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Gaines, Joanna K.; Palmer, Katherine V.

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Genetically Modified Organisms and WTO Trade Rules

Joanna K. Gaines^a and Katherine V. Palmer^b
^aUniversity of Minnesota, ^bUniversity of Chicago

Trade in genetically modified organisms (GMOs) has long been a contentious issue, especially between the European Communities (EC) and the United States. While the EC has invoked the "precautionary principle" to insure the safety of its food supply and the health of its citizens, the United States has filed formal complaints with the WTO Dispute Settlement System stating that the EC's de facto moratorium on GMO products violates WTO guidelines and constitutes a protectionist barrier to free trade. More broadly, after reviewing the countries' stakes involved, the role of the WTO in this dispute about different regulatory approaches is analysed. A potential ruling of a WTO dispute settlement body with respect to GMOs would have tremendous implications for Members' perceptions of their own sovereignty to formulate health and safety policies, and could pose serious threats to the multilateral trading order, irrespective of which party would eventually win that case. It is argued that the WTO lacks both the legitimacy and implementation capacity to act as a policy organisation, thus all parties involved should handle the GMO conflict with utmost sensitivity.

Keywords: genetically modified organisms, SPS, TBT, public health,

precautionary principle, GMO labelling

JEL-Codes: F13, F42, I18, K33

1 Introduction

Genetically modified organisms (GMOs) are living organisms whose genetic makeup has been altered through recombinant DNA technology to produce desirable traits such as disease resistance or better nutritive content. While it is true that GMOs offer many potential benefits, "like all new technologies, they also [pose] some risks, both known and unknown. Controversies surrounding [genetically modified] foods and crops commonly focus on human and environmental safety, labelling and consumer choice, intellectual property rights, ethics, food security, poverty reduction, and environmental conservation." Genetically modified crops such as rice, soybeans, cotton, and corn, are grown all over the world. In 2003, the main growers of genetically modified crops were the United States (63%), Argentina (21%), Canada (6%), China (4%), Brazil (4%), and South Africa (1%).

¹ U.S. DEPARTMENT OF ENERGY GENOMES ORGANIZATION (2004).

² U.S. Department Of Energy Genomes Organization (2004).

³ U.S. DEPARTMENT OF ENERGY GENOMES ORGANIZATION (2004).

Until recently, the European Union (EU)⁴ has chosen a cautious stance regarding GMOs. Its position, supported in particular by France, Greece, Italy, Luxembourg, and Denmark, is based largely on concerns regarding the safety (both for the environment and for individuals) of these relatively new organisms and consumer confidence in products containing them.⁵ Other concerns include identifying consumer products containing GMOs with labels, segregating genetically modified and non-genetically modified crops and products, and the traceability of GMOs in end products. Since these issues relate to human and environmental safety, the EU has justified its "de facto moratorium" by instituting a "precautionary principle", which it believes is within the bounds of World Trade Organization (WTO) Agreements.⁶

Some of the EU's main trading partners, however, maintain a very different opinion. In 2003, the United States (with the support of Canada and Argentina), filed a complaint with the WTO about the EU's policy on GMOs, arguing that the EU's restrictions are harming domestic farmers and are inhibiting free trade. The [United States] insists that there is no scientific evidence proving damage to either human health or the environment, and that the EU's "precautionary principle" goes too far."

In environmental law, a precautionary principle "requires that, if there is a strong suspicion that a certain activity may have environmentally harmful consequences, it is better to control that activity now rather than to wait for incontrovertible scientific evidence." However, more specifically, and for the purposes of this paper, the precautionary principle is a temporary emergency trade suspension measure available to WTO member countries (Members) and supported by the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures (SPS or SPS Agreement), Article 5, paragraph 7, which states:

"In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, including that from the

(Argentina).

⁴ For legal reasons the EU is referred to as the European Communities (EC) in WTO matters, however, EU and EC will be referred to synonymously throughout this paper.

