The threats to forests from trade liberalisation under the WTO

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Abbreviations

ACP	African, Caribbean and Pacific countries (see gloassary)
AoA	Agreement on Agriculture (of the WTO)
APEC	Asia-Pacific Economic Cooperation
ATL	Accelerated Tariff Liberalisation
CBD	Convention on Biological Diversity
CDM	Clean Development Mechanisms (under UNFCCC)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP	Conference of the parties (of a MEA)
CTE	Committee on Trade and Environment (of the WTO)
DEG	German Investment and Development Company [Deutsche Investitions- und Entwicklungsgesellschaft]
DSU	Dispute Settlement Understanding (of the WTO)
FAO	The Food and Agriculture Organization of the United Nations
FSC	Forest Stewardship Council
GATS	General Agreement on Trade in Services (of the WTO)
GATT	General Agreement on Tariffs and Trade (of the WTO)
GSP	Generalised System of Preferences
IFF	Intergovernmental Forum on Forests
ILO	International Labour Organization
IPF	Intergovernmental Panel on Forests
IPPC	International Plant Protection Convention
IPR(s)	Intellectual property right(s)
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization

LDC(s)	Least Developed Country (Countries)
MAI	Multilateral Agreement on Investment
MEA(s)	Multilateral environmental agreement(s)
MFN	Most favoured nation (see gloassary)
NAFTA	North American Free Trade Agreement
NTM(s)	Non-tariff measure(s)
OCP	Oleoducto de Crudos Pesados (OCP Project in Ecuador)
OECD	Organisation for Economic Co-Operation and Development
PPM(s)	Process and production method(s)
SBSTTA	Subsidiary Body of Scientific, Technological and Technical Advice (of the CBD)
SCM	Agreement on Subsidies and Countervailing Measures (of the WTO)
SFM	Sustainable forest management
SPS	Agreement on the Application of Sanitary and Phytosanitary Measures (of the WTO)
TBT	Agreement on Technical Barriers to Trade (of the WTO)
TRIMs	Agreement on Trade-Related Investment Measures (of the WTO)
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights (of the WTO)
UNCCD	UN Convention to Combat Desertification
UNCED	UN Conference on Environment and Development (Rio 1992)
UNFCCC	UN Framework Convention on Climate Change
UNFF	UN Forum on Forests
WIPO	World Intellectual Property Organization
WSSD	World Summit on Sustainable Development (Johannesburg 2002)
WTO	World Trade Organization (see gloassary)

Glossary of terms

ACP countries

78 African, Caribbean and Pacific countries with preferential trading relation with the EC.

Ancient forests

Old growth, natural or primary forests.

Agenda 21

The Agenda for the 21st Century - a declaration from the 1992 Earth Summit (UN Conference on the Environment and Development) held in Rio de Janeiro.

Closed canopy

Defined as all lands with a forest cover of trees with their crowns interlocking and a canopy density of 40% or above.

Dispute Settlement Understanding

Understanding on rules and procedures governing the settlement of disputes in the WTO.

GATT (1994)

The General Agreement on Tariffs and Trade, as revised in 1994, which is part of the WTO Agreements. GATT 1994 includes the original General Agreement, which is known as GATT 1947.

Global Ministerial Environment Forum

Meeting of the world's environment ministers under the auspice of UNEP. The first Global Ministerial Environment Forum took place in Malmö, Sweden on 29 - 31 May 2000.

Most-favoured-nation treatment

Article I of the GATT 1994 requires countries not to discriminate between goods on the basis of their origin or destination.

Modes of delivery

How international trade in services is supplied and consumed. Mode 1: cross border supply; mode 2: consumption abroad; mode 3: foreign commercial presence; and mode 4: movement of natural persons.

National treatment

Obligation under Article III of the GATT 1994 which requires that imports be treated no less favourably than domestically-produced goods once they have passed customs.

Non-tariff measures

Non-tariff measures are quotas, import licensing systems, sanitary regulations, prohibitions, etc.

Tariff escalation

Higher import duties on semi-processed products than on raw materials, and higher still on finished products. This practice protects domestic processing industries and discourages the development of processing activity in the countries where raw materials originate.

Tariff peaks

Relatively high tariffs, usually on "sensitive" products, amidst generally low tariff levels. For industrialized countries, tariffs of 15 per cent and above are generally recognized as "tariff peaks".

Uruguay Round

Multilateral trade negotiations launched at Punta del Este, Uruguay in September 1986 and concluded in Geneva in December 1993. Signed by Ministers in Marrakesh, Morocco in April 1994.

Waiver

Permission granted by WTO members allowing a WTO member not to comply with normal commitments. Waivers have time limits and extensions have to be justified.

World Trade Organization

The World Trade Organization was established as the successor to the GATT on 1 January 1995.

Foreword by Greenpeace

Environmental organisations raised the issue of the threat to forests from new liberalisation measures set up by the World Trade Organization (WTO) before and during the third WTO Ministerial Conference in Seattle (30 November - 3 December 1999). It was feared that an agreement on unrestricted logging, a so-called "Global Free Logging Agreement", might be made either at the conference itself or as part of the planned new trade round. Even in the run-up to Seattle, the governments of Canada, Indonesia, New Zealand and the USA appeared to be pushing for such a plan. The fears were based on an initiative taken by the organisation for Asia-Pacific Economic Cooperation, APEC, to which these four countries belong. In the summer of 1999, the APEC community decided to bring its plan for reducing tariffs in several of its sectors, including the forest industry, to the WTO. The APEC countries called for tariffs to be reduced in forestry and other sectors in what it called "Accelerated Tariff Liberalisation (ATL)".

However, the two components of a "Global Free Logging Agreement", reducing tariffs and non-tariff barriers to trade, are being discussed in general terms in WTO circles, i.e. not in direct relation to forests. The issues of access to markets, reducing tariffs for imports from developing countries, and reducing industrial countries' subsidies have thus been crucially important before, during and after Seattle. Offering better market access was part of the strategy employed by the WTO Secretariat and the "Quads", a quadrilateral organisation of major WTO members (USA, Canada, Japan, EU), of making concessions to developing countries and, in particular, the "least developed" countries (LDCs), in order to finally win their support for a new round of trade negotiations.

Where market access is concerned, there is the danger of a conflict of goals between development policy goals and environmental measures. From the development policy point of view, a general improvement in market access for forest products, and a reduction in measures which escalate tariffs for processed products, might to be welcomed. A better access to foreign markets can improve the economic situation of the exporting country. But market access as such leaves the question of who profits from the exports unanswered. In addition, market access bears the risk that the development of export markets is paid by disruption of local markets. Should improved market access increase the extent of unsustainable logging (clear-cutting, say) and the timber and paper industry's pollution of the environment through processing, these impacts will contradict environmental protection goals. This conflict in goals should be removed by using various possible alternatives.

The failure of the WTO Conference in Seattle to adopt any decision did not reduce the threat to forests. In fact, two years later, the danger to forests has become even greater, for two reasons. First, the industrialised countries have successfully pressured for the start of a new trade round. The proponents of a new trade round learned from the failure of Seattle, and were better prepared than two years ago to get the new round through. One of the least disputed points amongst WTO members is the demand for "market access for non-agricultural products", which should include all products. Because forest products also belong to the category of non-agricultural products, this point hides an indirect demand for a Free-Logging Agreement. In addition, other contents of the negotiating package for the new round, such as the negotiations on agriculture, on services and on market access for environmental goods, will also impact on forests.

Second, the forests situation has not improved, but rather the opposite - the threats have clearly increased. Large tracts of forests, in particular ancient forests, around the world stand on the brink of extinction. Around 10 million hectares are cleared or degraded each year and lead to the destruction of indigenous peoples' livelihood and of flora and fauna habitat. Many scientists believe that the world is facing the largest wave of species extinctions since the disappearance of the dinosaurs 65 million years ago. Most of these extinctions will be due to habitat destruction, and most of these habitats are in forests, in particular ancient forests. Moreover, in some places, deforestation continues to accelerate. Deforestation of the Brazilian Amazon, for example, was greater in 2000 than at any time since 1995, according to new satellite data released by the Brazilian government.

Greenpeace commissioned the following study to show that the dangers to forests from further liberalisation measures has not lessened in the two years since Seattle, but rather has grown. The study aims not only to clarify the dangers, but also to show the ways to reach solutions. The 4th WTO Ministerial Conference in (Doha/Qatar, 9 - 13 November 2001) took the decision to start inter alia negotiations on market access for non-agricultural products. The implementation of the solutions presented in this study is absolutely necessary to prevent the loss of the world's last remaining forests, in particular ancient forests. Agreement to adopt and implement these solutions will be a test-case of the willingness of the WTO member states to act in accordance with their obligation to promote sustainable development.

1 Executive Summary

1.1 Findings

The rules of the World Trade Organization (WTO) currently interfere with efforts to conserve and sustainably use the world's forests. The lack of certainty on the relationship between WTO rules and multilateral environmental agreements (MEAs) threaten to undermine the full effectiveness of MEA rules aimed at forests. Similarly, WTO rules "chill" the full implementation of forest conservation provisions and the development of trade measures in MEAs. WTO rules do not allow countries to apply economic pressure to rogue countries that are massively destroying their forests. At the same time, WTO rules prevent countries from using export bans to promote sustainable development, may not allow the application of independent voluntary forest certification, and may interfere with the full application of traditional forest-related knowledge and effective efforts to combat illegal trade in forest products.

Despite the commitment to sustainable development and environmental protection in the Preamble of the Agreement Establishing the WTO, the WTO does not contain rules that ensure that trade policy supports the conservation and sustainable use of forests.

The WTO and MEAs, such as the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the UN Framework Convention on Climate Change (UNFCCC) have an important role to play in creating a coherent global system whereby trade and sustainable forest management become mutually supportive. As trade is an important aspect of forest use, sustainable use of forests depends to a large extent on the sustainability of trade in forest products. Therefore, a balanced relationship between the WTO and MEAs needs to be created. However, at present, WTO rules continue to threaten the effectiveness of these key multilateral environmental agreements.

WTO rules also do not support positive efforts to guide trading patterns in support of sustainable development. It does not allow for trade preferences for products from sustainably managed forests, except potentially in the context of Generalized Tariff Preferences for developing countries. But this has not yet been effectively implemented by developed countries. The use of certification and labeling of products from sustainably managed forests managed forests remains under

threat in the WTO. WTO rules no longer permit subsidies for adjusting to new environmental regulations. Developing countries and civil society stakeholders are effectively shut out of much of the decision-making in the WTO. The politicized culture in the WTO has become such that the lack of consideration for developing country concerns has effectively blocked progress on the environmental agenda.

A number of proposed WTO measures are likely to impact adversely on the conservation and sustainable use of forests. These include tariff liberalisation of forest products, reduction of non-tariff measures that affect forests, agriculture liberalisation, investment liberalisation and services liberalisation. All of these look likely to be undertaken without due regard for ensuring that policies aimed at conserving forests are not undermined. The negotiating dynamics of the new WTO work programme, which came out of the Doha Ministerial, risk having environmental concerns traded away against important economic interests.

1.2 Main recommendations

In order to enhance the conservation and sustainable use of the world's forests, in particular ancient forests, Greenpeace calls on the WTO Members to:

- Ensure that Multilateral Environmental Agreements, in particular the CBD, and other legitimate trade-related measures aimed at enhancing forest conservation and sustainable use are not undermined by WTO rules.
- Ensure that international trade regulations are compatible with conservation and sustainable use of forest biological diversity and promote related economic instruments.
- Ensure that independent forest certification initiatives, such as the Forest Stewardship Council, are not threatened by WTO rules.
- Ensure that measures to control international trade and the import of illegally harvested timber and other forest products are not threatened, but supported, by WTO rules.
- Not undertake further trade liberalisation without a full assessment of their environmental and social impacts on forests
- Ensure that WTO rules do not interfere with the full protection of traditional forest-related knowledge and are not used to provide cover for biopiracy.

• Ensure that national efforts to conserve and sustainably use forests are not undermined by liberalisation of the services and investment sectors.

The WTO can only do part of the work necessary to ensure that trade supports conservation and sustainable use of forests. International bodies that specialize in matters relating to forests must become more proactive in addressing the trade-related issues of their mandates. Specifically, Greenpeace calls for:

- The CBD to develop an action-oriented work programme on forest biodiversity in April 2002 that considers measures to deal with: (a) trade as a threat to forest biodiversity, (b) subsidies that lead to deforestation, and (c) trade-related incentives to enhance conservation and sustainable use of forest biodiversity. The CBD process could usefully contribute to developing methodologies to assess the negative and positive impacts of trade on forest biodiversity. All agreements of WTO should not contradict the CBD goals on forests.
- The Clean Development Mechanism (CDM) under the UNFCCC should be implemented such that "land use, land use change and forestry (LUCF)" activities do not degrade, convert or otherwise result in the loss of forests, in particular ancient forests, or other highly natural ecosystems. These rules should ensure that the sustainable development priorities of the host country to directly promote biodiversity conservation and sustainable use of natural resources for local needs are fully supported - including those relating to forests - even at the cost of not rewarding the very highest returns to foreign investors. Large-scale industrial tree plantations and the use of genetically engineered trees should be excluded as eligible projects under the CDM.

In order to improve global governance on environmental conservation and sustainable development, Greenpeace calls for:

- The World Summit on Sustainable Development to create a process to develop recommendations on overcoming contradictions, and enhancing synergies, between the WTO and MEAs.
- All countries to explore the possibility of resolving trade and environment disputes in international fora that can better balance between trade and environment interests than the WTO.

2 Introduction to the post-Doha edition of this study

The first edition of this study was commissioned in the run-up to the WTO Ministerial Conference at Doha, which was held in November 2001. At the time, there were concerns that the initiatives that triggered such great NGO concerns about forests and the Seattle Ministerial Conference might be repeated. Unfortunately, some of these concerns continue to be justified.

The Doha Ministerial Declaration succeeded in agreeing a Declaration and a Work Programme for further negotiations, but it is doubtful that very much of it will enhance the conservation and sustainable use of the world's forests. On the contrary, there are now additional reasons for concern.

The Preamble of the Declaration contains a reaffirmation of the commitment to sustainable development that appears in the Preamble to the Marrakesh Agreement, but the Declaration contains few mechanisms or provisions to actually implemented this commitment. The WTO Committee on Trade and Environment and the Committee for Trade and Development are to debate the developmental and environmental aspects of the negotiations, but it is uncertain that these bodies will actually be able to influence the negotiations. Indeed, members tend to be represented in these committees by environment and development ministries, which are often less powerful than trade ministries. Moreover, years of discussion in the Committee on Trade and Environment have hardly made any progress in forging consensus on its mandate.

One clear objective of the Work Programme is to increase market access. Paragraph 16 initiates negotiations on reducing or eliminating tariffs and nontariff barriers on non-agricultural products, but without any stipulation that such reductions should be examined for their sustainability. Indeed, product coverage is to be "comprehensive and without a priori exclusions". Thus, attempts to exclude forest products from being liberalized are to be thwarted.

As regards the continued negotiations on liberalizing agriculture, the Declaration contains very weak language that merely takes note of the proposals that contain "non-trade concerns" (e.g. environment and sustainable development) and confirms that non-trade concerns will be taken into account in the negotiations.

Paragraph 19 instructs the TRIPS Council to examine, inter alia, the relationship between the TRIPS Agreement and the Convention on Biological Diversity (CBD) and the protection of traditional knowledge. However, there is no commitment to creating an equitable relationship between the two treaties or to ensuring the protection of traditional knowledge. In addition, the TRIPS Council has still not accepted the CBD Secretariat's request to become admitted as an observer.

The Declaration contains a commitment to consider in initiating negotiations on a multilateral agreement on investment after the next WTO Ministerial Conference. Until then, the Working Group on the Relationship between Trade and Investment is to focus on several issues relating to investment, but environmental conservation is not one of them.

An entire chapter on trade and environment is included in the Declaration (paragraphs 31 – 33). However, it contains very little that will enhance forest conservation and sustainable use. Negotiations are to begin on "the relationship between existing WTO rules and specific trade obligations set out in MEAs", but are not to prejudice the WTO rights of any member that is not a party to an MEA. Later on, the Declaration states that the outcome of the negotiations on trade and environment are not to "add to or diminish the rights and obligations of members under existing WTO agreements... nor alter the balance of these rights and obligations...". This language not only promises that the outcome of these negotiations will not result in any meaningful modification of the WTO, but is a step backwards from the original mandate of the Committee on Trade and Environment agreed at Marrakesh - where actual reform on the trading system was a potential outcome. Furthermore, the negotiations are only to focus on "specific" trade obligations set out in MEAs, leaving "non-specific" measures even more vulnerable to WTO challenge. The declaration goes on to call for "the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services". While the concept of environmental "services" is relatively well known through the negotiations under GATS, it is woefully unclear what is meant by environmental "goods". There was no discussion at Doha of what this means. This potentially large loophole could be an entry point for leveraging additional trade liberalisation of all natural resources.

Negotiations are also to take place on the reduction of fisheries subsidies, but there is no provision for eliminating potentially harmful subsidies in the forestry sector.

Lastly, the WTO Committee on Trade and Environment is to give particular attention to the topic of labeling requirements for environmental purposes. No

guidance is given here, which means that the stalemates and uncertainties that characterized previous discussions in that Committee will likely continue.

The Doha Ministerial Declaration grants the WTO Committee on Trade and Environment and the Committee on Trade and Development the right to

identify and debate developmental and environmental aspects of the negotiations, in order to help achieve the objective of having sustainable development appropriately reflected [1].

However, given past experience, it is unlikely that these debates will actually influence the outcomes of the trade negotiations, particularly since so little substantive consensus has yet been achieved in the CTE, despite years of discussion.

