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# THE BIOSAFETY PROTOCOL AND THE WORLD TRADE ORGANIZATION: CAN THE TWO COEXIST?

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CONTENTS



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## INTRODUCTION

After five years of intense negotiations, a group of over 130 countries adopted the Cartagena Protocol on Biosafety[1] to the Convention on Biological Diversity ("CBD") to address safety issues involved in the transboundary movement of living modified organisms ("LMOs") resulting from modern biotechnology.[2] Biotechnology includes a broad scope of agricultural, industrial, and medical technologies that are used to create new products, referred to as Genetically Engineered Products, from LMOs.[3] While biotechnology can be credited for biological advances, such as better crop durability without the use of pesticides, the field of biotechnology has outpaced the study of the environmental impacts of such "advances."

Although the Biosafety Protocol recognizes that, "trade and environmental agreements should be mutually supportive . . .,"[4] the protocol raises serious international trade issues. Con-

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[1] INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, *Report of the Resumed Session of the Extraordinary Meeting of the Conference of the Parties for the Adoption of the Protocol on Biosafety to the Convention on Biological Diversity: 24-28 January 2000,* EARTH NEGOTIATIONS BULLETIN No. 137, at 1 (Jan. 31, 2000). Note that the authors use the terms "Biosafety Protocol" and "Protocol" interchangeably throughout this article to refer to the Cartagena Protocol on Biosafety.

[2] *See* <http://www.biodiv.org/biosafe/PROTOCOL/PROTOCOL.html>. *See also United Nations Conference on Environment and Development: Convention on Biological Diversity*, June 5, 1992, 31 I.L.M. 818, at *pmbl.* (entered into force December 29, 1993) [hereinafter *CBD*].

[3] LMOs are used to produce agricultural or pharmaceutical products that have been genetically altered to produce plants that are more resistant to insects, viruses or bruises, or that can better grow in certain areas or climates.

[4] *See Protocol, supra* note 2, at *pmbl, para.9.*

cerned with the uncertainty of the environmental and health impacts regarding the use of LMOs, some governments fear that the importation of LMOs into their countries will place their citizens and their environments at risk. To protect against such unknown and undesired consequences, these countries, throughout the Biosafety Protocol negotiations, have argued for the ability to refuse the importation of LMOs. Major exporters of LMOs, however, contend that refusing such imports would violate their long-standing trade rights as members of the World Trade Organization ("WTO").

As discussed in this Article, neither treaty law nor international trade case law clearly determines whether such trade restrictions under the Biosafety Protocol violate WTO principles. In fact, the interplay between the Biosafety Protocol and WTO is just one of many similar international debates between trade interests and environmental concerns. Although cases decided by the WTO hearing panel seem to indicate a bias in favor of trade issues, this Article concludes that trade measures contained in the Biosafety Protocol are compatible with WTO principles.

Section I of the Article discusses the background of the Biosafety Protocol and the WTO. This section describes the creation and evolution of each Agreement, which is important in appreciating the areas of contention between them. Section II analyzes whether the WTO will hinder the enforceability of trade restrictions under the Biosafety Protocol. This section first examines the issue of treaty supremacy under the Vienna Convention.[5] The Vienna Convention principles do not apply to international agreements if they contain a clause, such as the "savings clause" contained in the Biosafety Protocol, which specifies its relationship to other international agreements. Moreover, the Vienna Convention does not address rules of conduct pertaining to non-Parties, unless the principles in a treaty rise to the level of customary law, in which case the treaty binds non-parties. Therefore, the presence of the "savings clause" in the Biosafety Protocol, coupled with the fact that some WTO members are not Parties to the CBD, confirm that the Vienna

[5] *See* Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331 (entered into force January 27, 1980) [hereinafter Vienna Convention].

Convention principles do not solve the WTO and Biosafety Protocol dilemma.

Since treaty law under the Vienna Convention does not solve the WTO and Biosafety Protocol dilemma, Section II also analyzes existing international trade case law and how the decisions may impact the relationship between the WTO and the Biosafety Protocol. The General Agreement on Tariffs and Trade ("GATT") Panel's approach to deciding similar issues, such as the tuna/dolphin issue and the shrimp/turtle dispute, in particular, provide a legal basis from which to derive insight for the potential relationship between the WTO and the Biosafety Protocol.

Section III explores various solutions to the WTO and Biosafety Protocol dilemma and the overall trade and environment debate. Based upon recent international trade case law, this section also illustrates how the Biosafety Protocol aligns with WTO principles. The conclusion that the Biosafety Protocol and the WTO can coexist is reached through a comparative analysis of the language in the Biosafety Protocol to the recent decisions in similar international trade cases. Section IV provides recommendations for ensuring compatibility between the Biosafety Protocol and the WTO.

## I. BACKGROUND

Before addressing the areas of contention between the Biosafety Protocol and the WTO, it is important to understand the evolution of the Biosafety Protocol and the WTO. This section will briefly describe the creation and purpose of the Biosafety Protocol and the WTO.

### A. *Biosafety Protocol*

The United Nations' (U.N.) Framework CBD was established in 1993 with the following objective: "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources."[6] The CBD calls for Parties to consider the "need for and modalities of a protocol, including advance informed agreement ("AIA") in particular, to ensure

[6] *CBD*, *supra* note 2, at art. 1.

the safe transfer, handling and use of living modified organisms derived from modern biotechnology that may have an adverse effect on biological diversity and its components."[7] In response to this mandate, the Parties to the CBD established a legally binding Biosafety Protocol to address the risks of trade in LMOs developed through the use of modern biotechnology.

Negotiations to establish a Biosafety Protocol began in 1996 with the first meeting of the Biosafety Working Group ("BSWG"). In 1999, the BSWG completed a draft text of the Biosafety Protocol and submitted it to the CBD Parties at an extraordinary meeting of the Conference of the Parties ("ExCOP") for possible adoption.[8] The ExCOP consisted of the Miami Group of agricultural exporting countries, the "Like-Minded Group" of developing countries and the European Union ("EU").[9] Despite long hours of negotiations, the three groups failed to reach an agreement on the proposal.[10]

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[7] *See Draft Report of the Extraordinary Meeting of the Conference of Parties for the Adoption of the Protocol on Biosafety to the Convention on Biological Diversity*, Conference of the Parties to the Convention on Biological Diversity, 1st ext. mtg. at 10, U.N. Doc. UNEP/CBD/ExCOP/1/L.2/Rev.1 (1999) [hereinafter *Proposed Protocol*].

[8] *See id.* at para. 43.

[9] *See id.* at para. 43-44; *see also id.* at Art. IV.

[10] *See id.* at annex 2-4. The Miami group supports limiting regulation of LMOs to only LMOs intended for direct release to the environment; minimizing impacts upon trade with non-parties; eliminating Parties' right to refuse import of LMOs in the absence of full scientific certainty that there will be no potential adverse effects on the environment; limiting financial responsibility of exporters for risk assessments; ensuring confidentiality; and fully protecting WTO protections by deleting the "Savings Clause" in the draft of the proposed Protocol.

The Like-Minded Group, made up of China and the "Group of 77" developing countries not included in the Miami Group, favor including commodities in the AIA procedure, and including even those LMOs that are unlikely to adversely impact biodiversity, also taking into account risks to human health. Among other things, the Like-Minded Group also wants to include products derived from LMOs in the Protocol, make risk assessment less science-based, and make the obligations apply evenly between Parties without any opt-out provisions with regard to trade with Parties and non-Parties by entering into other agreements, including those that permit the application of domestic regulations to LMO imports that may be inconsistent with the provisions of the Protocol.

The European Union maintained a fairly neutral position; however, it favored the possibility of allowing AIA to pertain to commodities, rather than just LMOs; eliminating the right of importing countries to refuse imports in the absence of full scientific discovery; certain requirements relating to trade with non-Parties and replacing certain qualifications of Protocol rights and obligations to free trade with non-binding language.

The failure to reach a consensus centered on two major areas of contention. First, significant differences persisted regarding whether the Biosafety Protocol should subject commodities intended for food, feed, or processing to its AIA procedures, which would require exporting countries to provide prior notice to importing countries regarding the intentional transboundary movement of all LMOs covered under the Biosafety Protocol.[11] Such "prior informed consent" ("PIC") provisions are not uncommon to treaties.[12] Based upon certain risk assessments, PIC provisions allow an importing country to prohibit such import, request additional relevant information regarding the import, or approve the import without conditions.[13]

Second, governments disagreed to certain provisions, such as the "savings clause," which would allow the WTO rights and obligations to supercede those of the Biosafety Protocol. Opponents to the Biosafety Protocol (most notably, the United States) favor the use of "trade protective" provisions and argue that the use of trade sanctions (commonly referred to as "sticks") to ensure compliance with the Biosafety Protocol are unenforceable because they go beyond the permitted trade regulations of the WTO Agreements and hinder trade.[14] WTO policy strongly favors incentives such as financial or technical assistance (commonly referred to as "carrots"), over "sticks," to encourage compliance with multinational environmental agreements ("MEAs"). Some supporters of the Protocol, however, argue that the use of "carrots" is an insufficient method to promote such environmental compliance. Countries that are acting in compliance with the environmental standards are placed at a distinct competitive disadvantage to those countries

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[11] See Protocol arts. 7, 10.

[12] *See, e.g., United Nations Environment Programme Conference of Plenipotentiaries on The Global Convention on The Control of Transboundary Movements of Hazardous Wastes: Final Act and Text of Basel Convention*, 28 I.L.M. 649, 664, at art. 6 (entered into force May 5, 1992) (shipments of hazardous wastes cannot be exported without prior informed consent of importing country). *See also The Legally Binding Instrument for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*, (visited March 5, 2000) <http://irptc.unep.ch/pic/> (PIC Treaty requiring prior consent and agreement of importing countries regarding exports of certain chemicals and pesticides).

[13] *See CBD, supra* note 2, at arts. 8,12.

[14] *See id* at 63.

that refuse to comply, and are all but without a viable means of redress.

The Biosafety Protocol addressed each of these areas of contention. First, the Biosafety Protocol distinguishes between products derived from LMOs that are intended to be introduced into the environment (such as seeds, fish, and microorganisms) for AIA purposes, and similar products intended to be used as food, feed, or processing.[15] Products intended to be introduced into the environment are subject to an AIA procedure, which requires exporters to seek consent from importers before the first shipment of products derived from LMOs.[16] If an importing country determines there is insufficient evidence that the product is safe based on a scientific risk assessment, it may ban the import of such product.[17]

Bulk shipments of LMOs that are intended to be used as food, feed, or for processing (referred to as "commodities") are not subject to the AIA procedure; however, the Biosafety Protocol requires proper labeling and documentation of these products indicting that the shipment "may contain" living modified organisms and are "not intended for intentional introduction into the environment."[18] Over the next two years, however, negotiators are to develop more specific labeling requirements.

