

**THE STATE OF TRADE LAW AND THE ENVIRONMENT:
KEY ISSUES FOR THE NEXT DECADE**

WORKING PAPER

**INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT
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1. INTRODUCTION

1.1 Objectives

The relationship between trade law and the environment became a prominent agenda item in the last four to five years prior to the creation of the World Trade Organization (WTO). Decisions under the General Agreement on Tariffs and Trade (GATT) arbitration process and the Uruguay Round negotiations for what was to become the Agreement Establishing the World Trade Organization and its associated Agreements and Decisions, led several environmental and other civil society groups to focus on this issue as never before.

In the course of developing this focus, a number of serious concerns, myths, and combinations of both, emerged into the public discourse. As the Doha Round of trade negotiations moves forward, the International Institute for Sustainable Development (IISD) and the Center for International Environmental Law (CIEL) have joined forces to look at the current state of the law – trade law – as it relates to some key environmental issues. The objective of this effort is to establish, based on the WTO Agreements and WTO Dispute Settlement decisions what the current state of the law is in these key areas. Only when there is a consistent view on what the state of the law is, can a meaningful dialogue take place as to what the state of the law should be. The objective of this project is to help set such a baseline, so that negotiators, observers, civil society groups, etc., can have a consistent platform to be working from.

If a widely agreed baseline can be achieved, the priorities for trade and environment negotiations under the Doha Ministerial can be better understood, progress and regress can both be measured, and results at any given point in time assessed. For this to be possible, the IISD and CIEL have committed themselves to develop, to the best of their ability, an objective view on the current state of the law on the key issues selected for this workshop and current project. Not everyone will agree with the findings. But it is hoped that two aspects of potential agreement and disagreement can be separated: what *is* the state of the law, and what *should be* the state of the law.

The present paper has been prepared for an informed and engaged audience. It is intended to be legally accurate, but not burdened with legal jargon or style. The aim of this Working paper is to encourage debate and discussion at the nexus of trade and environment law and policy-making.

1.2 The Issues Addressed

This project addresses four issues relevant to the Doha Agenda, even if they are not fully expressed in it:

- The status of trade law relating to process and production methods and extra-territorial measures;

- The relationship of WTO obligations to multilateral environmental agreements;
- The precautionary principle, the role of science, and the WTO Agreements; and
- The relationship between intellectual property rights, TRIPS and the Convention on Biological Diversity.

These issues collectively share two features. On the one hand, they were significant issues during the negotiation of the Uruguay Round or became so shortly afterwards. On the other hand, they have seen significant legal development over the past decade so that an accurate reflection of the current state of the law is important for situating these issues into future discussions, including the post-Doha negotiations. In the course of the discussions on each issue, the changes in the law will be reviewed, and their relationship to the present negotiations identified. To be clear, there is no suggestion being made here that these four issues must be included in the current negotiations as specific items. Some issues may already have been resolved in a satisfactory way in the jurisprudence or through other processes. What is being suggested here is that each of these issues does have a relationship, directly or indirectly, to items *already* on the Doha Work Programme, and thus it is important that the current state of the law be understood as these go forward to avoid unintended consequences of the negotiations, and ensure that intended consequences are based on the law as it exists today.

1.3 Next Steps

Following the Workshop, the lead authors for IISD and CIEL will review and revise the sections of this Working Paper with the intent of generating a single article for publication in a leading trade law journal. The views expressed therein will be solely those of the authors, and no effort will be made to generate a consensus for this purpose at the Workshop. Rather, it is hoped that the process of debate and discussion will enrich the authors' understanding of the law for this next stage, and the participants' understanding of the law for their ongoing work as negotiators, observers, and participants in the Doha Round negotiations, in a mutually supportive way.

2. THE CHANGING TRADE AND ENVIRONMENT DEBATE

Sections 3-6 below consider some important substantive developments or changes in how trade law, and in some cases international environmental law, addresses specific environment-related issues. Some broader changes in the debate are, however, also worthy of note.

The debate on trade law and the environment was, to an extent, formalized in the 1994 Decision on Trade and Environment that accompanied the adoption of the Marrakesh Agreement Establishing the World Trade Organization. The Decision reflected many of the then current issues in its mandate, and established an institutional process, through the Committee on Trade and Environment (CTE), to address them. The mandate of the CTE was, and remains, broad. It includes:

- the relationship between the provisions of the multilateral trading system and trade measures for environmental purposes, including those pursuant to multilateral environmental agreements;
- the relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system;
- the relationship between the provisions of the multilateral trading system and:
 - (a) charges and taxes for environmental purposes;
 - (b) requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labeling and recycling;
- the provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements which have significant trade effects;
- the relationship between the dispute settlement mechanisms in the multilateral trading system and those found in multilateral environmental agreements;
- the effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions;
- the issue of exports of domestically prohibited goods,
- that the Committee on Trade and Environment will consider the work programme envisaged in the Decision on Trade in Services and the Environment and the relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights as an integral part of its work, within the above terms of reference,

While its mandate was broad, its powers were less so. The CTE had and has no negotiating mandate. It is institutionally separated from the WTO Committees that do, in fact, have direct responsibility for the ongoing development of the specific Agreements most relevant to environmental issues. The committees on technical barriers to trade, and sanitary and phytosanitary measures, and the Councils for TRIPS and Services, are the most prominent of these bodies. Whether it was the institutional framework or the simple dynamics of the decade, the CTE has not been able to move many of the trade and environment issues on its mandate very far forward, if one takes “forward” as meaning resolving foreseen and unforeseen issues. The reasons for this may be numerous, and are certainly beyond the scope of this paper. What is important is the understanding that the lack of significant progress in the CTE did *not* lead to stagnation in the broader debate.

For example, some of the broad CTE agenda has been addressed with success outside the WTO. The export of domestically prohibited goods is a good example of this, with considerable success being seen under the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade that was concluded in 1998.¹ The relationship of the WTO

¹ As of December 6, 2002, the Rotterdam Convention had 73 signatories and 36 Parties. It is not yet in force. <http://www.pic.int/en/ViewPage.asp?id=265>

Agreements to MEA's, while the subject of much study by the CTE and the Secretariat, as well as considerable academic and civil society publishing, actually saw significant legal development through the Appellate Body and the MEA processes themselves. This is reviewed below.

During this period, other items that may have been "bubbling up" to the surface prior to the Marrakesh meeting have emerged into the debate. The balance between the application of the precautionary principle and the role of science, for example, became a central concern of many observers, especially with the onset of the so-called Beef Hormones cases against the EU and the resulting decisions. This issue also considered in detail below.

While specific issues have seen developments, we also believe a more systemic development has begun to occur. One aspect of this is a growing recognition of, and focus on, environmental and human health concerns of developing countries within the WTO agenda and institutions. The trade and environment debate unquestionably began in the WTO as a north versus south issue, and large power versus small power issue, largely based on a developing country and small power fear of trade conditionality. Certainly, many suspicions still remain among developing countries and some trade "purists" as to the motivation for its rise within trade law discourse.² And a healthy concern to ensure that environmental issues do not become the vehicle for disguised barriers to trade is a valid point of reference. But, it is also clear that the agenda has begun to shift from solely demands of the north to often similarly grounded demands of the south. One example of this lies in the area of genetically modified crops, where much effort to align trade and environmental law has taken place. Much of the impetus for this work originated in the developing countries, going back to the final days of the negotiation of the Convention on Biological Diversity. A second example is seen in the initiation of an environmental protection measure by Chile, and challenged by the EU, to protect bluefin tuna by preventing landings of fish caught in an environmentally damaging way. This case, settled by the parties prior to any panel hearings or decisions, reversed the traditional context of process and production method issues being only concerned with those imposed by the north on the south. The southern agenda to conserve fish stocks led to the imposition of trade restrictions. Other examples could be raised, but would not alter the point: trade and environment issues are no longer found exclusively in the context of northern demands and measures and southern market access.

Beyond the appearance of southern-based environmental issues, a broader contextualization of these issues within the concept of sustainable development has emerged in the body corporate of the WTO. No longer is sustainable development seen simply as a goal outside the realm of the WTO and its purposes. The cornerstone of this development is, of course, the inclusion of the objective of sustainable development into the preamble of the Agreement Establishing the WTO. The initial part of the paragraph below comes from the original GATT of 1947. The second half (in italics here) was inserted in 1994:

² A classic example of a dismissive view of the environmental issues as illegitimate trade issues illegitimately motivated can be found in William Dymond & Michael Hart, "Post Modern Trade Policy: Reflections on the Challenges to Multilateral Trade Negotiations After Seattle," (2000) 34(3) *Journal of World Trade*, pp. 21-38.

The *Parties* to this Agreement,

Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources *in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development.*

The important role of this expansion of the GATT preamble was seen in the first environmental cases to be heard by the WTO, especially the Appellate Body. These cases allowed sustainable development and environmental protection to become important aspects of WTO jurisprudence, including a specific statement by the AB that following the insertion of the second half of the above-quoted preambular paragraph, identifying the objective of “the full use of the resources of the world” was no longer appropriate to the world trading system of the 1990s.³ But the AB has also ensured that sustainable development was not defined solely in terms of its environmental issues. This is especially clear in the significant efforts of the Appellate Body to balance the development and environmental issues in the Shrimp-Turtle cases, reviewed in some detail below.

With a growing opportunity for southern environmental concerns to be raised and recognized, and the incorporation of economic and development issues into the WTO thinking on sustainable development, both had an additional impact of bringing different actors into the trade and environment agenda. First, there are a growing number of active participants in the debate. While the 1994 Decision on Trade and Environment that accompanied the adoption of the Marrakesh Agreement Establishing the World Trade Organization envisioned a major role for the Committee on Trade and Environment that it established, the Doha Ministerial Declaration broadens the environmental issues to negotiating groups on agriculture, market access and TRIPS. Moreover, several of the environmental issues identified in Doha are now negotiating items, rather than study items in the CTE. Consequently, more trade negotiators will be compelled to understand and work on the environmental issues.

Perhaps the most important new actor on the trade and environment front was the Appellate Body (AB). This body, created in the 1994 Agreements, was composed of international lawyers with strong backgrounds in many areas of public international law. This allowed them to more fully situate trade law within the broader context of public international law, including international environmental law. While older GATT cases had not ignored this need, the cases decided closer to the end of the Uruguay Round seemed to take a stricter line on what may be called an “insular”

³ *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, Report of the Appellate Body, WT/DS58/AB/R, 12 October 1998, para. 152.

approach to trade law.⁴ The AB reversed this trend, breathing new vigor into the issues in doing so.

Many states expressed concern over the role of the AB in “filling in” gaps in WTO law – the debate on *amicus* briefs, often tied to environment-related disputes, is perhaps the most visible example of this. Despite these expressions of concern, it is clear that the AB has contributed to an expanded world view within trade law.

An additional new form of actor on the trade and environment front is the MEA bodies themselves. Secretariats that manage the MEA’s for their members have become frequent visitors to the WTO, and contributors to a more informed debate on their purposes and their use of trade measures. Again, a broader world-view has begun to emerge as a result of this interaction.

And, finally, the growing interaction of the WTO with civil society organizations has caused some Members, delegates and staff to reconsider the linkages of the WTO and its Agreements to the outside world. Regular information exchanges and workshops between traditional trade law and policy participants and traditional civil society organizations, once separated by a trade law version of an Iron Curtain, have become a feature of WTO life.

This is not the place to assess the entire environmental record of the WTO since 1 January 1995. However, the above suggests that the conflict-based trade and environment agenda and debate of the early 1990’s is, perhaps slowly, being replaced, a decade later, by a much more mature relationship. The sections below consider some important substantive issues in this context. It is hoped that the broader, more systemic changes, will lead to a cogent and constructive debate on these issues.

3. THE STATUS OF TRADE LAW RELATING TO PROCESS AND PRODUCTION METHODS AND EXTRA-TERRITORIAL MEASURES

3.1 Background

Two closely related issues arose during the late 1980s and early 1990s to help propel the trade and environment debate into a major trade law and policy concern. These are:

- the application of trade law to measures that address how a product is made – process and production methods or PPMs; and
- the application of trade law to measures aimed at conduct or activities outside the territory of the state taking the measure—or extraterritoriality, “ET”.

The notion of PPMs has also been divided into two types. There are those that find a reflection in the final product, for example the chemical constituents of paint reflects directly how it was made. These are called product-related PPM’s, and can clearly be captured in the constituent features of a product. The second type is PPMs that do not find any reflection in a final product. For example, the rate of harvest of trees does

⁴ In section 4, below, the inclusion of a number of international environmental law sources in WTO dispute settlement analysis will be reviewed.

not affect the quality of the wood or paper that is produced. These are called non-product related PPMs, and it is these that are the main subject of this section. In addition, trade law began to grapple with the combination of these issues: the enactment and implementation of measures aimed at PPMs in a foreign country.

The importance of these issues from a trade and environment perspective is clear: expanding trade opportunities almost always requires an expansion of production from the exporting country. Where the production is environmentally unsustainable, either due to rate of harvest of natural resources, or the environmental consequences of the PPM in question, pressures to increase production can add to the environmental stresses. In some cases, there is a concern for longer term, irreversible damage due to such increased, trade-related production.

There is a second aspect to the concerns raised by environmentalists: in the absence of an ability to ensure that imported products also had to meet high environmental standards, it is argued, the ability to apply high standards to domestic producers would be hindered, thus fostering a race to the bottom phenomenon. The only way, therefore, to increase domestic standards was to help protect domestic production from production in countries with lower standards when domestic standards were increased.

The importance of the issue from a development perspective, however, was exactly the opposite: if environment-related concerns were used to prevent increased trade opportunities, then the development objectives of trade liberalization could be stifled. This form of environmental conditionality on trade was seen by developing countries, small trading powers and many trade policy theorists as creating additional barriers to trade in order to protect production in developed countries from increased competition due to other changes in trade law. That this was for environmental reasons was often seen by trade analysts to be a reflection of policy failures in the environmental area, or simply as an excuse for veiled protectionism.

The key legal issue is whether trade law creates a “threshold” barrier to a measure that addresses the PPMs of imported products. The concept of a threshold barrier holds that if trade law establishes a threshold barrier against measures that address foreign PPMs, then *any* measure doing so will *automatically* not be justifiable under trade law, including under the environmental exceptions in Article XX. Trade law would simply ban such measures. If it does not act as a threshold barrier, then measures addressing foreign PPMs would simply be subject to the same rights and obligations as any other environmental measure. A “middle” ground would see trade law establishing different rules for measures addressing foreign PPMs, as opposed to direct product-related or domestic PPM measures. It is the threshold question that captured environmentalists’ interests in the late 1980’s, and would ultimately lead to a middle ground materializing at the turn of the millennium.

A separate question is whether process and production methods, or more aptly the environmental or conservation impacts of PPMs, can be considered when addressing the question of “like products” under Article III of the GATT, or similar articles in other WTO Agreements. If they can, then differing environmental consequences will be used to distinguish between otherwise similar physical products, and this will reduce the occasions when a breach of trade law will be established. If products are seen as “like products”, then they require treatment no less favourable than domestic

competing products. However, if they are not legally “like” under trade rules, then they are not subject to the requirement of no less favourable treatment. Only if they are subject to that requirement, and if it is breached, does the question of applying the environmental exceptions to justify an environmental measure arise. So this is, as well, an important legal issue directly related to the PPM question.

3.2 The state of the law in 1994

3.2.1 *The PPM/ET issues as threshold issues*

The evolution of the PPM and ET issues shows an initial acceptance of PPM issues within the GATT, followed by a rejection of them in the early 1990’s. The initial cases on PPMs, as do many of the more recent cases, come from the fisheries sector.

Much of the PPM history pre-1994 addressed US measures, and many of these were addressed to Canada. One example is the 1981 GATT panel report on a Canadian complaint against a US ban on imports of Canadian tuna.⁵ This case arose out of US retaliation for measures taken by Canada to ban foreign, uncontrolled fishing in the 200 mile zone off Canada’s coasts before the recognition of the 200 mile exclusive economic zone under the Law of the Sea Convention. This was part of Canada’s larger effort at the time to solidify coastal state jurisdiction over coastal fisheries. After Canada stopped US tuna fishermen in this area of waters, the US banned the import of Canadian tuna. While the US at the time had some tuna conservation measures in place, they were limited to certain species. The Canadian ban covered all species. The circumstances of the case made it clear this was not a valid conservation measure. What is worth noting, however, is that the Tribunal never addressed the question of whether issues relating to the catching of tuna were for any reason excluded from justification under Article XX of the GATT, as raised by the US. Rather, the panel simply went straight into the analysis of its terms and determined that the facts of the case indicated that the specific requirements of Article XX(g), in this case, were not met. No threshold issue preventing the possible applicability of Art. XX was addressed.

Other cases followed this pattern. One case concerned a requirement to land salmon and herring caught in Canada for processing before it was exported. This measure was found to be a violation of trade law by a GATT panel.⁶ A second case concerned a Canadian requirement to land the fish in Canada for monitoring and reporting purposes prior to their export for processing or consumer sales. This measure replaced the previous processing requirement, but was also found to breach GATT rules.⁷ In both cases, breaches of Article XI’s rules on export controls were found, and in both justification under Article XX(g) was pleaded by Canada. Both these cases related to the conservation of Canadian fish stocks, so no ET issue arises. Still, landing requirements for processing and for monitoring purposes both raise PPM-related issues. Despite this, no threshold questions of GATT law prohibiting PPM-

⁵ *United States - Prohibition Of Imports Of Tuna And Tuna Products From Canada*, Report of the Panel adopted on 22 February 1982, (L/5198 - 29S/91)

⁶ *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, Report of the Panel Adopted on 22 March 1988 (L6268 – 35S/98).

⁷ *Canada’s Landing Requirement for Pacific Coast Salmon and Herring*, Final Report of the Panel Under Chapter 18 of the Canada-United States Free Trade Agreement, 1989. The Canada-US FTA includes by direct reference Article XX of the GATT.

related measures arose in either case. In fact, in the second of these two cases, the exact opposite is seen.