⁵ BIOSAFETY INFORMATION NETWORK AND ADVISORY SERVICE ONLINE (1999).

BIOSAFETY INFORMATION NETWORK AND ADVISORY SERVICE ONLINE (1999).
 See EUROPEAN COMMUNITIES – Measures affecting the approval and marketing of biotech products, WTO Document No. WT/DS291/23 (United States); WT/DS292/17 (Canada); and WT/DS293/17

⁸ BBC News World Edition (2003).

⁹ ENCYCLOPAEDIA BRITANNICA ONLINE (2005).

relevant international organizations as well as from sanitary or phytosanitary measures applied by other Members. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time."10

WTO regulations allow Members to establish their own standards on food, animal, and plant safety. These standards should be based on science and existing international standards. However, Members may apply higher standards if they are invoking a precautionary principle in cases where there is scientific uncertainty and considerable risk. 11 The question, then, is whether the EU's position regarding genetically modified organisms is within the bounds of a precautionary principle, implemented to insure the safety of its food supply and the health of its citizens, or whether the EU is invoking a precautionary principle as a trade barrier to protect its domestic farmers (so-called "green protectionism"). More broadly, there are two major issues at hand: whose regulations regarding genetically modified organisms will prevail? And what should the WTO's role in these regulations be?

Historical Arguments Against Trade in GMO Products¹² 2

The main arguments justifying the EU's position on GMOs have been mentioned above. They will be examined in further detail here.

Safety — The long-term effects of genetically modified organisms on human health and the environment are as yet unknown, and this is the EU's main claim to the use of a precautionary principle. How might these products affect the human immune system, create allergies, or interact with other human diseases? How will GMOs interact with natural, unmodified organisms in the wild, especially in situations where GMO crops crosspollinate with native flora? How will they impact other plant and animal species, and are there long-term implications for biodiversity? Will GMOs that are resistant to certain diseases now result in tougher, more vicious diseases later?

¹⁰ WORLD TRADE ORGANIZATION (2005a).

WORLD TRADE ORGANIZATION (2005b).
 APPLETON (2000), see also U.S. DEPARTMENT OF ENERGY GENOMES ORGANIZATION (2004).

Consumer Concerns and Various Ethical, Religious, and Emotional Beliefs — Many consumers have passionate beliefs about their health, the environment, and the foods they eat. Those against the inclusion of GMOs in their diets or who believe that GMOs are a violation of nature's principles are naturally supporters of the EU's position.

Government's Role in Protecting Consumers — As agriculture becomes more complex and more heavily regulated, the role of informing and protecting consumers about the foods they eat has increasingly been taken on by governments. Again, the EU views its moratorium in large part as a public safety measure, implemented to protect consumers and biodiversity.

Effects on Domestic Farmers and Developing Countries — Cheaper U.S. imports may affect the profitability of local EU farmers and farming methods in developing countries. Will GMOs result in the formation of a few giant multi-national food conglomerates that squeeze out smaller producers? Will cheap GMO imports lead to poorer countries' increasing dependence on U.S. commodities, or will GMOs help farmers in developing nations increase their yields?

3 Historical Arguments For Trade in GMO Products¹³

On the other side, most arguments in favour of GMOs have trade-based, business, or economic rationales.

Green Protectionism — Those opposing the EU believe that it is engaging in Green Protectionism: the reliance on purported environmental concerns to support protectionist trade policies. They see the EU's position as a barrier to free trade that shores up domestic production.

Violations of WTO Regulations — Detractors suggest that the EU is well outside the limits of a precautionary principle in implementing its de facto moratorium with respect to GMOs. A precautionary principle should be a short term measure only, and the Member country implementing it should duly seek scientific evidence to support its position. As yet, there is no evidence that GMOs are harmful to either humans, plants, animals, or the environment. Under article 4 (1) of the SPS, "if an exporting country can demonstrate that the measures it applies to its exports achieve the same

¹³ APPLETON (2000), also U.S. DEPARTMENT OF ENERGY GENOMES ORGANIZATION (2004).

level of health protection as in the importing country, then the importing country is expected to accept the exporting country's standards and methods." Since the EU lacks supporting scientific evidence to the contrary, the United States believes that the EU should accept its exports.