This provision came as a compromise between the Miami group, that favored softer labeling requirements, and the Like-Minded group, that would have required labels giving specific details of what LMOs were in exported products.[19] The U.S. argued that requiring specific labels would entail identification of different strains of LMOs which would cost the grain industry billions of dollars.[20] Without such labeling, however, a country would not be on notice that its imports contain potentially hazardous materials.

In addition to the AIA procedures, the Biosafety Protocol also establishes an Internet-based Biosafety Clearinghouse where governments will post results of their domestic findings

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15 *See Protocol*, *supra* note 2, arts 7,11.

16 *See id.* at art. 7.

17 *See id* at art. 10.

18 *See id.* at art. 18 para.4.

19 *See Global Deal Agreed on GM Food, January 31, 2000* (visited Feb 2000) <http://www.bioindustry.org/newsnet/current/3.htm>.

20 *See id.*

regarding biosafety and exchange scientific, environmental, technical, and legal information about products derived from LMOs.[21] Final decisions on domestic use of LMOS must be distributed to the Clearinghouse within fifteen days of a government's decision on use.[22] The Biosafety Protocol assists developing countries in building their capacity for managing modern biotechnology.

Second, the Biosafety Protocol chose to preserve the economic interest of the Parties by the inclusion of the "savings clause." The clause simply provides that the Biosafety Protocol does not alter, but fully preserves, the rights and obligations of governments under the World Trade Organization (WTO) and other international agreements.[23] This provision arises from the inherent differences in environmental agreements and trade agreements. Environmental agreements typically rely on the Precautionary Principle, which does not require full scientific certainty that a product will cause serious harm before such product can be prohibited or restricted, while trade agreements require a degree of scientific evidence to restrict the use or trade of potentially dangerous products. Thus, in preserving existing international agreements, the Biosafety Protocol favors economic interests of the Parties over the Precautionary Approach.

### B. *World Trade Organization*

The GATT 1947 was formed after World War II to promote world peace through equitable and efficient world trade. By nurturing international relations through the development of trade efficiency, the Parties sought to eliminate a major source of conflict between countries.[24] During the negotiation stage of the CBD and before the creation of the WTO, the GATT 1947

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[21] *See Protocol*, *supra* note 2, at art. 20.

[22] *See id.* art. 11, para.1.

[23] *See id.* at preamble.

[24] General Agreement on Tariffs and Trade, Oct. 30, 1947, 55 U.N.T.S. 194 [hereinafter GATT]. After the Uruguay Round of trade negotiations, the GATT organization became the World Trade Organization [WTO] on January 1, 1995. Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Apr. 15, 1994, LEGAL INSTRUMENTS-RESULTS OF THE URUGUAY ROUND vol. 1 (1994), 33 I.L.M. 1125 (1994) [hereinafter Final Act]. For purposes of this Article, all references to GATT 1947 and GATT 1994 as established in the Final Act are recognized as GATT 1994.

was undergoing amendment. The amendments resulted in the GATT 1994, which incorporated GATT 1947 principles.[25]

Most notable among these GATT principles is the prohibition of protectionist activities by domestic industry such as the imposition of bans, quotas and licenses on imported and exported products.[26] Another important GATT 1947 principle, the "Most Favored Nation" ("MFN") obligation, also was incorporated. Designation as an MFN prevents nations from discriminating between "like products" of other Member States.[27] Also of significance in this analysis is a retained GATT 1947 section that allows for certain exceptions to the prohibition on the use of trade sanctions.[28]

The WTO came into existence in 1995 and now consists of over 130 members, accounting for over 90% of trade worldwide.[29] The main objective of the WTO is to help trade "flow smoothly, freely, fairly, and predictably."[30] The WTO encompasses the rules of GATT 1947, the Uruguay Round Protocol, including its annexes, and the Agreement on Technical Barriers to Trade.[31] The WTO also incorporates GATT 1947 provisions that apply to issues not covered by the Uruguay Round, including trade-related issues such as technical barriers to trade, sanitary and phytosanitary measures, and agriculture.[32]

Despite its primary trade mission, the WTO recognizes the need for environmental considerations. This approach is reflected in the preamble of the WTO, which states:

> Recognizing that [the Member States'] 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,

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[25] *See* GATT 1994, *supra* note 24.

[26] *Id.* at art. 3.

[27] *Id.* at art. 1. It is important to note that the language compares only products, not the processes or methods of production of the products.

[28] *Id.* at art. 20.

[29] *See World Trade Organization Home Page* (visited June 16, 1999) <http://www.wto.org/wto/inbrief/inbr02.htm>.

[30] *Id.*

[31] *See* GATT 1994, *supra* note 24, at art. 16 (Members of the WTO "shall be guided by the decisions, procedures and customary practices followed by the Contracting Parties to GATT 1947 and the bodies established in the framework of GATT 1947.").

[32] *See* Final Act, *supra* note 24.

> 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 . . . .[33] (emphasis added)

In accordance with its preamble, the WTO's Trade Negotiations Committee established the WTO's Committee on Trade and Environment ("CTE").[34] The CTE was established in 1994 as a result of the Uruguay Round on trade negotiations.[35] The CTE replaced and continued the work of the GATT's 1947 Working Group on Environmental Measures and International Trade and was charged with a concise ten-point work plan.[36] Most notably, the work plan included a charge to study the relationship between the provisions of the multilateral trading system and the trade measures for environmental purposes, including those pursuant to MEAs.[37]

Notwithstanding its environmentally promising preambular language and the establishment and charge of the CTE, the WTO remains under attack for ignoring environmental concerns in favor of free trade.[38] One commentator has argued that the WTO Dispute Settlement Body focuses on "whether environmental laws are trade-friendly, not whether one member's laws are appropriate for the environment."[39] If this perception truly reflects the attitude of the WTO Dispute Settlement Body,

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[33] The Agreement Establishing the World Trade Organization, 1994 WL 761480 (Apr. 15, 1994).

[34] Trade Negotiations Committee, *Decision on Trade and Environment*, MTN.TNC/W/141 (Mar. 29, 1994).

[35] IISDnet Trade and Sustainable Development, *The WTO Committee on Trade and Environment (CTE)* (visited June 22, 1999) <http://iisd.ca/trade/wto/cte.htm> [hereinafter IISDnet].

[36] *See id.*

[37] *See id.*

[38] DANIEL C. ESTY, GREENING THE GATT: TRADE, ENVIRONMENT, AND THE FUTURE 53 (1994) (noting that the WTO's "substantive rules, which predate the emergence of the environment as a critical issue, are too narrowly focused on the commercial benefits of trade facilitation and must be updated to reflect environmental considerations.").

[39] Julie B. Master, Note, *International Trade Trumps Domestic Environmental Protection: Dolphins and Sea Turtles are "Sacrificed on the Altar of Free Trade,"* 12 TEMP. INT'L & COMP. L.J. 423, 431 (1998).

environmental issues will not be given priority over trade concerns, regardless of the gravity of harm to the environment. This article, however, will examine the shift in the WTO Dispute Settlement Body from its alleged anti-environment position towards one that is more environmentally conscious.

## II. THE PROBLEM: WILL THE WTO IMPEDE THE EFFECTIVENESS OF THE BIOSAFETY PROTOCOL?

The Biosafety Protocol contains provisions that could impede rights that members of the WTO currently enjoy. Now that the Parties have agreed to a Biosafety Protocol, they will be forced to determine which Agreement prevails. In making this determination, countries must first examine existing treaty law. If treaty law does not answer the issue in question, countries must next consider similar trade and environment case law. Unfortunately, in this situation, neither treaty law nor case law provides a clear resolution as to which Agreement prevails.

### A. *Conflicts Between Agreements: Which One Prevails?*

While the principles of the WTO have matured into a well-established body of law, the issue of "treaty supremacy" or "treaty accordance" is intensifying in the trade and environment debate as the number of MEAs grows. The Vienna Convention on the Law of Treaties provides that when conflicts arise between two treaties concerning the same subject matter and between countries that are a party to both of the conflicting agreements, the latest treaty will prevail.[40] The Vienna rule, however, contains two limitations. First, it does not apply if a treaty contains a clause specifying its relationship to other international agreements. Secondly, it offers no rules of conduct pertaining to non-Parties to either one of the treaties at issue.

#### 1. *Savings Clause*

Regarding the first limitation of the Vienna rule, the preamble to the Biosafety Protocol contains a provision, known as the "savings clause," similar to that of Article 22 of the CBD,[41]

[40] *See* Vienna Convention, *supra* note 4, at art. 59.

[41] *See Protocol*, *supra* note 2, at art. 31.

which emphasizes that the Biosafety Protocol will not impact the rights and obligations of a party under any existing international agreements.[42] This preambular language, however, is not identical to the savings clause found in the CBD, which provides " [t]he provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity."[43] Taken together, the savings clauses contained in the Biosafety Protocol and the CBD raise the issue of whether GEPs pose serious damage or a threat to biological diversity so as to allow the Biosafety Protocol to take precedence over existing trade agreements. Hence, the issue arises as to whether GEPs pose a serious damage or threat to biological diversity, so as to allow the Protocol to take precedence over existing trade agreements.

When considering biotechnology, one must weigh the prospect of massive benefits to society from the use of LMOs against the reservations associated with the use of such products. Reservations arise due to the vast uncertainties regarding environmental and health implications caused by the often untested and ever-expanding range of LMOs.

The Biosafety Protocol will regulate LMOs likely to have adverse effects on the conservation and sustainable use of biological diversity. During the negotiations, most countries agreed that items such as seeds, plants, animals and other material able to transfer or replicate genetic material could potentially have an adverse effect on the conservation and sustainable use of biodiversity.[44] Ultimately, the parties agreed to subject only LMOs for intentional introduction into the environment to the AIA procedure.[45] This provision does not include LMOs intended for direct use as food or feed, or for processing.[46] Such commodities, however, must be accompanied by documentation stating that shipments "may contain"

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[42] *Id.* at art.7, para.1.

[43] *See id.* at *pmbl.* para.10; *see also CBD*, *supra* note 2, at art. 22.

[44] *See Proposed Protocol, supra* note 6, at para. 12.

[45] *See id.* at art. 7, para. 2.