The potential outcomes and impacts of the new WTO Work Programme on forests may be far reaching, and potentially negative. This is partly because of the limitations to the negotiating mandate discussed above, combined with the reality that the decisions relating to environment (and forests) may have ultimately little to do with achieving sustainability. Rather, they may have more to do with the wider bargaining context and depend on how the on-going negotiations in the agriculture and service sectors are linked with other issues like industrial tariffs, government procurement, safeguards, market access and the implementation of Uruguay Round agreements. The negotiations in Seattle demonstrate how quickly governments are prepared to sacrifice their environmental objectives. In that case, the EU reportedly gave up their opposition to the US demand for a Biotechnology Working Group - which would have complicated negotiations of the Biosafety Protocol - in favour of US In the dynamic and secretive negotiation concessions on agriculture. environment of the WTO, it is hardly possible to foresee the outcomes of these trade-offs, but rather considerable reason to be concerned.

3 How current WTO measures affect forests

Trade alone does not cause forest destruction, but in combination with poor management, it can be an important driver of deforestation. Some of the impacts of increased international trade in forest products include:

- Overexploitation of tree species
- Pressure to convert natural forests to plantations
- Damage to rivers and streams in forests
- Increased soil erosion in forests
- Harm to traditional communities through loss of forest biodiversity
- Economic costs arising out of providing infrastructure and other common subsidisation of logging operations.

Under certain circumstances, trade can also be an incentive that enhances sustainable forest management. Unfortunately, WTO rules stand in the way of efforts to control trade-induced deforestation and do not ensure that trade supports sustainable forest management.

Box 1: The threats to forests are increasing

Large tracts of forests, in particular ancient forests, around the world stand on the brink of extinction, as affirmed by the following two publications:

According to a most recent study be the United Nations Environment Programme (UNEP, 2001: "An Assessment of the Status of the World's Remaining Closed Forests"), the Earth's remaining closed-canopy forests and associated biodiversity are destined to disappear in the coming decades.

"Annual losses of natural forests are estimated at 16.1 million hectares per year or 0.42 percent per year. During the 1990s the world lost 4.2 percent of its natural forests, an area considerably bigger than Venezuela" (FAO, 2001: "The Global Forest Resources Assessment 2000 (FRA 2000)", p. xxiii).

3.1 WTO impedes efforts to control trade related deforestation and forest degradation

WTO rules are meant to promote trade liberalisation. Although other policy areas, such as sustainable development and environmental protection, are mentioned in the preamble to the Agreement Establishing the WTO, the WTO has so far not proven able to create an appropriate balance between these different interests. This is evident in the structure of the rules, as well as the discussions in the organization and the rulings of the disputes settlement body on the themes highlighted below.

3.1.1 WTO rules may undermine Multilateral Environmental Agreements (MEAs) that protect forests

Several MEAs contain rules aim at the conservation of forests, such as the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the UN Framework Convention on Climate Change (UNFCCC). However, the full development of these important instruments is impaired by the lingering uncertainty over whether or not they conflict with WTO rules.

Although the WTO dispute settlement body has consistently indicated that it prefers multilateral approaches to addressing global environmental problems, its Committee on Trade and Environment (CTE) has failed to find consensus on the legal relationship between MEAs and WTO rules. Notwithstanding that there has not yet been a WTO dispute involving a direct conflict with an MEA, the risk of such a dispute is not only ever present, but is steadily increasing, as MEA rules continue to develop so as to impact on economic behaviour. In addition, the refusal of the United States to become party to the CBD or the UNFCCC's Kyoto Protocol, raises the likelihood of an eventual WTO challenge to an MEA rule, as non-Parties to MEAs use the WTO to protect their economic interests.

The problem of how to handle trade restrictions with non-Parties to MEAs does not lend itself to an easy legal solution (see Table 1). Legally speaking, WTO members who choose not to join MEAs are still entitled to claim their entitlements under the WTO, when those entitlements are impaired as a result of an MEA. This is of course, potentially threatening to the integrity of the MEA. Therefore a political solution will have to be found to eliminate or at least minimise the chances to a non-Party using the WTO to undermine an MEA.

Table 1: WTO members that are not yet CBD Parties*

Brunei Darussalam

Thailand**

Taiwan (Chinese Taipei)

United States of America**

** Country signed but not ratified the Convention on Biological Diversity.

The consequences of a WTO panel ruling against an MEA would be disastrous: in the first place, the economic nature of the WTO remedy would likely undermine the MEA, and secondly, the WTO would lose considerable political credibility as an institution claiming to support sustainable development.

At most risk to WTO challenge are "non-specific trade measures", which are undertaken individually in pursuit of fulfilling an MEA objective. They arise because most MEAs contain "obligations of result", that leave Parties with the discretion to choose the most appropriate means in which to achieve their legal obligations. For example, the CBD text does not specifically mention the term "trade", however several of its provisions call for actions that will impact on trade policy. These measures include the use of incentive measures, access to genetic resources and benefit sharing, protection of traditional knowledge, as well as integrating conservation and sustainable use of biological diversity into all policy areas.

^{*} As of 1 January 2002 the CBD has 182 parties (168 signatures), including the European Community, and the WTO 144 members. including the European Community.

Box 2: Key GATT / WTO provisions

The key WTO provisions that can be used to challenge environmental measures are: GATT Article I contains the "most-favoured nation" (MFN) obligation: Contracting Parties must unconditionally grant all Contracting Parties advantages which are as favourable as those given in respect of "like" products from any individual Contracting Party. This means that there is to be no discrimination in the way any party to the GATT treats other parties to the GATT in relation to matters covered by the Agreement. Therefore, if a MEA contains trade related measures that distinguish between countries (e.g. as between developed and developing countries; or that are aimed at non-Parties), which many MEAs do, it may violate GATT Article I.

GATT Article III is known as the "national treatment" obligation: Contracting Parties must treat imported "like" products no less favourably then "like" domestic products. In other words, domestic products and imported products should compete in the marketplace on an equal basis. This provision has been interpreted such that "likeness" is assessed on the basis of the end product, and not on how the product was produced. So, distinguishing between wood products on the basis of the sustainability of the source would risk clashing with GATT Article III.

Article XI prohibits, within certain exceptions, quantitative restrictions on import and export of products. Thus, restrictions on the exports of raw logs (e.g. a technique applied in some developing countries to strengthen domestic processing industries or by some developed countries to complement conservation measures) likely run counter to Article XI.

Once one of the above provisions has been found to have been breached, the legal analysis then turns to Article XX, which contains general exceptions, to see if the offending measure can be saved. Article XX allows Contracting Parties to take certain measures inconsistent with other GATT obligations if:

", they are not applied in a manner, which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade..."

Among the types of measures for which this exception can apply are those which are: ... "(b) necessary to protect human, animal or plant life or health" or ... "(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption".

Several cases involving environmental measures have been brought before the GATT and the WTO, resulting in an evolving jurisprudence that helps clarify the meaning of the treaty provisions. This jurisprudence has developed in several positive ways, but still does not ensure that environmental measures will be effectively safeguarded. In virtually every case, the decisions (nearly always against the environmental provision) have hinged on the interpretation of Article XX. In other words, the challenged environmental measures have been easily found to violate the substantive provisions of the GATT/WTO.

Box 2 (continuation): Key GATT / WTO provisions

The first cases that analysed Article XX, focused on whether the environmental measure fell within the scope of paragraphs (b) or (g). The first Tuna-Dolphin case in 1991 ruled that US restrictions of imports on Mexican tuna caught with purse seine nets and exceeded the dolphin mortality rate established by the US [2]. The panel ruled that these provisions were not saved by Article XX(b) because that provision prohibited taking trade measures aimed at protecting the environment beyond national jurisdiction. It also ruled that to meet the test of being "necessary", the environmental provision had to be the least "trade restrictive". As regards Article XX(g), the panel ruled that the measure had to be "primarily aimed" at the conservation of natural resources. Because the US measure did not pass these tests, it was found to violate the GATT. The second Tuna Dolphin panel ruled that the treaty does not support either limiting the scope of Article XX(b) to any particular jurisdiction or the "primarily aimed at" test. However, it did leave in place the "necessity" test and added a new element: that Article XX(b) does not permit a country to use trade measures to influence the policies of other countries. The Shrimp-Turtle case affirmed this view, but instead of applying it in the context of Article XX(b), it ruled that the chapeau of Article XX prohibited using trade measures to pressure other countries to change their policies. Indeed, the Appellate Body stated that, "the policy goal of a measure at issue cannot provide its rationale or justification under the standards of the chapeau of Article XX" (para 149). The result of this jurisprudence is that Article XX(b) and (g) have now taken on a meaning that conforms with the plain language of the treaty which makes it easier for an environmental measure to be captured by them - but that the chapeau is where the legitimacy of the measure is decided. In principle, this is a step forward.

However, two problems arise: one is that the hurdle set by the jurisprudence for meeting the terms of the chapeau may be too high to be realistic; secondly, MEAs contain provisions aimed at non-parties precisely because they want to eliminate "free riders" and induce them to join the regime. A recent positive development was the decision in the new Shrimp-Turtle case, where Malaysia challenged the US's implementation of the 1998 WTO Shrimp-Turtle decision. In this case, the Panel ruled that the US trade restrictions were justified because it had also made good faith efforts to seek a multilateral solution to the environmental problem, even though a multilateral agreement had not yet been reached. In addition, the Panel stated: "The Appellate Body Report [in the Shrimp-Turtle case] found that, while a WTO member may not impose on exporting members to apply the same standards of environmental protection as those it applies itself, this Member may legitimately require, as a condition of access of certain products to its market, that exporting countries commit themselves to a regulatory programme deemed comparable to its own..." (emphasis added).

After recognising that such a requirement may result in a distortion of an exporting country's environmental priorities, it stated that, "as Article XX of the GATT 1994 has been interpreted by the Appellate Body, the WTO Agreement does not provide for any recourse" in such a situation [3].

As indicated above, the CTE has been grappling with the relationship between MEAs and the WTO since its inception in 1995. However, to date, discussions in the CTE have been deadlocked on virtually every issue, including this one. On the question of MEAs, there appears to be a three-way split: some countries (e.g. the United States and many developing countries) are of the view that existing WTO rules can accommodate MEAs; some countries (e.g. New Zealand [4]) are of the view that MEAs can threaten the multilateral trading system, and thereby seek to minimise the trade impacts of MEAs; while some countries (primarily the European Community [5] and Switzerland [6]) are concerned that the WTO can undermine MEAs, and thereby seek solutions that protect the integrity of MEAs. This third group of countries must be supported in their efforts.

The mandate created at the Doha Ministerial provides for negotiations on:

the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules as among Parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a Party to the MEA in question [7].

There are several problems with this. Firstly, the negotiations seem limited to "specific" measures in MEAs, leaving out the more difficult, and more pressing, question of "non-specific" measures. Secondly, they seem limited to existing WTO rules, raising the question of WTO measures yet to be negotiated. Thirdly, the status of non-parties to MEAs is not to be prejudiced, meaning that there will be no progress on tackling this difficult problem. Furthermore, the Declaration goes on to say that these negotiations

shall be compatible with the open and non-discriminatory nature of the multilateral trading system, shall not add to or diminish the rights and obligations of members under existing WTO agreements, ... nor alter the balance of these rights and obligations...

This effectively rules out a meaningful accommodation with MEAs that is based on equality of status as between the trade and environment regimes.

Box 3: The WTO dispute settlement

The WTO Dispute Settlement Body is one of the most powerful features of the WTO system. It not only allows for compulsory adjudication once a member lodges a complaint (which is rare in international law) but it also imposes economic consequences on a member found to be in breach of WTO rules.

In principle, the Dispute Settlement Body grounds the rules-based trading system, and indeed does help prevent smaller countries from being bullied by bigger ones. However, there are also serious shortcomings. The adjudicators that hear Panel and Appellate Body cases are trade law specialists, who do not necessarily have expertise in other areas affected by trade rules, such as environment and sustainable development. This reality, as well as the mandate of the Dispute Settlement Body, leads to cases being decided through a trade policy lens. Even if the attitudes of adjudicators was different, judicial decision-making cannot, and should not, compensate for a lack of political decision-making. The Dispute Settlement Body is in sore need of clearer political guidance on how to address the trade and environment nexus, which has so far been lacking. Furthermore, like virtually all WTO activities, the adjudication process is mostly non-transparent, closed to outside observers, such as NGOs and other stakeholders.

3.1.2 The WTO "chills" the full development of rules on forest conservation

Concern about conflicts between environmental standards and WTO rules have "chilled" the development of effective trade-related environmental rules [8]. The example in Box "SPS body mulls pests in wood crate", taken from WTO Internet site, shows how a WTO member can use the WTO or the threat of a WTO dispute to prevent another WTO member from implementing a trade-related regulatory measure.

Box 4: SPS body mulls pests in wood crates

"A draft EU emergency measure against pests in pinewood packaging, which would affect a large share of goods trade, generated some concern in the 8 - 9 November 2000 meeting of the WTO Committee on Sanitary and Phytosanitary Measures...

This issue was raised by Canada which complained that this measure would cover 69% of all Canadian exports of all goods to the EU since it applies to packaging.

The draft measure [EU draft temporary emergency measures on wood packaging (G/SPS/N/EEC/93)] covers a wide range of wood packaging that uses coniferous wood originating in Canada, China, Japan and the US. It is designed to protect EU forests against pinewood nematode (Bursaphelenchus xylophilus). The products covered would have to be either heat treated to 56°C for at least 30 minutes and have a moisture content below 20 per cent or have been pressure (impregnated) treated.

Canada recognized the EU's legitimate need to protect its forests against pests, but urged the EU to follow its example by waiting until negotiations on multilateral standards are completed in the International Plant Protection Convention (IPPC) even if pests are detected. Canada also urged all participants in the negotiations to work for a swift conclusion.

Sharing Canada's concern were the US, Rep of Korea, Japan and Chile. They complained about both the "enormous impact" and the "abrupt" timing of the proposed measure, which in its original draft was due to take effect from 1 January 2001.

The EU said the measure was notified to the SPS Committee so that WTO members could comment, and three (including Canada) have commented so far. The draft is being reviewed and the original target date of 1 January will be postponed, the EU said. But it argued that an emergency has arisen since it found numerous occurrences of the pest. The EU added it could not wait for the IPPC negotiations to reach agreement since they appear to be heading for considerable delay. ,This is a new and serious problem for us,' the EU said" [9].

3.1.3 The WTO restricts a country's ability to take trade measures to counter massive forest destruction in another country

Trade measures are one of the few ways to pressure countries to improve their environmental policies, especially in cases involving massive forest destruction, for example by refusing to import forest products from that country. However, as mentioned above, WTO rules would likely preclude such actions. WTO jurisprudence has made it quite clear that trade measures should not be used to influence the policies of other countries. For example, the first two environment related trade disputes, the Venezuela Gasoline case and Shrimp-Turtle case, have ruled that Article XX cannot be used to exempt provisions that contravene other parts of the GATT, if their purpose is to influence the policies of other members [10]. This is notwithstanding the reality that environmental trade policies are often part of a broader package of measures that are a combination of "carrots and sticks" aimed at ensuring a high level of environmental performance.

Admittedly, this limitation is not just due to the WTO. If the international community wished to combat significant deforestation, it would establish international standards and mechanisms under such instruments as the Convention on Biological Diversity (CBD) to address significant environmental destruction. However, such developments are still a distant prospect, given that the CBD has still not yet developed an "action-oriented" work programme on forests [11]. In addition, the development of the means to ensure that a country does not massively deforest is not politically feasible, especially in the present climate of distrust between North and South.

The use of trade measures to influence the policies of other countries is a tool that must be used with care, and must be controlled so as to avoid abuse. This is particularly necessary given the economic imbalances that exist between rich and poor countries. Therefore, the WTO would be correct to scrutinize such measures closely. However, by totally eliminating these measures, no matter what the circumstances - even in instances where there is overwhelming credible evidence that unjustified forest destruction is taking place on a grand scale - is to deprive countries of an important tool to deal with rogue States.

The WTO jurisprudence reveals a bias against taking of unilateral measures. All the disputes involving the use of trade-related environmental measures have involved individual countries taking such measures on a unilateral basis. However, as mentioned above, multilateral approaches are not always feasible, leaving unilateral ones as the only alternative. While the bias against unilateral measures, and a preference for multilateral standards, is understandable from the perspective of implementing a "rules-based trading system", as opposed to one based on economic and political power, there is no basis in the treaty text for an outright ban on unilateral measures.

Ultimately, the key issue for the WTO should not be whether an environmental measure is unilateral or multilateral. Rather, a better approach would be for the WTO and other relevant international institutions to examine challenged measures on their substantive merits. If the WTO is truly intent on supporting sustainable development, it should have the mechanisms to create the right balancing of interests so that the determining factor is whether the measure in issue is substantively legitimate or not.

3.1.4 WTO rules restrict export bans on raw logs

Many countries, including Canada, the United States, China and Indonesia have limited exports of their raw logs. The reasons for doing so vary, but on many occasions they are linked to conservation or sustainable development policies. In particular, developing countries seeking to offset the effects of tariff escalation on processed wood or to generate greater revenue from their forests have banned export of their raw logs in order to stimulate a domestic processing industry. However, according to GATT Article XI (General Elimination of Quantitative Restrictions), such export restrictions are not permitted.

The long-term consequences of these exports on sustainability are unclear. They depend largely on the circumstances in the particular country. For example, the log export ban in Indonesia led to a 40-50 % reduction in prices, which reduces the profitability of sustainable forest management and thereby may have triggered increased logging [12]. In addition, there is a risk of increased pressure on the forests of other countries, to compensate for the decrease opportunities in the country imposing the ban.