Undisputed Benefits of GMOs — GMOs produce heartier, higher yielding, cheaper crops with resistance to pests and diseases. GMOs also improve yields of eggs, milk, and meat in animals and increase their resistance to disease. GMOs improve waste management and aid in soil, water, and energy conservation. Overall, these benefits help ensure a better, more reliable food source worldwide.

4 The European Union's Policy on GMOs

The European Union first implemented specific policies with respect to GMOs in the early 1990s and has continued to refine and expand that regulatory framework. The EU has stated that its regulations are intended primarily to protect its citizens' health and the environment, as well as to ensure future stability of the biotechnology market. The EU's stance on GMOs is recorded in Directive 2001/18/EC, which states that "any person must, before undertaking a deliberate release of a GMO or of a combination of GMOs, submit a notification to the competent authority of the Member State within whose territory the release is to take place." Companies may export goods containing GMOs only upon receipt of "the written consent of the competent authority." 16

While the EU has authorised the inclusion of traces of GMOs in imported animal feed, it has not retracted its ban on other imported goods containing GMOs, particularly those intended for domestic consumption. The EU maintains facilities across Europe that test imported products for trace quantities of GMOs. Recently, the EU opened three additional testing facilities in new EU member states, a move which aims at harmonising GMO policy across the EU.

¹⁴ WORLD TRADE ORGANIZATION (2005a).

Directive 2001/18/EC Of The European Parliament And Of The Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC. Official Journal of the European Communities Nr. L 106 of 17 April 2001, p1.

¹⁶ See Directive 2001/18/EC.

Consumer support within the EU for its GMO ban is broad. A Eurobarometer consumer poll reports that "more than 70 per cent [of consumers] do not want GM foods, while almost 60 per cent believe the technology causes significant damage to the environment." European consumers seem just as concerned about GMOs now as they were when the issue first arose. Indeed, the issue is not limited to the European Union; several non-EU member states, such as Switzerland, have equivalent, if not more restrictive, policies with respect to GMOs.

5 The United States' Position on GMOs

The United States, backed by Canada and Argentina, has filed formal complaints with the WTO stating that the EU's GMO ban violates WTO guidelines and constitutes a barrier to free trade. Without any scientific evidence supporting the EU's concerns regarding the safety of GMOs, these three agricultural exporters believe that the EU's "de facto moratorium" on GMOs and products containing GMOs is a thinly veiled protectionist measure. Though the EU may legitimately implement a precautionary principle for a short time, such a measure is intended to be temporary only. Since the EU's ban has been in place for several years now, the United States argues that the EU may no longer invoke a precautionary principle to support its claims unless it is able to present new scientific justification supporting the necessity of its position. The U.S. stance is supported directly by language in the SPS Agreement.

The EU's ban has clearly impacted exporters of genetically modified grains and byproducts of animals that have been raised using genetically modified feed, and there can be no question that the ban has helped agriculture in the European Union. ^{18,19} The United States also claims that some EU member states even continue marketing and import bans on GMO products that have already passed through the approval pipeline. ²⁰

¹⁷ Farmers Guardian (2001).

¹⁸ BBC News World Edition (2003).

¹⁹ International Trade Reporter (1999).

²⁰ ECONOMIST INTELLIGENCE UNIT (2003).