In the landing for monitoring and reporting purposes case, the panel states expressly

*“that there is a rational case for distinguishing the salmon and roe herring fisheries (from other types of fisheries). The most persuasive distinction is the relatively greater pressure for overfishing in these fisheries, due to the greater size and harvesting power of the salmon and herring fleets and the greater economic rewards of overfishing.”*⁸

In other words, for GATT Article XX(g) purposes different fisheries could be distinguished for different regulatory needs based on their PPMs. Again, this is a case of Canadian based PPMs rather than foreign based PPM's. Nonetheless, the threshold issue associated with the PPM question is clearly not evidenced in this case.⁹

The first example of a foreign or extraterritorial PPM measure comes in the final Canada-US fisheries case. It arose from a ban on “undersize” lobster imports into the United States. The US measure required minimum sizes for lobsters to be sold in the US, regardless of their point of origin. This size was consistent with minimum size requirements in US lobster harvesting, based on conservation requirements in US lobster fisheries: size acts as a surrogate for age and hence for reproductive purposes. However, because Canadian waters are a different temperature, Canadian lobster mature to reproductive ages at a smaller size. The size requirement therefore introduced a ban on Canadian lobster at a level that had no conservation purpose for the lobster being harvested. The US justification centered on the need to ban all lobsters below the required US harvesting size to prevent US lobsters that were undersized being sold as well in US markets. This case, therefore, had a clear application of foreign PPMs: the harvesting size of lobster based on reproductive requirements. However, for reasons well beyond the scope of the present review, the measure was not tested substantively under Article III or Article XX by the panel as a whole. A minority of the panel did review the measure under Article XX, but did not find it to be applicable because they could not determine whether the measure was primarily aimed at conservation or at trade. What is not evidenced anywhere in that analysis, however, is a threshold issue of the US addressing foreign PPMs.

This takes the development of the law to the famous Tuna-Dolphin cases. In the briefest of terms, the Tuna-Dolphin cases arise from a US measure that bans the import of tuna from countries whose fishing fleets do not ensure that dolphin mortality as a by-catch from fishing for tuna is reduced. This was known as the primary nation embargo. As a related measure, the US also banned the import of canned or processed tuna products from third countries that did not ban the import and use of tuna caught from countries with a high dolphin mortality rate. This was the secondary nation embargo. Both bans were challenged by Mexico in the first Tuna-Dolphin case,¹⁰ and by the then European Economic Community in the second Tuna-

⁸ Ibid, para 7.12.

⁹ Trade law cautions, however, against extrapolating comparisons and reasoning from one context directly into another, due to different roles and purposes of the different articles.

¹⁰ United States – Restrictions on Imports of Tuna, Report of the Panel, (DS21/R-39S/155), 1991, not adopted. Hereinafter, Tuna Dolphin I.

Dolphin case.¹¹ A third measure, setting standards for dolphin-friendly tuna labeling, was also enacted but is outside the scope of the present subject matter. The link between tuna fishing and dolphin mortality arises because dolphins swim in schools above tuna. When fishermen see the dolphin, they can sink their nets and have a higher chance of a good harvest, but also a high dolphin mortality rate.

The first Tuna-Dolphin case was between Mexico and the US, and tested the primary ban on imports of tuna. In that case, Mexico raised the question of whether any domestic measures impacting trade could be compatible with the GATT if they addressed producers as opposed to products. This was raised in the context of arguments on Article III, on the basis that only product-related measures could be justified under Article III, not “producer”-related measures.¹² The issue is important to the scheme of the GATT: if a producer-related measure could not be considered under Article III, where the national treatment tests were relevant to finding a breach of the GATT, then the measure would fall under Article XI of the GATT and be a banned import restriction. It could then be saved only by reference to the Article XX exceptions. The US argued that Article III did not distinguish in any way between product-related measures and producer or non-product related measures.¹³ The Mexican arguments were not watertight, however, as Mexico also argued that as a PPM measure it was discriminatory between US producers and other foreign producers. In other words, Mexico argued the threshold product/PPM issue for the first time, but included the alternative, more traditional issues of discrimination and national treatment.

On the extraterritorial front, this arose in the context of US reliance on the environmental and conservation exceptions in Article XX of the GATT. Here, Mexico raised the objection, as a threshold issue, that Article XX could not be used to justify measures otherwise inconsistent with the GATT to the extent those measures had an extraterritorial reach or impact on PPMs outside US jurisdiction.¹⁴ The US rejected these positions as unfounded under Article XX.¹⁵

The panel in Tuna Dolphin I found in favour of the Mexican arguments. In relation to Article III, the panel found that PPM issues that were not directly reflected in the final product were not to be considered under Article III, and hence regulations addressing such issues could not be considered as covered by Article III. Thus, they fell under the categorical ban of Article XI of the GATT, and could only be saved by reliance on the exception provisions of Article XX. No test of national treatment was applicable. In essence, by having the issue determined under Article XI, there were fewer opportunities to show the measure complied with trade law. The panel went further to argue that even if the above were wrong, factors addressing environmental and conservation impacts of PPMs could not be counted in distinguishing between products:

Article III:4 therefore obliges the United States to accord treatment to Mexican tuna no less favourable than that accorded to United States

¹¹ United States – Restrictions on Imports of Tuna, Report of the Panel, (DS29/R), 1994, not adopted. Hereinafter Tuna Dolphin II.

¹² Tuna Dolphin I, para. 3.16 et seq.,

¹³ Ibid, paras. 3.20-3.21.

¹⁴ Ibid, para. 3.31; 3.35; 3.47; 3.48.

¹⁵ US response, *ibid*, paras. 3.32, 3.36, 3.49

*tuna, whether or not the incidental taking of dolphins by Mexican vessels corresponds to that of the United States vessels.*¹⁶

The ET issue was addressed in the context of Articles XX(b) and (g). The panel noted that “the basic question... whether Article XX(b) covers measures ... outside the jurisdiction of the contracting Party taking the measure, *is not clearly answered by the text of that provision.*”¹⁷ Similarly, there is no clear statement on this in Article XX(g). In both instances, however, the panel held that only measures to protect resources within the jurisdiction of a state taking the measure were acceptable under these provisions. The basis for each ruling is similar: only measures for the protection of resources or the environment within the jurisdiction of the state taking the measure are contemplated by this article. A second element of this finding was that the GATT reserves for each Member the right to set its environmental standards under Article XX(b) and (g) and thus prevents a state from imposing its standards on another Party. Allowing another Member to set standards in such a way would no longer protect the trade rights of all Members it was argued, only of those that had the same laws and regulations in place.¹⁸

The result of these findings in combination is as follows: By excluding PPMs from analysis in any context under Art. III, a measure addressing PPMs that impacts on imported products can only be considered under Article XI, where it becomes GATT inconsistent by virtue of being an import prohibition or restriction. Then, by excluding a foreign conservation objective or impact from justification as a threshold issue under Article XX, such a measure becomes completely inconsistent with GATT law.

The panel in Tuna Dolphin II followed the same reasoning as in Tuna Dolphin I on the issue of considering PPM-related regulations under Article III. It found that only product related regulations and standards could be included here. As the US measure continued to be directed at PPMs, it could not be considered for purposes of Article III. Article III did not permit regulations that addressed harvesting methods as these did not have an impact on the inherent character of the tuna itself.¹⁹ This applied the same threshold finding as in the first panel decision. Having thus eliminated the option of analyzing the measures under Article III, the panel then ruled, as had the first one, that the primary and intermediary embargos fell within Article XI of the GATT as prohibited import restrictions. Thus, the US was left to justify them under Article XX of the GATT, where the ET issue arose as a second threshold question.

At first blush, the panel in this case appears to have rejected the Tuna-Dolphin I ruling that only conservation measures within the territorial jurisdiction of the state taking the measure can be justified under Article X(b) or (g). It stated that there was no evident geographical limitation on where conservation measures could be applied under Article XX(g), or where the species whose conservation is being sought were located. Basing itself in large part on other sources of state jurisdiction under international law, the panel found that states could regulate the activities of *its* nationals abroad, such as on fishing boats or in relation to plants and animals more

¹⁶ Ibid, para. 5.15

¹⁷ Ibid, para. 5.25, emphasis added.

¹⁸ Ibid, paras. 5.27 et seq. The intermediary nations embargo was found to be GATT inconsistent for the same reasons.

¹⁹ Tuna Dolphin II, para. 5.9.

generally.²⁰ It then went on to state that “there was no valid reason supporting the conclusion that the provisions of Article XX(g) apply only to policies related to the conservation of exhaustible natural resources located within the territory of the contracting party invoking the provision.”²¹ However, it went on to qualify this substantially: “The Panel consequently found that the policy to conserve dolphins in the eastern tropical Pacific Ocean, which the United States pursued within its jurisdiction over its national and vessels, fell within the range of policies covered by Article XX(g).”²² This left the measure’s applicability to non-US citizens or others outside US jurisdiction still under the Tuna Dolphin I determination, which the panel here modified only to the limited extent of US nationals or boats outside US territory but otherwise under US jurisdiction.

The panel went on to observe that the measures in question could only be effective in conserving dolphin if they compelled changes in the laws and policies of other states on tuna fishing and dolphin mortality.²³ The panel then went on to find, again similar to Tuna Dolphin I, that

“measures taken so as to force other countries to change their policies, and that were effective only if such changes occurred, could not be primarily aimed either at the conservation of an exhaustible natural resource, or at rendering effective restrictions on domestic production or consumption, in the meaning of Article XX(g).”²⁴

The same precise reasoning was then applied to Article XX(b).²⁵ Thus, the Tuna Dolphin II panel slightly recalibrated the scope of territorial jurisdiction to include other recognized bases of jurisdiction a country may rely upon to apply its laws outside its territory, primarily to its national, boats under its flag, etc. But on the broader issue of ET application beyond this, the panel used other criteria found in Art. XX(g) to again set a threshold barrier against the extraterritorial application of a Members environmental or conservation laws.

The Tuna Dolphin II panel went on to make an additional concluding statement on the scope of the GATT as a policy instrument for environmental purposes:

The issue was whether, in the pursuit of its environmental objectives, the United States could impose trade embargos to secure changes in the policies which their contracting parties pursued within their own jurisdiction. The Panel therefore had to resolve whether the contracting parties, by agreeing to give each other in Article XX the right to take trade measures necessary to protect the health and life of plants, animals and persons or aimed at the conservation of exhaustible natural resources, had agreed to accord each other the right to impose trade embargos for such purposes. The Panel had examined this issue in the light of the recognized methods of

²⁰ Ibid, para. 5.17.

²¹ Ibid, para. 5.20.

²² Ibid, para. 5.20.

²³ Ibid, para. 5.24.

²⁴ Ibid, para. 5.27.

²⁵ Ibid, paras. 5.33 and 5.38.

interpretation and had found that none of them lent any support to the view that such an agreement was reflected in Article XX.²⁶

This statement directly addressed and precluded, at January 1995, the use of trade measures in order to protect the competitive position of domestic producers who are required to achieve higher environmental standards in their domestic PPM and product standards. Thus, from the environmentalist perspective, the Tuna Dolphin decisions lent credence to the likelihood of trade law becoming a factor governments had to consider as weighing against the enactment of higher environmental standards, as the competitive position of domestic industries could not be protected from the additional costs of achieving higher standards. If this may not have supported a “race to the bottom”, it began to be seen as supporting a “stuck at the bottom” phenomenon. For developing countries, however, this was seen as a bulwark against green protectionism, and a necessary ingredient in the making of a system of trade law that would support their development.

3.2.2 PPMs as a like products issue

The issue of whether PPM-based distinctions can be considered when assessing whether competing products are “like products” under trade law rarely arose in the pre-1995 trade cases. As noted above, this issue is important because only like products must be treated in no less favourable ways under Article III of the GATT and other similar national treatment rules in trade law. If their PPMs can be used to distinguish which are like and which are not, then they can be used to establish different rules based on their environmental impacts during harvesting and production.

One major reason there are few cases on this pre-WTO is that most of the cases where this was potentially a viable issue were decided under unfettered prohibitions on import restrictions in Article XI of the GATT. Thus, they did not fall under Article III, where “like product” is a defining element.

In the Canada-US case concerning salmon and herring landing requirements, different environmental impacts of PPMs on different fish stocks and species are expressly seen as a valid basis for differentiating the regulations applied to these different species. While noteworthy, this was in the context of Article XX(g), not Article III, and one must be careful in assessing the state of the law in extrapolating too quickly from one to the other.

Thus, in the pre-WTO period, the state of the law is really left to the Tuna Dolphin cases. In the Tuna Dolphin I panel decision, the issue does arise as part of the threshold discussion. By excluding PPM issues entirely from the scope of the GATT Article III analysis, the panel necessarily excluded the possibility that environmental impacts associated with the harvesting or making of a product could be part of the like products analysis. This was expressly decided in a passage already quoted in the previous section.²⁷ This exact same result is found in Tuna Dolphin II, as noted above. Consequently, the other trade cases that address product-based distinctions are

²⁶ Ibid, para 5.42

²⁷ See Tuna Dolphin I, para. 5.15

of little direct benefit: the state of the law at the end of 1994 as it relates to PPM-based distinctions is determined by the rulings in the two Tuna Dolphin cases.

When the issue becomes more cogent is in the post 1994 period. As will be seen next, the Tuna-Dolphin threshold decisions on PPMs and ET have been invalidated, thereby also opening up PPMs for possible consideration under Article III's like products test as well.

3.3 Developments since 1994

The critical case post 1995 is unquestionably the Shrimp-Turtle case, beginning with the first panel decision of May 1998 and running until the Appellate Body decision on the implementation of the first decisions in October 2001. This set of cases has, quite simply, redefined the state of the law on PPM and ET issues. The cases do not simply reverse the Tuna-Dolphin cases on several points, but add additional elements to the mix.

3.3.1 *Developments on PPMs and ET as threshold issues*

The Shrimp-Turtle cases have essentially the same fact basis as the Tuna-Dolphin cases. In Shrimp-Turtle, it is endangered species of sea turtles whose conservation is at issue, due to being caught and killed in nets designed for shrimp fisheries. In response to this conservation issue, the US imposed a ban on imports of shrimp or shrimp products that were not caught in turtle-friendly nets, i.e., nets that included TED's (turtle excluder devices). Some narrow exceptions for artisanal or traditional fisheries without nets were available, but these were essentially inoperable during the first set of cases because certification was available only on a country-by-country basis, based on laws or regulations in existence in those countries. In addition, there were no opportunities for foreign countries or shrimp fishermen to fully review or appeal US government decisions on certification. A final major point was that the US had reached an agreement on shrimp fishing with shrimping countries in the Caribbean basin, but had simply imposed the import restrictions on the Pacific and Indian Ocean countries. This was due to court action in the US imposing action on government officials in this regard.

The result of all of the above is a situation that was legally almost identical to the Tuna Dolphin cases. A US measure was being imposed to help conserve endangered turtles from a PPM that created extensive risks. It created barriers to the US market in order to achieve this result. Further, in Tuna-Dolphin terms, it required foreign governments to change policies and laws in order for it to be effective from a conservation perspective in foreign countries. The measure was first brought to the WTO dispute resolution process by four countries: India, Malaysia, Thailand and Pakistan.

The first Shrimp-Turtle decision was rendered in May, 1998.²⁸ For all practical purposes, its legal findings followed closely those of the Tuna Dolphin panels. The panel found the measure was in violation of Article XI of the GATT, as per the Tuna

²⁸ *United States – Import Prohibition of Certain Shrimp and Shrimp Products, Report of the Panel, WT/DS58/R*, 15 May 1998. Hereinafter, Shrimp-Turtle panel decision.

Dolphin cases, and then proceeded directly to an analysis of Article XX. There is little by way of analysis on the Article III issues that might have otherwise arisen.

Under Article XX, the panel first addressed the ET issue, with the parties essentially repeating the arguments from the Tuna-Dolphin cases. The panel undertook its analysis in an incorrect manner, analyzing the application of the chapeau of Article XX before the application of paragraphs (b) and (g), and applying incorrect burdens of proof in the process. These issues are outside the scope of the present review, but may have contributed to a set of comments on the chapeau of Article XX that went beyond the rulings on ET in the preceding cases. Following extensive reasons, the panel concluded that measures aimed at compelling another party to change its policies to be consistent with the enacting member's policies are (1) a threat to the multilateral trading system as a whole, and (2) against the object and purpose of the WTO Agreements and (3) therefore outside the scope of Article XX *in toto*. This is so even if the individual measure is not a particular threat, as allowing such *types* of measures creates a systemic threat. The panel stressed the right of states to establish their own environmental and conservation policies, and that this right could not be undermined by trade measures imposing policy choices as a condition of market access.²⁹ As a result, the panel never went beyond this to assess the more precise legal ET issue *per se* of a measure applying outside its jurisdiction. But the ruling had, for all practical and legal purposes, the same impact of creating a threshold barrier for most, if not all, ET measures affecting citizens or vessels beyond those of the state enacting the measure.

The panel's reasoning, did not survive review by the Appellate Body.³⁰ Indeed, the panel report was excoriated by the AB for both its approach and its conclusions. The AB stated, *inter alia*:

*Maintaining, rather than undermining, the multilateral trading system is necessarily a fundamental and pervasive premise underlying the WTO Agreement; but it is not a right or an obligation, nor is it an interpretative rule which can be employed in the appraisal of a given measure under the chapeau of Article XX.*³¹

The AB then went on to make a broader statement on the scope of Article XX, one that effectively reverses the conceptual basis of the Tuna Dolphin decisions:

It appears to us however, that conditioning access to a Member's domestic market on whether exporting Members comply with or adopt a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling within

²⁹ *Ibid*, paras 51, 53, and more generally paras. 31-62.

