural sector, demanding better market access individually would not be a good strategy, at least for Indonesia due to limited bargaining power. A coalition among ASEAN countries might boost ASEAN member countries bargaining positions at the WTO. There are at least four issues regarding agricultural commodities in which ASEAN member countries might have similar positions. **Firstly,** market access to developed countries. Most of ASEAN countries exports are to developed countries, where trade protection remains relatively high. Concerted requests upon developed countries opening up its market would be more powerful than individual requests. **Secondly**, related to market access, developed countries tend to impose new forms of trade barriers, such as Sanitary and Phytosanitary (SPS) and other standards. Indonesia, together with Vietnam and Myanmar had experienced huge losses with their shrimp exports being rejected in EU for failing to meet the SPS standard. ASEAN cooperation in addressing this issue would also be effective by pushing for transparency of standards and mutual recognition of inspections and standards. ASEAN countries could demand pre-shipment inspections, including transfer of technology and training of personnel (HRD). In addition, EU can choose a private run inspection laboratories operated in ASEAN if required. **Thirdly**, S&D treatment might be a common interest of ASEAN member countries. Unequal capacity and level of development between the developed and developing countries is a reasonable ground for S&D treatment. Developing countries should be granted longer time to adjust to a new trade environment, not the other way around. Concerted actions demanding S&D treatments are another issue for such coalition to fight for. **Fourthly**, there are non-trade concerns of developing countries such as rural development, poverty alleviation and food security. While farmers in the developing countries are always associated with poverty, ASEAN member countries should join forces pursuing multi-functionality of agricultural sector so as to protect its farmers on a temporary basis, while domestic policies should be developed to enhance farmers' position. This request should be put under S&D treatment.

While China has become a member of WTO and agreed to establish a free trade area with ASEAN it would be beneficial to include China in ASEAN regional coalitions for WTO negotiations purposes, especially as China includes agricultural sectors in the liberalization package.

Will coalitions among ASEAN member countries at WTO bring different results compared to CAIRNS, which failed to echo developing countries interest? ASEAN countries differ from CAIRNS members. Firstly, ASEAN member countries are exporters of similar commodities. Secondly, ASEAN member countries are more or less in the same stage of development, with Singapore as an exception. Those similarities would make ASEAN coalition perform better than under CAIRNS.

As an importing country, however, issues relating to rural development, technology transfer, food security and a range of non-trade concerns appear to be major challenges in responding to the WTO negotiations on agriculture. Indonesia

would be reluctant to open certain agricultural commodities such as rice as it might negatively affect its farmers, who are mostly poor. Here, the issue of S&D might be relevant to Indonesia. At the same time, this might be opposing to what Vietnam and Thailand be willing to pursue, as they are main exporters of rice.

Indonesia's past policies in both the trade-social clause and the trade-environment debate has been consistently in favor of reducing market barriers in developed markets. Thus, Indonesia has always been promoting a position not to link trade issues with environmental and labor standards within the WTO regime. The most important fundamental ILO conventions and commitments to Multilateral Environmental Agreements have been ratified by Indonesia. The principle of common, but differentiated responsibilities holds for both issues. This calls for further pushing to eliminate trade restrictions for export goods in developed markets, while securing financial and technical assistance to improve and enforce domestic environmental and labor standards and regulations. Thus, Indonesia's future positions in the social clause and the environment debate are similar: de-link both issues from trade within the WTO regime and use instead the ILO and the various MEAs to address the issues. This means expanding exchange and collaboration between WTO and the ILO and the various Secretariats responsible for monitoring the implementations of MEAs. For the environment in particular, the current government position is to call for:

- Negotiations on the relationship between existing WTO rules and specific trade obligations set out in MEAs.
- Negotiations should be limited in scope to the applicability of existing WTO rules as among parties to the WTO in question.
- Establishing procedures for regular information exchange between MEA Secretariats and the relevant WTO committees, and the criteria for granting of observer status.
- Reductions or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services.