[46] The contention, however, arose over whether agricultural commodities such as oils, sugars, and animal feed derived from GEPs also should be included with these requirements. Industrialized countries argued that scientific evidence does

LMOS and are "not intended for intentional introduction into the environment."[47]

Importing countries argue that there is a lack of scientific certainty regarding the safety of most LMOs, especially those products able to replicate genetic material. In fact, herbicide tolerance and insect resistance of plants are among the most common genetically engineered traits; therefore, it seems that most LMOs are prone to replicate genetic material.[48] A recent report on risk assessment of genetically engineered plants found that, "[a] reasonable risk assessment for long-life and genetically heterogeneous plants (*e.g.*, forest trees) seems impossible . . . (and) [i]n agriculture . . . long-term impacts can hardly be assessed."[49]

Given that there are various examples of types of LMOs, and multiple risks associated with each, a general list of the potential dangers from LMOs is helpful.[50] The following is a listing of potential risks:

- New toxins and allergens in foods;
- Other damaging effects on health caused by unnatural foods;
- Increased use of chemicals on crops, resulting in increased contamination of food and water supply;

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not support the contention that commodities derived from LMOs threaten biodiversity, and therefore should not be regulated under the Biosafety Protocol.

[47] *See id.* at art. 18, para. 2(a).

[48] Mae-Wan Ho and Ricarda A. Steinbrecher, *Fatal Flaws in Food Safety Assessment: Critique of the Joint FAO/WHO Biotechnology and Food Safety Report* (visited on June 14, 1999) <http://.southside.org.sg/south/twn/title/fao-cn.htm>.

[49] H. Torgersen, *Ecological Impacts of Traditional Crop Plants – A Basis for the Assessment of Transgenic Plants?* (visited on June 7, 1999) <wysiwyg://25/http://www.ubavie.gv.at/publikationen/mono/m75s.htm>.

[50] A study on insect-proof potatoes found "significant differences in levels of protein, starch, sugar, and other enzymes. The study further found that rats that fed off of the potatoes developed impaired development in the intestine, pancreas, kidneys, liver, lungs and brain; an enlarged thymus; and a depressed immune response with evidence of intestinal infection. Jill Davies, *So Why All the Fuss Over GE Foods?* (visited on June 7, 1999) <http://www.purefood.org/ge/jilldavies.cfm>.

Another example of such risk is the well-known bovine growth hormone (rBGH), which is associated with "high incidence of udder infections, internal bleeding, stress-related weight loss and severe reproductive disorders in cows. Additionally, "pigs altered to produce human growth hormone for leaner meat have underdeveloped muscles and often cannot stand up." Brian Tokar, *Fact Sheet on Genetically Engineered Foods & Crops,* (visited on June 7, 1999) <http://www.purefood.org/ge/geFactSheet.htm>.

- The creation of herbicide-resistant weeds ("Superweeds");
- The spread of diseases across species barriers;
- Loss of biodiversity in crops;
- The disturbance of ecological balance;
- The artificially induced characteristics and inevitable imperfections will be passed on to all subsequent generations and to other related and unrelated organisms; and
- Genetically engineered food can never be recalled or contained.[51]

Based on this long list of potential risks and the vast amount of uncertainty in biosafety, it is likely that the exercise of WTO rights and obligations would cause serious damage, or at least a threat, to biological diversity. For this reason alone, the provisions of the CBD, as well as the Biosafety Protocol, could prevail according to the terms of the Vienna Convention.

Similarly, according to general principles of international law, when dealing with treaties on the same subject, the treaty that is more specific governs matters under its domain, while the more general treaty governs the broader scope at issue. Usually, MEAs are more subject-specific. Thus, when dealing with a trade dispute between two Parties to an MEA, the rules of the MEA would likely govern.

Therefore, although the savings clause in the Biosafety Protocol preserves the rights and obligations of the Parties under prior Agreements, the exception to the savings clause contained in the CBD, which reads, "except where the exercise of those rights and obligations would cause serious damage or threat to biological diversity," also could apply. Although there is an overlap between the Biosafety Protocol and the WTO rights, the focus is on Biosafety. Since the Biosafety Protocol and the CBD speak more specifically to this issue than the WTO Agreement under the Vienna Convention Principles, the Biosafety Protocol and the CBD would most likely govern.

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[51] The impacts of these risks are incalculable. *See Lifeforce, Genetically Engineered Food, A Serious Health Risk,* (visited on June 7, 1999) <http://www.veganvillage.co.uk/veganvillage/newstand/life.htm>. *See also Topics of Concern Related to the Environmental Release of Genetically Modified Organisms (GMOs)* (visited June 15, 1999) <http://www.icgeb.trieste.it/biosafety/bsfconc.htm>.

2. *Non-Parties*

The second deficiency of the applicability of the Vienna Convention is the issue of non-Parties, specifically the United States, in the Biosafety Protocol negotiations. Although the non-Party dilemma is generally associated with MEAs, the non-Party issue in the Biosafety Protocol centers on the United States' involvement in the Biosafety Protocol. Currently, the United States is not one of the 175 governments who are Parties to the CBD.[52] Despite its non-Party status to the CBD, the United States was active in the Biosafety negotiations, advocating that the Biosafety Protocol should not impact WTO rights and obligations.[53]

While the United States has a rather strict set of environmental standards and biosafety regulations, other countries may not have the capacity to develop or enforce such regulations.[54] If domestic law alone were applied, those countries with inadequate or nonexistent biosafety regulations would be defenseless against the importation of products beyond their borders, especially LMOs that are able to reproduce. Therefore, uniform trade restrictions or guidelines for developing and developed countries are necessary to ensure proper regulation of LMOs and the adequate protection of biodiversity in all countries.

Under Article 24 of the Biosafety Protocol, Parties are allowed to trade in LMOs with non-Parties only in a manner consistent with the objectives of the Biosafety Protocol.[55] The

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[52] *See CBD, supra* note 2. The U.S. has signed the Agreement; however, formal ratification awaits in the Senate. *See Biotechnology: U.N. Experts Meeting Recommends Pact on Genetically Modified Organisms*, BNA INT'L ENV'T DAILY, 8/1/95 IED d2. The U.S. is part of the Miami Group, which consists of Argentina, Australia, Canada, Chile, the United States and Uruguay. These six major agricultural exporting countries contend that sufficient guidelines and regulations already exist under other international agreements, and that the imposition of a Biosafety Protocol will only cause economic inefficiencies and financial loss to agribusiness companies. *See* Paul E. Hagen & John B. Weiner, The Proposed Biosafety Protocol to the Convention on Biological Diversity (April 15-16, 1999) (unpublished manuscript cosponsored by the Environmental Law Institute with the cooperation of the ABA Section of International Law and Practice) at 19.

[53] *See Protocol, supra* note 2, para. 2 allowing non-Parties to participate as observers in the proceedings of the Biosafety Protocol.

[54] *See United States, Regulatory Oversight in Biotechnology* (visited on June 15, 1999) <http://www.aphis.usda.gov/biotech/OECD/usregs.htm>.

[55] *See Protocol, supra* note 2, at art. 24.

vague language in Article 24, however, is subject to various interpretations. A broad interpretation could be quite troublesome for importing countries, especially considering that the same Article also recommends that Parties to the Biosafety Protocol conduct trade with non-Parties while only *encouraging* non-Parties to conform to the Biosafety Protocol. Thus, it is possible to envision a country expanding its interpretation to allow trade with a non-Party who otherwise would be excluded from such trade.

Additionally, without trade sanctions, an importing country, especially a developing one, probably cannot *encourage* a developed country like the United States to adhere to the Protocol. Aside from trade sanctions, importing countries possess few, if any, levers to enforce the provisions of the Protocol.

Alternatively, Article 24, interpreted narrowly, could require non-Parties to adhere strictly to the specific provisions of the Protocol. As importing countries welcome the protections this interpretation offers, other countries, like the United States, fear that non-Party provisions could restrict trade in covered LMOs that are currently protected under existing WTO rights and obligations.

In response to such fears, the United States and other members of the Miami Group demanded that the savings clause be included in the Biosafety Protocol. Generally, this provision allows trade concerns to take priority in the event of a conflict between the WTO rules and the Biosafety Protocol.[56] Non-governmental organizations also have expressed similar interests.[57]

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[56] *See Protocol*, *supra* note 2, at *pmbl.*

[57] Some United States industry groups also view the Biosafety Protocol as a restriction on their ability to export genetically modified products to other countries. In a letter to the United States Trade Ambassador, Charlene Barshefsky, several United States business and agricultural organizations expressed their concerns with the draft text of the Protocol. The letter listed the following "problems" with the draft Protocol:

- Import bans and/or significant non-tariff barriers (NTBs) in some countries would effectively block trade in biotech products . . . that do not have an adverse impact on biodiversity.
- The inclusion of non-scientific based criteria in assessment and/or risk management procedures, such as socio-economic considerations.
- Onerous labeling or documentation requirements for seeds . . . and consumer goods could result in product production method discrimination . . . .

Despite the European Union's attempts during the negotiations to ensure that the Biosafety Protocol would not be overshadowed by other international agreements, ultimately, "[t]he trade interests of just six countries (total population around 500 million) [have] blocked a protocol that would have provided a basis for the safe transfer, handling and use of LMOs in countries around the world (6,500 million consumers)."[58] This is significant because it illustrates that any MEA having a negative economic impact on trade could be challenged by those countries negatively affected, especially the United States, under the auspices of the WTO.[59] If the conflict between the WTO rules and MEAs are not clarified, the MEAs could become virtually meaningless if they, in any way, affect trade.

On the biosafety issue, the United States favors free trade over environmental concerns. The United States contends that the implementation of the GATT 1994 exceptions to allow envi-

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- The legitimization of decision-making regimes based on non-scientific principles will undermine progress made within . . . the WTO and lead to a patchwork of diverse regulatory regimes and to increasing uncertainty in trade.
- Restrictions on trade with non-parties, such as the United States, could effectively decrease competitiveness of U.S. exports vis- . . . -vis its competitors that are Parties to the CBD.

*USCIB Letter to the USTR Ambassador Regarding the Biosafety Protocol in* a letter dated Dec. 2, 1998 (visited on June 14, 1999) <http://www.uscib.org/policy/barfin.htm>.

John Fitzgerald, head of the Western Ancient Forest Campaign, indicated that the issue of biodiversity must be addressed in terms of guidelines dealing with the regulation of trade in genetically modified organisms; however, he warned that a "full-fledged protocol" may not be the answer. Fitzgerald suggested that Parties should instead consider developing biological criteria with certain testing procedures and other guidelines in place to ensure protection of the ecosystem against potential problems of some GMOs. Richard D. Godown, senior vice president of the Biotechnology Industrial Organization, reaffirmed Fitzgerald's position and claimed that the Protocol would "kill any prospects of U.S. ratification" of the CBD and that, "while GATT is trying to open up trade, this would restrict it." Helena Paul, *Biosafety Talks Break Down Without Agreement as U.S. and Other Grain Exporters Block Progress* (visited on June 18, 1999) http://www.oneworld.org/news/reports/lmo.html>.