So far, there has been no formal complaint brought to the WTO against the use of export bans, so Article XX has not been interpreted in this context. The absence of a complaint may lie in the lack of economic harm such bans cause to potential trading partners. However, it has been reported that Japan raised the issue of log export bans at the Seattle Ministerial, in the hope of having the logging ban in the Pacific Northwest removed [13]. A WTO panel faced with such a challenge is not likely be sympathetic to the argument that the trade restriction is necessary to further the sustainable development ends of the exporting country if there is any amount of trade protectionism that results. Since it is very difficult to use this measure without having some amount of trade protectionism result, this WTO rule may eventually deprive countries of an important conservation or development tool, depending on the circumstances.

3.1.5 WTO rules may not permit independent voluntary forest certification

Independent voluntary forest certification, when done properly, is an effective tool for promoting sustainable forest management. However, its status vis-à-vis WTO rules remains unclear. The issue is: do WTO disciplines apply to certification and labelling so as to prohibit distinctions between products based on their sustainability?

The key instrument is the WTO Agreement on Technical Barriers to Trade (TBT). In addition, despite a preambular statement in favour of protecting the

environment in the TBT Agreement, WTO members have not yet agreed whether standards based on non-product related process and production methods (PPMs), that are not internationally agreed, are permitted.

Box 5: "Like products" and "PPMs"

The treatment of trade-related environmental measures based on the process and production methods (PPMs) of the product in trade goes to the heart of the trade and environment interface. Central to the non-discrimination provisions of the world trading system is the notion that "like products" should be treated alike. The logic of this proposition is irrefutable, from the trade perspective. The key issue, however, is to define what is meant by "like".

Environmental regulation often is concerned not only with the end result of production, i.e. the product itself, but with the PPMs leading to the end product. This is because many environmental objectives can only be met if a holistic, cross-sectoral and cradle-to-grave approach is adopted. This self-evident truth, is reinforced by measures at national and international levels that apply distinctions as between products whose PPMs are environmentally acceptable and those that are not.

For example, CBD Article 11 calls for using incentives to support conservation and sustainable use - such incentives could be measures to promote wood from sustainable sources. So as not to lose any market share for products that are regulated in this manner, countries may seek to offset the competitive advantages of imported products which are not subject to as stringent rules regarding their PPMs. Such offsetting measures will be trade-related environmental measures that potentially conflict with the WTO.

The question for the WTO is whether two products, both of which are indistinguishable as end products, can be treated differently if their PPMs are different. The text of the GATT does not define "like" and neither did the GATT contracting parties nor the members of the present WTO.

In the absence of political direction, dispute panels have had to develop their own tests, on a case-by-case basis. The results have been undesirable. Various criteria have been developed and applied, which affirm that "like" is not "identical" [14]. However, at best it remains ambiguous as to whether PPM distinctions on the basis of MEAs are permissible. Although the most recent WTO decision on GATT Article III [15], broadened the concept of "likeness", by ruling that it is appropriate to take account of health risks in determining "likeness". The Appellate Body also affirmed that "the extent to which consumers are - or would be - willing to choose one product instead of another to perform" the same end-uses is highly relevant evidence in assessing "likeness".

However, the issue will not be fully resolved until Article III is broadened to permit PPMs, at the very least those derived from MEAs. This can only happen in a political negotiation and not in the context of a particular dispute.

The TBT Agreement provides rules for setting and enforcing technical standards, including those relating to biodiversity, with a view to reducing barriers to international trade. The TBT Agreement favours international standards by requiring members who adopt technical regulations to participate in efforts to set international standards for the product concerned [16]. Members are required to use international standards where they exist, except if doing so would be ineffective or an inappropriate means of fulfilling legitimate objectives, which includes protection of human health or safety, animal or plant life or health, or the environment [17]. A rebuttable presumption is created that a technical regulation based on international standards, and for a legitimate purpose, is not an unnecessary obstacle to international trade [18]. Should members choose not to follow international standards, the Agreement Procedurally, several imposes procedural and substantive requirements. provisions seek to enhance transparency in the establishment of the standards [19]. At the substantive level, the TBT Agreement requires compliance with the most favoured nation and national treatment obligations and seek to ensure that standards are to be no more trade restrictive than necessary [20].

The TBT Agreement applies to central governments, but governments are take measures to ensure that non-governmental bodies under their jurisdiction comply with the annexed Code of Good Practice.

Thus, the problem, once again, is the definition of "like products". If the TBT Agreement does apply to voluntary independent certification (and members are divided on this), then it may prohibit distinctions caused by measures based on "non-product PPMs", i.e. measures aimed at PPMs that do not refer only to the end product, such as the sustainability of the source. However, distinctions based on non-product PPMs are central to credible certification. A recent report by FERN put it as follows:

If certification is to influence a consumers purchasing choice, the certifying process must follow an item through its entire production process, from the forest to the shop. For a product from a certified forest to carry a label claiming that the product comes from well-managed forests, it is necessary to certify the "chain of custody", including log transport, processing, shipping and further processing. To allow consumers to make a choice with positive impacts, a reliable chain of custody is essential. Without this, there is nothing to link the product to the certified forest [21].

All these issues, and others, do not relate to the characteristics of the end product, but rather to non-product related PPMs.

The Parliament in the Netherlands is currently grappling with this problem. Before it is a private member's bill that would require ecolabelling for all timber products. All timber products would be labelled with either a green or red label depending on whether it is produced according to the sustainability criteria laid down in the law. These criteria are based on Forest Steward Council (FSC) standards and consumers are free to decide whether they want to buy green or red labelled timber. However it is unclear if the second chamber, the Dutch senate, will accept this proposed law. One problem is that the European Commission has raised concerns about the compatibility of the law with WTO rules.

The WTO must eliminate the lingering uncertainty about the WTO-compatibility of schemes such as the FSC. The FSC continues to grow in acceptance in all parts of the world, and even local and national government procurement programmes on forest products of some WTO members have also embraced its standards. Therefore, the TBT Agreement should either not apply to such schemes, or it should permit "non-product PPMs". The Ministerial Declaration at Doha called for the WTO Committee on Trade and Environment to give particular attention to the issue of labeling requirements for environmental purposes. However, in the absence of any further guidance, it is doubtful that the CTE will progress any further beyond what the years of inconclusive discussions have already failed to produce.

Box 6: FSC Principles and Criteria for Forest Stewardship

The Forest Stewardship Council (FSC) Principles and Criteria set forth a set of requirements for certification that go well beyond the characteristics of the end product. The Principles are as follows:

Principle 1: Compliance with laws and FSC Principles. Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Principle 2: Tenure and use rights and responsibilities. Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Principle 3: Indigenous peoples' rights. The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognised and respected.

Principle 4: Community relations and workers' rights. Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.

Box 6 (continuation): FSC Principles and Criteria for Forest Stewardship Principle 5: Benefits from the forest. Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Principle 6: Environmental impact. Forest management shall conserve biological diversity and its associated values, water resources, soils and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and integrity of the forest.

Principle 7: Management plan. A management plan - appropriate to the scale and intensity of the operations - shall be written, implemented, and kept up-to-date. The long term objectives of management, and the means of achieving them, shall be clearly stated.

Principle 8: Monitoring and assessment. Monitoring shall be conducted - appropriate to the scale and intensity of forest management - to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Principle 9: Maintenance of high conservation value forests. Management activities in high conservation value forests shall maintain or enhance the attributes which defined such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

Principle 10: Plantations. Plantations shall be planned and managed in accordance with Principles and Criteria 1-9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests [22].

3.1.6 WTO rules do not fully support a precautionary approach to protecting forests, in particular ancient forests

Although purporting to support sustainable development, the WTO rules do not allow much scope for applying one of sustainable development's constituent principles: the precautionary approach or principle. This is evident in the application of the Agreement on Sanitary and Phytosanitary Measures (SPS Agreement). This Agreement regulates measures WTO members can take to protect their biodiversity from alien species, which also pose threats to forests. The SPS Agreement affirms the right of members to take SPS measures, subject to certain disciplines aimed at preventing economic protectionism and minimising negative effects on trade. These disciplines are meant to be based on notions of risk assessment, which may not be entirely consistent with the precautionary principle. It is important to note that the SPS does not contain the usual GATT principles of "most favoured nation" and "national treatment", meaning that it does allow countries the right to discriminate against imported This is why it seeks to place disciplines on the extent to which products. countries take such measures, as well as on the process underlying the decisions to impose the measures. However, by being unclear as to whether countries can fully take precautionary action to protect their biodiversity, these disciplines go too far.

The SPS Agreement requires that SPS measures only be applied to the extent necessary and that they ought not to be applied without sufficient scientific evidence [23]. Article 3 expresses a presumption of consistency for international standards; members are afforded some scope in adopting more stringent standards than those at the international level "if there is a scientific justification, or as a consequence of the level of sanitary or phytosanitary protection a member determines to be appropriate" pursuant to risk assessment procedures [24]. Article 5 sets out the requirements for the risk assessment procedures and disciplines the way in which members determine the appropriate level of protection. Provisional measures are permitted when scientific evidence is not sufficient, but they must be reviewed by the member issuing the measures within a reasonable period of time [25].

In 1997, the first case involving the SPS Agreement was launched in the WTO, in the case on EC Measures concerning Meat and Meat Products (Hormones). The complaint was brought by the United States and Canada and concerned the EC prohibition of imports of beef treated with growth promoting hormones. The allegation was that this measure violated, inter alia, the SPS Agreement. The Panel found that the EC failed to fulfil the minimal procedural, as well as substantive, requirements for risk assessment as required under Article 5.1. The EC's defence that it was invoking the precautionary principle was dismissed.

Furthermore, since the measures were not based on an existing international standard, they were found to be contrary to Article 3.1 [26].

Box 7: The precautionary principle

One of the cornerstones of effective environmental management is the "precautionary principle". Indeed, the validity of the precautionary principle has been reaffirmed in many international instruments [27]. The precautionary principle provides that where there is a threat of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation [28]. Given to the reality that in many instances involving the environment, absolute proof will not be present, responsible decision-makers must be allowed full scope to take precautionary action.

The precautionary principle is triggered once the presence of significant risk is determined. It does not prescribe precisely what actions are to be taken in any given situation. Rather, it operates so as to shift the "burden of proof", so that those who object to the precautionary measures must be the ones to prove that these measures are without scientific foundation.

This shifting of the burden of proof is not sufficiently reflected in WTO rules. In most cases, it is the member seeking to justify the environmental measure that bears the burden in accordance with GATT Article XX. The WTO must fully acknowledge the legitimacy of the precautionary principle, such that the member objecting to measures protecting human health and the environment should have to show that the challenge measures are not scientifically justified. In the case of restrictions on trade in a product or substance that cannot be presumed to be benign (e.g. by being a restricted substance listed in a MEA), the member objecting to such restrictions must be the one to prove its safety.

On appeal, the WTO Appellate Body held that the EC is permitted by the SPS Agreement to establish, on a scientific basis, a level of consumer protection higher than international standards and that these provisions do not "exclude a priori from the scope of a risk assessment, factors which are not susceptible of quantitative analysis..." The Appellate Body also reversed the Panel's imposition of the evidentiary burden on the complainant to prove that the EC measures do not conform to international standards. The Appellate Body indicated that risk assessment need not be a monolithic process, but could set out both mainstream and divergent scientific viewpoints, especially where the risk is great. As to the precautionary principle, the Appellate Body was of the view that it could not override the SPS Agreement in order to justify otherwise inconsistent obligations, but, in any event, the principle was reflected in various provisions of the Agreement. Despite this partial affirmation of the precautionary principle in the WTO, the Appellate Body did not overturn the

ultimate conclusion of the Panel, and held that the EC import prohibition was inconsistent with the SPS Agreement [29].

In 2000, the European Communities submitted its Communication on the Precautionary Principle to the several WTO bodies, including the CTE, TBT and SPS Committees [30] The reactions it received are instructive. Noting that the precautionary principle is a principle of international law, the EC indicated that the precautionary principle relates to decisions regarding the environment, as well as human, animal or plant health. The Communication expressed the view that each member has the right to establish the level of protection that it deems appropriate, and that the precautionary principle is a key tenet of its policy, particularly in relation to risk management and assessing the acceptable level risk. The Communication lists a set of criteria which measures based on the precautionary principle should meet: proportionality, non-discrimination, consistency, based on costs and benefits (including of no action), subject to review, capable of assigning responsibility for producing the necessary scientific evidence. The European Commission published a second paper on the precautionary principle in July 2001 "stating that a New Round of multilateral trade negotiations should clarify the relationship between precaution and WTO rules" [31].

In the discussion that followed, Japan expressed uncertainty as to the relationship between the precautionary principle and the WTO Sanitary and Phytosanitary Agreement, while Japan and Hong Kong China noted that there is a need for clarification of who bears the burden of proof when precautionary measures are taken. This affirms the level of ambiguity about if and how the precautionary principle fits into WTO rules.

As it turned out - notwithstanding the EU negotiation position - the Doha Declaration does not provide for any examination of the precautionary principle in the context of the new work programme of the WTO. The only potential implication for the precautionary principle is a statement in the Preamble recognising members rights to take measures to protect human, animal or plant life or health so long as these do not distort trade or contravene WTO rules [32]. Even if this were to include measures based on the precautionary principle, it is unclear what the legal force of this statement is. Since then, EU Trade Commissioner Pascal Lamy wrote to US Trade Representative Robert Zoellick on 14 November 2001, to assure Mr. Zoellick that the EU will not seek to alter the balance of rights and obligations of WTO members with respect to precaution [33].

3.1.7 WTO rules restrict full protection of traditional forest-related knowledge

Several international instruments affirm the value of traditional knowledge, such as the Convention No. 169 on Indigenous Peoples of the International Labour Organization (ILO) and the Draft UN Declaration on Indigenous Peoples. As is recognised by the Intergovernmental Panel on Forests (IPF) and Intergovernmental Forum on Forests (IFF), this knowledge is an important component of sustainable forest management, and therefore it must be Indigenous and local people are often the custodians of protected [34]. biodiversity, and protecting their knowledge is a potentially powerful incentive for them to continue to conserve the biodiversity. However, not only does the WTO not contain any mechanisms for protecting traditional knowledge, but indeed the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) restricts the means available for recognising and protecting traditional In addition, it may not prevent biopiracy, by unscrupulous knowledge. individuals claiming patents for inventions based on traditional knowledge. Indeed, many developed countries are using the TRIPS Agreement to prevent countries from requiring the prior informed consent of the country of origin in patent applications based on genetic resources.

The TRIPS Agreement is based on conventional (Western) intellectual property rights, which are not appropriate to protect the collective and often oral nature of traditional knowledge. It aims to create an internationally agreed minimum, but strong, standard set of rules for the protection and enforcement of intellectual property rights (IPRs). The IPRs covered under the TRIPS Agreement include patents, copyright, trade secrets, and geographic indications.

Article 27(2) requires that patents be available for all inventions, but adds that,

Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect ordre public or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment, provided that such exclusion is not made merely because the exploitation is prohibited by their law.

This provision uses the "necessity" threshold, which likely creates too high a standard to save most environmental provisions. According to previous GATT cases, to be "necessary", a measure must employ the "least trade-restrictive" means to achieving its objective [35]. Often the theoretic possibility of less trade-restrictive means exist, but from a practical point of view, are not realistic. By allowing a trade forum, such as the WTO, to make this judgement,

means that trade values will inevitably trump over environmental ones in most cases.

Of particular importance to forest biodiversity is Article 27.3(b), which states that members may also exclude from patentability,

"plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof."

The criteria for determining what is meant by "effective" in this context have not yet been defined. It remains to be seen whether the WTO will interpret "effectiveness" in accordance with whether forest biodiversity is conserved and indigenous knowledge protected.

In the Doha Declaration provides that the TRIPS Council is to examine the relationship between the TRIPS Agreement and the CBD [36]. However, it is unclear that any consensus on this issue will be reached, given past discussions in the WTO, and furthermore, there is no recognition of the equal legal status of the CBD over these issues.

3.1.8 WTO rules may hinder measures aimed at tackling illegal logging

Illegal logging, and trade in illegally logged forest products, is a growing international problem [37]. As a rules-based organisation concerned with promoting international trade, the WTO should have a genuine interest in hindering illegal trade. But the opposite seems to be the case. While the WTO does not require a country to import illegal products, it does tie their hands when it comes to designing measures to combat illegal trade. For example, even where there is evidence that a majority of wood exports from a country are from illegal logging, a country cannot ban the import of all wood products without violating GATT rules. Although such a measure would be an effective way to help combat illegal logging - i.e. by denying market opportunities to those who log illegally - the importing country would risk being challenged at the WTO by the exporting country for arbitrarily restricting their exports. The result is that an importing country wishing to help combat illegal logging faces the unrealistic burden of proving that a particular shipment is from an illegally logged source before deciding not to allow it in. Furthermore, as discussed above WTO rules also may undermine one of the most effective instruments to combat illegal logging: forest certification.

Box 8: Illegal logging: Amazon Mahagony criminals busted

31 October 2001, Para State, Brazil: The growing battle against the mahogany criminals in the Brazilian Amazon reached flash point yesterday as an unprecedented joint operation, between the federal police, government officials, and Greenpeace, raided a sawmill, bringing to an end a five-day mission which uncovered a total of 7,165 cubic metres of illegal mahogany worth almost US\$7 million on the international market. The sawmill, empty but surrounded by logs carefully hidden in the bush, would have been the clearing point for the illegal mahogany found in the previous days.

Three helicopters, two planes, five trucks, 16 officials from the Brazilian environmental agency IBAMA and police, accompanied by 11 Greenpeace activists, yesterday converged on the sawmill outside the township of Uruara, the frontline of illegal logging in the Amazon. The sawmill is owned, according to IBAMA, by a frontman for Osmar Ferreira, one of the mahogany kings identified in a recent Greenpeace investigation as laundering illegal mahogany for export to the US and Europe.