³⁰ *United States – Import Prohibition of Certain Shrimp and Shrimp Products, Report of the Appellate Body, WT/DS58/AB/R*, 12 October 1998. Hereinafter Shrimp-Turtle AB Report. This decision was later followed by two more decisions on implementation of the AB report: *United States – Import Prohibition of Certain Shrimp and Shrimp Products, Recourse to Article 21.5 by Malaysia*, Report of the Panel, WT/DS58/RW, 15 June 2001. Hereinafter, Shrimp-Turtle Implementation review panel decision; *United States – Import Prohibition of Certain Shrimp and Shrimp Products, Recourse to Article 21.5 by Malaysia, Report of the Appellate Body, 22 October 2001, WT/DS58/AB/RW*. Hereinafter, Shrimp-Turtle AB Implementation review decision.

³¹ *Ibid*, para. 116.

*the scope of one or another of the exceptions (a) to (j) of Article XX. ... It is not necessary to assume that requiring from exporting countries compliance with, or adoption of, certain policies (although covered in principle by one or another of the exceptions) prescribed by the importing country, renders a measure a priori incapable of justification under Article XX. Such an interpretation renders most, if not all, of the specific exceptions of Article XX inutile, a result abhorrent to the principles of interpretation we are bound to apply.*³²

With this ruling, the AB effectively did away with the PPM and ET issues as *prima facie* threshold barriers to using Article XX to justify measures aimed at and impacting PPMs in jurisdictions outside the country enacting the measures. Any doubt on this point is erased in the remainder of the decision and in the second AB decision on this case, considered below.

The AB did not, however, leave a simple vacuum in the wake of this ruling. Rather, it effectively replaced the *prima facie* threshold test with a broader set of tests that appear to be more applicable to PPMs, especially those on an extraterritorial basis, than to product related measures.

First, the AB stated that it was not ruling on whether there was an implied jurisdictional limitation in Article XX(g), and if so the extent of that limitation.³³ However, the logic is inescapable: if “conditioning access to a Member’s domestic market on whether exporting Members comply with or adopt a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling within the scope of one or another of the exceptions (a) to (j) of Article XX,” and such measures are not *prima facie* inconsistent with the WTO Agreements or the GATT, and such measures necessarily have an ET component to them by their nature, then there can be no exclusion of such characteristics implied on a jurisdictional basis under the Article XX exceptions.

To address the resulting but unstated conclusion, the AB went on to state that in the specific circumstances of the case at hand, “there is a sufficient nexus between the migratory and endangered marine populations involved and the United States for purposes of Article XX(g).”³⁴ The result of this new test is quite different than a simple threshold test. In particular, it looks to the environmental links between the country taking the measure and the geographic area the measure purports to apply to. Clearly, this cannot be limited to links within a states territorial jurisdiction or jurisdiction over its own flag vessels. Indeed, the AB ruled specifically in this case that the measure was justifiable under Article XX(g), thus showing there was no extraterritorial limitation applicable.

The sufficient nexus test may also conceivably address the difference between the environmental motivation for a measure and the competitiveness motivation linked to preventing a race to the bottom scenario raised in the introduction to this section. Based on the conceptual framework and the result of this decision the AB has

³² Ibid, para. 121. This statement is highlighted as a critical view of the AB in its Implementation Review report, para. 137-138.

³³ Ibid, para. 133. The AB did not address Article XX(b) in this decision, but there appears to be no reason not to extend the logic they use on Article XX(g) to XX(b).

³⁴ Ibid, para. 133.

accepted the possibility of ET measures where there is a sufficient environmental nexus. But it leaves unaddressed the issue of whether this can be done to balance competitiveness impacts of new domestic environmental protection measures on domestic businesses. While it is clear from other cases that taxes imposed on a business for environmental purposes can be adjusted for through border adjustment taxes,³⁵ it is still unclear whether or how costs borne by industry to improve environmental performance and protection standards can also be adjusted for. This AB decision suggests it likely cannot. Rather the purpose of a measure with ET dimensions must be focused on the environmental linkage for an extraterritorial scope to be justified. To some extent, of course, many environmental issues with have multiple jurisdictional connections today. Climate change, ocean pollution, ozone layer protection are simple examples of this fact. But the focus of the new sufficient nexus test on this element may exclude the race to the bottom concerns of environmentalists from future analyses.

The AB added more, however, to the equation, by emphasizing the provisional justification step for a measure under Article XX(b) and (g), and the final justification after the analysis on its application and implementation is completed under the chapeau of Article XX. In doing so, the AB set out a series of tests or requirements that a measure with ET effect would have to “pass” in order to ensure that a measure provisionally justified under Article XX(b) or (g) is not applied in an arbitrary or unjustifiably discriminatory way or as a disguised restriction on trade. A key requirement for the AB in setting out its tests in this case was that “a balance must be struck between the *right* of a Member to invoke an exception under Article XX and the *duty* of that same Member to respect the treaty rights of the other Members.”³⁶ In seeking to establish this balance, the AB moved the issue of the coercive intent from the threshold test in paragraphs XX(b) or (g) to the question of discrimination under the chapeau of Article XX. However, in doing so it modified the test by focusing not on whether there is simply a coercive element, but on whether the coercive element requires one exact policy result or whether it requires an environmental result, leaving the means of achieving it more flexible.³⁷ Thus, some flexibility and discretion must be left to the foreign, exporting state. The AB emphasized that the object should be conservation, not the enactment of the same legal or administrative scheme, noting here that even shrimp harvested in a turtle-safe manner were not admitted to the US if they were not from a certified country under the administrative rules. The AB also made it clear that the different economic and technological conditions that may occur in other states must be accounted for as part of this flexibility.³⁸ This discretion and flexibility was found to be absent, in practice, in the US measure at this stage of the case.

As part of meeting the tests in the chapeau, the AB went on to *require* that states imposing such a measure seek “serious, across the board negotiations with the objective of concluding bilateral or multilateral agreements for the protection and conservation of sea turtles, before enforcing the import prohibition against the shrimp

³⁵ This was accepted in the 1987 “superfund” case, *United States- Taxes on Petroleum and Certain Imported Substances*, Report of the Panel adopted on 17 June 1987 (L/6175 – 34S/136).

³⁶ *Ibid*, para. 156, original emphasis.

³⁷ *Ibid*, paras. 161 et. seq.

³⁸ *Ibid*, para. 164.

exports of those other Members.”³⁹ This requirement was subsequently confirmed as being to negotiate in good faith, but not to conclude an agreement. The requirement is also one that applies to all states potentially implicated by the issues at hand. While the *demandeur* has a primary obligation to act in good faith, and an expanded one when it is financially and technically able, this obligation extends to all the negotiating parties.⁴⁰

Another factor set out by the AB was to ensure phase in periods that allowed shrimp producers to develop and install the necessary technologies and/or to seek new markets where the import requirements did not apply.

Collectively, these requirements under the chapeau of Article XX clearly work to replace the threshold test of whether a measure addresses PPMs and is applied extraterritorially. What the AB makes clear in its conclusions is that the measure by the US aimed at imposing harvesting standards for shrimp harvested in foreign countries for them to be imported into the US was a justifiable measure under Article XX. What the AB then found was that its *implementation* was done in a manner contrary to the requirements of the chapeau in Article XX, and hence it failed for that reason.⁴¹ This, it is submitted is a huge legal difference, and a complete reversal and repudiation, of the application of the PPM and ET tests as threshold barriers to the similar type measure in the Tuna-Dolphin cases. Any doubt on this point is erased when the same states challenged the US on the implementation of this first decision.

Over a two year period subsequent to the first set of decisions, the US amended the implementing regulations under the act in question, undertook negotiations with southeast Asian and Pacific countries, provided financial and technical support for the negotiations called for and for implementing new technologies in exporting countries, ensured certification was available on a shipment-by-shipment basis rather than a country basis only, set out phase-in periods, and provided other administrative improvements to the regime called for by the AB’s initial decision. As a result, when Malaysia challenged these measures under the Article 21.5 of the Dispute Resolution Understanding (the procedures to challenge whether or not a state found to have acted inconsistently with trade law is now acting in a manner consistent with its obligations), both the reviewing panel and the AB ruled that the US was now in compliance with GATT law.⁴² These decisions again confirm that the ET and PPM issues as a threshold question have been ended.

³⁹ Ibid, para. 166-168. There is some doubt as to whether there was a requirement to negotiate set out *per se*, or whether the requirement arose in this case because the US had negotiated with some states in the Caribbean and reached an agreement on turtle management, but had not done so with others, leading to discriminatory results. Some ambiguity remains on this point after the AB decision on implementation as well, as discussed below. Paras. 119-124, 134, of the AB Implementation review report, *infra*. The implementation review of the panel report suggests more clearly that the obligation to negotiate arises from several inter-related aspects of the AB ruling on the conditions in the chapeau, and not just the issues of the US having negotiated with some states and not others. (Paras. 5.43-5.48) The authors believe that the Panel view is likely correct on this point, and that the requirement is directed in general at this type of measure. The differences in the resulting regimes are used by the AB to highlight the reasons why this requirement is established, as well as to support a case of arbitrary discrimination among foreign shrimp harvesting countries.

⁴⁰ Shrimp-Turtle Implementation review, Panel report, para. 5.78, 5.83.

⁴¹ Shrimp Turtle AB report, para. 186.

⁴² *United States – Import Prohibition of Certain Shrimp and Shrimp Products, Recourse to Article 21.5 by Malaysia*, Report of the Panel, WT/DS58/RW, 15 June 2001. Hereinafter, Shrimp-Turtle Implementation review panel decision; *United States – Import Prohibition of Certain Shrimp and*

A key legal concern of the AB that is addressed by the US in its implementation review decision is the issue of coercion. By introducing flexibility in how the policy goal can be met and how it is certified, the US significantly altered the compulsive nature of the measures to protect turtles. It ended the approach of demanding one scheme, and instead allowed various schemes to achieve the conservation goal to be available. Thus, the AB's initial decision had an impact in significantly altering the US measure's implementation process. The importance of these changes is highlighted by the AB in its implementation review report. In essence, the AB noted the difference between requiring essentially the same practices and procedures to be applied by a foreign jurisdiction and requiring a "*programme comparable in effectiveness*."⁴³ The latter was acceptable, subject to its inclusion of flexibility in doing so and the other factors already discussed. The former was not an acceptable approach.

Overall, it is clear that the Shrimp-Turtle decisions have invalidated the late GATT-era jurisprudence on PPMs and ET, and expressly confirmed what seemed to be implied by silence on these issues in the earlier GATT-era cases. But in ending the threshold nature of the PPM and ET questions, other conditions for applying PPM-measures on an extraterritorial basis have been added via the chapeau of Article XX. They need not be re-iterated here. The point is, at the end of the day, there is a much more balanced and nuanced approach that stems directly from the systemic integration of the concept of sustainable development into the fabric of WTO law through its preamble.

Some additional questions remain: would, for example, the same conditions set out in the Shrimp-Turtle cases apply to product-based environmental or human health impacts as opposed to environmental impacts of foreign PPM's? This is not clear, but the structure of having bilateral or multilateral negotiations in all such cases seems, at first blush, to be impossible to achieve and hence to impose. In addition, the ET element is not present when a product-related hazard exists that could have impacts in the country of use, transit or disposal. A second question already noted is how this case law will extend from the kind of conservation concerns addressed in Shrimp-Turtle, where there is a shared conservation issue, compared to foreign PPM measures designed to address the economic concerns of a level playing field for environmental law-making. How often and how tightly the environmental nexus will be drawn is not certain. A third question is whether the reversal on PPM and ET issues in Shrimp-Turtle also has an impact on the use of PPM factors to differentiate between products under Article III of the GATT and similar "like product" tests in other WTO Agreements? It is this issue that is now addressed.

3.3.2 *Developments on PPM's as a like products issue*

As noted above, case law on whether PPMs can be used as an element to help define "like products" is rare pre-1995. Post WTO they remain rare at this time, but are likely to increase in numbers, scope and importance. This is because the WTO regime has been significantly expanded with the inclusion of the Agreement on

Shrimp Products, Recourse to Article 21.5 by Malaysia, Report of the Appellate Body, 22 October 2001, WT/DS58/AB/RW. Hereinafter, Shrimp-Turtle AB Implementation review decision.

⁴³ AB Implementation review report, para. 143-144, at 144, original emphasis.

Technical Barriers to Trade (TBT Agreement) as being fully subject to the dispute resolution process. Challenges to environmentally related constraints can now be made under the GATT and under the TBT Agreement, or the often-similar Agreement on Sanitary and Phytosanitary measures (SPS Agreement). Both these Agreements – the TBT Agreement and the GATT – apply to restrictions and technical regulations establishing requirements for products in trade, and require comparisons between treatment of domestic and foreign-produced like products.

In brief, there are no cases to date where the environmental impacts of how a product is made has been a determining factor in a like products analysis. In the Shrimp-Turtle panel decision, the panel ruled that the measure fell within, and violated, Article XI of the GATT. On that basis, it refused to rule on whether another provision of the GATT, Article I on most favoured nation treatment, might also be breached. Had it done so, it may have addressed the PPM issue as part of the like products analysis, as it raised the issue in an *arguendo* context, thus showing its awareness of the potential concerns.⁴⁴ It went no further than that, however.

The Shrimp-Turtle cases remain significant nonetheless. This is because they end the *prima facie* barrier to considering PPM and ET issues under the GATT and arguably under WTO Agreements more generally. The relevance of this should be understood in conjunction with the *EC-Asbestos* case ruling of the AB, coming between its first and second Shrimp-Turtle reports.

While not itself addressing a PPM-based measure, the Asbestos case addressed in detail the scope of the factors relevant to a like products analysis under Article III of the GATT.⁴⁵ The particular question there was whether the human health impacts of asbestos could be included in the analysis of whether asbestos containing products and non-asbestos products were “like”. The panel ruled that they were “like products” after excluding the health impacts as a factor for consideration. Rather, the panel argued that the health impacts could only be considered later under the Article XX analysis the case included. The conclusion that human health implications of a product could not be considered in the like products analysis was overturned by the AB. It found that the human health impacts of a product could be included in the analysis, though how directly remains unsettled.⁴⁶ The AB concluded that the analysis of Article III should not be impacted by the fact that Article XX(b) can be available to justify breaches of Article III itself: including health impacts in the analysis of Article III did not deprive Article XX of its use. Rather, the analysis of health factors in Article III went to understanding the competitive relationship between allegedly like products, whereas the analysis in Article XX served to justify measures otherwise inconsistent with GATT obligations.⁴⁷

⁴⁴ Shrimp-Turtle Panel decision, para. 18.

⁴⁵ *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products, Report of the Appellate Body*, WT/DS135/AB/R, 12 March 2001. More specifically, it did so in the context of Article III:4, concerning regulatory measures, which is the most pertinent part of Art. III for present purposes.

⁴⁶ *Ibid.* The analysis takes place in paragraphs 84-148 of the AB report, followed by a “concurring statement” by a single member of the AB in paragraphs 149-154. The importance of this statement is returned to in a moment.

⁴⁷ *Ibid.*, para. 115.

Further, the AB noted that the purpose of Article III, which guarantees national treatment for imported products, is to ensure equality of competitive conditions for imported products, and prevent regulations being used so as to afford protection to domestic production. As a result, it was noted that a determination of likeness is fundamentally a determination of the nature and extent of a competitive relationship between and among products.⁴⁸

Flowing from this, the AB applied criteria adopted under the GATT, in the Report of the Working Party on *Border Tax Adjustments*, which had been applied in previous GATT and WTO cases. The criteria set out in that report fall under four categories: (1) the properties, nature and quality of the products; (2) the end uses of the products; (3) consumers' tastes and habits in relation to the products; and (4) the tariff classification of products.⁴⁹ These factors were then analyzed for asbestos and non-asbestos containing products, from the perspective of competitive positions in the market place. The AB stressed the need to examine all the evidence relating to all the criteria, then reach a balanced conclusion on the issue of likeness.

The AB held that the carcinogenicity of asbestos constituted a defining aspect of the physical properties of asbestos and asbestos-containing products.⁵⁰ As the panel did not account this for, and other elements of the criteria also were not addressed, the panel ruling was vitiated by the AB as being based on insufficient evidence and analysis relating to all the criteria. The AB then went on to issue no ruling on the question of likeness of the cement products containing and not containing asbestos, on the basis that there was a lack of evidence adduced by Canada on all the criteria, and hence incomplete evidence before them. The AB then concluded that Canada failed to meet its burden of proof on this issue. At several points, however, the AB noted that the carcinogenic aspect of the asbestos was a factor to consider and have evidence upon, in order to determine its impacts on consumer tastes or other criteria in the analysis. The issue of carcinogenicity was therefore raised by the AB for purposes of analyzing the economic factors and physical property criteria as they relate to the relative competitive position of the products.

The one AB member making a separate "concurring statement" indicated he would have gone further. He indicated that the evidence as to carcinogenicity was sufficient for the AB to have made a finding of the products not being like products under Article III.⁵¹ He further argued that that the evidence on carcinogenicity in this case would be such as to override any other economic factors relating to economic competitive relationships. The statement continues to argue that not any degree of health risk would negate a finding of likeness based on other factors, but that in this specific case it was warranted. The AB member argued that the reason the AB as a whole would not take this step because of "their conception of the "fundamental", perhaps decisive, role of economic competitive relationships in the determination of the "likeness" of products under Article III:4."⁵²

The separate statement then concludes with a pointed questioning of the necessity or appropriateness of a fundamentally economic interpretation of likeness, arguing this

⁴⁸ Ibid, para. 97-99.

⁴⁹ Ibid, para. 101.

⁵⁰ Ibid, para. 114.

⁵¹ See *ibid*, paras. 149-154, and at 152.

⁵² Ibid, para. 153.

proposition does not appear to be free from substantial doubt, and could lead to a difficult time drawing a line between a fundamentally and exclusively economic analysis.⁵³ Nothing in the full AB report, it may be noted, supports a legal requirement for an exclusively economic analysis.