[58] *See id.*

[59] U.S. Delegate, Rafe Pomerance illustrated this concern in his remarks regarding the Biosafety negotiations, "[w]e were too important, too big, and too thoughtful to be ignored . . . we are pleased that everyone in the end agreed that it would be inappropriate to move forward without a consensus." *Biotechnology: Talks on Biosafety Pact Suspended; U.S.-Led Group Blocks Compromise Accord,* BNA Int'l Env't Daily, 2/6/1999 IED d2.

ronmental trade measures ("ETMs"), based upon process and production measures ("PPMs") to protect health or life, will impede its WTO rights. In the cases discussed in Section II, however, the United States argued that exceptions under Article XX should include extra-jurisdictional protections concerning PPMs used in the production of certain products, irrespective of the WTO rights of other Parties. Therefore, it is possible, if not likely, that without clear and uniform guidelines indicating which international agreement obligations trump the other, a country merely will commit to whichever agreement favors its position based on the given issue, rather than in accordance with a uniform principle or procedure.

### B. *International Case Law Addressing Trade and Environment Disputes*

As evidenced in the Vienna Convention analysis, international treaty law does not always provide clear solutions for problems involving two or more conflicting international agreements. Given the lack of guidance in international treaty law, countries must look to international trade case law for an understanding of whether the Biosafety Protocol and WTO can coexist. Unfortunately, the lack of international coordination in the formulation of international trade law and international environmental law has contributed to a mounting tension between trade interests and environmental concerns creating the so-called trade and environment debate.[60]

Given the similarity of issues raised in the Biosafety Protocol and the standard arguments presented in the trade and environment debate, it is important to have a general understanding of not only the Biosafety Protocol, but also the long-standing contentions between trade objectives and environmental concerns. The debate usually involves a country or group of countries asserting that free trade endangers the environment, while other countries assert that environmental pro-

[60] One environmental organization attributed the problem to the "complex structure of international environmental management, involving a large number of regimes at many different levels of governance." *Six Easy Pieces: Five Things the WTO Should Do – and One it Should Not* (last modified May 27, 1999) <http://iisd.ca>.

tection endangers free trade.[61] Similarly, some countries claim that "sticks" should serve as a device to promote environmental protection, while other countries assert that "carrots," rather than penalties, would better advance compliance with environmental standards.

Most multilateral environmental agreements, including the Biosafety Protocol, use both the "carrot" and the "stick" approaches. For instance, to ensure compliance with the MEAs, developed countries may offer financial or technical assistance, or both, ("carrots") to developing countries so that developing countries can comply with the environmental standards. To avoid "free riders," however, some countries also have found it necessary, in their efforts to preserve and protect the environment, to impose ETMs on other countries that enjoy the benefits derived from the financial sacrifices of others.

Usually, ETMs exist in the form of product standards, tariffs, taxes, restrictions on imports and exports, or sanctions and are used to influence environmental policy in other countries.[62] This article will discuss how the GATT panel has found the use of unilateral ETMs, as opposed to multilateral ETMs, to be contradictory to the goals of the WTO. Principle 12 of the Rio Declaration states that "[u]nilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided."[63] WTO members have acted in accordance with Principle 12, expressing their condemnation of unilateral trade measures used to pursue environmental objectives outside the jurisdiction of a Member state.[64] Thus, arguments supporting unilateral trade measures have proven fruitless in disputes before the GATT Panel.[65]

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[61] For an overview of the trade and environment debate, *see generally* DAVID HUNTER ET AL., INTERNATIONAL ENVIRONMENTAL LAW AND POLICY 393 (Treaty Supp. 1998).

[62] Michael Edward Foster, Note, *Trade and Environment: Making Room for Environmental Trade Measures Within the GATT*, 71 S. CAL. L. REV. 393 (1998).

[63] Rio Declaration on Environment and Development, June 14, 1992, 31 I.L.M. 874, 878 (1992) [hereinafter Rio Declaration].

[64] Report of the WTO Committee on Trade and Environment, WT/CTE/1 (Nov. 8, 1996) [hereinafter 1996 CTE Report].

[65] *See* RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW §402 (1987) [hereinafter RESTATEMENT]. Customary international law allows for extraterritorial regulation when the subject of the regulation is aimed at an activity that has a "substantial effect" on the regulating state. Unfortunately, however, it is difficult

Multilateral ETMs, on the other hand, are arguably more WTO-compatible because they reflect international consensus, usually in the form of an MEA. In the GATT Panel's Tuna/Dolphin I and II and Shrimp/Turtle decisions, the Panel indicated its uneasiness with unilateral sanctions and its willingness to consider multilateral ETMs for this reason.[66] Although there is evidence that the use of ETMs pursuant to an MEA, such as the Biosafety Protocol, will "survive GATT 1994 scrutiny," the legality of such trade measures under GATT remains unsettled.[67]

Another issue regarding ETMs often will arise when a country refuses imports from an exporting country based upon the exporting country's method of production. The exporting countries argue that such practices are unilateral trade measures, imposed solely to force them to change their domestic policy in order to reestablish trade ties with the importing country. While GATT 1994 prohibits discrimination among "like products," the GATT definition does not determine the likeness of products according to the methods by which they are produced.[68] Thus, the sirens of "state sovereignty" begin to sound when trade sanctions are imposed on any "like product" based upon the manner in which it is obtained or produced.

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to determine what constitutes a "substantial effect" when balancing the negative effect on the regulating country with the impact on the regulated country. Traditionally, customary law requires consistent State practice and the existence of *opinio juris* (legal obligation). *See generally* The Paquette Habana, 175 U.S. 677 (1900) (stating that where there is no **treaty**, and no controlling executive *or legislative act* or judicial decision, courts must resort to the **customs** of nations); *The North Sea Continental Shelf Case*, 1969 I.C.J. 3,12 (1969) (discussing customary international law).

[66] *See* GATT Dispute Panel Report on United States Restrictions on Imports of Tuna, 30 I.L.M. 1594 (Aug. 16, 1991) [hereinafter Tuna I]; GATT Dispute Panel Report on United States Restrictions on Imports of Tuna, 33 I.L.M. 839 (May 20, 1994) [hereinafter Tuna II]; WTO Report of the Panel Concerning the United States – Import Prohibition of Certain Shrimp and Shrimp Products, *available at* 1998 WL 256632 (May 15, 1998) [hereinafter WTO Shrimp Panel Report]; WTO Report of the Appellate Body Concerning the United States Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R (98-0000) (Oct. 12, 1998) [hereinafter Appellate Body Report].

[67] *See* RESTATEMENT, *supra* note 65. "When account is taken of the limited numbers of MEAs that contain trade provisions, and the fact that no trade dispute has arisen over the use of those measures to date . . . there is no evidence of a real conflict between the WTO and MEAs." 1996 CTE Report, *supra* note 64, at para. 6.

[68] GATT 1994, *supra* note 24, at art. 3.

Alternatively, while noting the importance of guarding against protectionist abuse, proponents of environmental trade measures based on PPMs argue that a determination of "like products" must be based upon PPMs. Market-based incentives can thus be employed to pressure industry into practicing environmentally responsible production and consumption.[69] MEAs usually focus on the impacts of a product's production, use, and disposal on the environment, rather than the use of the product itself.[70]

Furthermore, many MEAs adopt the precautionary approach to avoid potential harm and increased costs associated with correcting the damage, as opposed to the lower cost of preventative measures.[71] By entering into MEAs, importing countries argue that they should have the ability to compel sustainable production practices, especially if they are prohibited from rejecting imported products that were produced in an environmentally degrading fashion. Despite the environmental arguments to the contrary, "sticks," whether or not mixed with "carrots," are most often prohibited by the WTO. This prohibition restricts MEA parties' ability to ensure compliance with environmental measures. Thus, nations, including those that freely enter into MEAs like the CBD, may be prohibited from enforcing ETMs as a means of enforcing compliance. The prohibition of ETMs ("sticks") is a critical issue because it strips the MEA Parties of one of only a few devices used to promote environmental compliance. Without this tool, Parties may be unable to ensure compliance and ultimately, the environments of all countries will suffer.

Recently, several situations, similar to the biosafety issue, have arisen requiring the interpretation of certain provisions of the GATT 1994 and its relationship to MEAs. While interna-

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[69] *Six Easy Pieces: Five Things the WTO Should Do – And One it Should Not, supra* note 60.

[70] The Biosafety Protocol covers LMOs that are destined for direct entry into the environment such as corn and soy. Some countries, however, argue that the Protocol also should cover products *derived from* LMOs such as pharmaceuticals, textiles and processed foods. Therefore, if the Protocol is extended to cover products derived from LMOs, the Biosafety Protocol, as an MEA, would ratify the applicability of PPMs in determining the imposition of environmental trade measures upon a country. *See generally Protocol*, *supra* note 2 *passim*.

[71] *See* Rio Declaration, *supra* note 63.

tional case law does not establish binding precedent, it is nevertheless persuasive authority. Thus, it is important to evaluate existing international environmental law principles and compare the earlier decisions and opinions of the GATT Panel regarding trade and environment issues in order to adequately analyze the impact of the GATT-WTO framework on the Biosafety Protocol.

To date, the GATT Panel has decided several major trade and environment cases.[72] The major issue in each of the cases was whether the imposed trade measures were allowed under the exceptions found in Article XX of the GATT 1994, which provides in pertinent part:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of *arbitrary or unjustifiable discrimination* between countries where the same conditions prevail, or a *disguised restriction* on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> (b) *necessary* to protect human, animal or plant life or health; . . .
> (g) *relating to* the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption.[73]

Also at issue in each of these cases were U.S. attempts to impose trade sanctions on other countries based upon PPMs. In other words, the actual products (i.e., tuna or shrimp) were not at issue. Rather, at issue were the methods by which the products were obtained and the detriment such methods caused to other environmental resources. Regardless of the adverse environmental implications involved in each case, trade issues trumped environmental concerns each time.

Considering that PPM-based trade sanctions were rejected in prior case law, one might also presume the failure of such measures based on PPMs under the Biosafety Protocol. Despite the uncertain forecast of the Biosafety Protocol's power, language in the GATT panels' opinions suggests a possible shift by

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[72] *See, e.g., supra* note 66 (listing various reports).

[73] GATT 1994, *supra* note 24, at art. 20 (emphasis added). This introductory language is referred to as the "chapeau."

the GATT Panel towards a more balanced approach between trade and environment issues.