6 **Developing Countries' Position on GMOs**

Last year, U.S. President GEORGE W. BUSH stated at a press conference that the EU's ban on GMOs hinders efforts to fight famine and starvation in Africa, since developing nations will be discouraged from investing in biotechnology if they cannot export their goods to the European Union. However, there are several Members in Africa, including Malawi, Mozambique, Zambia, and Zimbabwe, that have actually banned GMOs of their own accord, despite facing problems with famine. For example, according to Zambian Agriculture Minister Mundia Sikatana, Zambia has rejected GMO foods, arguing that "the country should ... refrain from actions that might adversely affect human and animal health as well as harm the environment."21

This issue is complicated by the fact that many developing nations that are members of the WTO have ratified the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Protocol), but the United States has not. The Protocol, an agreement signed by 111 countries, "seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology."²² While issues such as public health are covered by external organisations such as the World Health Organization, currently the only international standard set in place to protect biodiversity is the Protocol. Due to the fact that it also embodies a precautionary principle, the Protocol calls for full information in order to be effectively implemented, which in the case of GMOs would mean labelling. Developing nations and the EU support this precautionary premise, meaning that until genetically modified crops are proved safe to humans and to biodiversity, they should not permit them. On the other hand, the U.S. premise is that of "substantial equivalence", meaning that until a problem arises with GM crops, they should be used. The U.S. insistence that EU policy causes African producers to disallow GMOs was rejected soundly by African nations at the 2003 Cancun Ministerial Meeting. These nations felt that, while the United States continues citing the substantial equivalence premise and not labelling its GMO products, African nations are forced to allow dangerous products across their borders without prior knowledge.²³

²¹ BBC News (2002).

²² Convention on Biological Diversity (2005).23 Berhan Gebre Egziabher (2003).

However, other developing nations would likely have an interest in certain genetically modified organisms, such as those that enable crops to resist drought or grow well in acidic soils. These, however, are still in laboratories, and the GMOs that currently dominate world markets are primarily crops with traits that would not benefit farmers in non-industrialised nations: 75% of GMO crops are modified to be herbicide resistant and another 18% are modified to be insecticide resistant, both of which are valuable traits to large agricultural and commercial farming operations, but not necessarily to small farmers.²⁴

Developing countries may recognise other benefits from aligning themselves with the EU's perspective on GMO specific issues such as labelling. Agriculture is a staple of many of these countries' economies, as evidenced by the fact that they have traditionally made concessions in negotiation scenarios involving agriculture. Restrictions on U.S. agricultural products could make these countries' exports more competitive.

7 Labelling GMOs and GMO-related Products

The European Union has suggested that labelling all products containing GMOs that are sold within EU borders would perhaps alleviate its concerns regarding GMOs, indicating that it might lift its ban if a comprehensive labelling scheme were to be introduced. The EU argues that consumers have a fundamental right to know what a product contains so that they may make informed purchasing decisions. Were consumers given information prior to purchase, the market would end up determining whether or not food should be produced using GMOs.²⁵

On the other hand, opponents argue that labelling increases consumer suspicion, making GMO products or products with GMO traces unattractive and therefore not competitive. Thus labelling would ultimately discourage the development of advances in biotechnology, as well as deter current producers from investing further in GMO technology. In addition, manufacturers with GMO and non-GMO containing products would need to keep those products completely isolated from one another to maintain product standards and accurate labelling. For example, if the United States wanted to supply corn to Europe, producers would need

²⁴ EU Business Ltd. (2003).

²⁵ Guzman (2004)

separate product lines, so that GMO trace elements would not be found in non-GMO products destined for European markets. Separating production lines would diminish producers' scale advantages, resulting in higher food prices and declining profitability. It would also be quite difficult operationally for agricultural producers to implement this strict segregation, especially due to cross-pollination issues. Thus additional development and technology resources would need to be committed to production of this class of good.²⁶

Other inherent costs of labelling come to light when considering the downstream effect of increasing operation costs for handling GMO products. Obviously, producers would eventually pass these costs on to consumers in the form of higher food prices. This would apply to both GMO and non-GMO products, as economies of scale for both types of product would be lost once production was segregated. Eventually, anything with either genetically modified or non-genetically modified ingredients would be more expensive due to the higher raw materials cost.