The Asbestos and Shrimp-Turtle cases address different aspect of the issue of including PPM based-issues in a like products analysis. Shrimp-Turtle ends the *prima facie* barrier to including PPM and ET issues in a GATT or WTO law analysis. Asbestos allows the inclusion of the environmental or human health aspects relating to a product, previously through inadmissible for like product purposes. But there is still no direct decision on the inclusion of PPM issues in a like product analysis under Article III.

Given the absence of such a specific decision, the actual state of the law remains unclear. Several factors, however, suggest strongly that there is no longer a ban on doing so. First, the threshold issue of whether PPMs can be addressed under trade law at all has been clarified by the Shrimp-Turtle decisions. With no threshold barrier in place today, there is no *prima facie* legal basis to argue it cannot be done using the product/non-product relate distinction. Second, the Asbestos case clearly allows environmental impacts associated with a product into the like product analysis. Indeed, it calls for an analysis of all the evidence going to commercial competitiveness, including consumer tastes and habits. That environmental factors concerning product use and production are relevant to consumer tastes and habits as a general proposition is unquestionable today. Indeed it is the basis of most eco-label and corporate environmental responsibility programs. How this may affect any given product is a matter for more specific determination. This view, therefore, leaves open the possibility of raising the environmental impacts of a product during its PPM cycle, as well as during its use and disposal.

From an environmental perspective, the issue that the WTO now faces is to be able to recognize that the world has changed since the formation of the Border Tax Working Party report in 1970. From an environmental perspective, it is obvious that the environmental impacts of how a product is made are critical today. Indeed, this is a core challenge in promoting sustainable development, and is as important for developing countries concerned with unsustainable production and consumption in the North as it is for those concerned with unsustainable production in the south. The full exclusion of this factor from any consideration in assessing like products is, therefore, not a viable policy option. From a trade policy and developing country perspective, the issue is to ensure that like product criteria and factors do not create an open-ended basis for unrestricted differentiation of products based on PPMs. This would raise serious and legitimate concerns for market access, for developing countries in particular. This challenge remains a live one.

3.4 The issue in Doha and beyond

PPM and ET issues are not directly mentioned in the Doha Ministerial Declaration. However, issues may arise in some contexts. One of the most prominent places will be the negotiations on fish. The negotiation on fish that is foreseen relates expressly

⁵³ Ibid, para. 154.

to subsidies.⁵⁴ However, one cannot very easily disentangle the subsidies issues from the rate of harvesting and style of harvesting issues that are critical to the sustainability of global fish stocks.

There are two other paragraphs in Doha of particular relevance. Para. 32 calls on the CTE to increase its analytical focus on the effect of environmental measures on market access, especially in relation to developing countries. This has an obvious relevance to PPM and ET oriented measures. Para. 16 calls for negotiations to reduce tariff and non-tariff barriers to trade in non-agricultural products. This is part of the negotiating mandate and could lead to more or less restrictions on the application of PPM and extraterritorial measures. It is equally relevant to the PPM and ET issues.

Developments relating to all these paragraphs will, therefore, require watching.

4. THE RELATIONSHIP OF WTO OBLIGATIONS TO MULTILATERAL ENVIRONMENTAL AGREEMENTS

4.1 Background

The relationship between WTO obligations and Multilateral Environmental Agreements (MEAs) has been the subject of much debate and discussion within and outside the WTO. The frequent calls at the WTO in dispute resolution bodies, the Committee on Trade and Environment, Ministerial Declarations and so on for negotiations and multilateral approaches to replace unilateral trade measures for environmental purposes are well known. In addition, the AB has set out a legal requirement in the Shrimp-Turtle decisions for Members to seek to negotiate MEAs in good faith prior to initiating enacting measures with extraterritorial effect.⁵⁵ Given these statements of the law and of WTO policy objectives, it is clear that the WTO as a whole, including in its dispute settlement processes, must give appreciable legal weight to these MEAs. To fail to do so would be to call for them on the one hand and ignore them on the other hand. It would leave the WTO as the proverbial “emperor with no clothes”. However, it is arguable that the WTO already does give appreciable legal weight to MEAs, and therefore it is at least questionable as to how much more if anything need be done to clarify the relationship between WTO obligations and MEAs.

This section looks at the relationship between concluded (though not necessarily in force) MEAs and the WTO agreements, especially in the dispute resolution context. Having noted that the WTO both encourages and in some cases mandates the good faith effort to negotiate and seek to conclude MEA’s, what weight do they take on when a trade law dispute is brought before a panel or the Appellate Body? This

⁵⁴ Doha Ministerial Declaration, paras, 28, 31.

⁵⁵ As noted previously, but included here again for the sake of a complete section, the precise timeframe for negotiating and concluding an MEA is difficult to assess fully. In the Shrimp-Turtle implementation review, the panel noted that the US had initiated multilateral negotiations prior to enacting its amended measures reviewed in the Article 21.5 process. However, they could not be concluded at that time. The panel, in a move endorsed by the AB subsequently, stated that the US had an ongoing obligation to continue to negotiate in good faith in order to reach an MEA with the Asian and Pacific countries, and that the Panel would seize itself of an ongoing review function at the behest of any disputing party to reassess their performance of this obligation as time moved forward. Thus, the obligation seems to be an ongoing one, irrespective of unilateral measures having been taken at a given point in time. Shrimp-Turtle Implementation review, Panel report, paras. 5.83-5.88; 6.1- 6.2.

section is not focused primarily on the rules of the Vienna Convention on the Law of Treaties in relation to potential conflicts between treaties, but more on how, in practice, the dispute resolution process has addressed the issues.⁵⁶

The WTO dispute resolution process can only address matters arising under the WTO Agreements, and the panels and AB must base their rulings on the relevant WTO Agreement(s). But this does not define the boundaries of what must be considered by WTO adjudicatory bodies. Further questions must then be considered to fully understand the WTO-MEA relationship: What happens when there *is* an MEA that is relevant either because it compels the measure being challenged to be taken or because it enables or promotes such a measure? What happens if general principles of international environmental law have relevance to a WTO right or obligation: can these sources then be referenced for understanding the proper interpretation and application of trade law? And when substantive issues surrounding the obligations in an MEA arise, who decides the issues of law and based on what advise?

The relationship of the WTO agreements to MEAs is a relatively complex question of defining how two critical branches of international law that are intended to share a similar objective of promoting sustainable development interact with each other.

4.1.1 Trade-related environmental measures in MEAs

The WTO and other sources have analyzed the nature and scope of trade-related environmental measures adopted in a variety of MEAs to date.⁵⁷ Several reasons for including trade-related measures are found in these analyses, such as:

- Discouraging unsustainable exploitation of natural resources;
- Discouraging environmentally harmful production processes;
- Creating market opportunities and incentives to use or dispose of a good in an environmentally sound manner;
- Preventing or limiting the entry of a harmful substance into a country;
- Inducing producers to internalise the costs to the environment caused by their products or production processes;
- Preventing non-Parties from exploiting lower environmental standards to gain unfair competitive advantages;
- Discouraging the migration of industries to countries with lower environmental standards;
- Reducing the incentives for countries to remain outside the agreement and become “free riders” who can benefit competitively from the absence of MEA standards;

⁵⁶ Many articles have addressed these rules over the past few years. ⁵⁶ See, e.g., Gabrielle Marceau, “A Call for Coherence in International Law – Praises for the Prohibition Against ‘Clinical Isolation’ in WTO Dispute Settlement,” *Journal of World Trade*, 33, (1999); Richard Tarasofsky, “Ensuring Compatibility between Multilateral Environmental Agreements and GATT/WTO”, Vol. 7, *Yearbook of International Environmental Law*, 1996, pp. 52-74.

⁵⁷ See, e.g., Matrix on Trade Measures Pursuant to Selected MEAs, Note by the Secretariat (Revision), WT/CTE/W/160/Rev.1, 14 June 2001.

- Controlling trade, where trade provides market incentives that threaten the environment; and
- Enhancing compliance with MEA rules.

Other analyses have tried to define very broad trade law categories for environmental measures. Among these categories are concepts of specific and non-specific measures, and party/non-party measures. While the party/non-party distinction is easy to grasp as a legal matter, and has its origins in the rules of the Vienna Convention on the Law of Treaties, the specific/non-specific dichotomy is less easily grasped.⁵⁸ Indeed, while this is part of the framework for the negotiations on the MEA/WTO relationship under paragraph 31 of the Doha Ministerial Declaration, the negotiations since then show a lack of agreement on just what the terms mean.

Despite this lack of clarity, it may be noted that the Doha mandate includes negotiations only on measures that fall within one category: those that are specific and apply between parties to both the MEA and the WTO (i.e. party/party). It may be noted that there has never been a trade law dispute between parties to an MEA and the WTO over a measure to implement the MEA, which may be all that would be covered under the mandate as many people understand it. As will be seen below, however, WTO jurisprudence has already gone beyond this limited construct to adopt a broader approach to encouraging a mutually supportive and constructive relationship. The implications of this for the Doha Work Programme are considered in section 4.4, following the analysis.

4.2 The state of the law in 1994

The state of the law on the role of MEAs in the trade law system is perceptually dominated by the Tuna-Dolphin cases. But, as is the case with the PPM and ET issues, and while the actual number of cases involved is small, this is not a full picture.

In the 1987 GATT Panel decision in the so-called Superfund case, the Panel made express reference to the consistency of the GATT with the Polluter Pays Principle, which the European Community had argued was being breached by the US in imposing a tax on imports of foreign made products that did not cause pollution in the US. The Panel stated that while the US had the ability to tailor its border adjustment tax for imported goods according to the amount of pollution caused by the product, the GATT did not compel it to do so. It stated that “The General Agreement’s rules on tax adjustment thus give the contracting party in such a case the possibility to follow the Polluter-Pays Principle, but they do not oblige it to do so.” The panel then went on to a conventional statement of the view that its mandate was to examine the case in the light of the GATT provisions. As a result, it did not examine the consistency of the provisions of the Superfund Act with the Polluter-Pays Principle.⁵⁹

In the early fisheries cases already discussed in relation to PPM and ET issues, one does find references to other international agreements scattered about, most frequently

⁵⁸ Neither dichotomy is necessarily accepted as an appropriate basis for negotiations or analysis by the authors or their affiliated organizations. Nonetheless, this is part of the state of play today.

⁵⁹ United States – Taxes on Petroleum and Certain Imported Substances, Report of the Panel Adopted on 17 June 1987, at paras. 5.25-5.26.

in the review of the pleadings of the parties involved that is found in the panel reports. However, the general understanding stated above, that only the GATT is turned to for making a finding, is again repeated here. Thus, the panel recognized that Canada had referred to international fishery agreements and the Convention on the Law of the Sea, but stated that “The Panel considered that its mandate was limited to the examination of Canada’s measures in the light of the relevant provisions of the (GATT). This report therefore has no bearing on questions of fisheries jurisdiction.”⁶⁰

In the Canada-US panel decision on the landing requirement for salmon and herring prior to export, the panel noted that Canada and the US were committed to an extensive cooperation agreement under the bilateral Pacific Salmon Treaty:

Nevertheless, in view of the rights and obligations of a coastal state with regard to fisheries management under the law of the sea, and particularly in view of the level of friction that tends to characterize international relations in fisheries matters around the world, the Panel could not accept the contention that GATT Article XX(g) required such cooperation. The Panel agreed with Canada’s position that a state could not be obliged to make its fisheries conservation and management regime dependent on cooperation with another state.⁶¹

The Panel then went on to apply this determination on the requirements of Article XX of the GATT to help it determine what alternative measures might be reasonably available to Canada to meet its conservation requirements. In other words, the Panel in this decision expressly used the conservation and fisheries management provisions of the Law of the Sea Convention to help it understand and interpret the GATT provisions it was called on to apply. It did not rule on the rights or obligations of Canada or the US under the Convention, but rather used the Convention to inform itself of the scope and extent of GATT rights and obligations. This is, therefore, a very different approach than what was seen in the two preceding decisions.⁶²

The above cases illustrate two different directions for considering the relevance of non-GATT law, and take us to the Tuna-Dolphin decisions on this point. Tuna Dolphin I simply restated the basic mandate of the GATT panels, to decide the matter in the light of the relevant provisions of the GATT. As we have seen, however, two panels at least had already interpreted that same mandate in different ways.

Tuna Dolphin II took a more deliberate approach. The Panel noted that both parties to the dispute (the US and EEC) had based many of their arguments on the location of the exhaustible natural resources covered under the terms of Article XX(g) on environmental and trade treaties outside the GATT. “However, it was first of all necessary to determine the extent to which these treaties were relevant to the interpretation of the text of the Agreement.”⁶³ In asking this question, the Panel

⁶⁰ Canada – Measures Affecting Exports of Unprocessed Herring and Salmon, Report of the Panel adopted on 22 March 1988, para. 5.3.

⁶¹ Final report of the Panel Under Chapter 18 of the Canada-United States Free Trade Agreement, *Canada’s Landing requirement for Pacific Coast Salmon and Herring*, September 1989, para 7.16.

⁶² Parenthetically, it is also worth noting that this decision is perfectly consistent with the decision of the AB in the Shrimp-Turtle cases, that the obligation to negotiate in good faith is not an obligation to conclude an agreement, but to strive to conclude one.

⁶³ Tuna Dolphin II, para. 5.18.

followed the approach seen in the Canada-US salmon and herring landing decision discussed above: can outside sources be used to help interpret the intended scope of a GATT article? After referring to several aspects of the rules of treaty interpretation in the Vienna Convention on the Law of Treaties, the panel concluded that these outside environmental agreements were not relevant to the interpretation of the GATT, and ruled accordingly on this question.⁶⁴

Consequently, the state of the law pre-1994 remained divided. If one was keeping score, those favouring the non-relevance of MEAs would have won, but at least one panel did use outside conservation agreements to help it interpret and apply the text of Article XX of the GATT.

4.3 Developments since 1994

There are at least two separate but equally important directions coming from post-1995 legal developments. One is fully inside the WTO, and reflected in AB reports. A second is outside the WTO, and reflected in a growing use of what has become known as “WTO savings clauses” but in reality are better seen, in several leading cases in any event, as “WTO/MEA consistency clauses”. In this report, only the first set of developments is considered, as this is most directly related to WTO law.

The foundation for changes in the approach to interpretation of the WTO Agreements is laid in the first case to go to the Appellate Body, the Reformulated Gasoline case.⁶⁵ In that case, the AB states that the inclusion of a specific reference in the new Understanding on Dispute Settlement coming from the Uruguay Round “reflects a measure of recognition that the General Agreement is not to be interpreted in clinical isolation from public international law.”⁶⁶

This recognition came to the fore in the Beef Hormones case, involving European Community bans on the import of cattle treated with hormones to promote their growth. In that case, the EC pleaded that the precautionary principle was a part of customary international law, and so had to be a factor in the interpretation and application of the WTO Agreements, thus forcing the issue into the legal analysis.⁶⁷

The AB reflected the different views of the main protagonists in the dispute as follows: the EC believed that the precautionary principle was reflective of customary international law, or at least was a general principle of law. The US argued it was not part of customary international law, and was better seen as an approach rather than a principle. Canada argued it was not a principle of customary international law, but that the precautionary approach or concept was an emerging principle of law.⁶⁸ After commenting on the inconclusiveness of the debate in international law on the status of the precautionary principle, the AB then suggested it was unnecessary to reach a conclusion on it for the purposes of the dispute. The EC is reported by the AB as having argued that the precautionary principle should be applied so as to override the

⁶⁴ Tuna-Dolphin II, paras 5.18-5.20.

⁶⁵ *United States – Standards for reformulated and Conventional Gasoline*, Report of the Appellate Body, WT/DS2/9, 20 May 1996.

⁶⁶ *Ibid*, para.

⁶⁷ *EC – Measures Concerning Meat and Meat Products (Hormones)*, Report of the Appellate Body, WT/DS26/AB/R, WT/DS48/AB/R, 16 January 1998, para. 16.

⁶⁸ *Ibid*, para. 121-122.

provisions of the Agreement on Sanitary and Phytosanitary Measures on risk assessment and risk management. The AB found that, irrespective of the legal status of the principle, the fact that it was reflected in the SPS Agreement in certain ways suggested it could not be relied upon to override other provisions. After suggesting specific provisions that reflected the principle, the AB concluded by stating that the precautionary principle does not, by itself, and without clear textual directive to that effect, relieve a panel from the duty of applying the normal (i.e. customary international law) principles of treaty interpretation in reading the provisions of the SPS Agreement.”⁶⁹

Although this is not a situation of a specific treaty provision being read into the WTO agreements, it does indicate a more expansive opening for seeing international environmental law more generally as a source of input into the interpretation of WTO provisions. The AB did factor the principle into its reading of certain provisions of the SPS Agreement (this will be considered in more detail in the next section). Even though this comes from a broader basis of customary international law or general principles of law, the AB did not shrink from considering its possible relevance in the express absence of a textual requirement to do so. Moreover, the AB considered its relevance as a principle that might override the SPS Agreement, and found it could not under the rules of treaty interpretation. On this point, it is likely a correct international law decision.⁷⁰

Consistent with other instances of the AB moving towards a greater inter-relationship between trade law and public international law more generally, The Appellate Body significantly expands the scope for considering MEAs in the first Shrimp-Turtle decision, and both the panel and AB do so again in the implementation review. Through various passages, the AB provides guidance in the initial Shrimp-Turtle decision:

- In ruling that the content of the term exhaustible natural resources in Article XX(g) is evolutionary, not static, the AB considers the content of the 1982 United Nations Convention on the Law of the Sea, the 1992 Convention on Biological Diversity, Agenda 21 from the 1992 Rio UNCED Conference, the Convention on the Conservation of Migratory Species of Wild Animals, and the Convention on International Trade in Endangered Species.⁷¹
- Moreover, the AB does so while expressly recognizing that not all the parties to the dispute, let alone the WTO, are signatories of parties to all the outside agreements they cite.⁷²
- They cite the 1992 Rio Declaration on Environment and Development as part of the legal and policy developments that lead to the integration of the concept of sustainable development into the fabric of the WTO.⁷³

⁶⁹ Ibid, para. 124.