### 1. *Tuna/Dolphin Cases: Interpreting GATT 1994, Article XX(b)*

The Tuna/Dolphin dispute ("Tuna I") arose in 1990, when the United States placed an embargo on tuna imports from Mexico pursuant to the Marine Mammal Protection Act ("MMPA").[74] The GATT Panel ("Panel") decided that the United States could not impose trade-restrictive measures against Mexico to protect dolphins killed by certain tuna fishing practices because the killings occurred outside of the United States.[75] Moreover, even if Article XX(b) were interpreted to include extra-jurisdictional protection of life and health, the Panel concluded that the United States had failed to meet the "necessary" element of the exception because it had not exhausted all GATT-consistent options reasonably available to it at the time.[76] Article XII of GATT 1994 merely states that parties are obligated to attempt to settle any trade disputes through consultation and negotiation.[77] Although the Panel did not offer any "less GATT-inconsistent" alternatives, previous decisions of the Panel may assist in explaining the rationale behind the Tuna I decision.

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[74] 16 U.S.C. §1361-1421h (1994) [hereinafter MMPA]. The embargo derived from an amendment to the MMPA that provided for trade restrictions against any nation that killed dolphins at rates above those of the U.S. tuna fleet. *See generally id.*

[75] *See* Tuna I, *supra* note 66 *passim*.

[76] *See id.* The exhaustion of all GATT-consistent options available was required of a party applying for the GATT 1994 exception. *See generally id.*

[77] GATT 1994, *supra* note 24, at art. 12. Article 12 states:

> (1) [e]ach contracting party shall accord sympathetic consideration to, and shall afford adequate opportunity for consultation regarding, such representations as may be made by another contracting party with respect to any matter affecting the operation of this Agreement. (2) The contracting parties may, at the request of a contracting party, consult with any contracting party or parties in respect of any matter for which it has not been possible to find a satisfactory solution though consultation under paragraph 1.

*Id.*

In the Cigarette Panel Report, the Panel interpreted the term "necessary" to mean that no alternative measure exists.[78] The Panel noted that when a measure consistent with other GATT provisions is not reasonably available, a contracting party is bound to use, among the measures reasonably available to it, that which entails the *least degree of inconsistency* with other GATT 1994 provisions."[79] In the Cigarette Panel Report, the Panel denied Article XX(b) exceptions because the objectives sought through import restrictions could have been achieved through internal regulations affecting domestic sales.[80]

In Tuna I, the United States did not satisfy the internal regulation requirement of the Panel's test. Therefore, the Tuna I Panel ultimately held that "the United States had not demonstrated . . . that it had exhausted all options reasonably available to it to pursue its dolphin protection objectives . . . in particular through the negotiation of international cooperative arrangements."[81]

After the Tuna I decision came the Tuna/Dolphin II dispute of 1994 ("Tuna II").[82] This time, the EU challenged the United States' ban on tuna imports to one of the EU's intermediate countries as a result of the MMPA. In another attempt to protect the dolphins, the United States argued that the ban was "necessary" under the Article XX(b). Although the decisions of the WTO dispute settlement system have no precedential value, the Panel nevertheless relied on its prior decision in Tuna I.

The Tuna II Panel employed a three-step process in interpreting Article XX(b). The Panel addressed three key issues:

> (1) Whether the substance of the policy of the measure in question was the protection of human, animal, or plant life or health; (2)

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[78] Report of the Panel on Thailand—Restrictions on importation of and internal taxes on cigarettes, Nov. 7, 1990, GATT B.I.S.D. (37th Supp.) 200, at para. 74 (1990), *reprinted in* GATT: Dispute Settlement Panel Report on Thai Restrictions on Importation of and Internal Taxes on Cigarettes, 30 I.L.M. 1122 (1991) [hereinafter Cigarette Panel Report].

[79] Report of the Panel on United States—Section 337 of the Tariff Act of 1930, Nov. 7, 1989, GATT B.I.S.D. (36th Supp.) 345, at para. 5.26 (1990) (last visited Mar. 5, 2000) <http://wto.org/dispute/panel.htm> (emphasis added).

[80] *See* Cigarette Panel Report, *supra* note 79 *passim*. Thailand argued that its import ban on cigarettes was "necessary" to protect human health, but the Panel concluded that domestic regulation was less inconsistent with GATT. *See id.*

[81] Tuna I, *supra* note 66, at para. 5.28.

[82] *See* Tuna II, *supra* note 66.

> whether the measure for which the exception is being invoked was *necessary* to protect human, animal, or plant life or health; and (3) whether the measure had been applied consistently with the chapeau, avoiding arbitrary or unjustifiable discrimination and/or a disguised restriction on trade."[83]

While the first issue was a given, the Panel decided that the trade measures used to force other countries into compliance did not satisfy the other two elements of Article XX(b). The second issue failed because the Panel again employed a "least trade restrictive" interpretation of "necessary."[84]

The Panel claimed to apply the ordinary meaning of "necessary." The plain meaning of "necessary" is "needed" or "essential." Thus, as applied in Article XX(b), "nothing in this Agreement shall be construed to prevent the adoption or enforcement . . . of measures . . . *[needed or essential]* to protect human, animal or plant life or health."[85]

Broadening the interpretation of "necessary" could allow countries to use trade devices as levers in forcing other countries to change their domestic policies to align with the desires of others. Although that is the purpose of ETMs, if conditions are not clearly articulated as to when ETMs are allowed, countries dependent upon the trade of such regulated products could, in effect, be forced to surrender their sovereignty to comply with the domestic law of another country. If this were the case, countries with ulterior motives could decide to impose trade sanctions to gain economic advantage over the importing country. Consequently, such bad faith unilateral sanctions defy the purpose of the WTO to promote fair and nondiscriminatory trade practices.

On the other hand, a narrow interpretation is also illustrative of how the prohibition of such trade measures results in weakened environmental compliance mechanisms. For instance, if an importing country already has undertaken good faith efforts to promote more sound environmental practices, while an exporting country refuses to negotiate concerning such

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[83] See Tuna II, *supra* note 66.

[84] *See id.* at para. 5.3. Recent Panel reports have required a measure to be "among the measures reasonably available . . ., that which entails the least degree of inconsistency with the other GATT provisions." *Id.*

[85] *See* GATT 1994, *supra* note 24, at art. XX (b).

environmental standards, without the Panel offering any examples of "least trade restrictive" options for a country to apply, an importing country remains defenseless against the infiltration of products across its borders. Thus, it follows that trade sanctions were included in GATT 1994 for just such a circumstance—when it is evident that a country is unwilling to work towards achieving environmentally sound policy. If environmental protection were not intended to override some of the trade interests in such circumstances, environmental protection language would not be written under the "Exceptions" title of GATT 1994.

Given that the Panel held the trade measure was not "necessary," the measure was viewed instead as arbitrary and unjustifiable discrimination and a disguised restriction on trade under the chapeau.[86] Thus, the third element also was not met. One WTO report noted that the purpose of the language in the chapeau exists to ensure Article XX exceptions are not abused.[87] Thus, it seems clear that the framers also had the same concerns, which would explain why such qualifying introductory language was incorporated in the Article. Thus, applying a "least trade restrictive test" to Article XX(b) is unnecessary given the introductory language of the Article, (the "chapeau") which prohibits "unjustifiable discrimination between countries" and "disguised restriction on international trade."[88]

The language in the chapeau is written to prevent unilateral sanctions intended to impose the policy of one country on another. The language, however, leaves the door open to justifiable and non-prejudicial use of trade sanctions in MEAs and other agreements where countries have joined to address environmental concerns without violating the WTO. Such allowance is consistent with the purpose of the WTO because the cooperative action of countries in addressing environmental threats reduces barriers to trade that could arise with various

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[86] GATT 1994, *supra* note 24, at art. 20.

[87] *See* Tuna II, *supra* note 66, at 898 para. 5.39 (stating that restrictions on the importation of tuna were not "necessary").

[88] *See* WTO Appellate Body: Report of Appellate Body in United States—Standards for Reformulated and Conventional Gasoline, 35 I.L.M. 603 (May 20, 1996) [hereinafter Reformulated Gas Report].

domestic programs and possibly could bring forth more disputes between countries.

Therefore, the "no other alternative" definition of "necessary" is too narrow when read with the opening language. The descriptions of "unjustifiable discrimination" and "disguised restriction on international trade" more adequately indicate the intent of the framers as to when the exception may or may not be applied. The language indicates that countries are to refrain from imposing trade measures except when they are truly needed to protect the environment. The sanctions, however, must be employed fairly and in good faith. This approach would address the two major concerns in the chapeau. First, "unjustifiable discrimination" speaks to the underlying purpose of the GATT-WTO regime, which is to promote fair trade practices. Second, a "disguised restriction on international trade" addresses the concerns of countries fearing the possibility of forced imposition of other countries' rules in order to preserve their economies.

Moreover, if the Panel's interpretation were literally applied, the failure of the uncooperative countries to internalize costs would reduce efficiency and cause harm to the environment. Even if countries choose not to adopt domestic policies to internalize costs, they should not adopt policies that externalize costs to other countries. This practice is both economically inefficient and harms the environment by forcing countries to accept goods produced in a way that is harmful not only to the country attempting to impose sanctions, but to the global community as well. Trade interests should not overshadow agreements in which countries recognize the problem, and through negotiations agree to include trade restrictions as levers within multilateral agreements to correct, or at the very least, mitigate potential environmental damage. If the agreements are rational, justifiable and non-prejudicial, they should fit within the environmental exception of Article XX.

Thus, interpreting "necessary" to mean that trade measures may only be applied when there are no alternatives, regardless of the effectiveness of such alternatives, is too narrow. Trade measures should be applied so long as they are not discriminatory and not imposed in bad faith with the intention of restricting trade to gain economic advantage.

2. *Shrimp/Turtle Dispute: GATT 1994, Article XX(g)*

On May 15, 1998, the WTO Dispute Settlement Body ("DSB") ruled that a United States embargo of shrimp was inconsistent with Article XI:1 of GATT 1994 and could not be justified under Article XX of GATT 1994.[89] The case began when India, Malaysia, Pakistan, and Thailand challenged a ban by the United States on imports of shrimp harvested without the use of turtle-excluder devices ("TEDs"). The use of TEDs was mandatory under Section 609 of the Endangered Species Act of 1973.[90] According to the Panel, the United States' ban on shrimp imports under Section 609 violated Article XI (as did the ban on Tuna in the previous cases) because it imposed a "restriction other than duties, taxes, or other charge."[91]

Asian countries argued that the United States' trade restriction also violated Articles I and XIII of GATT 1994 because it discriminated against "like products."[92] The Panel, however, held that it was not necessary to address this alleged violation because a violation already existed under Article XII.[93] The United States in response argued that its trade restrictions on shrimp fell under the Article XX exceptions of GATT 1994. The Panel, however, rejected the United States' affirmative defense and recommended that the United States limit its trade practices in accordance with its obligation under the WTO.[94]

The United States appealed the Panel's ruling, arguing that the Panel erred in finding that the trade restriction constituted unjustifiable discrimination.[95] Relying mainly on Article XX(g), and in the alternative upon Article XX(b), the United States contended that Section 609 fit within the exception because it strives to preserve a natural and endangered resource (sea turtles).[96] Further, the United States argued that Section

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[89] *See* WTO Shrimp Panel Report, *supra* note 66.