Differing GMO labelling policies among WTO Members has turned into a hotly debated issue, with the battle lines usually drawn between the EU, backed by a wide variety of developing nations who wish to tighten restrictions on one side, and the United States, backed by one or two additional GMO producers who wish to loosen restrictions. In terms of actual financial impact of these regulations, some crops have been affected minimally. For example, U.S. soy, which is a genetically modified varietal, still meets approval in the EU. Recent decreases in U.S. exports of soy to the EU are thus the result of increased competition in the soy market from Brazil and Argentina, rather than the EU's GMO policies.

Corn, however, is a different issue. The U.S. corn market is suffering dramatically from the EU's ban on its corn varietals. On the flip side, other nations have profited amply from the EU's decision to ban GMOs and stop the importation of American foodstuffs containing GMOs. For example, since 1995, the EU has nearly tripled its imports of Argentinean corn, while U.S. corn importation has shrunk considerably, with the likelihood of further declines in the future.²⁷

²⁶ International Trade Reporter (1999).

²⁷ European Commission (2003).

8 GMOs and the WTO

A fundamental aspect of WTO policy is that Members should maintain a large degree of autonomy with respect to their domestic trade policies. Members are able to (and should) draft policies protecting national interests, provided they pertain solely to domestically produced goods and the domestic manufacturers or producers of those goods. However, this conflicts with WTO Agreements when domestic policies begin to apply to imported products. With respect to GMOs, Members are free to demand that their own producers label genetically modified foodstuffs, or even ban production of such products; however, this creates a trade issue if a Member demands that other Members meet these same requirements.

Indeed, this is exactly what has happened now that EU GMO labelling and production requirements have been formalised²⁸ and the United States has filed a claim against the EU. Actual application of the WTO framework to the GMO issue is both complex and politically sensitive. One problem is that current WTO agreements were not developed with such biotechnology issues in mind. A more fundamental problem is that the WTO is a trade-related organisation, not a policy organisation. However, if Members' policies with respect to issues such as biotechnology contradict WTO trade commitments, then disagreements may be brought before the WTO Dispute Settlement System.^{29,30}

GMOs and their regulation are also topics for the Doha Agenda. This inclusion was highly contested, since placing this item on the agenda is currently seen as a massive overall roadblock that could impede negotiations in other areas. In addition, and equally alarming, is the fact that the outcome of the dispute could undermine WTO authority to an extent that could have a long-term impact on world trade.

²⁸ See Directive 2001/18/EC.

²⁹ FREDLAND (2004).

³⁰ Regulation (EC) 1829/2003 Of The European Parliament And Of The Council of 22 September 2003 on genetically modified food and feed. Official Journal of the European Union No. L 268 of 18 October 2003, p.1. See also Regulation (EC) 1830/2003 Of The European Parliament And Of The Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC. Official Journal of the European Union No. L 268 of 18 October 2003, p.24.

9 The Agreements on the Application of Sanitary and Phytosanitary Measures and Technical Barriers to Trade (TBT or TBT Agreement)³¹

The SPS and TBT Agreements must be considered before the General Agreement on Tariffs and Trade (GATT). Also, the SPS is a special agreement to the TBT. It applies for measures which aim to protect human, animal or plant life or health from risks arising from additives, contaminants, toxins, or disease-causing organisms in foods, beverages or feedstuff, or from the entry and spread of pests. For other objectives, or with regard to different risks, the TBT applies. This means that complaints against GMO regulations would be ruled under the SPS if health risks are at issue, but under the TBT if consumer information would be the dominating objective.

Both the SPS and TBT Agreements are complex and give rise to certain issues. While the SPS Agreement does not contain national treatment or Most Favored Nation (MFN) language, it does rely heavily on scientific principles and criteria. As mentioned, the SPS Agreement applies to the GMO question since it pertains to food, food safety, and the potential to jeopardise the lives of humans, animals, plants, or overall health, particularly in cases where "pests, diseases, disease-carrying organisms, additives, contaminants, or toxins" are concerned.