The investigation team visited four locations in the Middle Land in the Brazilian Amazon. Behind a dam built by loggers on the Carajari River, 1,674 cubic metres of illegal mahongany were found. These logs were located inside public lands where logging is strictly prohibited. Yesterday, IBAMA seized the largest haul of logs in the whole operation - 5,385 cubic metres - which was located at the Juvilandia farm, by the Iriri River. Two gunmen were also arrested by the police in the area during the operation.

The seizures follow several recent Greenpeace exposes of the mahogany corruption trail, which preceded a death threat to Greenpeace Amazon campaign co-ordinator, Paulo Adario, and an announcement a week ago by the Brazilian government suspending all logging, transport and trade of Brazilian mahogany until it completes an investigation into the industry.

High quality mahogany is only found in pristine areas of rainforest, and so the illegal mahogany trade is directly responsible for the destruction of these areas as it leaves behind a network of roads and trails that other loggers can use to access the remaining forest.

"The illegal mahogany industry has for years been driving the destruction of the Amazon. After witnessing the rampant destruction of this rainforest firsthand, it is clear to us that the only course of action left to the Brazilian government is to throw these loggers in jail and stop this industry until it can be brought under control," said Adario.

Box 8 (continuation): Illegal logging

Only a month ago, Greenpeace released photographs and video images from a recent aerial reconnaissance clearly showing sophisticated logging operations in lands belonging to the Amazon's Kayapó Indians, an area where logging is strictly prohibited. Three days ago, another flight over the area revealed that a large raft of illegal mahogany logs was ready to be transported downstream. IBAMA cannot investigate inside Indian lands without the support of FUNAI, the Brazilian Indian Agency, but unfortunately FUNAI did not take part in the operation.

A recent Greenpeace report, Partners in Mahogany Crime, found that the mahogany trade is driving the destruction of the Brazilian Amazon rainforest and is run by a corrupt industry which is undermining traditional cultures, and leading the illegal destruction of the world's most biologically diverse ancient forest. The report details these illegal acts and the two mahogany kings, Moisés Carvalho Pereira and Osmar Alves Ferreira, who control most of the trade. According to information obtained from workers, the wood seized at the Juvilandia farm belongs to Osmar Ferreira.

Much of the mahogany paperwork is falsified and the wood is then exported by these companies to international markets, predominantly to the US, the UK, the Netherlands and Germany.

Just four importers, DLH Nordisk, Aljoma Lumber, J Gibson McIlvain Co Ltd and Intercontinental Hardwoods Inc accounted for more than two-thirds of the mahogany export trade in one year from Moisés and Ferreira. This mahogany is used largely in luxury goods such as yachts, high-class furniture, musical instruments and coffins.

The exposure of this scandal is part of Greenpeace's global campaign for the protection of the world's last forests, in particular ancient forests. Approximately 80% of the original global forests have already been destroyed. Greenpeace is calling on world governments to take immediate steps to halt forest destruction by: placing a global moratorium on logging and other industrial activities in all large areas of forests, in particular ancient forests, adopting measures to ensure that timber is produced and traded in an ecologically, socially, and legally responsible way; establishing a network of protected areas and; creating a global ancient forest fund of \$15 billion annually to fund these measures.

On 6 December 2001 the Brazilian government put an end to the illegal mahogany trade following Greenpeace investigations. Thanks to an unprecedented move by the Brazilian government to suspend all mahogany forest management plans in the Amazon and take measures to protect Indian Lands and conservation areas, the illegal mahogany trade is being stopped. The decision was announced by Hamilton Casara, the President of the Brazilian environmental agency Ibama [38].

3.2 WTO does not support trade policy aimed at achieving sustainable forest management (SFM)

In addition to actually interfering with measures aimed at sustainable forest management, the WTO rules also place limits on trade policy options aimed at enhancing sustainable forest management.

Some of this is intentional and others are by-products of the WTO's drive towards trade liberalisation. An example of the latter is reduced prices that often result from trade liberalisation. This benefits the consumer in the short term, but there is no accompanying mechanism to ensure that all forest goods and services are adequately valued in the prices. Thus transactions today are at the expense of tomorrow's consumers. In addition, trade liberalisation is often accompanied by a reduced power and revenue generation for the state, which deprives countries, especially developing countries, of the means to effectively conserve their forests.

3.2.1 WTO rules do not allow for granting preferential trade treatment for products coming from sustainably managed sources

For trade to have a positive impact on the environment, it must be linked to a broader package of incentives for environmentally friendly behaviour. In the forest sector, this implies providing trade opportunities for forest products from sustainably managed sources that generate benefits for local communities and other custodians of forest biodiversity.

However, the WTO system is not designed with such specific ends in mind. Just as GATT Article III prohibits treating an imported product negatively compared to other "like" domestic products, so too does it prohibit the granting more favourable treatment. Given that the sustainability of the source is probably not relevant for the determination of "likeness", governments are prevented from granting preferences to forest products produced from sustainably managed sources.

One exception is the Generalized System of Tariff Preferences (GSP), which developed countries can offer to developing countries. For example, the GSP programme of the European Union is governed by Council Regulation (EC) No. 2820 of 21 December 1998 applying a multiannual scheme of generalised tariff preferences for the period 1 July 1999 to 31 December 2001. Title II establishes special incentive arrangements of increased preferences by up to 35%, depending on the product concerned, for countries that implement labour and environmental standards.

Potential conflicts with the WTO might exist in that it is unclear whether the Enabling Clause [39] allows for differentiated preferences on this basis, especially considering that it involves non-product related PPMs. However, the fact that the preferential treatment is open to all countries that fulfil multilaterally determined criteria might be sufficient to safeguard it from WTO challenge.

Although the only defined environmental criteria in the Regulation relate to forests (and refer to the criteria for sustainable forest management of the International Tropical Timber Organization), they have never been applied. Only three countries have applied for the preferences under the labour clause. This may partly be due to the complex application process.

As this scheme will expire at the end of 2001, and the European Commission has already put forth proposals for a new Regulation [40]. These new proposals no longer specifically mention the International Tropical Timber Organization (ITTO) criteria, which is a positive development since it is doubtful that ITTO criteria can effectively measure SFM. Instead, the Commission proposes conditioning the granting of the preference to domestic legislation that effectively applies domestic legislation incorporating the substance of internationally acknowledged standards and guidelines concerning sustainable forest management [41]. It further encourages the use of forest certification systems [42].

3.2.2 WTO no longer permits subsidies aimed at adjusting to new environmental regulations

Subsidisation of industrial forestry is a major driver of forest exploitation. On the other hand, government support for forestry that is environmentally economically competitive, should sensitive, but not be welcomed. Unfortunately, The WTO Agreement on Subsidies and Countervailing Measures neither prohibits the harmful subsidies, nor allows the beneficial ones. Somewhat promising was Article 8.2(c), which allows for assistance to promote adaptation of existing facilities to new environmental requirements imposed by law and/or regulations that result in greater constraints and financial burdens Unfortunately, this provision was time-bound, and is no longer on firms. applicable because there was a lack of consensus in the WTO to extend it. The Doha Decision on Implementation-Related Issues and Concerns takes note of a proposal that measures by developing countries aimed at achieving legitimate development goals, such as "development and implementation of environmentally sound methods of production", be treated as non-actionable (meaning that no member can lodge a complaint against them) [43]. This is to be discussed in the WTO Committee on Subsidies and Countervailing Measures.

3.2.3 The WTO is not a transparent institution - the voices of all affected stakeholders are not heard in decision-making

Despite significant improvements over the GATT, the WTO still remains far from a transparent institution - which goes against a basic tenet of sustainable development that stakeholders should participate in decision-making (see, e.g., Principle 10 on the Rio Declaration on Environment and Development and Agenda 21). The WTO secretariat has taken steps to increase access to documentation - e.g. through their internet site - as well as through convening symposia for NGOs. Indeed, the Doha Declaration calls for cooperation to be promoted between WTO and relevant international environmental and developmental organizations, especially in the lead up to the World Summit on Sustainable Development [44]. However, the rules of the organisation still do not permit observers into their deliberations, which is far from the current norm in international governance. Indeed, not only are NGOs denied access, but even intergovernmental bodies, such as the CBD Secretariat, do not yet have access to WTO councils and committees that specifically concern their mandates, such as the Committee on Agriculture and Council for TRIPS.

In addition, many developing countries are shut out of important "Green Room" decision-making process, even though the WTO is meant to work as a consensus based institutions and developing countries are in the majority. This was very evident at the Seattle Ministerial Meeting, with the result that developing countries helped block the launching of a new Round. In Doha, similar tactics by developed countries were also used for getting the final declaration through.

Recently, controversies have raged over the submission of amicus curae briefs to the WTO dispute settlement body. The practice of admitting such briefs written submissions by non-parties to the dispute, e.g. NGOs - is a common practice in many countries. However, when the WTO dispute settlement body admitted, in principle, such submissions, many developing countries complained that NGOs were being granted more rights than WTO members. The sense of frustration of developing countries, many of whom lack the capacity to effectively monitor and intervene in all WTO fora that impact on them, is understandable. However, the answer is not to restrict the rights of NGOs to intervene - since such interventions can bring valuable perspectives and arguments into the process - but rather to increase the capacity of developing countries in effectively representing their interests in all WTO bodies. Unfortunately, although the dispute settlement body allowed interventions in the Shrimp-Turtle case, it mysteriously ruled that no NGOs met its criteria for intervening in the recent Asbestos case - suggesting a retreat in light of the political controversies.

3.2.4 The WTO operating culture does not support developing country interests and thereby prevents consensus on environmental issues

The nature of the WTO is that agreements are based on broad-based bargaining. Thus, matters of social and development concern become subject to crude economic haggling. A blatant example of this phenomenon is that for a considerable period of time, the Cotonou Agreement on the EU-ACP Partnership did not receive the needed support for a WTO waiver necessary for it to become activated. This was because of the lingering EU-US dispute over bananas and because the EU wanted to ensure ACP support for a new WTO Round. Thus, a key instrument that could, inter alia, improve the management of forests in ACP countries, is being held hostage in the WTO to other issues.

All this impedes achieving consensus on environmental issues. Developing countries have come to view the environment as a developed country interest, whereby concessions are something to be bargained for. This is partly because of fears that environmental regulation will be used as "green protectionism", to shut out developed country products. But more importantly, this unfortunate state of affairs has arisen because issues of higher priority to developing countries have not been adequately dealt with.

Because of developing country pressure and resistance to developed country efforts to initiate a new negotiating Round, the WTO has recently been obliged to address "implementation issues". These are issues that have arisen out of the reality that many developing countries have not benefited fully from the promise of the Uruguay Round, such as increased access to developed country markets. However, as the Doha Decision on Implementation-Related Issues and Concerns shows, these discussions have not yet achieved very much in concrete terms [45].

4 The impact on forests of measures currently beeing proposed for inclusion in the WTO

The WTO regime is constantly being developed, either in the context of its "built-in agenda" - the timetable of negotiations provided for in the WTO treaties - or as a result of committee work or full blown trade negotiation rounds. Several of the measures currently under consideration within the WTO will have negative consequences for forests.

4.1 Tariff reduction in the forest sector

Despite the fact that tariffs on timber products are already quite low, further tariff reduction in conjunction with other liberalisation measures for wood and wood products will contribute to forest depletion. The only point at issue relates to how much forest depletion and which forests will be impacted. This depletion will be even greater if accompanied by proposed reductions of non-tariff measures relating to national forest management.

However, this is not to say that the current tariff structure is ideal. Far from it. At present there is also a phenomenon known as "tariff escalation", which harms developing countries and limits their options to develop sustainably. Tariff escalation is a process where importing countries apply in successive stages of production relatively higher rates of tariffs to a specific product. For example, before the Uruguay Round developed GATT contracting parties applied a tariff of 4.7 % on wood articles and 9.4 % on wood panels but only 0.9% on semi-processed wood products. After the Uruguay Round these rates went down to 1.6 % for wood articles, 0.4 % for semi-processed articles and 6.5 % for wood panels [46]. Tariff escalation places a high burden on developing countries that are mainly exporting primary products because they lack the financial, technical and knowledge capacities to establish competitive processing industries. Subsequently, many developing countries are still affected by tariff escalation for intermediary and manufactured products like panels and veneer [47]. But without effective forest conservation laws the abolishment of tariff escalation will lead to further forest depletion, if countries are not successful in establishing value-adding wood processing industries and exporting these products. In turn they might be forced to increase their output in primary wood products to keep their income revenues derived from exports.

The "Accelerated Tariff Liberalisation" (ATL) initiative highlighted these problems during the run-up to the 1999 WTO Ministerial conference in Seattle. The ATL was launched by the Asia-Pacific Economic Cooperation (APEC) in 1997 and covered eight sectors, one of them being forest products [48].

Tariff liberalisation in the forestry sector was then brought forward as a proposal in the context of the Millennium Round deliberations in Seattle 1999. It put the spotlight on the environmental impacts of tariff reduction and acceleration in the forestry sector. Environmentalists feared that ATL would lead to increased deforestation as most APEC and WTO members have only inadequate laws for forest conservation [49].

As a result of NGO demands, an assessment by the United States Trade Representative (USTR) estimated that the global effects of ATL amount to a maximum increase of trade in forest products by 2 % and a 0.5 % increase in timber harvest by 2010. The increase would be most significant in value-added manufacture products, up to 6 %, and with trade in raw materials and some semi-processed goods declining. Increases in timber harvests were projected to take place in Australia (9.2 %), Chile (0.5 %), China (1.4 %), Finland (11.0 %) , Indonesia (4.4 %), Malaysia (2.6 %), New Zealand (3.8 %) and Sweden (7.6 %). However, according to the study

it appears likely to reinforce existing trends toward timber harvest based on plantations and intensive management of secondary forests...This expectation is based on current resource conditions and patterns of harvest in countries where timber harvesting is likely to increase [50].

According to this assessment the environmental impacts of tariff liberalisation in the forestry sector of the APEC region is small. However, it has to be taken into consideration that between 1970 and 1996 the global demand for roundwood grew by 40 % which makes the USTR estimate appear too conservative [51].

Indeed, the USTR assessment can be criticised on several grounds. NGOs noted that the USTR assessment did not consider the local impacts of a logging increase, for example of 4 % in Indonesia, that will likely take place mainly in old growth natural forests. In addition, there was no assessment of the expansion of plantations into natural forests or the impacts of intensive forest management. And finally the study did not include a review of the impacts of the reduction in non-tariff measures (NTMs) that would likely ensue in combination with reduced tariffs [52].

Despite the failure of the Seattle Ministerial, tariff liberalisation in the forestry sector is still on the agenda for a new WTO round of liberalisation. The

following excerpt from the Ministerial Declaration for Doha confirms the fears of environmentalists that environmental safeguards are not being considered:

We agree to negotiations which shall aim, by modalities to be agreed, to reduce or as appropriate eliminate tariffs, including the reduction or elimination of tariff peaks, high tariffs, and tariff escalation, as well as non-tariff barriers, in particular on products of export interest to developing countries. Product coverage shall be comprehensive and without a priori exclusions... [53].

The most likely impacts of tariff liberalisation are increased exploitation and consumption of forest products. Especially in countries with weak environmental or forest protection policies, it is likely that liberalisation will lead to intensified exploitation of forests. In addition, if logging companies need to compensate for the loss of subsidies or declining world market prices resulting from more liberalize trade, logging can be expected to increase. Declining prices for wood and wood products may also contribute to increasing consumption [54].

Since it is not feasible to reduce tariff escalation by increasing tariffs on primary products, it is likely that some tariffs will need to be reduced. However, this reduction should aim at supporting sustainable forest management - this can only be achieved if tariff reduction is preceded by comprehensive sustainability assessments. However, the Doha Declaration contains no such provision. All that appears is an encouragement to members to share expertise and experience on environmental reviews at the national level [55].

Another key result of the Doha Ministerial was the formal completion of the accession processed by China to the WTO. This will have direct impacts on China's forests. China currently has relatively high import taxes for wood and wood products, e.g. 10.6 % on pulp, 27.6 % on paper, 14.8 % on solid wood, 28.8 % on board/furniture, and 20.4 % on sawn wood/veneer. At the same time China enforces stringent logging prohibitions in the water catchment areas of large rivers in order to control erosion and flooding [56]. Thus, once tariffs on forest products are slashed as a result of China's entry into the WTO, continued economic growth in China may lead to increased consumption of these products.

Box 9: What changes will China's WTO entry entail in forestry?

China is poor in forests, but rich in biodiversity - while China has 22% of the world's population, it has only about 7% of the world's farming land and about 4% of the world's forests. There is growing competition for alternative forest uses such as protected areas and ecological restoration. Domestic timber production capacity has been on the decline due to growing domestic conservation needs and decades of mismanagement of existing forests.

It is not yet clear what exact changes China's investment and trade policies in the forestry sector will undergo and when will these changes occur now that China has been admitted to the WTO. However, the following categories of change are speculated:

- Tariff rates for imports of processed forest products would be further reduced to the current world average level of 5%;
- Non-tariff measures for forest products will be relaxed;
- The business environment will be further improved to encourage more international capital inflow to China;
- The access of Chinese exports of non-timber forest products (NFTP) and furniture to overseas markets will be improved.

The changes in China's forestry investment and trade policies after its WTO accession could have far-reaching and fundamental impacts on Chinese forestry. These would include direct impacts on its forest industry and trade as well as indirect impacts on sectors that have an association with forestry.

Possible negative impacts on Chinese forests after WTO accession:

- more imports of paper, pulp and paperboards, domestic paper industry falling into serious trouble;
- increased threats and risks brought in by lax phytosanitary control over invasive species;
- communities, forest enterprises and governments in regions dependent on domestic timber production would face difficulty;
- unemployment rising in troubled processing plants or major forest regions, at least in the short run;
- more exports of furniture and other labour-intensive wood products
- growing mass tourism after WTO would increase pressure on the biodiversity and its related forest ecosystems in China [57].