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Appendix
Trade Reform during the crisis

No.	Policy Action	Target Date	Status	LOI no.
	TARIFFS			
1	Reduce by 5 percentage point tariffs on items currently subject to tariffs of 15 to 25 percent.	31-Mar-98	Done	2
2	Cut tariffs on all food items to a maximum of 5 percent.	1-Feb-98	Done	2
3	Reduce tariffs on non-food agricultural products by 5 percentage points.	1-Feb-98	Done	2
4	Gradually reduce tariffs on non-food agricultural products to a maximum of 10 percentage points.	2003	Under preparation	2
5	Reduce by 5 percentage point tariffs on chemical products.	1-Jan-98	Done	2
6	Reduce tariffs on steel/metal products by 5 percentage points.	1-Jan-98	Done	2
7	Reduce tariffs on chemical, steel/metal and fishery products to 5-10 percent.	2003		2
	IMPORT RESTRICTIONS			
8	Abolish import restrictions on all new and used ships.	1-Feb-98	Done	2
9	Phase out remaining quantitative import restrictions and other non-tariff barriers.	End-program		2
	EXPORT RESTRICTIONS			
10	Abolish export taxes on leather, cork, ores and waste aluminum products.	1-Feb-98	Done	2
11	Reduce export taxes on logs, sawn timber, rattan and minerals to a maximum of 30 percent by April 15, 1998; 20 percent by end December 1998, 15 percent by end December 1999 and 10 percent by end December 2000	First Step by April 22, 1998	First step done	2
12	Phase in resource rent taxes on logs sawn timber and minerals.	First Step by April 22, 1998	First step done	2
13	Replace remaining export taxes and levies by resource rent taxes as appropriate.	Over program period		2
14	Eliminate all other export restrictions	Over program period	Under preparation	2
15	Remove ban on palm oil exports and replace by export tax of 40 percent. The level of the export tax will be reviewed for possible reduction, based on market prices and exchange rate and reduced to 10 percent by end December 1999.	22-Apr-98	Done. Tax raised to 60 percent in July	2
	OTHER MEASURES			
	Local Contents			
16	Abolish local content regulations on motorvehichles	2000	done	1
17	Abolish local content regulations on dairy products.	1-Feb-98	Done	2
	Free Trade Zone			
18	Review the tax free status of the islands of Batam, Rempang & Galang, based on the comprehensive feasibility study being undertaken. Defer any plans pending the completion of the study	Based on feasibility study to be completed by August 31, 1999. 12: Immediate.		11, 12
19	Review the effectiveness of policies for the Integrated Economic Development Zones (KAPETS), especially the fiscal concessions.	Based on study to be completed by December 31, 1999.		11
20	Start collecting value added tax from Batam island	April 1, 2000.	pending	12

No.	Policy Action	Target Date	Status	LOI no.
21	Review the desirability of maintaining the income tax facilities and abolishing the indirect tax facilities for the Integrated Economic Development Zones (KAPETS). - Complete review	Complete review: Feb. 1, 2000, Implement measures: April 1, 2000		12
	Custom Administration			
22	Prepare draft amendments to the law on customs and issue implementation regulations to provide for penalties & interest on unpaid duties & implementing short, issue oriented audits.	31-Oct-99	Done	11, 12
23	Develop & implement the plan to combat valuation fraud by (i) strengthening physical inspections; (ii) establishing special valuation units in the regions;(iii) undertaking special valuation audits; and (iv) developing a valuation database to help detect	31-Oct-99	Done	11, 12
24	Reduce exemptions to import tariffs on capital goods, rationalize & make tranparent the remaining exemptions.	April 1, 2000.		12
25	Dissolve restrictive marketing arrangements for cement, paper and plywood.	1-Feb-98	Done	2
26	Eliminate price controls on cement.	3-Nov-97	Done	2
27	Allow cement producers to export with only a general export license.	1-Feb-98	Done	2
28	Free traders to buy, sell and transfer all commodities across district and provincial boundaries, including cloves, cashew nuts, and vanilla.	1-Feb-98	Done	2
29	Eliminate BPPC (Clove Marketing Board).	30-Jun-98	Done	2
30	Abolish quotas limiting the sale of livestock.	30-Sep-98	?	2
31	Prohibit provincial governments from restricting trade within and between provinces.	1-Feb-98	Done	2
32	Enforce prohibition of provincial and local-export taxes.	Jan-98	Done	2
33	Take effective action to allow free competition in:			2
	(i) importation of wheat, wheat flour, soybeans, and garlic;		done	2
	(ii) sale or distribution of flour; and		done	2
	(iii) importation and marketing of sugar.		done	12
	(iv) importation of rice		done	6,12

Note: 1 = MEFP October 31, 1997 *structural benchmark

2 = MEFP January 15, 1998
3 = SMEFP April 10, 1998
4 = SMEFP June 24, 1998
5 = MEFP July 29, 1998
6 = SMEFP September 11, 1998
7 = MEFP October 19,1998
8 = SMEFP November 13, 1998
9 = SMEFP March 16, 1999
10 = MEFP May 14,1999
11 = SMEFP July 22, 1999
12 = MEFP January 20, 2000.
MEFP is Memorandum of Economic and Financial Policies
SMEFP is Supplement to Memorandum of Economic and Financial Policies
Source: IMF website