When resolving trade-related issues, a Member may chose to place restrictions on trade of a certain product, based on that Member's ability to prove the existence of a hazard, using scientific evidence. Given that GMOs can be characterised as additives or contaminants, this would seem like a logical application of WTO policy. If there is scientific evidence that GMOs pose a risk to humans, animals or plants, certain barriers to trade may be permissible under the SPS Agreement.

However, the actual application of the SPS Agreement to the GMO issue might be problematic. One issue with the application of the SPS Agreement is that there is no actual definition in any WTO document of the terms "additives, toxins, or contaminants", so a panel or the Appellate Body would need to establish the exact meaning of those words and how it would apply to these issues.

³¹ For this section, see APPLETON (2000), also EURACTIV (2005).

³² Appleton (2000).

Another issue with the application of the SPS Agreement is that, in its reliance on scientific principles, it asks for extensive evidence of real risks as opposed to theoretical risks, particularly if those risks are going to be cited as an acceptable barrier to trade. Clearly, this relates directly to the invocation of a precautionary principle and the inability to accurately determine what constitutes precaution and what does not. The SPS Agreement allows reliance on the precautionary principle only as a temporary measure and under certain conditions. The precautionary principle may not be employed as a general policy with regard to health and safety matters.

Additionally, the SPS Agreement was not developed with the full scope of biotechnology questions in mind. This is compounded by the fact that the SPS Agreement looks for the international harmonisation of standards, guidelines, and recommendations, particularly with respect to those established by the Codex Alimentarius Commission (the international food standards organization). If the SPS were to be applied, this lack of both harmonised international standards and scientific evidence would place an additional burden on the EU to justify its position with respect to GMOs.

Aspects of the GMO issue that would not be covered under the more narrow SPS Agreement might fall under the TBT Agreement, which "tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles" to trade. For example, the GMO labelling issue mentioned above has been referred consistently to the TBT committee.

Yet there are potential problems with the application of the TBT to the GMO labelling issue. The TBT Agreement does provide for so-called "non-discrimination" between like products produced domestically and those produced in other countries. However, if products are not "like", then discrimination might be permitted under the TBT. The problem with this, of course, is the fact that "like product" in terms of how that relates to GMOs is extremely ambiguous. One WTO report, the Appellate Body's ruling on Alcoholic Beverages, states that all rulings concerning whether or not two products are "like products" must be decided on a case-by-case basis. According to this report, as well as to the Border Tax Adjustments report, when trying to determine what constitutes "like pro-

³³ WORLD TRADE ORGANIZATION (2005c).

³⁴ Appleton (2000).

ducts", the panel should look to things like "consumers' tastes and habits and the products' end uses in a given market", and the report recognises that these things vary from country to country. While the first criteria, "consumers' tastes and habits" seem to pertain to the GMO problem directly, there is some question as to whether or not this may really be applied, since doing so could result in product discrimination, which in turn would contradict the very same principles of the TBT Agreement. This could engender serious controversies for the WTO in the future.

With respect to the second aspect of the TBT Agreement that applies to determining "like products", which refers to the products' end use, WTO panels have refrained from evaluating a product's production or manufacturing process in the past unless it results in clearly discernable differences in the end product. When it comes to the GMO question, this raises the important issue of trace identification, not only in the final product, but also in raw materials and production processes. With improvements in technology, trace detection is becoming easier and easier, and the EU in particular is pushing a progressive trace identification and testing program. It could be assumed that the EU is pursuing this not only on moral and ethical grounds as they apply to GMOs in general, but also to retain an objective relationship with this clause of the TBT Agreement. The easier trace elements are to detect, the easier it would be to state that GMO and non-GMO products are truly different. Thus labelling would not be discriminatory, as the products would be non-comparable.