4.2 Reduction of non-tariff measures (NTMs)

A focus of the new WTO work programme will be the reduction of NTMs, which include environmental regulations and measures necessary to ensure sustainable forest management practices. As will be seen below, many NTMs are valuable tools for achieving the conservation and sustainable use of forests. Thus, the reduction of NTMs may be more harmful to forests than tariff reductions [58].

Most importers and exporters of timber products have various measures in place that regulate timber harvesting, processing and trading. A preliminary overview identified more than 200 such measures implemented by the main timber trading countries [59]. The consequences of NTM reduction on forests are difficult to assess because so far there is no comprehensive global overview of current NTMs. The exact amount of NTMs currently in existence is almost impossible to determine because often they are not only directly related to forest products, but also to the production of timber [60]. Because no common definition of NTMs exists and subsequently it is not entirely clear which NTMs constitute non-tariff barriers in the WTO context.

In general, NTMs can be described as

government laws, regulations, policies and or practices which either protect domestically produced products from full weight of foreign competition or artificially stimulate exports of particular domestic products [61].

Typical NTMs are:

- Quantitative restrictions on imports/exports (e.g. bans on export/import of raw logs)
- Labelling requirements
- Tax incentives
- Government procurement policies and recycling requirements
- Environmental regulations addressing reforestation
- Sanitary and phytosanitary standards regarding pest control
- Health standards related to the use or consumption of timber products
- Reforestation or afforestation requirements.

A number of specific NTMs were identified in a study produced by APEC, including:

• Export development grants to small and medium sized firms to assist with development of new markets in Australia;

- Reduction in import duty and value-added and income tax reductions for products manufactured for export in Indonesia;
- Government funded investment programme to develop and protect new forest lands and a loan programme to assist forest related industries in Korea;
- Tax and duty concessions, along with soft loans for export focused industry development for all manufactured wood products in Malaysia;
- Export credit guarantee programmes to encourage exports to buyers in countries where credit is necessary to maintain or increase sales of American products.

Indeed, most NTMs in the forestry sector address economic and social concerns of the timber industry. Nonetheless, the APEC study concludes that:

To date, environmentally motivated NTMs and other environmental measures are not having a significant effect on trade. However, the uncertainty the have created remains a threat to the global trading system because the interface between trade, development and the environment will continue to be contentious [62].

This statement reveals the underlying bias of the APEC study, that the impacts of NTMs on the trading system is what matters most, rather than the impacts on forests. In addition, the treatment of the impact of environmentally motivated NTMs is both exaggerated and inconsistent, considering that the large majority of NTMs listed in the APEC study have economic or trade protectionist origins. Thus, even on the basis of this study, the threat to the multilateral trading system originates from vested economic interests, rather than environmental provisions.

Typical environmental NTMs address forest conservation in the form of timber certification and sustainable forest management practices. Despite the fact that environmental NTMs constitute only a fraction of NTMs in the forestry sector - according to the APEC study - their trade impacts have been intensely discussed ever since Austria and the Netherlands started national initiatives in the 1980s to ban the import of tropical timber unless it was certified as being sustainably harvested [63]. These initiatives were withdrawn after exporters of tropical timber, namely Indonesia, threatened to challenge these measures in GATT.

Some environmental NTMs listed in the APEC study include:

• Australia restricted the use of tropical hardwood and gave government procurement only to certified wood products in the context of the Olympics in the year 2000 in Sydney;

- Japan has a marketing scheme for all products under the Japanese "Eco Mark and Forest Certification" schemes;
- Thailand subsidised the planting of up to 800.000 ha of community forests while celebrating the golden jubilee of the King's accession to the throne;
- the USA established the Green Seal for paper products according to FSC certification requirements.

The actual environmental impacts of the proposed NTM reduction depend to a great extent on the particular national and international policy framework.

Another consequence of reducing NTMs will be a lowering of potential controls on illegal trade. Lessons can be drawn from the experiences of Indonesia, where export bans of logs in order to promote domestic processing were later replaced by high export taxes. One consequence was that logging companies without manufacturing facilities logged even more to compensate the financial losses. Moreover, the illegal logging expanded considerably [64]. Environmental policy measures tackling illegal logging and illegal trade of timber have to be initiated by exporting and importing countries. Both parties need to have legal provision clearly defining illegal logging and illegal trade otherwise export or import restrictions run the risk of violating WTO rules [65].

Another important concern in the context of the reduction or the abolishment of phytosanitary NTMs is the danger of increasing plant diseases or the invasion alien species. Imported forest products can introduce species that are alien to the import country and destabilise ecosystems and threaten native biological diversity. For example in 1981, the European gypsy moth reached the US through imported European wood products, apparently causing damage of estimated at US\$ 746 m as a result of destroyed American pine trees [66].

Prior to the WTO Ministerial Conference in Seattle, the EU Commission initiated a preliminary sustainable impact assessment of a new WTO trade round. Its projection of a liberalisation scenario, based on the assumption of the elimination of all forms of domestic support measures and export subsidies, was that liberalisation would lead to economic gains and environmental losses in the forest sector, if environmental rules are not applied sufficiently [67]. Hence, if governments do not have effective forest management policies that are actually implemented, it is highly likely that further liberalisation will lead to further depletion of forests. In addition to the environmental consequences, the medium and long-term negative economic consequences arising out of this forest destruction is consistently overlooked by many politicians and industry representatives.

4.3 Agriculture liberalisation

A key item on the current agenda of the WTO is agriculture liberalisation. The relationship between agriculture policy and deforestation is both important and complex. The ultimate objective should be achieving diverse and plentiful agricultural production in a manner that is supportive of its surrounding biological resources, including forests. Current trade rules hinder the achievement of this objective, as do other factors, such as land tenure patterns and lack of protection of indigenous and local knowledge. If these factors combine to create a situation that encourages agriculture land expansion in the absence of an overall sustainable land use policy, then deforestation almost always follows. In addition, agriculture practices harm biological diversity through the use of pesticides and dangerous genetically modified organisms.

The WTO Agreement on Agriculture (AoA) was one of the most difficult instruments to negotiate during the Uruguay Round and remains one of the most complex. It derogates from many WTO trade-liberalising principles, but seeks to move progressively towards a market-oriented agricultural trading system and creates a reform process with this objective. However, it currently allows for some government subsidy of agricultural activities, which may include practices harmful to agricultural or other biodiversity. As such, this Agreement may run counter to Article 11 of the CBD, which calls on parties to adopt incentive measures to support conservation and sustainable use. Article 20 of the AoA requires negotiation on the reform of the Agreement, mainly towards liberalisation (i.e. progressive reductions to agriculture support), but also with a view to taking account of "non-trade concerns", including environmental protection. Although the negotiations have been launched at the beginning of 2000 it is difficult to judge their impacts on forests. They have only just entered the negotiations in substance [68]. So far, however, a proper balance between environmental and agricultural concerns has been elusive.

At present, the current trade rules on agriculture do not sufficiently support biological diversity, including forests, and moves to increase liberalisation may make matters worse. There are two main impacts of the current WTO rules that threaten forests: (a) the presence of subsidies that support agricultural practices harmful to biological diversity and increase the value of agricultural land as compared to forest land, and (b) the liberalisation of agriculture products that can depress prices and thereby increase pressure to use agriculture land more intensively. In addition, since the AoA does not specifically prohibit dumping of agriculture products, this practice continues, causing more intense agriculture in developing countries trying to compete. The Doha Declaration refined the mandate for negotiations on agricultural policy reform, confirming that "non-trade concerns" will be taken into account.

However, given the high-level controversy over these issues, it is unclear whether any substantive consensus can be reached.

Box 10: Agricultural liberalisation, development aid and the destruction of forests

The case below is a clear illustration of the effects of intensive agricultural production carried out without heed to the requirements of sustainable development. These adverse effects will become aggravated if the reduction in tariffs expected in the course of the current negotiations on the WTO's revised agriculture agreement lead to increasing demand for soybeans.

The German Investment and Development Company, DEG [69], on 13 March 2001 announced that together with the Dutch Rabobank it was supporting a project by the Brazilian Maggi group to extend soybean cultivation in the Brazilian state of Mato Grosso. DEG and Rabobank are together guaranteeing a loan of over 12 million dollars, thus financing half Maggi's investment plans, which include building new silos for storing soybeans. This money will also be used to make business loans available to farmers who grow soybeans [70]. The first half of the money pledged was paid out in December 2000 [71]. The loan is being heavily criticised by German and Brazilian environmental organisations because it has adverse effects on social structures, land use patterns, the habitats of indigenous peoples, the Cerrado and the rainforest.

The loan is being received by Sementes Maggi, a wholly-owned subsidiary of the Maggi corporation. This Maggi corporation is a Brazilian company, not the Nestlé corporation's Maggi company. Maggi has 13 companies and is regarded as one of the biggest soybean producers in the world today. The other half of the loan is used in going to farmers so that they can buy seed and fertiliser.

The cultivation of soybeans has been increasing continuously in Brazil for decades. In the year 2000 Brazil produced 32.7 million tonnes of soybeans - a fifth of the world's production. Soybeans have become a tenth of the total volume of Brazilian exports, and their cultivation is therefore heavily supported by the government. Support for cultivating soybeans is in conflict with the long declared, but never consistently implemented goal of agricultural reform to distribute land fairly and create employment. The boom in soybeans is aggravating social problems instead of solving them.

Impacts on habitats of indigenous people: In opening up new soybean regions hardly any consideration is taken of the indigenous peoples living there. One example of this is the Xingu reservation on the border between the Cerrado and the rainforest in the state of Mato Grosso, east of Sorriso, which has now been left as an island of original vegetation in the middle of farming areas. The people of the Waura tribe there complain of health problems due to contamination of water as a result of intensive farming in the upper reaches of a river. The DEG project will despite this open up new land in the Sorriso region.

Box 10 (continuation): Agricultural liberalisation

Impacts on land use patterns and the Cerrado: From 1990 to 2000 the area cultivated with soybeans in Brazil increased by 2.1 million hectares. This was not only at the expense of other arable crops, new land was also opened up. On being asked DEG said that while hardly any new land was being opened up for soybeans in the area around Brasnorte with the business loans, 30-40% of the soybean areas in the Sorriso region involved new land being opened up. DEG itself concedes that "acquiring new land in Mato Grosso is a sensitive issue" and in a press release points out that "the area for the silos and the land which supplying farmers are newly cultivating are, however, outside the tropical rainforest and the protected marshland of the Panatal." Apparently only these areas are thought worth preserving. While the locations for the new silos, in Brasnorte and Sorriso, are near the boundaries with the rainforest, they still count as part of the Cerrado. The Cerrado is savannah in which sparse groups of trees alternate between grass corridors, and is the savannah richest in species in the This means that in the Cerrado, too, clearing areas destroys a natural world. landscape of special conservation value.

Impacts on the rainforest: Although the silos and soybean fields in the DEG project are in the Cerrado, the rainforest is also affected by the project because the destruction caused by growing soybeans is not confined to those areas directly converted into farmland. What makes cultivating soybeans particularly problematic in Brazil is the fact that it requires and creates a huge expansion in infrastructure. Damage caused directly by farming is increased by the investment in infrastructure which then has to be made. Before new fields are set down in the hinterland transport routes enabling the harvest to be taken away have to be constructed so that the soybeans are able to be taken to ports for export as cheaply as possible. In Brazil tracks are therefore beaten through the rainforest, and several river systems developed to become waterways, some of which are supposed to be navigable even for ocean-going ships. Once these transport routes are built, areas along them which are so far undeveloped will also become attractive for growing soybeans, and for logging and mining minerals. In addition the risk of forest fires will increase there [72].

The actual impact of agriculture liberalisation on forests will depend on how the reductions of subsidies and the abolishment of NTMs will affect the world market prices of the agriculture product in question. For example, if the prices are high enough, incentives will be created for a country to increase exports, thereby possibly converting more forest areas into agricultural production. Another important factor are government subsidies for deforestation either to provide the landless population with land or to promote the cultivation of export crops. Finally, the impacts of agriculture liberalisation will depend on substitution effects, i.e. to what extent the market developments will lead to a shift in agricultural export commodities. Adverse impacts on forests are likely to occur in commodities such as beef, soy, and palm and other vegetable oils

where tariffs are currently relatively high in developed countries. The increased expansion of palm oil plantations "is currently one of the main causes of forest loss, particularly in Indonesia and Malaysia, and increasingly in Latin America and Central Africa" [73].

4.4 Investment liberalisation

Investment liberalisation is one of the most controversial issues in the WTO. Proponents of a new agreement on investment in the WTO (e.g. the European Union) achieved a partial victory at Doha, in that a decision to commence negotiations on such agreement may be taken after the next Ministerial Conference [74]. Unfortunately, the issues of concern that WTO members are to consider until then do not include the environment.

The current Agreement on Trade-Related Aspects of Investment Measures (TRIMs) contains some rudimentary investment provisions. The hope of the EU, Japan and others, is for more far reaching investment provisions to be agreed. However, unless the needs of investors are properly balanced against the need to conserve and sustainably use forests, there is a very real risk that investment liberalisation will lead to enhanced forest destruction.

Box 11: Investment - International groups call on German bank to suspend project loan to protect critically endangered species

(Los Angeles, CA, 27 November 2001) Ecuador's new heavy crude pipeline project fails to meet the minimal environmental standards established by the World Bank's environmental policies and guidelines, according to a report released this week by Amazon Watch.

The report which was written by the former head of World Wildlife Fund - Bolivia, was submitted to Westdeutsche Landesbank (WestLB), the lead arranger of the \$900 million syndicated pipeline loan as well as to the Parliament of the German State of North Rhine Westphalia (NWR) - 43 percent stakeholder in WestLB.

In public statements WestLB has repeatedly said, "a prerequisite for any financial involvement of WestLB in the project is that the project sponsors adhere to the environmental standards set by the World Bank."

The report details how the Project including its Environmental Impact Study and the Environmental Management Plan, fail to adhere to World Bank operational policies and guidelines, in particular the "Natural Habitat" Policy (OP 4.04) and the Environmental Assessment Policy" (OP 4.01).

Box 11 (continuation): Investment

"Given the findings of this report and WestLB's stated environmental policy, we are urging the Bank and the Parliament of NWR to conduct more thorough due diligence and to suspend the OCP loan at once," said Atossa Soltani, spokesperson for Amazon Watch.

The controversy over WestLB's role in the project has been the subject of heated debates in the Parliament of NWR. Yesterday, the parliamentary committee handling foreign development issues met to receive a report on the pipeline controversy from the state Environment and Finance Ministries. The committee criticized the Bank's handling of the project and scheduled a public hearing on the matter for January 14 in Dusseldorf.

A joint letter from more than 30 Ecuadorian and international NGOs including Greenpeace, Environmental Defense, and Friends of the Earth International, accompanied the Amazon Watch report. The letter's signatories called for immediate suspension of the loan given that construction crews have begun clearing sensitive ecosystems.

According to environmental observers in Ecuador, the pipeline is threatening critically endangered species and ecosystems in the Mindo Nambillo area. Local eyewitnesses report that in the Serra de Loma region, a catastrophic hillside fire adjacent to the right of way occurred last week during the construction of an access road for the pressure reduction station. This fire destroyed a significant portion of one of only five remaining habitats for the critically endangered hummingbird, the Zamarrito Pechinegro (the Black Breasted Puffleg). Less than 200 pairs of this bird remain in the wild. More than 46 endangered species are found in the Mindo area alone. The arrival of construction crews there has provoked protests and blockades and led to frequent interruption of construction works. Protests have also been held at WestLB offices in more than 10 countries. Last week, Greenpeace Germany held a demonstration in front of WestLB's headquarters in Dusseldorf capturing press headlines in Europe.

The 300-mile OCP pipeline would extend from the Ecuadorian Amazon to the Pacific Coast and would allow Ecuador to double its oil production in the Amazon. To fill the pipeline, the Ecuadorian government is permitting oil drilling to expand to several national parks and indigenous lands. Groups are calling on WestLB to suspend the loan until it can independently ensure that there are sufficient operating procedures and mitigation measures to address both the immediate and the long-term negative impacts of the pipeline and the associated drilling [75].

4.4.1 The NAFTA experience

Experience under NAFTA reveals how investment disciplines will impact an environmental agenda aimed at ensuring forest conservation and biodiversity protection. NAFTA investment rules impose broad constraints on the capacity of governments to adopt or maintain "measures" relating to investors of another NAFTA party and their investments. Measures are defined by NAFTA to

include "any law, regulation, procedure, requirement or practice." Investment is also very broadly defined to include virtually any equity, debt or contractual interest in a corporation doing business in Canada or other NAFTA country. NAFTA investment disciplines also apply fully to provincial and local governments subject to a few limited exceptions. However, even then governments must comply with several of the more onerous obligations established by NAFTA investment rules.

"minimum treatment". These include rules concerning standard of "expropriation and compensation" and "dispute settlement". The most pernicious feature of NAFTA investment disciplines is the extraordinary right it accords foreign investors to sue national governments for any alleged breach of the expansive and broadly-worded investor rights they are granted by this trade agreement. These disputes are then decided, not by a nation's courts or its judges, but by international arbitration panels operating under the auspices of institutions such as the World Bank [76]. Moreover, tribunals operate, not in accordance with domestic legal principles and procedures, but under international law and according to procedures established for resolving international commercial disputes [77]. In many ways these procedures are antithetical to the principles of open, participatory and accountable judicial procedures that are the hallmarks of every democratic society. For example, the arbitration rules that apply to such disputes provide:

The deliberations of the Tribunal shall take place in private and remain secret.