⁷⁰ Under the Vienna Convention on the Law of Treaties, it is recognized that states can adopt treaties that are not consistent with customary international law. Only those principles of international law considered to be principles *erga omnes*, or owed and applicable to all as a fundamental legal right and duty, cannot be contracted out of by states in a treaty. There was no apparent argument that the precautionary principle, even if it were a principle of customary international law, had become a principle of law *erga omnes*.

⁷¹ Shrimp-Turtle decision, Report of the Appellate Body, para. 130-132.

⁷² Ibid, footnotes 110-113.

⁷³ Ibid, para. 154.

- All of the above gets factored into crafting the balance that the AB seeks between the right to enact measures for the protection of the environment and the duty to meet one's obligations under the WTO Agreements. They state, "Having said this, our task here is to interpret the language of the chapeau, seeking additional interpretive guidance, as appropriate, from the general principles of international law."⁷⁴
- The AB also refers to Principle 12 of the 1992 Rio Declaration and to the concluded MEAs already listed above to support its view that measures to address common environmental problems should be, as far as possible, based on international consensus as opposed to unilateral action. Hence, the AB uses these sources of law not just to address the environmental issues but also the development and trade issues.⁷⁵
- The AB uses the regional MEA concluded by the United States with Brazil, Costa Rica, Mexico, Nicaragua and Venezuela on the protection of turtles during shrimp harvesting to help in its analysis of whether alternative, non-unilateral measures were available to the US, and whether such alternatives might be less discriminatory or trade restrictive. It does so even though it notes, once again, that not all the parties to the dispute are signatories to that Convention and it has not yet been ratified by any of the signatories.⁷⁶

All of the above is done in the context of interpreting and applying the terms and tests in Article XX(g) and the chapeau of Article XX. Given these specific and express arguments by the AB, it is clear that the constraints on the use of extraneous materials spoken of in the Tuna Dolphin II, Superfund and the landing of unprocessed herring and salmon cases has been rejected. In its place, the approach of allowing outside material to be used to help inform the interpretation of the WTO provisions has been adopted. And this has been done whether or not the parties to the dispute are all parties to the agreements in question, or even whether the agreements are in force.

The importance of this last understanding takes us back to one characterization of the MEA debate in the WTO. While the issues may be divided into party-non party and specific and non-specific, here the AB simply ignored any legal issues arising from these distinctions. This is returned to again below.

In the implementation review decision, the panel and the AB both take a further step in the use of MEA's under WTO law. The panel concludes in its review on implementation that "the Inter-American Convention can reasonably be considered as a benchmark of what can be achieved through multilateral negotiations in the field of conservation and protection."⁷⁷ The panel then went on to use it to assess what elements of a cooperative regime could reasonably be anticipated in a cooperative agreement, based on the Inter-American Convention, and apply these to test whether the United States was, under its revised measure, still acting in a manner that was arbitrarily or unreasonably discriminatory under the chapeau of Article XX. It found the US was not acting in such a manner, as there was a large degree of concordance between the new US measure and the Inter-American Agreement.

⁷⁴ Ibid, para. 158.

⁷⁵ Ibid, para. 168.

⁷⁶ Ibid, para. 169 and accompanying footnotes.

⁷⁷ Shrimp Turtle Implementation review, Panel report, para. 5.71.

This approach was specifically challenged by Malaysia before the Appellate Body. The AB found that, while the use of the word “benchmark” was unfortunate, the concept of using the Inter-American Agreement as an “example” was appropriate. It then went on to analyze what the panel had done, and concluded it has used the Agreement in just such a way. Moreover, the AB stated expressly: “The mere use by the Panel of the Inter-American Convention *as a basis for comparison* did not transform the Inter-American Convention into a ‘legal standard’.”⁷⁸

It may be noted that this brings the use of MEAs, whether the states in the dispute are parties or not, or the measures in question in the MEA are specific and mandatory or not, into a source that can be analogized to an international standard. This is not the place to detail the nature and content of international standards. Some basic points of how they relate to other aspects of trade law may be noted, however. Under the GATT, TBT Agreement and SPS Agreement, the three main sources of WTO law likely to be implicated by an environmental measure, when a Member applies in its domestic law the provisions set out in an international standard, there is a presumption of WTO consistency that arises. This presumption is rebuttable, but the burden of proof to achieve this rebuttal would be understood as fairly high.

In the fairly recent AB decision in the so-called Sardines case, the issue of how specifically and closely a domestic measures must follow an international standard arose in the context of Article 2.4 of the TBT Agreement. Basing its decision on the same issue in the SPS Agreement as they considered in the Beef Hormones case in 1998, the AB noted several comparative standards that would be relevant: principal constituent, fundamental principle, main constituent, and determining principle. All of these, noted the AB, “lend credence to the conclusion that there must be a very strong and very close relationship between two things in order to be able to say that one is the basis for the other.”⁷⁹

The analogy is useful, but only if the differences are also understood. First, trade law does compel the dispute resolution bodies to examine whether a measure is based on an international standard and is therefore subject to the mandatory legal presumption of being consistent with trade law. The decisions on using an MEA as an example create no such legal requirements, either for looking at the MEA or attributing any type or level of presumption for measures taken pursuant to it. Second, the standard for achieving the presumption is for the measure to be based on the international standard, which is a fairly high threshold. There is no specific standard for expressing when an MEA can be used as an example to apply for WTO compliance. This issue therefore remains very discretionary. Despite these differences, the conceptual convergence is noteworthy, and is a good basis for understanding that the AB has established an approach to integrating outside agreements such as MEAs into its role of interpreting and applying the WTO Agreements. Thus, the relationship of the WTO to MEAs at its most critical point of potential conflict – in the dispute resolution process – has some specific and cogent direction at this time: it is not a *tabula rasa*.

⁷⁸ Shrimp-Turtle Implementation review, Appellate Body report, para. 130, reiterated in para. 133.

⁷⁹ *European Communities – Trade Description of Sardines*, report of the Appellate Body, WT/DS231/AB/R, 26 September 2002. Para. 110.

A final question of importance for this section is who interprets the MEAs when they are brought to the analysis, and based upon what advice. The first set of answers stems from the nature of the dispute settlement process. The panel and AB must reach a determination of what the content of the Agreement is. This determination *must* be based, in part, on the submissions of the parties, and of third party Members of the WTO who have a right to be heard. The panel has the discretion how much weight to give the evidence and arguments of the parties. Two other sources remain *available*, however. One is the use of experts as a source of advice to the Panel. The second is the reception of *amicus* briefs from outside, non-party sources.

These issues, especially the latter, have a considerable degree of controversy to them. They will not be addressed in detail here. Suffice to say for present purposes, that the AB has made it clear that while both can be used, there is no requirement on the panel or the AB to appoint or commission an expert advisory body of any type in relation to extraneous materials such as an international standard (a Codex Alimentarius standard in that case),⁸⁰ or to accept *amicus* briefs for non-parties and NGOs.⁸¹ Given the scope of issues outside the traditional expertise of trade law dispute resolution, one must wonder whether this could be addressed by additional rules under the dispute settlement understanding that would ensure a sufficient range of expertise is before a panel or AB before a ruling is made on the substance of these external agreements.

In summary, the WTO dispute resolution process must still address issues arising under WTO Agreements, and is not triggered by outside sources of law. But, as noted in the introductory comments, this addresses only the trigger process for disputes in the WTO, not the full scope of the legal (or policy) analysis to prevent or resolve disputes.

Once triggered, it is clear that WTO law is no longer a watertight ship, impervious to other sources and branches of international law. Rather, the AB has clearly moved to referencing other branches, notably international environmental law in our case, for interpreting and applying the WTO Agreements. In doing so, they have helped to resettle trade law into the broader community that international law is and seeks to establish for the future.

4.4 The issue in Doha

The implications of the preceding analysis for Doha stems from the basic understanding that the WTO is not starting the negotiations on MEAs called for in paragraph 31(i) of the Doha Ministerial Declaration from a *tabula rasa*. The AB has established a rationally based approach to reducing conflict and promoting mutually supportive directions by interpreting the rules of trade law in the light of MEA provisions. This is an important development, that already goes beyond the framework of paragraph 31 of Doha.

⁸⁰ Ibid, paras. 151-155

⁸¹ Ibid, paras. 20-35

For ease of reference, para. 31(i) reads:

31. With a view to enhancing the mutual supportiveness of trade and environment, we agree to negotiations, without prejudging their outcome, on:

(i) 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.

Paragraph 32 states that the outcome of these negotiation “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 the rights and obligations, and will take into account the needs of developing and least developed countries.”

The text of paragraph 32 clearly limits the scope of work under paragraph 31, and prevents the negotiations under this heading leading to changes in legal rights and obligations. Interpretative notes could be adopted, and procedural elements such as on expert advice and other recommendations on the process of dispute settlement identified in the 1996 CTE Report to the Singapore Ministerial, may fall within this scope, as the AB has already made it clear these are within the existing rules.

Beyond that, there is also the risk that the limited scope of the negotiations under Doha can have a negative impact on the existing state of the law as seen in the AB rulings. First, the existing uses of MEAs as aids to interpretation of WTO rules is not limited to those where the parties to a dispute are parties to the MEA as well. The Doha negotiation may only cover that circumstance, which is truly the least controversial and the least likely to lead to an actual conflict. Indeed, there have been no such conflicts to date.

Second, as the Doha negotiations do not begin from a *tabula rasa*, there is a risk that what is agreed will be less supportive of a mutually integrative approach to trade and environment than what is seen today. This must be watched carefully. Negotiators should be working from the current rights of the parties and the tribunal to introduce MEAs into the analytical framework of WTO provisions, and not reduce these rights.

Third, there is a risk that whatever is agreed could somehow be read as limiting the ability of the AB to respond to MEA-related concerns only when they fall within the window of specific party-party measures. This would reduce the current scope for their use in the interpretive context, and reduce the capacity of the Appellate Body to interpret and apply WTO rules in a manner that avoids unnecessary conflict with other systems of law.

Fourth, care must be taken not to create a “lawyers delight”. It is entirely foreseeable that a legal text in this area will attract the exact kind of MEA-focused disputes that political pressure continues to prevent: there has never been a GATT or WTO case

that challenges the implementation of an MEA provision between the parties to the MEA. A legal document could invite parties to argue they are not challenging the MEA-basis for the measure, but simply whether the WTO criteria for it to be found relevant to trade rules has been met. Give litigating lawyers a new thing to litigate, and they will do so. Of course, one cannot fear new developments because of this. But one can, and should, foresee the impact of anything that is proposed from the litigation perspective.

Finally, as already noted, there is the issue of who interprets the MEA obligations, and with what advice. Addressing this in a constructive way could assist all parties to a dispute, and would seem to lie within the mandate of Doha.

5. THE PRECAUTIONARY PRINCIPLE, THE ROLE OF SCIENCE, AND THE WTO AGREEMENTS

5.1 Background

The 1990s was an important decade for the development of international environmental law. The precautionary principle stands out as one of the main areas of development within this period. This is not the place to argue the precise status today of the precautionary principle within the body of international environmental law or international law more generally. For present purposes, and in order that the reader have an opportunity to assess what follows in a transparent manner, it may be noted that the authors of the present paper do believe that the precautionary principle (PP) has emerged as a principle of customary international law. However, given the ongoing difficulties in determining its precise content, and existing variations in its formulation, the authors do not yet ascribe to the PP a status of international law *erga omnes*, as that concept is reviewed above. Thus, there is no international law barrier to the WTO Agreements including provisions that may breach the principle and impose constraints on the application of the principle where international law more generally would support, if not require, its application.

What follows below is not “based on” this viewpoint. Rather, what follows seeks to set out the current state of the law within the WTO: do the WTO Agreements allow a role for the PP in the interpretation of their rights and obligations? How might this be reflected, if it is? How is precaution and the role of science balanced, if it is?

As will be seen below, these are not uni-dimensional questions of whether a single provision of any given agreement does or does not reflect the PP. Rather, it is a more complex weaving between the precautionary principle on the one hand and the science-related substance and processes that are required under trade rules on the other hand. These processes are not uniform between different agreements, but one may note some generic elements in the context of human health and environmental protection measures. These include science-based disciplines such as basing a measure on sufficient science and risk assessments that are science-based and upon which an objective is set. These requirements are fleshed out in the cases discussed below. Also addressed below is how these disciplines relate to addressing what is not known or what is uncertain: how should these elements be included in the science-based processes that are required by trade law? It is in these areas that much of the relationship between trade law and precaution is set out. They also include more

traditional disciplines, such as non-discrimination and adopting the least trade restrictive measure available to meet the objective a state has chosen.

5.2 State of the law in 1994

The authors are not aware of cases that expressly address the precautionary principle prior to the transformation of the GATT into the WTO. The polluter pays principle has been considered, as discussed previously, thereby showing a sense of awareness of emerging concepts in international environmental law. But the PP itself begins to emerge as a principle only in the early 1990s, and takes its place as an emerging principle of law only with its incorporation into the 1992 Rio Declaration on Environment and Development, the Climate Change and Biodiversity Conventions, and other MEAs concluded shortly before and after the pivotal 1992 Conference at Rio.

Perhaps the most widely accepted statement of the precautionary principle is found in Principle 15 of the 1992 Rio Declaration on Environment and Development:

In order to protect the environment, the precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

There are few cases subsequent to 1992 and prior to 1 January 1995 where arguments surrounding the PP may have been relevant to the analysis of GATT law. Realistically, the two most likely candidates may have been the Tuna Dolphin cases. Neither, however, went beyond the threshold issues of PPMs and ET in resolving their cases, as seen above. In addition, there does not appear in the record of positions of the Parties as described by the panels in their reports any reference to the PP.⁸²

One may find some related issues addressed, such as the standards for determining what less trade restrictive measures may be reasonably available to achieve the objectives of a Member than the one being challenged. This issue we see debated in at least one of the fisheries cases between Canada and the United States (where the panel gave a reasoned view of limits to the analysis of what might be considered reasonably available), and in the Thai Cigarettes case concerning the import of US cigarettes into Thailand (where the GATT panel argued on the basis of theoretical possibilities concerning alternative measures without any real analysis of whether they were reasonably available).⁸³ However, these cases have limited analysis of the standards for assessing what constitutes a reasonable alternative, and so are of limited assistance today.

⁸² Each report in a GATT or WTO dispute settlement process includes a significant section recounting the views and positions of the parties to the dispute and any third parties that submit arguments. There appears to be no mention of the PP in any of these sections of the Tuna Dolphin reports.

⁸³ *Canada's Landing Requirement For Pacific Coast Salmon And Herring*, Final Report of the Panel Under Chapter 18 of the Canada-United States Free Trade Agreement, 1989, para. 7.16; *Thailand - Restrictions On Importation Of And Internal Taxes On Cigarettes*, Report of the Panel adopted on 7 November 1990, (DS10/R - 37S/200), paras. 75-81.

In short, the legal analysis of the relationship between the precautionary principle and the substance of trade law really begins only under the WTO regime.

5.3 Developments since 1994

Since 1994, at least three cases have addressed the relationship between precaution and scientific uncertainty in the context of the WTO dispute settlement system. These cases are the Beef Hormones case, the Australian Salmon case and the Japanese Varietal case. In addition, important elements of the EU-Asbestos case are also relevant to the present discussion. Each is considered in turn.

Beef Hormones case

The first AB case to seriously address the relationship between the PP and trade law was the 1998 Appellate Body decision in the Beef Hormones case.⁸⁴ This decision has already been referenced for its use of non-WTO sources of law in the analysis of WTO provisions. Here, the substance of that analysis is looked at more carefully. The case concerns, in very broad terms, the use of hormones in North America to increase the rate of growth of cattle. The EC banned the import of hormone treated beef in Directives proclaimed in 1981 and 1988. Because the application of the WTO agreements is generally retroactive, i.e. they apply to measures adopted before the coming into force of the WTO agreements, the United States and Canada were able to challenge the ban at the WTO. The EC appealed the panel decisions that held the Directives to be inconsistent with the SPS Agreement, the key WTO Agreement applicable here.

As discussed earlier, the EC was reported by the AB to have argued that the PP had emerged as a principle of customary international law, and should override the provisions of the SPS Agreement that were inconsistent with it. The US argued that the precautionary *approach* had not become part of customary international law and so should not be read into the SPS Agreement beyond its clear recognition in Article 5.7. This Article allows for temporary measures to be taken when there is insufficient scientific information on which to base a permanent or final measure. (Additional follow-up action is then required by the party taking the measure to ensure the scientific information has not changed over time.) Canada argued the same position on the SPS Agreement as the US did. However, it recognized the precautionary *approach* may be emerging as a principle of international law, but had not done so as yet.⁸⁵

The Appellate Body ruled that the status of the precautionary principle in international law was not clear. Nonetheless, they did not need to take a final position on this for several reasons,⁸⁶ each of which is quoted below, and followed by a brief comment:

First, the principle has not been written into the SPS Agreement as a ground for justifying SPS measures that are otherwise inconsistent with the obligations of Members set out in particular provisions of that Agreement.

⁸⁴ *EC Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R, WT/DS48/AB/R, 16 January 1998.

⁸⁵ The arguments of each party are set out in *Ibid.*, paras. 120-123.

⁸⁶ What follows is from para. 124, *Ibid.*

- *This reflects the general structure of much of trade law that exceptions to rights and obligations are specifically set out and must be narrowly construed. The dispute settlement bodies will not read in exceptions not provided for in the text.*

Secondly, the precautionary principle indeed finds reflection in Article 5.7 of the SPS Agreement. We agree, at the same time, with the European Communities, that there is no need to assume that Article 5.7 exhausts the relevance of the precautionary principle. It is reflected also in the sixth paragraph of the preamble and in Article 3.3. These explicitly recognize the right of Members to establish their own appropriate level of sanitary protection, which level may be higher (i.e., more cautious) than that implied in existing international standards, guidelines and recommendations.