[90] *See WTO Rejects U.S. Appeal Over Shrimp Import Ban and Turtle Deaths*, (last visited Mar. 5, 2000) <http://www.nando.com/newsroom/ntn/health/101298/health9_21468_noframes.htm>. The amendment requires foreign fishing vessels to equip their shrimp nets with the $75 devices to prevent the deaths of 150,000 turtles a year.

[91] *Id.*

[92] *Id.*

[93] *See id.*

[94] *See id.*

[95] *See* Appellate Body Report, *supra* note 66.

[96] *See generally id.* at pt. II.A.

609 was an evenhanded measure that was justifiable and did not constitute a disguised restriction on trade.

The Appellate Body (the "Body") seemed willing to accept Section 609 in principle. The Body, however, stated that "*a type of measure adopted by a Member* which, on its own, may appear to have a relatively minor impact on the multilateral trading system, *may* nonetheless *raise a serious threat to that system if similar measures are adopted by the same or other Members.*"[97] The Body relied on its decision in *United States–Gasoline*, where it stated that it is "important to underscore that the purpose and object of the introductory clauses of Article XX (the "chapeau") is generally the prevention of 'abuse of the exceptions of [Article XX]'."[98]

The Body also indicated the sequential order of analysis in determining the existence of an Article XX exception. First, the measure must satisfy a particular provision, (a) to (j), under Article XX.[99] Next, the measure must be analyzed in accordance with the chapeau of Article XX.[100]

Interpreting GATT 1994, Article XX(g) is fairly straightforward. First, the measure must involve an "exhaustible natural resource."[101] The Body found the term "natural resource" to be "evolutionary . . . thus embracing both living and non-living resources."[102] The Panel concluded the endangered sea turtles obviously were exhaustible. Thus, the sea turtles are "exhaustible natural resources."[103]

Next, the Body examined whether the measures sought "relate to the conservation of" the exhaustible natural resource (sea turtles).[104] Section 609 imposed an embargo on shrimp harvested without equipment necessary to preserve sea turtles. Therefore, because Section 609 sought to protect the turtle through means directly related to the ends, rather than through a "blanket prohibition" of imports, the Body concluded that Sec-

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[97] *Id.* at pt. VI.A. (emphasis in original).

[98] *Id.*

[99] *See generally id.* at pt. VI.A.

[100] *See* Appellate Body Report, *supra* note 66, at pt. VI.A.

[101] *Id.*, at pt. VI.B.1.

[102] *Id.*

[103] *Id.*

[104] *Id.* at pt.VI.B.2.

tion 609 is a measure "relating to" the conservation of an exhaustible natural resource within Article XX(g) of GATT 1994.

Finally, the Body examined whether the measures under Section 609 were made effective in conjunction with restrictions of domestic production or consumption. Since the United States promulgated regulations in 1990 that now require all United States shrimp trawlers to use TEDs, the Body also found that Section 609 satisfied this requirement. As a result, the Appellate Body held that Section 609 satisfied the Article XX(g) exception because it was aimed at the conservation of an "exhaustible natural resource" and was made effective in conjunction with restrictions on U.S. production. Finding Article XX(g) satisfied, the Appellate Body overruled the Panel's decision on that issue.

Noting the difficulty in applying the chapeau, however, the Body reversed the Panel's analysis of the introductory language. The Body further indicated that such an interpretation of the chapeau would render the Article XX exceptions "inutile, a result abhorrent to the principles of interpretation . . . ."[105] Instead, the Appellate Body established another interpretation, yet arrived at the same result.

The Appellate Body stated that the effect of the application of Section 609 "is to establish a rigid and unbending standard by which United States officials determine whether or not countries will be certified, thus granting or refusing other countries the right to export . . . ."[106] Additionally, the Body indicated that it had no evidence that the United States undertook negotiations to discuss sea turtle conservation with the Asian countries before the imposition of the shrimp import ban.[107] As it did in the Tuna/Dolphin cases, the United States had "jumped the gun" and imposed trade sanctions before entering into sufficient negotiations with its fellow WTO members. Therefore, the Body held that the application of Section 609 constituted unjustifiable discrimination.[108]

Next, the Body indicated that Section 609 did not allow for "minimum standards of transparency and procedural fairness

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[105] Appellate Body Report, *supra* note 66, at pt. VI.B.2.
[106] *Id.* at pt. VI.C.
[107] *Id.* at pt. VI.C.2.
[108] *Id.*

in the administration of trade regulations" as required under Article X:3 of GATT 1994.[109] Since Section 609 offered no formal notice or reasons for denial of certification to allow imports, nor did it allow for an appeal process, the Body held it to be both arbitrary and discriminatory as well.[110]

Despite the United States Trade Representative Charlene Barshefsky's insistence that the law was applied consistently, the WTO ruled that the restrictions were discriminatory under Article XX of GATT 1994, and were an illegal attempt by the United States to unilaterally impose its policies upon other countries.[111] Given the Body's conclusion that Section 609 constituted unjustifiable and arbitrary discrimination, it decided it was not necessary to examine whether Section 609 constituted a disguised restriction on trade.[112] Consequently, even though the U.S. embargo satisfied Article XX(g) of GATT 1994, it failed to withstand the test found in the chapeau.

## III. LESSONS LEARNED: SYNTHESIZING CASE LAW AND THE BIOSAFETY PROTOCOL

The majority of existing recommendations concerning issues raised in the cases discussed above are geared toward the trade and environment debate in general. These recommendations focus on creating a "louder" and more persuasive voice for environmental issues. The proposed alternative solutions concentrate on the Biosafety Protocol and the WTO, although lessons derived from the Biosafety Protocol experience likely will continue to influence the trade and environment debate.[113]

The alternatives proposed in this section suggest that progress has been made on the GATT Panel regarding environmen-

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[109] *Id.* at pt. VI.C.3.

[110] *See* Appellate Body Report, *supra* note 66, at pt.VI.C.3.

[111] *See WTO Rejects U.S. Appeal Over Shrimp Import Ban and Turtle Deaths, supra* note 91.

[112] Appellate Body Report, *supra* note 66, at pt. VI.C.3.

[113] *See* Hagen & Weiner, *supra* note 52, at 21. "The Biosafety Protocol would be the first multilateral agreement designed to regulate for environmental (and possibly health protection) purposes trade that is likely to expand significantly over time. As a result, these negotiations present the trade and environment debate in a particularly stark light. How the international community ultimately resolves the question of biosafety could shape the development of both international environmental and trade law (and their relationships to one another) for many years to come." *Id.*

tal awareness. Concededly, there has not been as much progress as environmentalists expect. However, when considering the overall approach of the Panel in its recent decisions, it seems that the Panel is willing to consider environmental concerns more seriously. The Panel favors the least restrictive type of trade measures; however, it states that if trade measures are imposed, it must be accomplished under a multilateral, rather than unilateral, trade agreement. This approach limits a country's ability to abuse such trade measures, while still allowing countries to enforce multilateral environmental agreements by using trade measures as leverage devices.

### A. *Existing Recommendations to Resolve the Trade and Environment Dispute*

Various approaches have been suggested to resolve the trade and environment debate. These approaches include the "sticks only" approach, where countries punish polluters through trade restrictions; the "carrots only" approach, where countries offer polluters positive economic incentives; and a mixture of "carrots and sticks" to protect the environment, while not hindering free trade.[114] One scholar suggested:

> One approach is to devise a clever mix of carrots and sticks from a diverse enough issue garden to allow a cross-fertilization of concerns. In between carrots and sticks are environmental products and process standards applied equally to both domestic production and imports. Such standards are not carrots because they provide no additional benefit to foreign countries. Yet they are not sticks either so long as such standards are applied to all countries in an evenhanded manner.[115]

Examples of recommendations to resolve the trade and environment debate are addressed below. Each offers its own combination of "carrots" and "sticks."

Currently, the WTO has in place a Committee on Trade and Environment (the "CTE").[116] The WTO, with the help of environmental experts, could work to strengthen the CTE. Although this proposal is unlikely to harm the environmental ef-

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[114] *See* Master, *supra* note 39, at 426, 427.

[115] ESTY, *supra* note 38, at 80. (discussing solutions to the trade and environment debate).

[116] *See generally* IISDnet, *supra* note 35 and accompanying text.

fort, it is unlikely that environmental concerns would ever gain equal ground so long as the CTE exists under the auspices of the WTO. After all, the mission of the WTO remains trade oriented, regardless of any committee it may choose to develop under its umbrella.

Additionally, environmental experts could be allowed to sit on GATT Panels dealing with trade and environment disputes. This approach would eliminate the arguably one-sided approach of the GATT Panel and allow for more informed decision-making on environmental issues. Although the experts can be extremely helpful in this regard, they should not be allowed to serve as members of the Panel. The WTO remains a "trade" organization and should remain focused on that purpose. It is appropriate that environmental experts continue to advise the GATT Panels on environmental issues that arise; however, the WTO should not attempt to become a quasi-environmental organization.

Another option, as one scholar has suggested, is to establish a "strong and comprehensive Global Environmental Organization (GEO)."[117] Such an entity would aid in bridging the gap between trade and environmental issues. Professor Daniel C. Esty noted:

> The world needs GATT-like rules of mutual forbearance to protect the environment and a supporting international body to manage global environmental relations. The presence of global environmental externalities, the public goods nature of environmental programs, and the intergenerational tradeoffs inherent in environmental policy choices necessitate an overarching regulatory structure.[118]

Esty suggests that this entity evolve as a counterpart to the WTO.[119] Esty further suggests that the GEO model structure resemble that of the WTO.[120] If the GEO is created with the intent of possessing the requisite authority and influence, its presence could serve as a catalyst and a voice for environmental objectives.

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[117] ESTY, *supra* note 38, at 78-82, 85-86.