Moreover, the secrecy of these international arbitral processes is often described as one of its most attractive features for the business community [78]. It bears emphasis that investor-state enforcement represents a truly radical departure from the norms of international law in two key ways:

- by providing corporations with the right to directly enforce an international treaty to which they are not parties and under which they have no obligations; and,
- by extending international commercial arbitration procedures to claims that have no foundation in contract, and which may only obliquely be considered commercial in character.

NAFTA investment rules have now invoked to challenge environmental law and regulation in all three NAFTA jurisdictions. In at least three of these cases the challenges have succeeded.

The first case was on Parks, Protected Areas and Other Impediments to Foreign Investment. Very recently the British Columbia Supreme Court had the opportunity to review one of these arbitral awards in a case involving a U.S. hazardous waste company, Metalclad Inc. and Mexico. The case provides the best evidence to date of how destructive this investment regime is likely to be for the policies and laws that are needed to protect forests.

The tribunal that decided the Metalclad claim against Mexico ruled that a local municipality had no right to deny the company a permit to build a hazardous waste facility because of environmental and public health concerns, or because the company had built much of its project before applying for a local construction permit. The tribunal objected to a decision by the state government to establish an ecological preserve that included the company's site. In its view, this also represented an expropriation of Metalclad's investment under NAFTA rules.

Mexico's appeal to the British Columbia Supreme Court presented the first opportunity for a court of any NAFTA jurisdiction to consider an award made under NAFTA investment rules. While the judge had some critical things to say about the way the tribunal went about its work, he ultimately found that by creating an ecological preserve, the State government had indeed expropriated the company's investment in a hazardous waste dump it built even without local approval. Mexico would have to pay the company more than \$ 15 million US in damages for allowing its state government to behave in a manner inconsistent with its obligations under NAFTA.

This is how the judge described the tribunal's view of NAFTA's expropriation provision:

<u>The Tribunal gave an extremely broad definition of expropriation</u> for the purposes of Article 1110. In addition to the more conventional notion of expropriation involving a taking of property, the Tribunal held that <u>expropriation under the NAFTA includes covert or incidental</u> <u>interference with the use of property</u> which has the effect of depriving the owner, in whole or in significant part, of the use of reasonably to be expected economic benefit of property. <u>This</u> <u>definition is sufficiently broad to include a legitimate rezoning by a</u> <u>municipality or other zoning authority</u>. <u>However the definition of</u> <u>expropriation is a question of law with which this Court is not entitled</u> <u>to interfere</u> under the International Commercial Arbitration Act [emphasis added].

The Metalclad case is particularly important for two reasons. First, it demonstrates the enormous breadth of NAFTA's expropriation rule. Second, it shows the wide latitude international arbitral tribunals will be allowed to interpret NAFTA investment disciplines as they see fit. As the law now stands, all three NAFTA nations, Canada, Mexico and the United States, are vulnerable

to similar claims for taking measures that would never be considered acts of expropriation under their domestic laws.

Beyond the obvious implications of this award for governments seeking to create parks, wilderness or other protected areas, there are few environmental regulations that would not fall within the sweeping definition of expropriation that has now been accepted by Canadian courts.

The second case relates to habitat protection as expropriation. For example, consider the impact of this constraint on environmental and planning objectives for forestland. Whether it is for the purpose of preserving salmon habitat or to protect endangered species, the imposition of habitat protection measures can have significant impacts on the use of land subject to such protective measures.

For example, stream habitat protection measures can substantially limit the extent and character of forest harvesting activities. Similarly, land use bylaws, agricultural land protection, parks creation, and other initiatives can impact development activity, whether occurring in remote or urban areas of the province.

By limiting the uses to which land may be put, the imposition of habitat protection measures can significantly reduce the development value of property or the profitability of harvesting licenses or other permits. But, under the NAFTA expropriation rules, any government action that even indirectly interferes with the profitability of an investment may justify a claim for damages and compensation. Nor are there any exceptions to this prohibition against such government actions. While such measures are permitted when taken for legitimate public purposes, in every instance full compensation must be promptly paid to any foreign investor and for the full market value of any investment "expropriated". This is true no matter how compelling the public policy rationale for infringing investor rights.

It is beyond the scope of this assessment to consider the full implications of this and other foreign investor rights on government policy and law concerning forests but among the conflicts that are readily apparent are the following:

- preferential treatment for community forest tenures, or First Nations entitlements would offend NAFTA National Treatment obligations that preclude discrimination against foreign investors;
- NAFTA Performance Requirements rule prohibits any government measure that would require investment in value added production as a condition to a forest or woodlot license, moreover raw log export controls would also offend this rule; and,

• the broad requirement that foreign investors be accorded a Minimum Standard of Treatment has been given such an expansive reading that its reach may even be broader than NAFTA's expropriation rule.

Even this brief overview underscores just how profoundly adverse the impacts of NAFTA investment disciplines will be for a sustainability agenda for forests. Moreover, it would be difficult to overstate the significance of allowing foreign corporations to enforce these disciplines directly.

Further investment liberalisation in the WTO should be opposed, in that it would introduce the Multilateral Agreement on Investment (MAI) agreement in the WTO through the backdoor after OECD members failed to agree to it because of the widespread and significant social and environmental implications [79]. The MAI was based on a very broad definition of investment. Unilateral governmental regulations addressing public goods like a specific level of environmental protection could have been potentially MAI incompatible if they impeded foreign direct investment. The MAI was an attempt to apply liberalisation principles to the investment context, without allowing sufficient safeguards for non-commercial interests. The MAI's main conceptual failure was that it did not balance investor rights against the pursuit of public goods. It would have created a situation where governments would have refrained from implementing strict environmental regulations out of fear of triggering lengthy and costly conflicts with investors or driving investors out of the country. The potential impacts can be observed in NAFTA (see above).

After a concerted campaign by environmental and developmental NGOs, the MAI was placed on a slower negotiation track. In 1998, the MAI initiative was abandoned after France withdrew, fearing that its cultural industries could become foreign dominated. In addition, Germany had decided to seek social and ecological guarantees.

The WTO decision in Indonesia - Certain Measures Affecting the Automobile Industry is a worrying example of how even the relatively mild investment rules in the WTO TRIMS Agreement can impact on national development priorities [80]. In that case, a tax credit aimed at encouraging local manufacturing was held to be inconsistent with Article 2.1 of the TRIMS Agreement. That provision requires the application of the GATT "national treatment" principle, such that encouraging local industry is not permitted. What is particularly striking is that the measure at issue in that case did not even require any specific action, but was an incentive for voluntary pursuit of a national objective.

Environmentalists should also be concerned about the implications of liberalised investment on standards established under MEAs. Until the international legal rules governing the relationship between MEAs and the WTO are clarified in a

manner that provides legal security to MEAs, liberalised investment might interfere with the full application of the CBD and the UNFCCC.

Finally, these problems are bound to increase once the trade in forestry products will be liberalised on a global scale. The reduction of phytosanitary measures and technical requirements aimed at sustainable forest management, in combination with a liberalised investment regime that caters especially for transnational companies, makes it very difficult for countries to have effective environmental forestry standards. Indeed, in the context of increased competition, and greater ease in relocating capital, countries will be loathe to unilaterally develop high standards for forest conservation.

4.5 Services liberalisation

The liberalisation of services risks impacting severely on national policies aimed at the conservation of forests. This is because such measures may not be considered as legitimate exemptions under the General Agreement on Trade in Services (GATS), during the process of liberalising services affecting forests. There is still insufficient experience and information as to the extent to which services liberalisation will impact on the conservation and sustainable use of forests. But the very broad scope of the GATS Agreement, combined with the risk that regulatory measures may be considered unacceptable barriers to trade, is reason for concern.

Similar to the agricultural sector the negotiations on liberalising trade in services started in the year 2000 as part of the WTO's built-in agenda. Services were first included in the GATT/WTO framework during the Uruguay Round with the conclusion of the Agreement on the Trade in Services (GATS). GATS is unique in the sense that it prescribes the general rules for liberalising trade of potentially all services in all sectors. The result is that the GATS represents an ambitious program to expand the application of international trade disciplines to a vast array of domestic policy, programs and laws that may have very little, and often nothing do, with international trade at all, although it is primarily directed at international trade in services. But to achieve the goal of comprehensive coverage, many GATS disciplines apply to government measures concerning services whether these are trade related or not.

One indication of how wide in scope the GATS is can be seen in the definition of the term "measure", to include any measure by a member, whether in the form of a law, regulation, rule, procedure, decision, administrative action, or any other form. By focusing on government "measures", the GATS ends up listing of actions which governments can no longer take to regulate in the public interest.

Thus under the GATS, trade in services is defined to include the supply of a service in any one of four modes of delivery:

- 1 cross border supply (mode 1: from the territory of one member into the territory of any other member);
- 2 to consumers abroad (mode 2: in the territory of one member to the service consumer of any other member);
- 3 by establishing a domestic commercial presence (mode 3: by a service supplier of one member through commercial presence in the territory of any other member); and,
- 4 through the presence of natural persons (mode 4: by a service supplier of one member, through presence of natural persons of a member in the territory of any other member).

GATS disciplines apply only to those services that members specifically and voluntarily submit. This is accomplished through a process of listing a service to country specific schedules which delineate the precise extent to which GATS obligations will be observed with respect to that particular service sector. To cope with the vast amount of professional services, WTO members follow a so-called "request and offer" approach where WTO members ask from or offer to other members certain liberalisation steps regarding specific services in all sectors. The negotiations entered this concrete phase in early summer of 2001.

With this broad approach to liberalisation of trade in services, the GATS captures broad spheres of domestic policy, programs and law that may have little if anything to do with international trade in services per se. Moreover the right to establish a commercial presence is largely an investment measure. These points are fundamental to understanding the relevance of the GATS to forest management policy and law.

All direct government services like the provision of security or public health care and related standards are exempted from GATS disciplines according to Art. VI on Domestic Regulation. However, services that are "outsourced" and administered by quasi-governmental or privatised entities are subject to GATS. Since more and more governments privatise public services they become subject to international competition once the sector is liberalised. This affects the implementation and monitoring of national measures and professional or technical standards in all sectors addressing quality and safety aspects. They can become barriers to trade in services when foreign providers have to comply with additional requirements and procedures in order to comply with technical and quality control standards.

Box 12: Liberalisation of Forest Services in Canada

A review of Canada's schedule reveals one forest specific reference - and this is to Services incidental to forestry and logging, including forest management. A review of complex service sector classifications reveals that no less than 53 different services are grouped under this heading including: Chipping logs (except in the forest) and chipping logs (in the forest) Construction and forestry machinery and equipment, wholesale agents and brokers Cutting cordwood, in the forest Fire inspection, forest fire prevention, Fire-fighting Forest conservation services Forest education programs for children Forest land leasing Forest management and Forestry services Forest nurseries Forest products trucking, long-distance Forest protection services Forestry equipment Forestry machinery and equipment repair Forestry maintenance Forestry nursery service, Nurseries for reforestation and growing trees Forestry school - and - Forest rangers' school Log chipping (in the forest) Log cutting (forest trees) Pest control services Pulp chips - and wood chips produced in the forest **Reforestation services** Tree planting Wholesale Forest products trucking, local Wholesale Forestry supplies.

Box 12 (continuation): Liberalisation of Forest Services

Moreover each of these subclassifications has its own subcategories. For example a search of services indexes using logging as the key word also reveals an expansive list of services. These include:

Contract logging

Contract timber felling

Contractor, log, salvage

Custom logging, contractor

Felling trees (logging)

General logging contracting

Log booming

Log yarding

Logging contractor (felling, cutting, bucking)

Logging industry (except contract logging)

Logging, pulpwood logs

Pulpwood logs, cutting

Veneer logs, logging

What these schedules reveal, is that when it comes to services that relate to activities on forest land, Canada has made extensive and virtually unqualified commitments to liberalise everything from logging, trucking, and silviculture to class room education about its forests. Furthermore, under the headings 'tourism' and 'construction' everything from ecotourism to logging road construction is also covered.

Apart from a general exception that allows Canada to review large-scale foreign buyouts of Canadian forest companies, the only reservations of particular relevance to this extensive list of commitments are for agreements of the Canadian government with aboriginal people and the Province of Quebec.

A key problem is that GATS has not yet defined the WTO or GATS-compatible procedures for establishing quality control measures according to public policy goals. The relevant GATS Art. VI, 4 states the following:

With a view to ensuring that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services, the Council for Trade in Services shall, through appropriate bodies it may establish, develop any necessary disciplines. Such disciplines shall aim to ensure that such requirements are, inter alia:

(a) based on objective and transparent criteria, such as competence and the ability to supply the service;

- (b) not more burdensome than necessary to ensure the quality of the service;
- (c) in the case of licensing procedures, not in themselves a restriction on the supply of the service.

For environmental policy and law the most important GATS provision is the one concerning Domestic Regulation, which establishes a number of onerous tests that any environmental regulatory initiative must pass, including the requirements that:

- it must have been made in a reasonable, objective and impartial manner;
- it must have been rendered within a reasonable period of time;
- it must be necessary;
- it must have been based on objective and transparent criteria;
- it must be no more burdensome than necessary to ensure the quality of the service;
- licensing procedures not restrict the supply of the service; and,
- it must have taken into account relevant international standards.

As in GATT Art XX, the GATS prescribes the necessity text in Article XIV (b) without referring explicitly to the protection of the environment. It states the following:

General Exceptions:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures:

(...)

b) necessary to protect human, animal or plant life or health.

Conversely a government seeking to defend an environmental measure will have to demonstrate:

- 1 that it canvassed every conceivable way in which it might, for example, improve air quality in a polluted urban environment;
- 2 that it subjected each to an assessment of its impacts on international trade in both goods and services; and
- 3 that putting other considerations aside, it opted for the approach that was least restrictive of that international trade.

Anyone familiar with the process of developing environmental policy and law even assuming the availability of unlimited resources to do so - will immediately recognise the difficulties that these requirements pose for countries. They are almost impossible to fulfil because trade law is oblivious to the competing economic and political pressures which inevitably make the legislative process a matter of compromise that can not always take the requirement of "least trade restrictiveness" into account.

Current proposals in the energy, gas/oil mining, tourism and environmental services sectors are likely to affect forests. Their environmental impact depends on the extent WTO members are successful in defining provisions requiring the use of technologies and measures to achieve environmental and conservation goals or sustainable development. Some proposals (e.g. USA and Venezuela on liberalisation of energy services, Canada and Switzerland on tourism) mention these concerns in a very general manner, by asking that reduction measures not run counter environmental policy goals or sustainable development.

This brief overview of the services sector shows that the GATS potentially threatens forest conservation by its broad sectoral approach. It might yet be the case that the environmental impacts of the services liberalisation will be less harmful to the environment than WTO rules in other sectors. However, given past experience with how the WTO dispute settlement system interprets WTO rules, it is questionable whether environmental policy measures will be given their due deference. So far, there is little clear guidance to countries on how to ensure their desired level of environmental protection in the services sector does not violate WTO rules. On the contrary, these unclear provisions contribute to potentially chilling innovative and efficient environmental policies. The Doha Declaration affirms the call in the Ministerial Decision of 1994 on Trade in Services and Environment [81] for a clarification of the relationship between GATS and the environment, which has not yet been forthcoming [82].

5 What the WTO and its members should be focusing on instead

Instead of following an unsustainable and environmentally dangerous approach to trade liberalisation, the WTO should be striving to make trade supportive of sustainable development, and to eliminate cases where this does not yet happen. This requires the co-ordination of initiatives on different levels of decision-making inside and outside the WTO. And it involves undertaking assessments and creating incentives for forest conservation and sustainable use.

Secondly, sustainability will not be assured until WTO decision-making procedures become more transparent. Developing countries must be granted full access to all negotiations, and the WTO should accept international practice of allowing in NGO observers.

WTO members need to broaden their approach to trade liberalisation taking into account the social and environmental impacts. That implies that a balance between trade liberalisation and social and environmental goals cannot be found with a perspective that values monetary benefits higher than social or environmental interests of civil society. On a more general level this also implies that trade liberalisation can no longer be regarded simply as deregulation in the sense that national rules - supposedly constituting barriers to trade - are to be abandoned. In the context of sustainable development trade liberalisation is now a question of re-regulation trying to find an equitable balance between economic, social and environmental goals. This means that the economically most feasible or least trade restrictive solutions would not necessarily be the only ones that is WTO compatible, especially if the potential aggregate social or environmental costs are higher than the economic benefits.

The WTO needs to ensure that trade supports sustainable forest management. This entails the improvement of market access for products from sustainably managed forests and the promotion of sustainably produced non-timber products, particularly from local communities. It also requires that the WTO members accept forest certification and labelling as legitimate instruments. The TBT Agreement should be clarified so as to not apply disciplines on the instruments aimed at non-product related PPMs or should recognise FSC or similar schemes as international standards.

The WTO needs to make sure that its rules do not exacerbate the underlying causes of deforestation (e.g. through agriculture, reduction of environmental NTMs or investment policies). WTO members need to gear further liberalisation to the results of sustainability impact assessments. The analysis above identified some of the trade measures that have environmental effects. These measures and effects can be used to develop sound methodologies for assessing the impacts of trade liberalisation on forests and for identifying the appropriate flanking measures to ensure that forests are conserved and sustainably managed.

WTO members could consider creating a "forest box", analogous to the suggested "development" exemptions to the Agreement on Agriculture. A "forest box" would define WTO compatible measures affecting trade in order to protect forests. It could contain:

- a list of measures that meet the GATT article XX test,
- rules allowing product-related governmental measures that support sustainable forest management, and
- governmental measures that support small producers and forest communities following sustainable forest management requirements and producing non-timber products.

In addition, measures that address the prevention of illegal logging, illegal trade and the monitoring of forest management despite trade-impeding effects might be included.