- *This creates an important linkage, which will be returned to in a moment. What the AB has done here is effectively enlarge the scope of application of the PP from the temporary measures to the setting of permanent or final regulations at the level of protection a state wishes to adopt.*

Thirdly, a panel charged with determining, for instance, whether "sufficient scientific evidence" exists to warrant the maintenance by a Member of a particular SPS measure may, of course, and should, bear in mind that responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, e.g. life-terminating, damage to human health are concerned.

- *The AB again suggests a broader applicability for the PP under the SPS Agreement, and returns to specifically relevant portions of this aspect later on. What is unclear in this passage is whether it is intended to apply as guidance only when damage is irreversible should it occur, as per life threatening damage, or whether this is one circumstance when states may, under trade law, "commonly act from perspectives of precaution. There is some clarification later in the decision.*

Lastly, however, the precautionary principle does not, by itself, and without a clear textual directive to that effect, relieve a panel from the duty of applying the normal (i.e. customary international law) principles of treaty interpretation in reading the provisions of the SPS Agreement.

- Under the Vienna Convention on the Law of Treaties, it is recognized that states can adopt treaties that are inconsistent with customary international law. Only those principles of international law considered to be principles *erga omnes*, or owed and applicable to all as a fundamental legal right and duty, cannot be contracted out of by states in a treaty. There was no apparent argument that the precautionary principle, even if it were a principle of customary international law, had become a principle of law *erga omnes*. Given the state of international law today relating to the principle, and a recent decision of the International Court of Justice that also did not accept the view that the PP had crystallized into a rule of international law capable of overriding treaty provisions,⁸⁷ this seems a fair

⁸⁷ *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, I.C.J. Judgement, 25 September 1997, paras. 140, 111-114.

statement of the law today, however unfortunate the result of it may be from some perspectives.

Of this full passage, most negative commentary seems to have focused on the final statement, that the PP does not overrule other provisions of the SPS Agreement. To the extent that this occurs, it distorts, in our view, the full import of the passage and of the decision as a whole. It is submitted that a second part of the AB decision is equally important and relevant to the balancing of trade rules and the precautionary principle, and is directly connected to elements in the above quoted passage.

This part occurs during the analysis of the SPS requirement for a measure to be based on a properly conducted scientific risk assessment. Article 2.2 of the SPS Agreement sets out the requirements for a measure to be adopted or maintained without sufficient scientific evidence. The AB has indicated that the provisions of Article 5 on risk assessment flow from this general obligation, and provide it with more detailed meaning and definition. Thus the general and specific obligations for science and risk assessment are linked in this way. These are among the provisions the EC suggested should be overruled by the PP. The AB stated clearly that risk assessment is a scientific assessment process aimed at establishing a scientific basis for a measure. Such a process is intended to be systematic, disciplined and objective.⁸⁸ On these points, the AB agreed with the panel. The AB disagreed, and this is critical, with the panel ruling that such an assessment must “exclude all matters not susceptible of quantitative analysis by the empirical or experimental laboratory methods commonly associated with the physical sciences.”⁸⁹ The AB ruled that risk must be that which actually exists, in the real world, not just what is found in the conditions of a laboratory. Measures not capable of quantitative laboratory-like analysis can be factored into the risk assessment.

The AB then went on to determine in a critical part of the decision that while an SPS measure must be based on a risk assessment,

We do not believe that a risk assessment has to come to a monolithic conclusion that coincides with the scientific conclusion or view implicit in the SPS measure. The risk assessment could set out both the prevailing view representing the "mainstream" of scientific opinion, as well as the opinions of scientists taking a divergent view. Article 5.1 does not require that the risk assessment must necessarily embody only the view of a majority of the relevant scientific community. In some cases, the very existence of divergent views presented by qualified scientists who have investigated the particular issue at hand may indicate a state of scientific uncertainty. Sometimes the divergence may indicate a roughly equal balance of scientific opinion, which may itself be a form of scientific uncertainty. In most cases, responsible and representative governments tend to base their legislative and administrative measures on "mainstream" scientific opinion. In other cases, equally responsible and representative governments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources. By itself, this

⁸⁸ Beef Hormones, AB Report, para. 187.

⁸⁹ Ibid, para. 187.

*does not necessarily signal the absence of a reasonable relationship between the SPS measure and the risk assessment, especially where the risk involved is life-threatening in character and is perceived to constitute a clear and imminent threat to public health and safety. Determination of the presence or absence of that relationship can only be done on a case-to-case basis, after account is taken of all considerations rationally bearing upon the issue of potential adverse health effects.*⁹⁰

This paragraph clearly establishes that the choice of measure can be based on a new scientific opinion, on a minority opinion, or on a majority opinion that is not unanimous. All these possibilities support the notion of regulating on a precautionary basis, including based on new scientific information, and a weighing of uncertainty derived from conflicting scientific information. Moreover, this passage does not refer exclusively to measures taken under Article 5.7 as temporary measures. Rather, it refers to all measures that the SPS Agreement requires be based on a risk assessment. Thus, permanent regulations can be based on minority or new scientific information.

Further, the passage also makes it clear that the ability to use minority or new scientific analysis is not restricted to life-threatening or irreversible situations. The AB in this regard says acting on such a basis would not signal the absence of a relationship between a measure and a risk assessment, “especially” where the risk is life-threatening and perceived to constitute a clear and imminent threat. But the AB does not say it is “exclusively” limited to such cases. This is an important difference, and one which suggests that the AB and panels will view lesser risks with more concern when based on minority opinions. But this skepticism does not alter the state of the law as they have expounded it.

Australian Salmon case

The Australian Salmon case was the next to address the precautionary principle/science relationship. This case concerned measures adopted by Australia to prohibit the importation of Canadian Pacific salmon. Prevention of disease among Australian salmon was the principle reason for this, and measures to prevent diseases crossing sub-species lines are quite a common occurrence. The measures were again adopted before the entry into force of the WTO Agreements. Based on a risk analysis done after the WTO Agreements came into force the Director of Quarantine recommended keeping the same restrictions in place. They were subsequently challenged by Canada.

The AB decision sets out some key elements in relation to a risk assessment, and both directly and indirectly in relation to the PP. On the process and content of a risk assessment, the AB ruled that it is not enough in a risk assessment to conclude simply that there is a *possibility* of entry of disease (or some other risk). Rather, the likelihood or probability of the risk materializing had to be assessed, along with the associated biological and economic risks. These factors then had to be compared with the risk levels if the measure (or measures) proposed to address the risk in question is

⁹⁰ Para. 194.

adopted or continued.⁹¹ The AB does note that the risk can be assessed in quantitative or qualitative terms, confirming that a laboratory-type analysis is not the only one applicable.⁹²

The AB also points out, importantly, that no minimum level of risk must be identified before a measure is permissible. While the risk must be an ascertainable one, and theoretical uncertainty is not the type of risk that is to be assessed, no minimum level of risk is a pre-requisite for action to be taken,⁹³ and the inability to assess theoretical uncertainty does not prevent a Member from determining its own level of risk to be zero risk.⁹⁴ The AB seems to go farther, however:

We might add that the existence of unknown and uncertain elements does not justify a departure from the requirements of Articles 5.1, 5.2 and 5.3, read together with paragraph 4 of Annex A, for a risk assessment. We recall that Article 5.2 requires that "in the assessment of risk, Members shall take into account available scientific evidence". We further recall that Article 2, entitled "Basic Rights and Obligations", requires in paragraph 2 that "Members shall ensure that any sanitary ... measure ... is based on scientific principles and is not maintained without sufficient scientific evidence, except as provided for in paragraph 7 of Article 5."⁹⁵

This passage seems to suggest that what is unknown scientifically is not relevant to a risk assessment. However, such a reading would defy the reference to a risk assessment being conducted based on scientific principles, which themselves allow for scientific uncertainty to be weighed and considered for its impact on the ability to establish a risk level with an acceptable degree of certainty. This weighing of what is known and unknown is part of a science-based risk assessment process, and generates a scientific understanding of the reliability from a risk assessment or risk management perspective of basing a decision only on what is "known" at a given time. The present authors do not believe that the statements of the AB are intended or should be read so as to preclude this type of assessment taking place. Given the fact that science is always evolving, the alternative would be a situation where measures would always have to be temporary in nature if the degree and importance of scientific uncertainty or lack of knowledge could not be appropriately weighed. We note also in this regard that the SPS Agreement talks of measures being taken or maintained based on "sufficient" scientific information, not absolute scientific information.⁹⁶

⁹¹ *Australia – Measures Affecting Importation of Salmon, Report of the Appellate Body*, WT/DS18/Ab/R, 20 October 1998, para. 121-123. The AB subsequently confirms a broad reading of this requirement, that all the alternative measures being considered for a response be assessed for their effectiveness in addressing the identified risk and achieving the identified acceptable level of risk. At para. 134.

⁹² *Ibid.*, para. 123.

⁹³ *Ibid.*, para. 124.

⁹⁴ *Ibid.*, para. 125.

⁹⁵ *Ibid.*, para. 130.

⁹⁶ Agreement on Sanitary and Phytosanitary Measures, Article 2.2. "Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence, except as provided for in paragraph 7 of Article 5."

These propositions as a whole present something of a mixed set of prescriptions at the nexus of risk assessment and risk management, both of which are part of the relationship of trade law to the precautionary principle.

After putting in place these legal requirements for a valid risk assessment, the AB concluded, as did the panel, that the risk assessment done in 1995 and 1996 did not meet the requirements for a risk assessment under the SPS Agreement, as it undertook only “some” evaluation of the likelihood of the risk materializing, and the ability of proposed measures to address the risk. Some evaluation is not sufficient for such risk assessment purposes, and hence the risk assessment was found not to meet the SPS requirements. Consequently, the measure at issue was inconsistent with the SPS Agreement as it was not adopted based on a risk assessment as required.⁹⁷ The very high standards for what is a valid risk assessment led to this result.

The risk assessment process analysis of the AB was supplemented by a panel report on the review of implementation of the decision of the AB, under Article 21.5 of the Dispute Settlement Understanding. In this report, the Panel observed that one purpose of the standards was to ensure a level of objectivity is achieved “such that one can have reasonable confidence in the evaluation made.”⁹⁸ The panel then held in its decision that this was done in the new risk assessment undertaken after the initial AB decision, and that it met the criteria previously set out by the AB for a risk assessment. Beyond the understanding of the basic purpose of the standards applied by the AB, this decision is also important for the realization that flaws in a risk assessment can be repaired without losing the whole measure. This understanding is inherent in the whole implementation review decision of the panel, which accepted the revised measures based on the fresh risk assessment as consistent with the SPS requirements, with one minor exception.⁹⁹

Japanese Varietals case

The Japanese Varietals case, the third in a trilogy of SPS Agreement cases addressing the precautionary principle, adds little by way of any clarification. In its most important statement on the issue, the AB makes the following juxtaposition:

We note Japan’s argument that the requirement in Article 2.2 not to maintain an SPS measure without sufficient scientific evidence should be interpreted in light of the precautionary principle. In our Report in European Communities – Hormone, we stated that the precautionary principle finds reflection in the preamble, Article 3.3 and Article 5.7 of the SPS Agreement and that this principle:

...has not been written into the SPS Agreement as a ground for justifying SPS measures that are otherwise inconsistent with the obligations of Members set out in particular provisions of that Agreement.¹⁰⁰

⁹⁷ Ibid, paras. 135-137.

⁹⁸ *Australia – Measures Affecting Importation of Salmon – Recourse to Article 21.5 by Canada*, Report of the Panel, WT/DS18/RW, 18 February 2000, para. 7.51.

⁹⁹ The substance of this aspect is not relevant to the present discussion.

¹⁰⁰ *Japan – Measures Affecting Agricultural Products, Report of the Appellate Body, WT/DS76/AB/R, 22 February 1999, (hereinafter, Japan – Varietals), para. 81.*

The response of the AB to Japan's submission seems inconsistent here with the AB's statements in the second portion of the Beef Hormones decision quoted above, where the AB considers the tendencies of governments to act with precaution, an obvious and specific context for the application of the precautionary principle. Further, Japan did not ask here for Article 2.2 to be overridden by the precautionary principle, but simply to be interpreted or understood within the context of the principle. This is exactly what the AB had done in the Beef Hormones case, beyond the scope of the specific paragraphs it references, when assessing what the requirement for a measure to be "based on" a risk assessment means. Thus, it is unclear at this point whether the AB intended to pull back from its initial reasoning or not. It is worth noting in this regard that the AB still has never issued an explicit ruling on the use of the PP to interpret WTO obligations. It has said that it is "reflected in" certain of the WTO's obligations, and may not override these obligations, but has not expressly proclaimed on its relevance as an interpretive tool.

The Japanese Varietals decision also has a second component whose relevance is twofold. This is the set of conditions that it places on a WTO Member that asserts it has enacted a temporary measure under Article 5.7 of the SPS Agreement. The AB sets out four conditions, all of which must be met:

- The provisional measures must be imposed in respect of a situation where "relevant scientific information is insufficient."
- The provisional measures must be adopted "on the basis of available pertinent information."
- The provisional measures may not be maintained unless Members "seek to obtain the additional information necessary for a more objective assessment of risk".
- Finally, the Member invoking Article 5.7 must demonstrate that it has reviewed the measure accordingly within a reasonable period of time.

The Appellate Body's analysis focused only on the third and fourth requirements and concluded that Japan had failed to fulfill both of these requirements.

The first point of relevance is that Article 5.7 is considered as the first point of intersection with the precautionary principle: it is where the principle is seen as most reflected in the Agreement. Yet, in establishing these conditions, the AB sets a high threshold for its use. In essence, it sets an interpretation that seems to be based on its approach to the chapeau of Article XX of the GATT: it is an exception whose use is to be safeguarded from abuse. This may be slightly overstated, but parallels do appear to be present. The second point of relevance comes in a less direct way. Because of the requirements of for applying this provision, it is no less onerous than applying the risk assessment provisions *in toto*. The implication of this is returned to below.

Commentary

The uncertainty left by the Japanese varietals decision leaves some conclusions less certain than they might otherwise be as to the state of trade law and the precautionary principle. When these cases are considered as a whole, the AB makes it clear that what is not acceptable under the SPS Agreement is to "invent" or establish a risk based on the PP: there must be some supportable scientific basis for doing so. The present authors see nothing very exceptional in this proposition: environmental and

human health protection laws do not get adopted by governments unless there is a risk to address, or the law seeks to establish a required process to determine whether there may be a risk to address. In that sense, the SPS provides a process requirement to establish a risk may exist before the measure is adopted.

This requirement seems to be balanced by the rulings that there is no minimum threshold or quantitative or qualitative risk that must be reached in a risk assessment for a state to be able to establish its own level of acceptable risk (still subject to disciplines on non-discrimination, etc.). In other words, the requirement is procedural, but does not set substantive limits on the level of risk a state may choose to apply. This, combined with the ability to base a measure pursuant to a risk assessment on minority scientific views, leaves significant scope for the application of the precautionary principle.

How the risk assessment process is to distinguish between theoretical uncertainty – which may not be included – and scientific uncertainty that inherently must be included, remains somewhat unclear. This may impact decisions as to how the WTO will treat new scientific information, or categorize gaps in scientific knowledge. But again, the AB has stated this uncertainty does not bar the adoption of a zero risk policy in any given instance.

Two other important concerns do add to the uncertainty that comes from the existing cases. First, the Australian Salmon case places the level of assessment at a very rigorous level. The extent and detail of the risk assessment process required under that decision costs money and requires expertise. These financial and human resources may well be lacking in many developing countries. Indeed, they are lacking in many countries. Wherever such resources are lacking, a strict application of the SPS rules will become a full barrier to the taking of many measures because all measures must be based on a risk assessment unless they are directly based on an international standard.¹⁰¹ But many developing countries do not participate in the making of such standards, and may not have the resources to verify whether they are appropriate to meet their needs, or to take alternative measures consistent with the SPS Agreement. The ability to rely on Article 5.7 alone for temporary measures is illusory in this circumstance, as the Japanese Varietal case has, as noted above, interpreted it to require an ongoing ability to gather and assess new information that becomes available. This is no less onerous a process.

It is noteworthy that the Cartagena Protocol on Biosafety addresses this specific issue by allowing the state where an exporter wishes to export a product to require the exporter or exporting country to either undertake the required risk assessment or to pay the putative importing state the costs of undertaking it.¹⁰² A failure by trade law to account for this same type of situation will harm the ability of developing countries to enact measures that are based in whole or in part on the precautionary principle, because they lack the resources to integrate this into the trade requirements in a systematic way.

¹⁰¹ Recall the measures based on international standards are presumed to be consistent with trade law.

¹⁰² Cartagena Protocol on Biosafety, 2000, ARTICLE 15.3 (stating “The cost of risk assessment shall be borne by the notifier if the Party of import so requires.”)

Secondly, there is the practical of the SPS Agreement and other WTO Agreements applying to measures adopted before they entered into force: it is most unlikely that such measures would be able to meet the scientific process obligations established after they were adopted. This is a basic problem with retroactive law making. One should not be surprised at such failures when retroactive law making does not account for this likelihood. However, as the dispute resolution process does not generally call for the immediate termination of a measure found inconsistent with trade obligations, there is an opportunity to undertake a process prior to adopting subsequent measures needed to put the measure into compliance. The time period allotted for implementation must now recognize this, which only makes sense because any replacement measure will otherwise also not be based on the sound scientific assessment that is required because the time allotted by other rules is not sufficient.

The preceding analysis is based primarily on the SPS Agreement cases. One limiting factor in transferring them to other areas of WTO law is that the SPS expressly requires all measures to be based on a risk assessment, while the TBT Agreement and the GATT, 1994, do not. Nonetheless, the TBT Agreement does include references to a scientific basis for risk assessment and management, and one can expect these to be subject to similar interpretations as the SPS Agreement when they are applicable. Likewise, the absence of scientific assessments justifying a measure has been seen as giving cause for concern in terms of a measure being a disguised restriction on trade, and this may arise in both the GATT and TBT Agreement contexts. Thus, one can foresee several circumstances where similar reasoning may be applied by the AB in the context of other WTO agreements. While this is not a foregone conclusion, the importance of these cases cannot be minimized.