[118] *Id.*

[119] *See id.*

[120] *See id.*

Despite the potential benefits of a GEO, most government officials and citizens are wary of more bureaucracy, whether domestic or international. Convincing citizens that multiple and separate environmental agreements are insufficient may be a difficult task. Moreover, the conglomeration of various environmental agreements, such as the separate trade agreements under the WTO, are necessary under a GEO structure. This also may prove to be a daunting task, especially if any of the Parties dependent on such agreements fear a loss of protection as provided for in the original agreements. Regardless of such important concerns, a GEO can be "responsibly" established in a way that would eliminate "bureaucratic waste" and instead implement more efficient and effective environmental policy. This entity would allow for more "clout" to negotiate with the WTO and begin creating sound policy that benefits both trade objectives and environmental concerns.

With respect to the Biosafety Protocol, the recommended GEO could oversee activities relating to biosafety, including setting incentives for collaborative efforts to regulate the transfer of LMOs, establishing penalties for countries failing to cooperate, serving as a hearing board to listen to the concerns of all countries in the areas of both trade and the environment, and mediating differences between the two sectors. Another obvious and practical duty of the GEO would be to serve as a clearinghouse for all of the technological information concerning biotechnology.[121]

It also has been recommended that the GEO develop "environmental indicators" to track and measure environmental policies.[122] This measure would help establish consistency among countries by eventually creating a set of "best practices" that can serve as models for other countries. Models would not only include the creation and testing of LMOs, but also would cover importing practices and implementation procedures such as risk assessment, effects on the environment (especially samples of how certain products react in particular climates), and do-

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[121] *See Protocol*, *supra* note 2, at art. 20.

[122] "A GEO could also serve as a focal point for work to improve scientific understanding of ecological problems, gather data on environmental trends, refine analytic tools, and develop environmental 'indicators' to track the success of different policies." ESTY, *supra* note 38, at 80.

mestic regulations. The GEO could create a set of common regulations for the biotechnology industry, thus eliminating unnecessary paperwork and allowing for more efficiency within the industry, as some industry officials have advocated.[123]

### B. *The Biosafety Protocol and the WTO Can Coexist*

Considering the outcome of the Shrimp/Turtle and Tuna/Dolphin decisions, environmental protection advocates may be jaded towards the WTO.[124] However, if the decisions are closely read, a trend towards environmental awareness and even a willingness to allow for exceptions under Article XX is discernible. For instance, the Appellate Body decision in the Shrimp/Turtle case discussed at length the importance of the preambular language of the WTO, which deals with environmental concerns. It also listed the charges of the WTO's CTE.

The WTO should recognize the importance and effectiveness of trade measures more fully than most other international entities. Keeping in mind that the WTO exists to promote trade, rather than hinder it, it is understandable that allowing exceptions to the general WTO principles will be applied extremely conservatively. Moreover, considering that the overall purpose of the WTO is to promote efficiency and fairness in trade, together with the decisions of the GATT Panel, it is clear that trade sanctions pursuant to MEAs are preferred over unilateral actions. This preference allows for a "clever mix of carrots and sticks" by permitting trade sanctions, which were

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[123] Marlon Allen, *Biodiversity: U.S. Industry Official Supports Biosafety Protocol to the U.N. Convention,* BNA INT'L ENV'T DAILY, 12/23/94 IED d2 *quoting* Chester T. Dickerson Jr., director, agricultural affairs at Monsanto Company, "[c]learly a biosafety protocol is needed; you just have to look to the United States. Biotechnology in the United States is regulated by (the Food and Drug Administration, the Environmental Protection Agency,) and the Department of Agriculture . . . ." *See also id. quoting* Jens Degett of Novo Nordisk (biotech firm with 50 percent of the world's market for enzymes and insulin as of 1994), "it is better for our work to have some rules to follow . . . [and that the] rules are very strict, but it also means that there is a great public perception of biotech . . . and people believe in the technology in general."

[124] In response to the Shrimp/Turtle decision, several environmental groups expressed their disapproval. The World Wildlife Fund announced, "[t]he WTO remains an institution captured by the special interests of multinational corporations and free trade technocrats" and further indicated that the WTO was ineffective in striking a balance between trade and environmental policies. *WTO Rejects U.S. Appeal Over Shrimp Import Ban and Turtle Deaths, supra* note 91.

agreed to by a group of countries, rather than merely allowing one country to unilaterally "bully" another into changing its domestic policies. Carrots still are available as levers to both individual, as well as groups of, countries to employ before imposing any trade measure.

On the surface, the recent GATT Panel decisions seemingly may make dismal any hope of Panel approval of ETMs within the Biosafety Protocol. The Biosafety Protocol, however, is distinguishable from each of the existing cases above. In fact, trade sanctions to enforce the Biosafety Protocol are permissible under GATT Panel decisions in the following key areas: (1) scope; (2) chapeau language; and (3) GATT exceptions.

1. *Scope: The Biosafety Protocol Does Not Violate WTO Rights or Obligations*

First, the Biosafety Protocol is compatible with the WTO because it provides for MEAs, not unilateral trade measures. The GATT Panel decisions have emphasized that MEAs are acceptable, whereas unilateral measures are not. Given that countries freely enter into MEAs, it is illogical to deem them as arbitrary, unjustifiable or protectionist as is prohibited under the chapeau of Article XX. Thus, so long as the MEAs are freely entered into and the same standards are applied both internationally as well as domestically, trade measures under MEAs should be considered as "promulgated or brought into effect together with restrictions on domestic production or consumption of natural resources."[125] This conclusion is consistent with the requirements under Article XX(g). Therefore, because the Biosafety Protocol is an MEA and contains built-in alternatives such as labeling and information dissemination through a Biosafety Clearinghouse, it should be able to overcome any challenge by any country claiming its WTO rights are impeded by arbitrary, unjustifiable, or disguised restrictions on trade.

Second, the Biosafety Protocol does not violate WTO rights because it covers everything related to biodiversity. A major difference between the Biosafety Protocol and existing international trade and environment case law is the amount of potential harm imposed upon humans, animals and plants if trade

[125] GATT 1994, *supra* note 24, at art. XX(g).

restrictions cannot be used to stop practices that cause such damage. While the loss of one species such as dolphins or turtles can be detrimental to the animals themselves, the ecosystem, and the industries that thrive from their products, the Biosafety Protocol deals with the biodiversity of the entire planet. It covers an expansive range of products consumed by humans and animals and inserted into plants and animals. These products have the capability to reproduce and alter the biodiversity of entire regions. Research in biotechnology, as indicated earlier in the Article, is incomplete, largely due to the inability to keep pace with the rapid development of biotechnological innovation. Thus, the potential large-scale impact of any unintended consequences is unfathomable.

Finally, the Biosafety Protocol is compatible with the WTO because it does not discriminate between "like products." One major distinction between these cases and the Biosafety Protocol is the issue of "like products." As in most other trade and environment disputes, the issue of PPMs exists in the struggle over the Biosafety Protocol. The issue of PPMs derives from the MFN principle of GATT 1994, which provides for the equal treatment of "like product[s] originating or destined for the territories of all other contracting parties."[126]

Generally, trade agreements deal strictly with the end-product. The phrase "like products" under GATT 1994 does not distinguish between products based on how they are produced, but only on the final product. Thus, goods produced in countries with low or no environmental quality standards, which allow them to produce at less expense, may gain a competitive advantage over those countries that enforce higher environmental standards. Not only does this practice place the environmentally conscious country at an economic disadvantage, it also allows environmentally harmful practices to persist. Case law discussed above suggests a grim outlook for the GATT Panel to consider PPMs in any future decisions.[127]

The distinction in the biosafety dilemma, however, is that the end-product arguably is not an identical or "like" product. Rather, in the case of biosafety, most of the characteristics of

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[126] GATT 1994, *supra* note 24, at art. 1.

[127] *See generally supra* pt. II.B, text and accompanying notes.

the products are derivatives of the PPMs.[128] Thus, unlike the previous cases, biotechnological products are not only produced in a distinct manner but they create an entirely new product. For example, genetically altered tomatoes contain elements that do not exist in "normal" tomatoes such as genes derived from animals, insects, fish or bacteria. However, whether a genetically engineered tomato and a regular tomato are "like products" remains questionable. Therefore, importing countries could argue that they are no longer dealing with "like products," and that the prohibition on trade sanctions under GATT's MFN provision should not apply. The concern of importing countries is simple; while the end product may look the same, sometimes, "it is what we don't see that will hurt us."[129]

### 2. *The Biosafety Protocol Does Not Constitute an Arbitrary or Unjustifiable Discrimination, Nor a Disguised Restriction on Trade*

The Biosafety Protocol does not allow for arbitrary or unjustifiable discrimination under the GATT 1994, Article XX chapeau. According to the decisions and discussion surrounding the Tuna/Dolphin cases and the Shrimp/Turtle Dispute, trade measures imposed under the Biosafety Protocol are allowed only after good faith efforts to negotiate are made.[130] If such measures are necessary, then they must extend to all Parties and non-Parties trading with Parties to satisfy the introductory language of Article XX. Sanctions also must be applied consistently and fairly, so as to allow for transparency. According to recent case law, if these tests are met, such sanctions under the Biosafety Protocol would not constitute arbitrary or unjustifiable discrimination between countries where the same condi-

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[128] *See* Thomas J. Schoenbaum, *International Trade and Protection of the Environment: The Continuing Search for Reconciliation,* 91 AM. J. INT'L. L. 268, 289 (1997) (discussing PPMs directly related to the characteristics of products such as pesticides and growth hormones for cows are covered by the SPS and TBT Agreements). *See* Final Act, Agreement on Technical Barriers to Trade, *supra* note 24, at art. 2.2 and annex 1, at para. 1 (TBT Agreement); Final Act, Agreement on the Application of Sanitary and Phytosantitary Measures, *supra* note 24, at 69 (SPS Agreement).

[129] Jackie Giuliano, Ph.D., *Healing Our World, It's What We Don't See That Will Hurt Us* (visited Mar. 5, 2000) <http://ens.lycos.com/ens/feb99/1999L-02-21g.html>.

[130] *See generally supra* Pt. II.B, text and accompanying notes.

tions prevail. The Biosafety Protocol satisfies these tests for three principal reasons.

First, the Biosafety Protocol applies evenly and fairly to all parties and non-parties. The distinguishing factor of existing international case law and the Biosafety Protocol is that, in each case, the United States unilaterally imposed sanctions based solely on its domestic law. No other countries joined the United States in restricting imports as part of an MEA related to the issues. Alternatively, the Biosafety Protocol contains provisions as part of the MEA that allow for refusal of imports under certain circumstances.[131] Thus, each Party to the Biosafety Protocol could enact domestic legislation and legally enforce such trade restrictions according to the Biosafety Protocol.