10 Should the WTO Be a Policy Organisation?

The WTO is a trade liberalisation organisation and traditionally has not participated in policy formation, particularly with respect to specific environmental or ethical issues. In fact, the WTO has specifically maintained that individual nations must develop their own policies and standards. However, if Members do not develop specific guidelines that harmonise under WTO principles, the WTO Dispute Settlement System will eventually be required to step in and arbitrate. With respect to GMOs, if the WTO were called upon to make a decision, future policies of Members concerning GMOs and the trade of products containing GMOs would need to be made compatible with a WTO decision rather than with Members' domestic policies. This, then, removes certain aspects of national policy making from Members – a weighty outcome indeed. Members must

seriously consider the ramifications of such a potential ruling and how much of their sovereignty they are willing to cede to an international body.

There are other serious issues that arise when considering the implications of a WTO ruling on the GMO dispute. First, the WTO would be interfering with national sovereignty, though it is inadequately equipped to make policy decisions that should be based upon an evaluation of science or risks. In addition, the WTO is not in a position to set up or enforce standards based on cultural norms, as it remains unclear which cultural norms are acceptable.

Should the WTO rule in favour of the United States, the organisation could stand to lose respect from other Members, particularly developing nations which regularly find themselves on the opposite and losing side of issues involving U.S. trade policy. In addition, the EU reaction to a ruling in favour of the U.S. pro-GMO stance could have the same outcome as the WTO ruling in favour of the United States in the Beef/Hormones dispute in the 1990s: the EU would not comply, which would allow the United States to lever additional sanctions on to the EU in other areas of trade. The long run effect of this is that it minimises the effectiveness of the WTO, while literally disregarding MFN principles if the United States imposes new sanctions on the EU.

Should the WTO rule in favour of the EU, there would also be major repercussions. A ruling in favour of the EU would mean that the WTO has chosen to support not only what can be perceived as a trade barrier (therefore setting a dangerous precedent for similar issues in the future) but also a set of values that were originally outlined by a single Member. This would not only be perceived as unfair by other Members, it would also mean that the WTO would be accepting a set of cultural norms without having the organisational resources or authority to do so.

Since there is also no organisation in place to monitor the application of labelling schemes, such a ruling would again raise the question of the WTO's capacity to act as a policy organisation. The WTO lacks the resources, expertise, and clout to accept that role. Also, forced labelling compliance would create resentment among Members that believe that the EU stance is merely a protectionist measure. In past cases where a nation has chosen to invoke the SPS Agreement in a dispute, the WTO Appellate Body has invariably chosen to support the complaint and iden-

tified barriers to trade, so a move away from this could create extensive policy concerns.³⁵

11 Conclusion

The European Union's ban on Genetically Modified Organisms and products containing GMOs appears to be based upon moral and ethical concerns. However, as an international trade organisation, the WTO was not established to adjudicate upon, nor does it have the expertise to comment on, normative issues. The WTO operates on a multilateral level and is not a supranational organisation with the ability to direct the internal policies of its members. According to the United States, the EU's ban can be considered a barrier to trade, which brings the GMO question back into the WTO's domain. Therefore, the issue is one of great import, which the WTO must handle with the utmost sensitivity.

Given the situation, limited potential outcomes would alleviate pressure on the WTO to begin acting as a policy organisation, thus avoiding the dangers outlined above. For example, perhaps the EU, through continuing research, could find parameters within WTO Agreements that support its labelling initiative. Product differentiation per the TBT Agreement, or scientific evidence per the SPS Agreement, are potential loopholes the EU could reference to legitimise its agenda in accordance with WTO policies.

Another avenue to pursue is the idea of letting the market decide the fate of GMOs. If a comprehensive labelling scheme were introduced, consumers would be able to choose whether or not to purchase products containing GMOs. This would enable the EU to meet its value- and health-based objectives, while permitting the United States to export its genetically modified products. If U.S. genetically modified goods are produced inexpensively, price conscious consumers may still purchase them, while consumers making purchases based on health, value, or environmental concerns may choose to avoid products containing GMOs.

Ultimately, the issue is complex and multifaceted, and its resolution will have long-term repercussions. Any decisions made with regard to the GMO issue will likely have a tremendous impact on Members' percep-

³⁵ GUZMAN (2004).

tions of their own sovereignty, the WTO's role in policy making, and the WTO's relevance as an international trade organisation. Above all, the World Trade Organization must avoid undermining its own authority and legitimacy, and should tread lightly as it addresses this volatile dispute between two of its most influential members.