Other factors will also come into play in assessing just how the WTO legal regime relates to the precautionary principle. One key one is the right of states to adopt their own desired acceptable level of risk. It has already been noted that the SPS cases affirm this right, and the Asbestos case similarly affirms it under the TBT Agreement. Both Agreements, however, impose non-discrimination disciplines in this regard. These are outside the present scope of discussion, but one may note that a reading of the non-discrimination disciplines that diminishes the right to choose an acceptable level of risk would also impact on the overall ability to adopt a precautionary approach to risk management under trade law.

In summary, when all the above reviewed elements are taken together, it is likely that the simple statement in the Beef Hormones and Japanese Varietal cases that the precautionary principle is reflected in Article 5.7 and two other paragraphs of the SPS Agreement (and by extension similar provisions in other WTO Agreements) does not limit the application of the elements of the precautionary principle to those few Articles. What emerges *in toto* is a more complex balancing of scientific information and process with the right of a Member to protect the environment and human health. It is certainly a science based approach to precaution, and we have yet to see the precise balances established between scientific certainty and uncertainty, but it is clear there is a balancing that is required.

Beyond this, specific problems with retroactivity and with the inability of developing countries to comply with the requirements of risk assessment processes will have serious impacts on the ability of many states to implement the precautionary principle.

5.4 The issue in Doha and beyond

The precautionary principle is not specifically mentioned in the Doha Ministerial Declaration. Despite this, it is clear that negotiations on market access for both agricultural and non-agricultural products could have direct implications for the future application of the precautionary principle. The important point to note in this regard is not the absolute position that the EC began the debate with – that the precautionary principle should override the requirements to base a measure on a sound basis – but how the certainties and uncertainties of a science based process are weighed and assessed.

The Doha negotiations may not directly confront this, but can certainly include elements that will impact it. Again, these negotiations will be watched and analyzed as much for what is expressly on the agenda as what may be indirectly impacted. This should be a subject that the CTE sees as part of its mandate under paragraph 51 of the Doha Declaration.

6. INTELLECTUAL PROPERTY, THE TRIPS AGREEMENT AND THE CONVENTION ON BIOLOGICAL DIVERSITY

6.1 Background

Of increasing importance in the trade and environment debate is the relationship between the conservation of biological diversity and intellectual property. Biological diversity – the variability in the genes and species of living organisms and the ecosystems in which they live – is necessary for maintaining life on earth. Moreover, it is the basis of numerous ecological, social, economic, scientific, and aesthetic values. The acknowledgment of the significance of biodiversity has increased in the past decades, as well as subsequent concern about the loss of biodiversity and conservation efforts. Intellectual property rights, by contrast, are private rights that grant their holder the ability to exclude others from certain activities, such as using a product or process, for a defined period of time, and as such have provided incentives for innovation for several centuries. In fact, intellectual property rights today are one of society's principal mechanisms for protecting and enforcing control over information.

The links between biodiversity and IPRs are complex and provide potential both for synergy and tension. They have deepened as the information encoded in genetic resources has increasingly gained commercial value (as a source of new crop and plant varieties, pharmaceuticals, herbicides and pesticides, as well as new biotechnological products and processes), and have thus become increasingly the subject of intellectual property rights. Realizing the value of genetic, species, ecosystem, and cultural diversity provides an essential incentive for its conservation. IPRs may thus act as economic incentives and, appropriately used, provide a tool to help conserve biodiversity. However, the increasing pressure by commercial interests to gain intellectual property rights over genetic resources can also negatively affect efforts to conserve biodiversity. The scope of the exclusive rights created by IPRs defines who can use the information contained in genetic resources, and thus influences the distribution of the benefits flowing from their use. Many are also concerned that economic and commercial rights are inadequate to protect the various facets of biodiversity and its numerous stakeholders.

These issues have come to play out primarily in the context of two major international agreements: the Convention on Biological Diversity (CBD) and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS Agreement). The CBD is an important measure taken by the global community to secure the conservation and sustainable use of biological diversity. It was agreed upon at the Earth Summit in 1992, came into force in 1993, and today is almost universally ratified (187 Parties). The objectives of the CBD are the conservation of biological diversity, the sustainable use of its components, and fair and the equitable sharing of the benefits arising out of the utilization of genetic resources.¹⁰³ To ensure that these objectives are met, the agreement establishes certain obligations for member states, including facilitating access to genetic resources for environmentally sound uses and equitable sharing of the benefits arising from its use,¹⁰⁴ respecting and preserving the knowledge of indigenous and local communities associated to biodiversity, and facilitating the transfer of technology relevant to the conservation and sustainable use of biological diversity under fair and most favorable terms.¹⁰⁵ The implementation of the CBD's objectives therefore relies on the protection and use of knowledge, including knowledge of genetic material, knowledge of technology, or the knowledge of indigenous and local communities regarding biological diversity.¹⁰⁶ Many of the CBD's provisions are thus affected, directly or indirectly, by intellectual property rights. The CBD, implicitly recognizing the potential for both synergy and conflict, requires parties to cooperate to ensure that patents and other intellectual property rights "are supportive of and do not run counter to" its objectives.¹⁰⁷

Just six months after the entry into force of the CBD, the TRIPS Agreement was adopted within the framework of the World Trade Organization (WTO). Intellectual property right regulation had previously largely been left to the individual countries, guided by a set of international agreements that had evolved since the nineteenth century. As intellectual property became more important in international economic activity and trade, developed countries promoted a more sophisticated set of internationally agreed trade rules for IPRs as a way to introduce more order and predictability. The culmination of this process occurred with the negotiation of the TRIPS Agreement, which endeavoured to bring the extent of protection and enforcement of intellectual property rights under a common international instrument, linked to a powerful dispute settlement system. The TRIPS Agreement has the goal of introducing minimum standards for the protection and enforcement of intellectual property and explicitly recognizes, in its objectives and principles, the inherent balance of public and private interest in intellectual property.¹⁰⁸

The relationship between intellectual property and biodiversity conservation and between the legal instruments addressing these realms – the TRIPS Agreement and the CBD – raises a number of issues. At the center of these is the role of intellectual

¹⁰³ Convention for Biological Diversity, Article 1.

¹⁰⁴ *Id.* at Article 15

¹⁰⁵ *Id.* at Article 16.

¹⁰⁶ Simon Walker, THE TRIPS AGREEMENT, SUSTAINABLE DEVELOPMENT AND PUBLIC INTEREST (IUCN, 2001).

¹⁰⁷ *Supra* note 1, at Article 16.5.

¹⁰⁸ For example, Article 7 of the TRIPS Agreement reads: The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

property rights as “rules of the game” affecting the conservation and use of genetic resources, and that changing these rules affects the structure of incentives, and the sharing of benefits and burdens between different actors (e.g. local communities and business). On one hand, conclusion of the TRIPS Agreement was seen by many in the business community as a major achievement. Realizing this inherent balance of public and private interests identified in its objectives and principles has, however, proved challenging. Many developing countries, and much of interested civil society, feel that the substantive obligations embodied in the TRIPS Agreement elevate private over public rights, and have in fact shifted the balance in favor of private IPR holders and away from the public. The CBD, by contrast, embodies the fundamental principle that States retain sovereign rights over their natural resources, thus subordinating private rights, such as IPRs, to the public objectives of the agreement. In consequence, there has been debate on the existence of an intrinsic conflict of objectives between the CBD and the TRIPS Agreement.

Regardless of whether such a fundamental conflict exists, there are substantial areas where intellectual property and biodiversity conservation operate in tension and synergy as a practical matter. In fact, the issue of the potential synergies and conflicts between the CBD and the TRIPS Agreement has achieved such significance that the Doha Declaration specifically provided for the examination of the relationship between the two agreements. The consequent discussions, however, have moved slowly and the issue remains contentious in the post-Doha discussions and the run-up to the Cancun Ministerial.¹⁰⁹

6.2 State of the law in 1994

At the time the TRIPS Agreement was adopted in 1994, the CBD had been adopted and was already in force. Despite the acknowledged linkages between intellectual property and biodiversity conservation, as well as the explicit references to intellectual property rights in the CBD, the issue of the relationship between the evolving intellectual property regime and the CBD was never explicitly addressed in the text of the TRIPS Agreement.

Notwithstanding, several countries did express specific concerns with direct bearing on the subject of biodiversity. India, for instance, desired the exclusion of the patent protection of micro-organisms and plant varieties. In their view, since micro-organisms existed in nature, they were not inventions and thus could not be patented. Other developing countries raised general concerns about patentable subject matter under the TRIPS Agreement, but were already revising their legislation to achieve consistency with the TRIPS standards. Finally, in exchange for TRIPS’ transition periods for implementation, developing countries accepted a final agreement that required patent protection for micro-organisms and plant varieties.¹¹⁰

¹⁰⁹ Paragraph 19 of the Doha Declaration reads: *We instruct the Council for TRIPS, in pursuing its work programme including under the review of Article 27.3(b), the review of the implementation of the TRIPS Agreement under Article 71.1 and the work foreseen pursuant to paragraph 12 of this Declaration, to examine, inter alia, the relationship between the TRIPS Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by Members pursuant to Article 71.1. In undertaking this work, the TRIPS Council shall be guided by the objectives and principles set out in Articles 7 and 8 of the TRIPS Agreement and shall take fully into account the development dimension.*

¹¹⁰ Terence P. Stewart, *THE GATT URUGUAY ROUND: A NEGOTIATING HISTORY* (1986 - 1992) (1993). The key Article 27.3(b) reads: *Members may also exclude from patentability:*

While WTO Members did not formally address the relationship between the CBD and the TRIPS Agreement, by the end of the Uruguay Round several issues that would pervade their discussions in the coming years started taking form:

- patentability of life forms,
- access to and fair and equitable sharing of benefits arising from the use of genetic resources,
- preservation and respect for the knowledge, innovation and practices of indigenous and local communities, and
- transfer of technology.¹¹¹

Today, these issues remain squarely on the agenda at the WTO. To set the context for how the state of the law developed following the Uruguay Round, the following section includes a brief overview of each of these issues and of their relevance to the trade and environment debate:

6.2.1 Patenting of Life Forms

Article 27.3 (b) of the TRIPS Agreement allows WTO Members to exclude patents over plants and animals and processes that are essentially biological, but requires them to grant patents over micro-organisms and non-biological and micro-biological processes. These “patents on life” granted by the TRIPS Agreement have raised a number of concerns. As mentioned above, it was one of the issues brought up during the Uruguay Round. Since then, countries and civil society groups have voiced additional ethical, environmental, economic and social issues.

For the conservation of biodiversity, the significance of Article 27.3(b) lies in the scope of the exclusions. Whether or not the TRIPS Agreement obliges Members to patent plant parts such as cells or genes, for instance, will have the potential to impact the CBD’s provisions on the access and benefit sharing of genetic resources. Moreover, the scope of Article 27.3(b) exclusions can affect the range of patent protection for biotechnology, with the potential risks to biodiversity. The issue remains unresolved, as the WTO has not definitely interpreted Article 27.3 (b). Discussion continues both in the WTO and in other fora.

6.2.2 Access to and Fair and Equitable Sharing of Benefits Arising From the Utilization of Genetic Resources

By recognizing State’s sovereign rights over their genetic resources, the CBD also recognized the rights of States to regulate access to those genetic resources. Access is to be granted on mutually agreed terms (Article 15.4), and is subject to prior informed consent (Article 15.5). Moreover, the results of any benefit arising from commercial or other use of these resources is to be upon mutually agreed terms and as fairly and equitably as possible (Article 15.7).¹¹² Intellectual property affects who controls and

(b) 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 provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.

¹¹¹ WT/CTE/W/210

¹¹² CBD, Article 15 on Access to genetic resources, reads:

benefits from genetic resources. The provisions of the TRIPS Agreement consequently raise a number of issues for biodiversity conservation.

First, concerns have been raised about the relationship between the TRIPS Agreement and the CBD's provisions on prior informed consent (PIC). These provisions are designed to ensure that collectors of biological resources or of related knowledge provide sufficient information on the purpose and nature of their work and obtain permission from the holders of such resources or knowledge. The PIC requirement is thus a measure to prevent misappropriation and to facilitate fair benefit sharing. The TRIPS Agreement does not include provisions requiring PIC. While there is also nothing in the Agreement preventing the use of a PIC mechanism, it has been argued that the omission of the requirement may effectively impede the goals underpinning the PIC requirements. If the TRIPS Agreement does not recognize the rights of the community or country in which a biological resource originated, yet it empowers private individuals to gain rights over such resources, it may be facilitating the submission of patent applications over such a resource in other countries without the knowledge or assent of the rightful owners. Such misappropriation has been dubbed "bio-piracy."¹¹³

The second set of concerns relate to the relationship between the TRIPS Agreement and the CBD's provisions on benefit sharing. The CBD emphasizes the need to share any benefit arising from the use of biological resources or related knowledge with the communities or countries of origin. It has been noted that the TRIPS Agreement does not include similar requirements. Concern has thus been raised that the IPRs required

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- 1. Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation.*
 - 2. Each Contracting Party shall endeavor to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention.*
 - 3. For the purpose of this Convention, the genetic resources being provided by a Contracting Party, as referred to in this Article and Articles 16 and 19, are only those that are provided by Contracting Parties that are countries of origin of such resources or by the Parties that have acquired the genetic resources in accordance with this Convention.*
 - 4. Access, where granted, shall be on mutually agreed terms and subject to the provisions of this Article.*
 - 5. Access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, unless otherwise determined by that Party.*
 - 6. Each Contracting Party shall endeavor to develop and carry out scientific research based on genetic resources provided by other Contracting Parties with the full participation of, and where possible in, such Contracting Parties.*
 - 7. Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, and in accordance with Articles 16 and 19 and, where necessary, through the financial mechanism established by Articles 20 and 21 with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms.*

¹¹³ Third World Network, *Intellectual property rights, TRIPS Agreement and the CBD*, Statement issued for the second meeting of the Expert Panel on Access to Genetic Resources and Benefit-sharing, Montreal, Canada, March 19 - 22, 2001.

by the TRIPS Agreement may be used in a manner that undermines the benefit sharing objectives of the CBD. In response to these concerns, some countries have suggested the negotiation of contracts as a valid alternative. However, many developing countries feel it is not only a complicated and costly process, but it also does not ensure adequate protection.¹¹⁴ In the same way, some developing countries reject the option of challenging cases of misappropriation of biological resources and indigenous and local community knowledge on a case-by-case basis as equally prohibitive.¹¹⁵

These issues have been the object of discussion both in WTO bodies and in meetings in other fora, yet, as discussed below, they remain largely unresolved.

6.2.3 Preservation of and Respect for the Knowledge, Innovations and Practices of Indigenous and Local Communities

The value of traditional knowledge and innovation methods held by indigenous and local communities for the conservation of biodiversity is increasingly being recognized. The CBD expressly provides for its preservation and promotion.¹¹⁶ As a regime developed to protect formal and systematic knowledge, the TRIPS Agreement emphasizes conventional intellectual property instruments and so does not provide any specific mechanisms to grant traditional communities control over their knowledge and innovations.

The TRIPS Agreement does, however, permit Members to adopt higher standards. Thus, supplementary requirements, such as certification of origin or the combination of existing intellectual property rights with benefit-sharing arrangements, could adequately address the issue of traditional knowledge.¹¹⁷ Nevertheless, although these methods could result in financial benefits to indigenous and local communities, there is debate over whether these measures fulfil the CBD's requirement of respect of traditional knowledge, which might demand the recognition of the complexity of the subject and the resort to non-IPR based solutions.

While the protection of traditional knowledge has been among the issues emphasized in discussions regarding the TRIPS-CBD relationship, in WTO bodies such as the TRIPS Council and outside the WTO, for instance in the World Intellectual Property Organization (WIPO), the issue is still open and the dialogue continues.

6.2.4 Transfer of Technology

The CBD recognizes that "both access to and transfer of technology, including biotechnology, among Contracting Parties are essential elements for the attainment of the objectives" of the agreement.¹¹⁸ Although the TRIPS Agreement also aims at a transfer and dissemination of technology to the mutual advantage of producers and users of knowledge and in a manner conducive to social and economic welfare, as mentioned above, the implementation of these provisions has been limited.

¹¹⁴ *Supra* note 4, at p. 35.

¹¹⁵ *Supra* note 11.

¹¹⁶ See Article 8(j) of the CBD.

¹¹⁷ [United Nations Environment Programme](#) and [International Institute for Sustainable Development](#),

ENVIRONMENT AND TRADE: A HANDBOOK (2000).

¹¹⁸ See Article 16.1 of the CBD.

Moreover, many feel that, in practice, the strength and scope of intellectual property rights established in TRIPS may seriously be undermining the transfer of technology between developed and developing countries. The data on the inter-linkages in this area is still indefinite and thus the issues have not been settled. However, technology transfer remains high in the list of priorities of developing countries.

6.2.5 The Legal Relationship Between the TRIPS Agreement and the CBD

It is noteworthy that discussions following the Uruguay Round have focused on the relationship between the TRIPS Agreement and the CBD, and the possibility of a conflict between the two agreements. Neither the CBD nor the TRIPS Agreement deals explicitly with one another.¹¹⁹ Consequently, the rules of treaty conflict of public international law would become applicable, to the extent the two agreements deal with the same subject matter. As has been mentioned, however, there is no easy answer to the question of the extent of mutual supportiveness or exclusion between the two agreements. Furthermore, countries and commentators do not concur on which of the rules of treaty conflict would be applicable. To some, the provisions of the later agreement, that is, the TRIPS Agreement, prevail to the extent of the incompatibility (*lex posterior derogat lex anterior*). To others, CBD provisions relating to IPRs in the specific context of conservation of biodiversity are more specialized and thus prevail over provisions in the TRIPS Agreement (*lex specialis derogat lex generalis*). As a result of these and other obstacles, such as the differing membership between the TRIPS Agreement and the CBD, this approach has also still not been able to clarify the relationship between the two agreements.