Once the Biosafety Protocol enters into force, there is a strong likelihood that some Parties to the Biosafety Protocol will refuse to import some of the biotechnology products from the United States. "While the signing of an MEA frequently is considered to constitute a waiver of the signatories' GATT 1994 obligations/rights with respect to a particular MEA, it is not clear whether a state can impose an ETM, even if it is authorized by an MEA, against non-signatories."[132]

Although the Biosafety Protocol allows Parties to enter into separate agreements with Parties or non-Parties, such agreements must be "consistent with the objectives of this Protocol."[133] Agreements between Parties cannot "result in a lower level of protection than that provided for by the Protocol."[134] Thus, a Party cannot opt out of the Biosafety Protocol under a separate and less-restrictive agreement with some countries, while imposing tougher standards on others. Therefore, the Protocol does not allow unjustifiable discrimination under GATT 1994's Article XX Chapeau.

Second, the Biosafety Protocol does not provide for arbitrary discrimination. The Appellate Body in the Shrimp/Turtle case emphasized the need for "transparency," or the ability for countries to make certain that any agreement is being applied

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131 *See Protocol, supra* note 2, at art. 10 (referring to the Decision Procedure).

132 Foster, *supra* note 62, at 393.

133 *Proposed Protocol, supra* note 2, at art. 24.

134 *Id.* at art. 14.

in a "fair and just manner."[135] Further, it noted that Article X:3 of GATT 1994 required such transparency.[136] There, however, countries had no means of receiving notification of denial of certification, nor a rationale behind the denial. Moreover, such countries were not granted a legal procedure for review or appeal from a denial.

Unlike the Shrimp/Turtle case, the Biosafety Protocol, through its AIA process, not only requires notification from the exporting countries of certain LMO transactions, but also requires "acknowledgement of receipt of notification" from the importing country.[137] Moreover, the Biosafety Protocol establishes a "decision procedure," which lays out a structure for accepting or denying imports.[138] Once a decision is made, or anytime thereafter, an importing country may change its decision "in light of new scientific information on potential adverse effects on . . . biodiversity" and an exporting country may, at any time, request that the importer review its prior decision.[139]

Also providing for transparency, the Biosafety Protocol requires reporting of all "multilateral, bilateral and regional agreements and arrangements" to a Biosafety Clearinghouse so that other countries may become aware of such agreements.[140] Similarly, the Biosafety Protocol requires that Parties promote "public awareness and participation."[141] Thus, not only can other countries obtain and review decisions, but any member of the general public may do so as well. Therefore, given the numerous and detailed provisions allowing for transparency and legal review throughout the body of the Biosafety Protocol, it does not constitute arbitrary discrimination of international trade under GATT 1994's Article XX Chapeau.

In addition to not constituting arbitrary or unjustifiable discrimination, the Biosafety Protocol does not provide for disguised restrictions on trade. The Biosafety Protocol contains language that protects against the possibility of protectionism

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[135] *See* Appellate Body Report, *supra* note 66.

[136] *See id.*

[137] *See Protocol*, *supra* note 2, at arts. 8-9.

[138] *Id.* at art. 10.

[139] *Id.* at art. 12.

[140] *Id.* at art. 14, para. 2.

[141] *Id.* at art 23. This includes making its decision-making process regarding LMOs available to the public.

by countries attempting to preserve their own economies.[142] Although the Biosafety Protocol provides that "[a]ny Party may determine that its domestic regulations shall apply with respect to specific imports to it," Parties cannot create "unnecessary obstacles to international trade."[143] Additionally, Parties to the Biosafety Protocol also are required to notify the Biosafety Clearinghouse of its decision not to import.[144] Since the Biosafety Clearinghouse will maintain this information, all additional agreements and restrictions (other than strictly protected confidential material) will be available to Parties up front.[145]

Hence, a protective mechanism against any disguised restrictions on trade exists because all of the cards will be on the table. Additionally, the clearinghouse will provide a forum for countries to make their terms of trade known to all other countries. Thus, if other countries want to participate, they are aware of the necessary criteria. As long as the country imposes the same regulations upon itself, there should be no claims of disguised restriction on trade.

Finally, in addition to the availability of information, importing countries also must base their decisions of whether to accept imports on certain risk assessments, as provided under the Protocol, as well as notify the exporting country of the reasoning behind its decision.[146] This measure also aids against disguised restrictions on trade by preventing a country from imposing trade sanctions unchecked.

However, a protection for importing countries is built into the Biosafety Protocol by allowing decisions to be made without full scientific certainty or scientific consensus regarding the potential adverse effects of LMOs.[147] Although some countries

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142 *See Protocol, supra* note 2, at art. 14.

143 *Id.*

144 *Id.* at art. 10 para. 4. The Biosafety Clearinghouse would serve to "[f]acilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms," while also assisting Parties in implementing the Protocol.

145 *See Protocol, supra* note 2, at art. 21.

146 *Id.* at art. 15. *See also id.* at art. 10 para. 3 (providing that, "[w]ithin two hundred and seventy days of the date of receipt of notification, the Party of import shall communicate, in writing, to the notifier and to the Biosafety Clearinghouse the decision." Also, except when consent is unconditional, such communication must include the reason for the decision.).

147 *See Protocol, supra* note 2, at art. 10 para. 6.

fear this provision will open the floodgates for countries to refuse imports of LMOs without any scientific basis, such a provision is necessary. It is especially necessary in the area of biosafety, where advances in biotechnology are outpacing the guidelines necessary to regulate such products. Little time is spared from development to test the effects of such products before introducing new products into the environment.

In an attempt to further protect importing countries, the Biosafety Protocol provides:

> "[n]othing in this Protocol shall be interpreted as restricting the right of a Party to take action that is more protective of the conservation and sustainable use of biological diversity than that called for in this Protocol, provided that such action is consistent with the objective and the provisions of this Protocol and is in accordance with its other obligations under international law."[148]

While seemingly allowing stricter domestic regulations on LMOs, the final phrase in this provision limits countries from taking any actions prohibited by the WTO. Although raising separate issues, this provision also prevents discrimination and disguised trade restrictions. Countries may apply stricter domestic law, but it must be applied in a manner consistent with the Protocol and the WTO, both of which require evenhandedness and prohibit discriminatory and self-interested trade practices.

### 3. *The Biosafety Protocol Qualifies for GATT 1994, Article XX Exceptions*

According to existing case law, trade sanctions under the Biosafety Protocol may satisfy the narrow interpretation of the environmental exception under Article XX(b). The GATT Panel, by not offering an explanation of what constitutes a "least GATT-restrictive measure" and not addressing the effectiveness factor of "reasonable alternative" in pursuing environmental objectives, is making it difficult, if not impossible, to predict the outcome of the status of ETMs within the Biosafety Protocol. Without knowing what constitutes the "least-GATT inconsistent measures," with respect to trade sanctions, it is dif-

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[148] *Id.* at art. 2.4.

ficult to examine the rationale as to why the XX(b) exception would apply.

As indicated above, if a broader interpretation were applied, sanctions imposed under the Biosafety Protocol to protect human, animal, or plant life easily would meet the exception. Especially when considering that LMOs largely impact food products consumed by humans and animals and are grown in genetically engineered plants. The "necessary" element should be satisfied if any such products from LMOs are found to significantly endanger any of these living species.

Despite the unpredictability of Article XX(b), the Biosafety Protocol would most likely fit under the Article XX(g) exception, provided the species being negatively impacted constitutes an "exhaustible resource" and the trade measures are "related to" the conservation of that particular resource.[149] Plants, animals, and humans together comprise the ecosystem that is at risk of endangerment from LMOs. The ecosystem is an exhaustible resource in the truest sense. Once one "resource" is exhausted, all the others may be negatively impacted.

As an illustration, if a genetically altered plant species is released into the environment, it would intermingle with other plant species, thus tainting them with its genetically manipulated traits. If, over time, the altered genetics impairs a normal function of any of the plant species by not allowing it to perform its function in the ecosystem, other plants and animals who eat the plants or the insects that feed off the plants, and the humans who eat the animals, all could experience damage. Given the GATT Panel's inclination to apply a broader interpretation under Article XX(g), along with the potential large-scale impact of LMOs on biodiversity, trade measures limiting the importation of LMOs, or at least requiring labeling of such products derived from LMOs, are definitely "related to" the exhaustible resources.

According to the provisions of the Biosafety Protocol, all provisions must be applied domestically, as well as abroad, in an evenhanded fashion. Therefore, provided such trade measures are implemented in conjunction with restrictions on domestic production or consumption, as is required by the

[149] *See Protocol, supra* note 2, at art. XX(g).

Biosafety Protocol, the Article XX(g) exception should be satisfied. Based upon the decisions of its Panel, the WTO does not inherently conflict with the Biosafety Protocol and the two can coexist. Although this analysis focuses solely on the Biosafety Protocol and the WTO, it also should serve as a guide in addressing similar disputes and addressing similar issues within the overall trade and environment debate.

## IV. CONCLUSION

The language of the Biosafety Protocol likely meets an environmental exception under GATT 1994 Article XX and therefore is compatible with WTO principles. This conclusion, however, is by no means a certainty. Good policy should be consistent and predictable. Each faction of countries already has begun to interpret the language to their own liking.

To support the consistency and effectiveness of the Biosafety Protocol, the following questions must be answered: (1) Are PPMs included under the Biosafety Protocol?; (2) What are the rights and limitations of non-Parties and of Parties that trade with non-Parties?; and (3) What course of action should be taken when the provisions of the Biosafety Protocol conflict with other international agreements? These are extremely difficult questions to answer. Moreover, no answer will satisfy the interests of every country. However, without any clarification, the Biosafety Protocol may prove meaningless. Parties and non-Parties alike will follow their respective interpretations until a dispute arises. If the matter is trade-related and brought before the GATT Panel, the Party with the environmental concern may have a chance at success, depending on the relevant facts of the case. That Party, however, likely will remain at a disadvantage, while the other party merely "preaches to the choir."

If it is made clear, internationally, that unilateral trade measures will not be tolerated, but that multilateral trade measures are able to qualify under one of the GATT exceptions, countries may be encouraged to refrain from the use of unilateral trade measures and become members of significant MEAs. This development will make both implementation of trade agreements and environmental agreements more efficient and effective. Despite the non-binding decisions and the reports

from the GATT Panels, the international community has yet to adequately define the relationship between MEAs, such as the Biosafety Protocol, that may provide for trade sanctions, and the requirements of trade agreements under the WTO. It is still unclear whether WTO rules could be used to challenge certain provisions of the Biosafety Protocol. Considering the GATT Panel decisions discussed above and the likelihood of a challenge by the United States, the international community may soon be forced to fully and definitively address the difficult question of which treaty prevails or, alternatively, how the WTO and the Biosafety Protocol can coexist.