Finally, WTO members must co-ordinate their initiatives within the WTO with initiatives in other international fora addressing forests and sustainability issues, to prevent conflicts between WTO rules and those of MEAs. This should be part of a broader approach to link forest conservation, trade liberalisation, and bilateral and international development aid programmes, as well as with the structural adjustment policies of the World Bank and International Monetary Fund.

6 What other international institutions should be doing to ensure that trade supports sustainable forest management

In addition to action in the WTO, the international community should optimise the other options available at the global level to ensure that trade supports sustainable forest management. This section will list existing proposals and develop additional suggestions regarding the role of other international institutions.

6.1 Multilateral Environmental Agreements should exercise full control over the trade-related aspects of their mandates

As indicated above, several multilateral environmental agreements cover trade policy in the context of forest conservation and sustainable use. The most important of these are: the Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the UN Framework Convention on Climate Change (UNFCCC) [83].

6.1.1 Convention on Biological Diversity (CBD)

CBD is a comprehensive instrument aimed at ensuring (a) the conservation of biological diversity, (b) the sustainable use of its components, and (c) the fair and equitable sharing of benefits arising out of access to genetic resources [84].

The text of the CBD does not contain the word "trade", however full implementation of a number of its obligations, and of its COP decisions, require actions related to trade policy. This is due to the Convention's comprehensive approach to achieving its objectives of conserving biological diversity, sustainably using the components of biological diversity, and equitably sharing the benefits arising out of access to genetic resources. Trade is an important, and sometimes the most important aspect of sustainable use. Provisions of the CBD that are relevant to trade include:

- Article 7 on monitoring and identification;
- Article 8(a), 8(b) on protected areas;

- Article 8(c), 8(d) on management of biological resources and the protection of ecosystems, habitats and species;
- Article 8(e) on the development of areas adjacent ot protected areas;
- Article 8(h) on invasive species;
- Article 8(j) on traditional knowledge;
- Article 10(b) using biological resources to avoid adverse impacts on biodiversity;
- Article 10(c) on customary use of biological resources;
- Article 11 on incentive measures;
- Article 14 on impact assessment.

At its 5th meeting, in 2000, the Conference of the Parties (COP) of the CBD, adopted the ecosystem approach to the implementation of the Convention. The ecosystem approach is a decision-making tool with 12 principles and 5 operational guidelines that is a comprehensive strategy for the integrated management of land, water and living resources. This ecosystem approach includes economic and thus trade aspects in its framework for decision-making. It specifically mentions destructive (perverse) subsidies and incentives and the internalisation of costs and benefits of biodiversity conservation.

Decisions from the perspective of the CBD should be aimed at enhancing those aspects of trade policy that support achieving the Convention's objectives, and controlling those impacts that hinder them. Implementing the Convention will increasingly have consequences for trade policy, considering that the scope of trade policy has expanded tremendously as a result of the Uruguay Round.

The CBD Work Programme on Forests, which was agreed in 1998, calls for research on a whole range of issues, including on further understanding the economic causes of forest biodiversity loss. The next Conference of the Parties, COP-6, in April 2002, will decide on a Work Programme that is to be made more "action oriented". The preparatory Ad hoc Technical Experts Group on Forest Biological Diversity, with experts nominated by governments, made several recommendations on trade and economic failures and distortions that lead to decisions that result in loss of forest biodiversity. The Expert Group found that globalization of trade is a very fundamental and complex underlying cause and that "loss of forest biodiversity cannot be stopped and reversed without addressing the underlying causes of such loss". In order to "mitigate the economic failures and distortions that lead to decisions that result in loss of forest biodiversity", it should be ensured "that national laws and policies and international trade regulations are compatible with conservation and sustainable use of forest biological diversity and promote related economic instruments" [85].

In addition, the CBD has work programmes on traditional knowledge, on incentive measures and sustainable use, all of which will impact on trade policy. The COPs of the CBD have also taken a number of decisions concerning intellectual property rights (IPRs). A key one is Decision III/17 on intellectual property rights calling for case studies on the impacts of intellectual property rights on achieving the CBD's objectives, including the development of sui generis systems or alternative forms of protection that promote achievement of the CBD's objectives.

The CBD faces the dual challenge of fully coming to terms with the trade implications of its scope, as well its applicability to forest biodiversity. Both are continuing processes. Although forests will be at the centre of the agenda for the next meeting of the COP, trade has not yet been considered as a discrete topic, and therefore may be longer in developing. On the other hand, the bases for the CBD's further development in both directions already appear in its decisions.

Thus, the following actions should be pursued in the CBD framework:

- The CBD Work Programme on Forests should implement and expand on the recommendations for action developed by the Ad Hoc Technical Expert In particular, the Work Programme should include provision for Group. increasing knowledge and awareness of the impacts of trade on forests and a structure for developing guidance on addressing any adverse impacts. It should address the issue of subsidies adversely affecting biodiversity. It should provide guidance to countries seeking to incorporate trade policy concerns into national biodiversity plans and strategies and their national forest programmes, so as to regulate those trade-related activities that have an adverse effect on forest biodiversity. Finally, the Work Programme should provide guidance on possible flanking measures to ensure that trade liberalisation does not harm forest biodiversity, and call for carrying out case studies on the application of the ecosystem approach with a focus on the impacts of trade on forests.
- Development of specific recommendations on sui generis mechanisms for the protection of traditional forest-related knowledge.
- Identification of trade-related incentives to enhance SFM and provide guidance on which perverse incentives should be eliminated.

The CBD should continue furthering consensus on the entitlements of traditional and local people arising from their biodiversity-related knowledge, with the aim of ensuring appropriate control and revenues from this knowledge so at to ensure sustainable use of forest biodiversity. The CBD bodies addressing access to genetic resources, in cooperation with the WTO and World Intellectual Property Organization (WIPO), as well as the future Permanent

Forum on Indigenous Peoples, should consider the options available to require patent applicants to disclose genetic resources and knowledge used to develop their inventions (e.g. through a certificate demonstrating prior informed consent of the holder of traditional knowledge, as in the Andean Pact system). In addition, the CBD should confirm that intellectual property rights on life forms is wholly inappropriate.

CBD bodies could provide guidance to governments seeking to use their public procurement policies as positive incentives to conserve and sustainably use forests [86]. The most far-reaching government procurement decisions relating to SFM have come from the United Kingdom. The UK policy is to require, as far as possible, that Government bodies purchase sustainably produced timber, for example by specifying in order and contracts that suppliers must provide documentary evidence that the timber derives from lawful and sustainably managed sources. This documentary evidence may take the form of a certificate issued under a credible, preferably independent, verification scheme or other documents that demonstrate the timber producers are conforming to internationally recognised principles [87]. However, the policy is new and its operation in practice still needs to be reviewed.

6.1.2 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) seeks to ensure that trade does not harm the conservation status of species in trade. This entails prohibiting commercial trade in those species that are endangered and for which trade is detrimental to their survival (CITES Appendix I species). It also entails controlling trade in species that are not yet endangered, but which may become so if trade in them is not controlled (Appendix II). Every export of an Appendix II species must be accompanied by an export permit whereby the scientific and management authorities certify that trade will not be detrimental to the survival of the species. A Party may also individually list their species on Appendix III, with the result that all exports of those species from that Party will be accompanied by an export permit.

To date, some 15 timber or "woody" species have been placed on CITES appendices. Proposals to list endangered tree species, particularly species which are commercially harvested for their timber, have been highly controversial. At COP-9, in 1994, the Parties decided to establish the Timber Working Group (TWG) to address some of the particular controversies surrounding these species. The TWG developed a number of practical recommendations to apply CITES in a manner that corresponds with the realities in the timber trade. At COP-11, in 2000, the terms of reference of the

working group on mahogany were revised so as to include reviewing the effectiveness of Appendix III listing, assessing information management, studying measures to widen the scope of Appendix III listings and matters relating to legal and illegal trade.

The main challenge under CITES is to ensure that timber species that are commercially significant get listed if they meet the scientific criteria. So far, this has not yet been achieved, although a lot could depend on the success of the Mahogany Working Group. This will involve building the confidence of exporters in the ability to CITES to enhance sustainable trade (through Appendix II), which provides greater protection of the species concerned than Appendix III.

Possible actions relating to trade in forest products to be taken in the CITES framework include:

- supporting the Mahogany Working Group process, either financially or in expertise,
- engaging in consensus building activities in range States to address controversies over CITES listings of tree species,
- support independent and credible studies that identify which timber species meet the scientific criteria for CITES listings,
- using CITES mechanisms more assertively to combat illegal trade in listed timber species.

6.1.3 UN Framework Convention on Climate Change (UNFCCC)

The UNFCCC seeks the conservation and sustainable use of forests, because of their ability to act as carbon sinks. Indeed, COP-6, which took place in two parts in 2000 and 2001, affirmed that forests as sinks can be used in the calculation of emissions credits under the Kyoto Protocol.

The UNFCCC and the Kyoto Protocol indirectly address three important trade issues relating to forests. The first relates to investment liberalisation. To operate effectively, the Clean Development Mechanism (CDM) under the Kyoto Protocol - a key instrument that will promote forest conservation and afforestation in developing countries - may entail creating distinctions among foreign investors. These distinctions - e.g. in the amount of emissions credits - will be based on the degree to which the home country of the investor is in compliance with the Protocol. Furthermore, under the Protocol, the host country may legitimately use the CDM to build local capacity, which may involve placing local content requirements on investments.

A further issue relates to liberalisation of the services sector. It is so far unclear whether liberalisation of the transport and energy sectors under GATS will

increase global warming. Prima facie, this is to be expected, as liberalisation will likely feed a growing demand. Therefore, until further information is available, the liberalisation of these services sectors should not occur. The assessment process should not only measure the impacts of liberalisation, but should also identify the conditions and policy context under which liberalisation can occur, in a manner that does further harm the world's climate.

6.2 UN Forum on Forests (UNFF)

In the run-up to the UN Conference on Environment and Development (UNCED), several developed countries attempted to get agreement on negotiating an international convention on forests. This initiative was rejected by many developing countries, and since then, the idea of such a convention has been controversial. Instead, the UN established the Intergovernmental Panel on Forests (IPF) (1995 - 1997), the Intergovernmental Forum on Forests (IFF) (1998- 2000), and most recently, in 2000, the UN Forum on Forests (UNFF). These bodies have been the frameworks for international forest policy discussions, including on trade issues, but where virtually no substantive agreement or progress has occurred.

Given this experience, it cannot be expected that the UNFF will be able to contribute much new substance to trade policy for forest products. It does not have the capacity to be a forum for deciding on major policy issues on trade in forest products. The WTO and multilateral environmental agreements will continue to be the bodies to take those decisions.

At UNFF-1, in 2001, developing countries successfully blocked the wishes of the secretariat and some Northern countries who wanted to place trade prominently on the UNFF agenda. At present, trade issues are mainly to be considered indirectly. In addition, there are several reasons to doubt that the UNFF will be able to effectively address trade policy. Firstly, the International Tropical Timber Organization (ITTO) - which is an organisation that does not successfully balance trade and conservation concerns - tends to be given the lead in the UN on trade and forest. Thus, one cannot expect it to provide the necessary leadership. Secondly, the UNFF tends to be dominated by Ministries of Agriculture, who also tend not to see trade issues from the perspective of conservation. Thirdly, UNFF-1 demonstrated how little consensus on the trade agenda actually exists.

Box 13: IPF proposals for action on trade

Both the IPF and the IFF considered the topic of "trade and environment". Despite being a non-legally binding process, in each case, the discussions on trade were very controversial. Indeed, consensus could not be reached on all proposals, including those relating to the use of unilateral trade measures, a legal agreement on trade in forest products, and on urging further trade liberalisation. Many of the Proposals below are vaguely formulated, with little guidance on how they should be implemented or how such implementation should be measured. Therefore, their impact on ensuring that trade is supportive of SFM is minimal.

The IPF Proposals for Action concerning trade and environment that did achieve consensus can be summarised as follows:

- (a) Improve market access
 - reduce tariff and non-tariff barriers
 - encourage the private sector and forest owners to promote SFM
 - ensure that trade policies take account of community rights
- (b) Improve relative competitiveness of forest products, inter alia, by gathering more information and supporting community-based processing
- (c) Promote use of lesser used species, where consistent with SFM
- (d) Certification and labelling
 - ensure that such schemes are not a disguised restriction on trade
 - enhance the assessment capabilities of developing countries in relation to voluntary certification
 - support such concepts for certification as: open access and nondiscrimination, credibility, non-deceptiveness, cost-effectiveness, participation of all interested parties, SFM, and transparency.
 - carry out further studies on a range of topics, including effectiveness in promoting SFM, relationship between criteria and indicators frameworks and certification, equivalency and mutual recognition, and the role of government.
- (e) Explore ways to establish full cost internalisation for both wood products and non-wood substitutes
- (f) Expand work on market transparency for trade in forest products.

One area, however, where the UNFF can be constructive is in addressing the complex problem of illegal logging and illegal trade in forest products. This is an issue of global dimensions, where only effective dialogue and cooperation between developed, developing countries, and countries in transition will lead to solutions. The UNFF could help leverage further information on the causes and amount of illegal logging, and forge consensus on the measures needed to

combat it. Once there is increased consensus on these measures, the chances of the WTO preventing them from being implemented will diminish.

Box 14: IFF proposals for action on trade

The IFF proposals for action on trade and environment can be summarised as follows:

- (a) contribute to achieving trade in wood and non-wood products and services from sustainably managed forests
- (b) carry out further cooperative work on voluntary certification and labelling, while seeking to enhance international comparability
- (c) carry out analysis of full-cost internalisation
- (d) undertake further work on life-cycle analysis of the environmental impacts of forest products
- (e) improve market transparency
- (f) promote international cooperation to reduce illegal trade in wood and non-wood products.

7 Recommendations

WTO rules and further trade liberalisation envisaged as a result of the Doha Ministerial Conference will threaten forest biodiversity. A major paradigm shift must take place at the WTO, so as to permit measures aimed at conservation and sustainable use of forests, even if such measures distort international trade. International trade is not an end in itself, but rather a means that, properly channelled, can improve human development. Thus, trade must not be given higher priority than internationally accepted values such as sustainable development and environmental conservation. The relative strength of the WTO as an institution must not be allowed to continue to ride roughshod over key principles and approaches developed in other international bodies.

Achieving these recommendations will entail building effective coalitions and alliances against those interests that are only concerned with trade liberalisation. The joint efforts of developing countries, the European Union and environmental NGOs were successful in overcoming opposition to establishing trade measures under the Basel Convention on the Transboundary Movement of Hazardous Waste and the Biosafety Protocol. These actors can also come together to ensure that trade supports, rather than contradicts, efforts to maintain forests across the globe.

In order to enhance the conservation and sustainable use of the world's forests, in particular ancient forests, and the sustainable devolpment of forest countries, Greenpeace calls on the WTO members to:

- Ensure that Multilateral Environmental Agreements, in particular the CBD, but also CITES, the UNFCCC and UN Convention to Combat Desertification, as well as other legitimate trade-related measures aimed at enhancing forest conservation and sustainable use are not undermined by WTO rules.
- Ensure that international trade regulations are compatible with conservation and sustainable use of forest biological diversity and promote related economic instruments.
- Ensure that independent forest certification initiatives, such as the Forest Stewardship Council (FSC), are not threatened by WTO rules.
- Ensure that measures to control international trade and the import of illegally harvested timber and other forest products are not limited, but supported by WTO rules.
- Open up their deliberations to civil society stakeholders and ensure full participation of all developing country representatives as members

- Not undertake further trade liberalisation without a full assessment of their environmental and social impacts on forests
- Ensure that the WTO does not prevent the precautionary principle and other environmental core principles fixed in the Rio Declaration from being applied to their full extent.
- Ensure that WTO rules do not interfere with full protection of traditional forest-related knowledge and are not used to provide cover for biopiracy.
- Refrain from developing new rules on liberalising unsustainable investment.
- Ensure that national efforts to conserve and sustainably use forests are not undermined by liberalisation of the services sector.

The WTO can only do part of the work necessary to ensure that trade supports conservation and sustainable use of forests. International bodies that specialize in matters relating to forests must become more proactive in addressing the trade-related issues of their mandates. Specifically, Greenpeace calls for:

- The CBD to develop an action-oriented work programme on forest biodiversity in April 2002 that considers measures to deal with: (a) trade as a threat to forest biodiversity, (b) subsidies that lead to deforestation, and (c) trade-related incentives to enhance conservation and sustainable use of forest biodiversity. The CBD process could usefully contribute to developing methodologies to assess the negative and positive impacts of trade on forest biodiversity.
- The UNFCCC should develop its Clean Development Mechanism (CDM) "land use, land use change and forestry (LUCF)" rules and safeguards such that mitigation measures do not degrade, convert or otherwise result in the loss of forests, in particular ancient forests, or other highly natural ecosystems. These rules should ensure that the sustainable development priorities of the host country to directly promote biodiversity conservation and sustainable use of natural resources for local needs are fully (effectively) supported including those relating to forests even at the cost of rewarding the very highest returns to foreign investors. Large-scale industrial tree plantations and the use of genetically engineered trees should be excluded as eligible projects under the CDM.
- The UNFF should spearhead the process for international consensus building on measures to combat illegal logging and trade with illegally harvested timber and forest products.
- The Global Ministerial Environment Forum, with the support of UNEP and relevant MEAs (in particular the CBD), should place trade in forest products onto its agenda. It should make recommendations on ensuring that trade in forest products is supportive of conservation and sustainable use. These recommendations should be aimed at the environmental institutions and States, as well as to the WTO.

• WTO secretariat should join the Collaborative Partnership on Forests (CPF) to contribute to synergies more than to live with the contradictions in forest conservation and sustainable use and benefit sharing.