6.3 Developments since 1994

In the same manner that WTO Members did not formally address the relationship between the CBD and the TRIPS Agreement in the end of the Uruguay Round, nor specifically identify the issues at stake, discussion after 1994 in the framework of the WTO have not always been clearly articulated or well focused. The Doha Declaration acknowledged the lack of progress in the topic and emphasized the need to closely examine the inter-linkages between the two agreements. In the meantime, organizations such as World Intellectual Property Organization (WIPO) and the Food and Agriculture Organization (FAO) have picked up key issues in the relationship, as will be described below.

6.3.1 Developments within the WTO

Discussions on the relationship between the CBD and the TRIPS Agreements, as well as on the specific issues involved in that interface, have taken place in both the Committee on Trade and Environment (CTE) and the TRIPS Council. Moreover, while no case has reached the dispute settlement procedure regarding the TRIPS-CBD relationship, WTO jurisprudence has provided some initial guidance as to how such a case would potentially evolve.

Developments in WTO jurisprudence

¹¹⁹ Article 22 of the CBD states that “the provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement,” but the provision does not apply to the TRIPS Agreement, which is a later agreement.

Over 25 dispute settlement proceedings have been brought under the TRIPS Agreement, relating primarily to patent, enforcement, copyright, and trademark provisions. While the legal reasoning and interpretative methodology of the emerging jurisprudence may provide a basis for the further clarification of TRIPS obligations,¹²⁰ little has been said about the areas of the agreement that directly implicate the CBD and biodiversity.

An examination of TRIPS-related cases, however, does evidence the Panels' and Appellate Body's very legalistic approach to the interpretation of the Agreement's provisions, as well as their particular understanding of the general TRIPS exceptions in the patent and copyright areas. This is significant because the success or failure of any challenge of measures taken to implement CBD obligations, such as national legislation requiring patent holders to share their profits with the providers of genetic resources or providing for licenses for the use and development of patented products, will largely depend on the interpretation of the obligations and exceptions within the TRIPS Agreement.¹²¹

The *Canada – Patent Protection* case¹²² was the first time a panel was required to interpret one of the TRIPS Agreement's generally worded exception provisions. The case involved an EC challenge of the TRIPS consistency of a Canadian law that created exceptions to the exclusive rights of patent holders. To fall within the scope of Article 30 of the TRIPS Agreement, an exception must be "limited," not "unreasonably conflict with the normal exploitation of the patent," and not "unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties." The Panel stated the first step in interpreting Article 30 was to examine its object and purpose, that is, to consider the goals and limitations established in Articles 7 and 8 of the TRIPS Agreement.

Despite the reference to articles 7 and 8, however, the Panel did not make mention of these provisions when actually examining the meaning of Article 30, relying instead on the context provided by national patent laws and the negotiating history. While the decision has been criticized for having ignored the fundamental balance between public and private interests in IPRs, some commentators feel the decision did consider the objectives and principles of the TRIPS Agreement, though not explicitly, and is legally beyond reproach.¹²³

In the *United States – Copyright* case,¹²⁴ where the European Communities challenged U.S. limitations on certain exclusive rights in copyright works, the panel interpreted Article 13 of the TRIPS Agreement, which establishes limitations and exceptions for copyrights and related rights. Once again, the Panel adopted a textual approach, only in this case, it did not refer at all to Articles 7 and 8.

Beyond the analysis of the specific cases, many see a trend towards a limited interpretation of any exception within the TRIPS Agreement. The consequent issue, thus is how such a narrow view of IPR protection may affect measures taken by

¹²⁰ Dara Williams, "Developing TRIPS Jurisprudence: The First Six Years and Beyond" *Journal of World Intellectual Property*.

¹²¹ Center for International Environmental Law and World Wildlife Federation, *Biodiversity & Intellectual Property Rights: Reviewing Intellectual Property Rights in Light of the Objectives of the Convention on Biological Diversity* (March, 2001).

¹²² *Canada – Patent Protection of Pharmaceutical Products*, WT/DS114/R, adopted on 17 March 2000.

¹²³ Robert Howse, "The Canadian Generic Medicine Panel: A Dangerous Precedent in *Dangerous Times*," *Bridges*, Year 4, No. 3 (2000).

¹²⁴ *United States – Section 110(5) of the U.S. Copyright Act*, WT/DS160/R, adopted on 27 July 2000.

Members to implement the CBD, and whether it would increase tensions, rather than synergies, between the two agreements.

Developments at the TRIPS Council

The discussion on the relationship between the TRIPS Agreement and the CBD in the TRIPS Council has taken place primarily in the context of the review of the provisions of Article 27.3 (b) of the TRIPS Agreement.¹²⁵ In fact, it is within the framework of this revision that countries have explicitly voiced their perspectives regarding the relationship between the two agreements. These perspectives can be loosely grouped in three broad categories. First of all, a number of developing countries have taken the position that there is inherent conflict between the two instruments. These countries point, for instance, to Article 27.3(b) itself, which, as has been described, could eventually be interpreted in a way inconsistent with the sovereign rights recognized by the CBD.¹²⁶ The second view, held by some developed countries, is that there is no conflict between the TRIPS Agreement and the CBD, two agreements with differing objects and purposes that do not prevent compliance with one another. Finally, some countries note that, while there may be no inherent conflict between the two agreements as a matter of law, their considerable interaction creates a potential for conflict in their implementation.

Specific issues have also been contentiously debated. For instance, the intrinsic inconsistency between patentability under the TRIPS Agreement with the CBD, sustained as mentioned by developing countries, has been strongly challenged by some countries. Other countries feel that, since life forms in their natural state do not satisfy patentability criteria in the TRIPS Agreement, as long as these criteria are properly applied, conflicts will be avoided.¹²⁷ Moreover, a patent on isolated or modified genetic material would arguably not amount to ownership of the genetic material itself, and thus would not affect the source from which the gene was taken.¹²⁸ However, some national legislation does in fact include the discovery of naturally occurring matter when defining inventions, and thus have led to patents on life forms found in their natural state.¹²⁹

Another critical issue discussed in the TRIPS Council has been access and benefit sharing. Some proposals have suggested that the TRIPS Agreement be amended to include provisions that, like the CBD, require prior informed consent and benefit sharing for the granting of patents for inventions that use genetic materials.¹³⁰ However, the possibility of including such requirements in the TRIPS Agreement has been rejected by other Members as inconsistent with IPRs generally, which do not aim to regulate the access and use of genetic resources, and with the agreement itself, which limits disclosure rules to the determination of whether an invention meets the standards of patentability (Article 29).¹³¹ The alternate suggestion is that access should be regulated through contracts with the competent authorities. However, as Pakistan expressed and has been previously noted, the negotiation of such contracts on equal terms would be extremely difficult.¹³²

¹²⁵ IP/C/W/368.

¹²⁶ Kenya, on behalf of the African Group, IP/C/W/163.

¹²⁷ Switzerland, IP/C/M/C30, para. 164.

¹²⁸ EC, IP/C/W/162.

¹²⁹ Kenya, IP/C/M/28, para. 141.

¹³⁰ Brazil, IP/C/W//228, IP/C/M/32, para. 128.

¹³¹ Japan, IP/C/M/29, para. 155; United States, IP/C/M/30, para. 177.

¹³² Pakistan, IP/C/M/28, para. 158.

The topic of traditional knowledge has also been discussed at length. Countries have expressed their concern with traditional knowledge being patented and used without the authorization of the indigenous and local communities who developed it, and without proper sharing of the benefits resulting from such patents and use.¹³³ Still, some countries resist discussions on traditional knowledge in the TRIPS Council, claiming that priority should be given to the work taking place in WIPO and other international fora. However, most Members recognize that the possible conflicts between the CBD and TRIPS on the subject of traditional knowledge demand a systemic solution within the WTO.

In this regard, the very adequacy of the existing IPR system to deal with traditional knowledge has been questioned. While IPRs may be usable in certain situations, many countries feel that they are unable to comprehensively protect traditional knowledge, which is largely collective, intergenerational, and based on the use of trial and error methods over time.¹³⁴ In addition, particular areas of the patent system have been pointed out as problematic with respect of traditional knowledge. For instance, “novelty,” as defined by some Members, does not recognize information available to the public through the use or oral traditions outside their domestic jurisdictions.¹³⁵ Therefore, patents are granted without any consideration to rights of the holders of the traditional knowledge on which the patents are based.

The transfer of technology has been discussed very little in the context of the CBD. A more general discussion on implementing the TRIPS Agreement in a way to achieve the transfer and dissemination of technology, though, has taken place in the framework of Articles 66.2 and 7 and 8.

Clearly, discussion on these issues is slowly proceeding in the TRIPS Council, and may gain some momentum in the pre-Cancun discussions. However, Members have reached no consensus on the legal relationship between the TRIPS-CBD, and such consensus does not appear to be forthcoming in the near future.

Developments at the Committee on Trade and Environment (CTE)

As mentioned, the mandate of the CTE includes examining the relationship between the rules of the multilateral trading system and the trade related measures adopted by MEAs. As far as the relationship between the TRIPS agreement and the CBD, the CTE has discussed it under agenda item 8, which deals specifically with TRIPS provisions.

As in the TRIPS Council, three broad views have been expressed in the debate: that, at least in some areas, the TRIPS Agreement and the CBD are incompatible;¹³⁶ that there is no conflict between the two agreements;¹³⁷ and that, while there are no legal conflicts, potential conflicts exist as long as the implementation of the agreements is not mutually supportive.¹³⁸ Specific issues such as traditional knowledge, access to genetic resources, and the review of Article 27.3 (b) have also been discussed. Nevertheless, discussions of the TRIPS-CBD relationship in the CTE have always been limited by the fact that deliberations on the subject were “under way” in the

¹³³ IP/C/W/370.

¹³⁴ Brazil, IP/C/W/228.

¹³⁵ India, IP/C/M/28.

¹³⁶ Thailand, WT/CTE/M/23, para. 9.

¹³⁷ EC, WT/CTE/M/23, para. 10; United States, WT/CTE/M/23, para. 14.

¹³⁸ Norway, WT/CTE/M/30, para. 18.

TRIPS Council.¹³⁹ In fact, several Members expressly recommended that the dialogue on this topic take place in the TRIPS Council, which was “the body with the IPR expertise.”¹⁴⁰ After the Doha Declaration, which refers to the TRIPS-CBD relationship within its mandate for the TRIPS Council, even more countries noted that “while the CTE had a role to play in examining the effects of the TRIPS provisions on operation of MEAs, the fundamental intellectual property rights issues and definitions needed to be left to the World Intellectual Property Organization (WIPO)” and the “discussions of trade-related intellectual property obligations” to the TRIPS Council.¹⁴¹ Therefore, the clarification of the relationship between the two agreements is unlikely to be reached within this body, which moreover has no negotiating mandate.

The TRIPS Agreement and Health

An issue that seemed to take over the WTO since Doha was the Declaration on the TRIPS Agreement and Public Health. While unrelated to biodiversity, this discussion did show the flexibility of the TRIPS Agreement in dealing with the effective use of compulsory licensing by WTO Members, and, as such, may provide a valuable precedent for the TRIPS-CBD relationship.

6.3.2 Developments outside the WTO

Developments at the CBD

The CBD recognized from early on the relevance of IPRs to the implementation of the Convention, as well as their possible implications for the achievement of the Convention’s objectives, and thus has been actively involved in examining these inter-linkages.¹⁴² The second Conference of the Parties (COP), for instance, decided to conduct diverse studies on the impact of IPRs on the conservation and sustainable use of biodiversity and other goals of the CBD.¹⁴³

In the same way, the CBD appreciated the “multifaceted and complex” correlation between the Convention and the TRIPS Agreement, and thus emphasized the need to liaise with the WTO in order to clarify tensions and increase synergies.¹⁴⁴ The CBD has repeatedly recognized, though, that only the governing body of each agreement is competent to develop the authoritative interpretation of their respective agreement.

Notwithstanding, the CBD Secretariat has analyzed the relationship between the CBD and TRIPS in several documents. In a document presented to COP III, for example, the Executive Secretary acknowledged that, while IPRs are important under both the CBD and the TRIPS Agreement, the two agreements approach them from very different perspectives, which generated the possibility of conflict. For example, national measures to promote technology transfer under Article 16 of the CBD might raise issues under the TRIPS Agreement if owners of proprietary technology were

¹³⁹ WT/CTE/M/23, para. 13.

¹⁴⁰ WT/CTE/M/26, para. 27.

¹⁴¹ Canada, WT/CTE/M/30, para. 20.

¹⁴² CBD Conference of the Parties, *Intellectual Property Rights*, Decision III-17 (Buenos Aires, Argentina, 1996).

¹⁴³ *Intellectual Property Rights*, Decision II-12 (Jakarta, Indonesia, 1995).

¹⁴⁴ *Id.* For example, Decision III-17 requested the Executive Secretary to transmit COP III decisions and documents to the WTO and to endeavor to undertake further cooperation and consultation, for instance by applying for observer status in the CTE.

compelled to license technologies on grounds other than those explicitly prescribed. However, the Executive Secretary noted that both the CBD and the TRIPS Agreement allow “a significant degree of flexibility in national implementation.” Thus, certain legal or policy mechanisms could augment synergies and avoid conflicts between the two agreements. For example, mutually agreed-upon terms for access to genetic resources could allocate IPR as part of the benefits to be shared among parties to the agreement and such IPR could be defined in a manner compatible with the TRIPS Agreement.

With time, suggestions of the CBD decisions and documents have become even more specific, stressing the need to ensure consistency in the implementation of the two agreements and inviting the WTO to consider how to achieve mutual supportiveness in light of Article 16.5 of the CBD within the review of Article 27.3 (b) of the TRIPS Agreement.¹⁴⁵ In June, 2002, the CBD presented a document to both the TRIPS Council and the CTE examining the review of provisions of Article 27.3 (b), the relationship between TRIPS and the CBD and the protection of traditional knowledge and folklore.

Developments at WIPO

While WIPO has not adopted a formal position on the relationship between the TRIPS and CBD, it is actively involved in the link between IPRs and biodiversity. WIPO began participating in international discussions relating to genetic resources, traditional knowledge and folklore to identify the possible implications of these issues for intellectual property. With time, it took the lead in addressing some of the relevant inter-linkages. In September, 2000, WIPO Members established an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, which has subsequently dealt with, for instance, with possible ways of providing legal protection for traditional knowledge and folklore, including through the use of databases, a multilateral *sui generis* system and disclosure requirements for country of origin. Still, since WIPO is very concerned with avoiding prejudgment of the outcomes of possible negotiations on traditional knowledge and biodiversity-related issues in the WTO, the scope of these discussions is always limited. Many developing countries feel, moreover, that not only are discussions taking place at an extremely slow rate, but that they are not even being considered by other WIPO bodies or the WTO.

Developments at the FAO

FAO adopted a comprehensive international agreement dealing with plant genetic resources for food and agriculture in 1983. The International Undertaking (IU), as it was known, was a non-legally binding instrument to promote international harmony in matters regarding access to plant genetic resources for food and agriculture. Later, the IU incorporated interpretations aimed at achieving an improved balance in the agreement, recognizing, for instance, the sovereign rights of nations over their genetic resources. In addition, the IU attempted to balance the products of biotechnology, on one hand, and farmers' varieties and wild material, on the other.

In 1992, Agenda 21 called for the review of the FAO system in light of the CBD. The result, the International Treaty on Plant Genetic Resources for Food and Agriculture

¹⁴⁵ CBD Conference of the Parties, *The relationship of the Convention on Biological Diversity with the Commission on Sustainable Development and biodiversity-related conventions, other international agreements, institutions and processes of relevance*, Decision IV-15 (Bratislava, Slovak Republic, 1998).

(ITPGRFA), was adopted by the FAO Conference in 2001. While still not in force, the ITPGRFA is the third pillar in the discussion of IPRs and biodiversity, since it deals the scope and access to plant genetic resources and the fair and equitable sharing of benefits arising from the use of such resources for food and agriculture “in harmony with the Convention on Biological Diversity” and “for sustainable agriculture and food security.”

6.4 The issue in Doha and beyond

The Doha Ministerial Declaration includes language relevant to the relationship between the TRIPS Agreement and the CBD in several parts of the text. The Preamble, for instance, refers to the importance of “upholding and safeguarding an open and non-discriminatory multilateral trading system,” and states that “acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive.”¹⁴⁶ While there is not explicit reference to the CBD or biodiversity, the recognition of the need to create synergies between MEAs and the WTO is fundamental.¹⁴⁷

The actual text of the Declaration, however, is less explicit about the need to develop a mutually supportive relationship between the TRIPS Agreement and the CBD. Paragraph 19, which refers to the TRIPS-CBD relationship specifically, fails to clearly identify which of the existing reviews of the TRIPS Agreement (i.e. under Articles 27.3 (b) and 71.1) should address issues arising in relation to the CBD. Moreover, paragraph 19 calls for the TRIPS Council to “examine” the relationship between TRIPS and the CBD, when some WTO Members believe that further study is not required, but rather that negotiations on practical means to include the objectives and principles of the CBD into the WTO are required.¹⁴⁸ The diversity of views about the relationship between the CBD and the TRIPS Agreement, and the strength with which they are advocated, indicates that the relationship will likely continue to be vigorously discussed and debated at the WTO in the months preceding the Cancun Ministerial in September 2003.

¹⁴⁶ Doha Ministerial Declaration,, para. 6.

¹⁴⁷ David Vivas and Elizabeth Tuerk, *Preliminary Comments on the Revised Documents for the Doha Ministerial Conference* (November, 2001).

¹⁴⁸ *Id.*