References

- APPLETON, ARTHUR E. (2000), The Labeling of GMO Products Pursuant to International Trade Rules, *NYU Environmental Law Journal* 8 (3), pp. 566–578.
- BBC News (2002), Famine-hit Zambia Rejects GM Food Aid, Internet: http://news.bbc.co.uk/1/hi/world/africa/2371675.stm (as of 09 February 2005).
- BBC News World Edition (2003), WTO to probe Europe's GMO policy, Internet: http://news.bbc.co.uk/2/hi/business/3191395.stm. (as of 26 January 2005).
- BERHAN GEBRE EGZIABHER, TEWOLDE (2003), When Northern Elephants Fight Over GMOs, *The Independent*, 12 October 2003.
- BIOSAFETY INFORMATION NETWORK AND ADVISORY SERVICE ONLINE (1999), "De Facto Moratorium" on GMOs Agreed for EU, Internet: http://binas.unido.org/binas/show.php?id=66&type=html&table=news_sources&dir=news (as of 09 February 2005).
- Convention on Biological Diversity (2005), Cartagena Protocol on Biosafety: About the Protocol, Internet: http://www.biodiv.org/biosafety/background2.aspx (as of 04 February 2005).
- ECONOMIST INTELLIGENCE UNIT (2003), External Relations—World Trade, European Policy Analyst, June 2003, pp. 27–33.
- ENCYCLOPAEDIA BRITANNICA ONLINE (2005), "Environmental Law", Internet: http://search.eb.com/eb/article?tocld=224613 (as of 04 February 2005).
- EU Business Ltd. (2003), Treaty Regulating Biotech Food Trade to take effect in September, Internet: http://www.eubusiness.com/imported/2003/06/112457/ (as of 09 February 2005).
- EURACTIV (2005), *Biotech: Genetically Modified Organisms*, Internet: http://www.euractiv.com/Article?tcmuri=tcm:29-11749816&type=LinksDossier (as of 26 January, 2005).
- EUROPEAN COMMISSION (2003), European Commission regrets US decision to file WTO case on GMOs as misguided and unnecessary, Internet: http://europa.eu.int/comm/trade/goods/agri/pr130503_en.htm (as of 09 February 2005).
- FARMERS GUARDIAN (2001), New EU Poll Shows 70% of Consumers Reject Frankenfoods, *Farmers Guardian*, 28 December 2001.
- Fredland, John Steven (2004), Unlabel Their Frankenstein Foods!: Evaluating a U.S. Challenge to the European Commission's Labelling Requirements for Food Products Containing Genetically-Modified Organisms, *Vanderbilt Journal of Transnational Law* 33 (1), pp. 184–218.

- GUZMAN, ANDREW T. (2004), Food Fears: Health and Safety at the WTO, *Virginia Journal of International Law.*
- INTERNATIONAL TRADE REPORTER (1999), WTO: U.S. Canada Lodge Complaints Over Rapid Rise in Genetic Labeling Measures, *International Trade Reporter World News* 16 (24), p. 1006.
- U.S. DEPARTMENT OF ENERGY GENOMES ORGANIZATION (2004), Genetically Modified Foods and Organisms, Internet: http://www.ornl.gov/sci/techresources/Human_Genome/elsi/gmfood.shtml (as of 09 February 2005).
- WORLD TRADE ORGANIZATION (2005a), Sanitary and Phytosanitary Measures, Internet: http://www.wto.org/english/tratop_e/sps_e/spsagr_ e.htm (as of 09 February 2005).
- WORLD TRADE ORGANIZATION (2005b), *Standards and Safety*, Internet: http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm4_e.htm (as of 09 February 2005).
- WORLD TRADE ORGANIZATION (2005c), *Technical Barriers to Trade*, Internet: http://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm (as of 09 February 2005).