In order to improve global governance on environmental conservation and sustainable development, Greenpeace calls for:

- The World Summit on Sustainable Development (WSSD) to recommend the establishment of a process to develop recommendations on overcoming contradictions, and enhancing synergies, between the WTO and MEAs. This process should include all relevant intergovernmental organizations and representatives of civil society.
- All countries to explore the possibility of resolving trade and environment disputes through mechanisms that can better balance trade and environmental objectives and the WTO.

Remarks

- 1 Paragraph 51 of the Doha Declaration. See: WTO 2001a.
- 2 This case was decided under the old GATT regime. See: United States -Restrictions on Imports of Tuna, the "Tuna-Dolphin" case. The case was brought by Mexico and others against the US under GATT. The panel report was circulated circulated on 3 September 1991, but not adopted, so it does not have the status of a legal interpretation of GATT law. The US and Mexico settled "out of court".
- 3 This case was appealed by Malaysia, however, the Appellate Body has affirmed the Panel decision. See: WORLD TRADE ORGANIZATION, WT/DS58/RW, 15 June 2001, UNITED STATES - IMPORT PROHIBITION OF CERTAIN SHRIMP AND SHRIMP PRODUCTS, Recourse to Article 21.5 by Malaysia, Report of the Panel.
- 4 WORLD TRADE ORGANIZATION, WT/CTE/W/162, 10 October 2000, Committee on Trade and Environment: THE RELATIONSHIP BETWEEN THE PROVISIONS OF THE MULTILATERAL TRADING SYSTEM AND TRADE MEASURES FOR ENVIRONMENTAL PURPOSES, INCLUDING THOSE PURSUANT TO MULTILATERAL ENVIRONMENTAL AGREEMENTS. Communication from New Zealand.
- 5 WORLD TRADE ORGANIZATION, WT/CTE/W/170, 19 October 2000, Committee on Trade and Environment: RESOLVING THE RELATIONSHIP BETWEEN WTO RULES AND MULTILATERAL ENVIRONMENTAL AGREEMENTS. Submission by the European Community.
- 6 WORLD TRADE ORGANIZATION, WT/CTE/W/139, 8 June 2000, Committee on Trade and Environment: THE RELATIONSHIP BETWEEN THE PROVISIONS OF THE MULTILATERAL TRADING SYSTEM AND MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEAs). Submission by Switzerland. And: WORLD TRADE ORGANIZATION, WT/CTE/W/168, 19 October 2000, Committee on Trade and Environment: CLARIFICATION OF THE RELATIONSHIP BETWEEN THE WTO AND MULTILATERAL ENVIRONMENTAL AGREEMENTS. Submission by Switzerland.
- 7 Paragraph 31(i) of the Doha Declaration. See: WTO 2001a.
- 8 See Stilwell 1999.
- 9 WTO 2000.

- See "United States Standards for Reformulated and Conventional Gasoline", WTO case Nos. 2 and 4. Ruling adopted on 20 May 1996. Case brought by Venezuela and Brazil: The case affirmed that the US had every right to adopt the highest possible standard to protect its air quality so long as it did not discriminate against foreign imports. The US lost the case because it discrminated - its requirement on domestic producers was less stringent than that imposed on imported gasoline (in this case from Venezuela and Brazil). And "United States - Import Prohibition of Certain Shrimp and Shrimp Products", the "shrimp-turtle" case. WTO case Nos. 58 and 61. Ruling adopted on 6 November 1998. Case brought by India, Malaysia, Pakistan and Thailand.
- 11 Forest biological diversity is one of priority issues for the sixth meeting of the Conference of the Parties to the Convention on Biological Diversity, The Hague, 8-19 April 2002.
- 12 FERN 2000.
- 13 FERN 2000.
- See, e.g., Japan Taxes on Alcoholic Beverages, Spain Tariff Treatment of Unroasted Coffee, 28th Supp. BISD 102 (1982, Japan - Customs Duties, Taxes and Labelling Practices on Imported Wines and Alcoholic Beverages, 34th Supp. BISD 83 (1988), Belgian Family Allowances (Allocations Familiales), GATT, 1st Supp. BISD 59-62, 1953.
- 15 See: WORLD TRADE ORGANIZATION, WT/DS135/AB/R, 12 March 2001, European Communities - Measures Affecting Asbestos and Asbestos-containing Products, AB-2000-11, Report of the Appellate Body.
- 16 Article 2.6 of the TBT Agreement.
- 17 Article 2.2 and 2.4 of the TBT Agreement.
- 18 Article 2.5 of the TBT Agreement.
- 19 Articles 2.9, 2.11, 5.6, 5.8 and 10. of the TBT Agreement.
- 20 Articles 2.1, 2.2 and 5.1 of the TBT Agreement.
- 21 FERN 2001: 25.
- 22 See: FSC Principles and Criteria for Forest Stewardship, Revised February 2000. Available at: http://www.fscoax.org/principal.htm.
- 23 SPS Agreement, Article 2.
- 24 SPS Agreement, Article 3.3.

- 25 SPS Agreement, Article 5.7.
- 26 WORLD TRADE ORGANIZATION, WT/DS26/R/USA, 18 August 1997, EC Measures Concerning Meat and Meat Products (Hormones), Complaint by the United States, Report of the Panel.
- 27 See, e.g., the 1987 Ministerial Conference for the Protection of the North Sea, the London Dumping Convention, the Convention for the Protection of the Marine Environment in the North East Atlantic, the Convention on Biological Diversity, the Framework Convention on Climate Change, the Agreement on Straddling and Highly Migratory Fish Stocks, and the Cartagena Protocol on Biosafety.
- 28 See Principle 15 of the 1992 Rio Declaration on Environment and Development.
- 29 WORLD TRADE ORGANIZATION, WT/DS26/AB/R, WT/DS48/AB/R, 16 January 1998, , EC Measures Concerning Meat and Meat Products (Hormones), Report of the Appellate Body.
- 30 WORLD TRADE ORGANIZATION, WT/CTE/W/147, G/TBT/W/137, 27 June 2000, Committee on Trade and Environment: COMMUNICATION FROM THE EUROPEAN COMMISSION ON THE PRECAUTIONARY PRINCIPLE. Submission by the European Communities.
- European Commission, DG Trade: Precaution in the WTO EC position paper,
 24 July 2001. Available at http://europa.eu.int/comm/trade/miti/envir/prec.htm.
- 32 Paragraph 7 of the Doha Declaration. See: WTO 2001a.
- 33 Multilateral Environment Agreements and Precaution. Correspondence from Pascal Lamy to USTR Robert Zoellick, Benny Haerlin, Greenpeace International, Brussels, November-December 2001. Available at http://europa.eu.int/comm/trade/miti/envir/ustr.htm. The EU view is that the precautionary principle is already reflected in the WTO, although many other members would dispute this.
- 34 More generally, Article 8(j) of the CBD recognises the importance of traditional knowledge in the conservation of biological diversity.
- 35 E.g. Tuna-Dolphin case.
- 36 Paragraph 19 of the Doha Declaration. See: WTO 2001a.
- 37 See, e.g. Greenpeace 2001a.
- 38 See Greenpeace International Press Releases on 6 December 2001: "Brazilian government puts an end to the illegal mahogany trade following Greenpeace investigations" and on 31 October 2001: "Amazon Mahogany Criminals Busted -

 \cdot US \$7 million of 'green gold' seized". Press releases and other information are available at: http://www.greenpeace.org/amazon.

- 39 Generalised Systems of Preferences have their legal base in the GATT Decision of 28 November 1979 on differential and more favourable treatment, reciprocity and fuller participation of developing countries, otherwise known as the "Enabling Clause". Among other things (it also allows for agreements between developing countries), this clause allows the industrialised countries to diverge from the GATT MFN clause and grant more favourable treatment to developing countries, provided that all such treatment, unless it is positive discrimination in favour of the LDCs, is extended to all developing countries.
- 40 Proposal for a COUNCIL REGULATION applying a scheme of generalised tariff preferences for the period 1 January 2002 to 31 December 2004 (presented by the Commission, Brussels, 12. 6. 2001, COM(2001)293 final, 2001/0131(ACC)).
- 41 Article 23(2) of the Proposal.
- 42 Article 24(1) of the Proposal.
- 43 Paragraph 10.2 of the WTO DECISION ON IMPLEMENTATION-RELATED ISSUES AND CONCERNS. See WTO 2001b.
- 44 Paragraph 6 of the Doha Declaration. See: WTO 2001a.
- See Walden Bello's characterization of the outcome of the World Trade Organization ministerial in Doha: "Doha was a clear setback for the developing countries, most of whom had wanted to focus the ministerial and its aftermath on resolving outstanding issues of implementation from the Uruguay Round, of which there are at least 104 according to the Group of 77. The declaration simply acknowledged these concerns and outlined a vague process for their resolution. Indeed, even in key areas of implementation specified in the text, such as agriculture and textiles and garments, the developing countries came out as losers. The European Union managed to water down the Cairns Group's demand that there be a quick phase-out of agricultural export subsidies, and the US and other developed countries did not commit to an early removal of quotas on textile and garment imports of critical importance to the developing countries". See Bello 2001.
- 46 CUTS 1998.
- 47 See Sizer et. al 1999
- 48 APEC in summer 1999 decided to take to the WTO its plan for reducing tariffs in several of its sectors including the forestry industry. The APEC countries called for tariffs to be reduced in forestry and other sectors in what it called "Accelerated Tariff Liberalisation (ATL)". The ATL initiative is a reduced version of "Early Voluntary Sectoral Liberalisation (EVSL)", the more extensive move to

liberalisation which was started by APEC in 1997 and included reducing NTMs. The APEC countries have however had problems in implementing their voluntary EVSL initiative in the APEC region, partly as a result of resistance by Japan.

- 49 FERN 1999.
- 50 USTR 1999: iv.
- 51 FAO 1999.
- 52 FERN 2000.
- 53 Paragraph 16 of the Doha Declaration. See: WTO 2001a.
- 54 Sizer et al. 1999.
- 55 Paragraph 33 of the Doha Declaration. See: WTO 2001a.
- 56 FERN 1999: 9.
- 57 Excerpts from Sun 2000.
- 58 See also Sizer et al 1999, APEC 1999.
- 59 APEC, 1999.
- 60 See APEC, 1999: 21-41.
- 61 APEC 1999: i.
- 62 APEC 1999: 92.
- 63 GATT 1992.
- 64 APEC 1999: 67-69.
- 65 Ecologic 2001.
- 66 Downes 1999: 2.
- 67 Kirckpatrick and Lee 2000: 66.
- 68 Detailed information on the agriculture negotiations can be found at http://www.wto.org/english/tratop_e/agric_e/negoti_e.htm. For an overview see "WTO Agriculture Negotiations The issues, and where we are now" (4 October 2001).

- 69 DEG, the German Investment and Development Company (Deutsche Investitions- und Entwicklungsgesellschaft), is a financing and advisory firm for the promotion of the private sector in developing countries, and holds interests in and offers direct loans to private enterprises, chiefly small and medium-sized companies. It advises private companies, structures and finances their investments in Africa, Asia, and Latin America as well as in Central, Eastern and Southeast Europe. As one of the largest European development finance institutions, DEG has thus far cooperated with more than 950 companies and by financing 4.2 billion euro it has attained an investment volume of 30 billion euro. The government owned KfW (Kreditanstalt fuer Wiederaufbau) became the sole DEG shareholder in June 2001 by acquiring all the federal government's shares in DEG in June 2001. Source: DEG press release, 19 June 2001: "KfW acquires government's shares in DEG. Agreement signed in Frankfurt".
- 70 DEG press release, 13 March 2001: "Demand increases for soybean meal as replacement for animal feed. DEG finances Brazilian company which cultivates and markets soya beans".
- The DEG has not paid out the second half of the loan up to now.
- Fearnside 2000.
- 73 FERN 2001: 22.
- 74 Paragraph 20 of the Doha Declaration. See: WTO 2001a.
- 75 See: Amazon Watch, NEWS RELEASE 27 November 2001: "Ecuadorian Pipeline Fails to Comply with World Bank Policies". For further information go to www.amazonwatch.org
- For example, the International Centre for the Settlement of Investment Disputes (ICSID) was established under the Convention on the Settlement of Investment Disputes between States and Nationals of Other States and is overseen by an Administrative Council and a Secretariat. The Administrative Council is chaired by the World Bank's President and consists of one representative of each State which has ratified the Convention.
- 77 These are the regimes established pursuant to the ICSID convention, and UNCITRAL Arbitration Rules, recourse to which is provided by Article 1120.
- 78 Redfern et al. 1999: 430-432.
- 79 FoEE 2001, WWF 2001.
- 80 WORLD TRADE ORGANIZATION, WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, 2 July 1998: INDONESIA - CERTAIN MEASURES AFFECTING THE AUTOMOBILE INDUSTRY. REPORT OF THE PANEL.

- 81 Decision on Trade in Services and the Environment adopted by Ministers in Marrakesh on 15 April 1994.
- 82 Paragraph 15 of the Doha Declaration. See: WTO 2001a.
- 83 The International Tropical Timber Agreement (ITTA) is not considered in this chapter. Although the ITTA contains the so-called "Year 2000 Objective" whereby all exports of tropical timber should be from sustainably managed sources - the International Tropical Timber Organization (ITTO) did not have the clout or the capacity to make that a reality, and still does not.
- 84 Article 1 of the CBD.
- 85 See: UNEP/CBD/SBSTTA/7/6, 20 September 2001
- 86 Among the most recent initiatives to promote sustainable forest management are public procurement policies aimed at encouraging governments to limit their purchases of forest products to those from sustainably managed sources. The WTO Agreement on Government Procurement is a plurilateral agreement (so far binding only OECD states) that places disciplines on public procurement policy. However, that Agreement appears to allow sufficient scope for such policies, in particular those that are not expressly aimed at products from particular countries. This is because of the exceptions contained in the agreement itself, and the plurilateral nature of the Agreement. Notwithstanding this, some countries are hesitating to use this important instrument, because of unfounded fears that WTO rules prevent them from doing so.
- 87 For Europe, these principles should correspond to those elaborated under the Pan European Process; outside Europe, the UNCED Forest Principles and regional processes for developing criteria and indicators for sustainable forest management, the ecosystem approach, and the precautionary principle.

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Annex: Selected links

American Forest & Paper Association (AF&PA): http://www.afandpa.org

Asia-Pacific Economic Cooperation (APEC): http://www.apecsec.org.sg

Center for International Environmental Law (CIEL): http://www.ciel.org

Center for International Forestry Research (CIFOR): http://www.cifor.cgiar.org/

Commission on Sustainable Development (CSD): http://www.un.org/esa/sustdev/csd.htm

Convention on Biological Diversity (CBD): http://www.biodiv.org

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):

Earthjustice Legal Defense Fund: http://www.earthjustice.org

Ecologic: http://www.ecologic.de/

European Commission, Directorate-General for Trade: http://europa.eu.int/comm/trade/index_en.htm

Fern: http://www.fern.org

Focus on the Global South: http://www.focusweb.org

Food and Agriculture Organization of the United Nations (FAO): http://www.fao.org

Forest Stewardship Council (FSC): http://www.fscoax.org

Foundation for International Environmental Law and Development (FIELD): http://www.field.org.uk

Friends of the Earth Europe (FoEE): http://www.foeeurope.org

German Investment and Development Company (DEG): [Deutsche Investitions- und Entwicklungsgesellschaft]: http://www.deginvest.org

Greenpeace: http://www.greenpeace.org

http://www.cites.org

Intergovernmental Forum on Forests (IFF): http://www.un.org/esa/sustdev/forests.htm

Intergovernmental Panel on Forests (IPF): http://www.un.org/esa/sustdev/forests.htm

International Forum on Globalization (IFG): http://www.ifg.org International Labour Organization (ILO): http://www.ilo.org International Network of Forests and Communities (INFC): http://www.forestsandcommunities.org International Tropical Timber Organization (ITTO): http://www.itto.or.jp IUCN International Law Programme: http://iucn.org/themes/law/index.html North American Free Trade Agreement (NAFTA): http://www.nafta-sec-alena.org/ Organisation for Economic Co-Operation and Development (OECD): http://www.oecd.org Pro Regenwald: http://www.pro-regenwald.de Rettet den Regenwald: http://www.regenwald.org Taiga Rescue Network (TRN): http://www.snf.se/TRN The World Conservation Union (IUNCN): http://www.iucn.org/ UN Convention to Combat Desertification (UNCCD): http://www.unccd.int UN Forum on Forests (UNFF): http://www.un.org/esa/sustdev/forests.htm UN Framework Convention on Climate Change (UNFCCC): http://www.unfccc.org **UNEP Economics and Trade Programme (ETP):** http://www.unep.ch/etu/etp/index.htm UNEP Economics and Trade Unit (ETU): http://www.unep.ch/etu/etugen/about.htm United Nation Environment Programme (UNEP): http://www.unep.org United States Trade Representative (USTR): http://www.ustr.gov/ World Intellectual Property Organization (WIPO): http://www.wipo.org World Rainforest Movement (WRM): http://www.wrm.org.uy World Resources Institute (WIR): http://www.wri.org/wri World Summit on Sustainable Development (WSSD): http://www.johannesburgsummit.org/index.html World Trade Organization (WTO): http://www.wto.org World Wide Fund for Nature (WWF): http://www.panda.org

The report "Trading away the last ancient forests" shows the dangers to forests from further trade liberalisation measures recently adopted by the World Trade Organization (WTO). The study aims not only to clarify the dangers, but also to show the ways to reach solutions. These solutions are absolutely necessary to prevent the loss of the world's last remaining forests, in particular ancient forests, and must be taken up in the WTO trade negotiations launched in Doha, Qatar in November 2001 at the 4th Ministerial Conference of the WTO. Agreement to adopt and implement these solutions will be a test-case of the willingness of the WTO member states to act in accordance with their obligation to promote sustainable development.

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