Chapter 27

The WTO Agreements: An Introduction to the Obligations and Opportunities for Biosafety

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The Cartagena Protocol on Biosafety is an extremely important development in the international regulation of genetically modified organisms (GMOs) and genetic engineering. It is the first international law to specifically regulate GMOs and genetic engineering. However, there are also other international laws and forums that are part of the international regulatory framework, which set up standards relevant for biosafety and which will have a relationship with the Cartagena Protocol.

This chapter covers the biosafety-related World Trade Organization (WTO) Agreements, which are legally binding for its Members. It examines the key relevant obligations contained in these agreements, and the opportunities for biosafety to be ensured.

The three forums that are recognized by the WTO's Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) as international standard-setting bodies – the Codex Alimentarius Commission for food safety, International Plant Protection Convention (IPPC) for plant health, and the World Organization for Animal Health (OIE) for animal health and zoonoses – are considered in Chapter 28. Because these bodies are recognized by the SPS Agreement as standard-setting bodies, a WTO Member's measures that conform to their standards, guidelines and recommendations are presumed to be WTO-consistent. It is thus important to be aware of their developments in relation to biosafety.

However, it is also important to note that the SPS Agreement list of the three forums is not exhaustive. This means that international biosafety standards can be set in other relevant international organizations. In addition, standard-setting bodies should also be guided by the principles and standards established under the Cartagena Protocol on Biosafety. Although the standards from the three forums are guidelines, in practice they are often incorporated as national standards.

Since the WTO is the only international organization with a formal and enforceable dispute settlement system, it could have the effect of creating a legal hierarchy through its decisions with respect to United Nations agreements, which was not the intention of countries that negotiated the trade agreements and the establishment of the WTO. This 'relationship' issue was a key part of the Cartagena Protocol negotiations.

A problem that has arisen is the substantial interpretations of the WTO Agreements by dispute settlement panels and the Appellate Body (where appeals are made on panel decisions) of the WTO. These have included adjudication of conflicting provisions in two WTO Agreements. Under the WTO system, it is the General Council comprising all Members that is supposed to provide authoritative interpretation. However, in practice, the interpretations contained in the recommendations of the Appellate Body tend to become the final pronouncements of the issues concerned. Trade experts sit on WTO dispute panels, while trade lawyers are members of the Appellate Body.

Where there are possible conflicts between WTO and other agreements the situation raises even more concerns as it would mean that the WTO could be effectively adjudicating on those other agreements. An example is some observations about the Precautionary Principle made by the Panel in the case involving the European Communities' approval and marketing process of biotechnology products, ¹ and the decision by the Panel to not consider the Biosafety Protocol.

1. General Agreement on Tariffs & Trade (GATT) 1994

In essence, WTO rules are disciplines on Member States' rights to take actions that affect trade, and this includes their rights to regulate biotechnology and adopt biosafety measures. GATT 1994 applies to all measures affecting any product in international trade among WTO Members, including GMOs and genetically modified (GM) products. It should be read together with GATT 1947. The key disciplines are in three provisions:

- Article I on Most Favoured Nation requires that any advantage, favour, privilege, or
 immunity offered by any Member to any product originating in or destined for any other
 country shall be accorded immediately and unconditionally to the 'like product' originating or
 destined for the territories of all other Members.
- Article III (National Treatment) prohibits WTO Members from taking measures that directly or indirectly discriminate between the like products on the basis of their country of origin.
- Article XI (Quantitative Restrictions) prevents WTO Members from instituting or maintaining
 prohibitions or quantitative restrictions (such as quotas or import licences) on the import of
 products from other WTO Members.

Two important and unsettled issues on interpreting these Articles are relevant for biosafety regulation. First, there is no determination on whether GMOs and GM products and conventional products are 'like products' (e.g. GM soya and conventional soya).

Secondly, there is no agreement among Members on whether and how production and processing methods (PPMs) are regulated under the WTO Agreements. Developing countries that are WTO Members are wary of the *general* inclusion of PPMs in the WTO as these could be disguised trade protectionism.

The biosafety argument distinguishes genetic engineering as a production method that is fundamentally different from a conventional method, with potential risks inherent in the former. Thus, a soya variety that is produced from genetic engineering can be subject to trade restrictions necessary for biosafety, compared to a variety that is produced conventionally. This is the position that the majority of developing countries took in pressing for the Cartagena Protocol on Biosafety. However, PPMs in the WTO context and legal jurisprudence remain unsettled. In any event, Article XX of GATT contains several general exceptions to these disciplines, including allowing for trade-restricting measures:

- I. 'necessary to protect human, animal or plant life or health' under Article XX(b)
- II. 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption' under Article XX(g).

¹European Communities – Measures Affecting the Approval and Marketing of Biotech Products

This means that Members may adopt or enforce such measures, even though they restrict trade. There are, however, limits on measures taken under Article XX. These measures must not imply 'arbitrary or unjustified discrimination between countries where the same conditions prevail or a disguised restriction on international trade'.

The body of WTO-related rules does not contain general exemptions of an environmental nature, nor does it provide a special status for multilateral environmental agreements such as the Cartagena Protocol on Biosafety. This is why the provision on general exceptions in Article XX is of crucial importance.

A biosafety measure would fall within Article XX provided it meets certain criteria (see Section 6).

2. Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)

A WTO Member intending to apply measures to restrict trade for the protection of the life or health of humans, animals or plants has to comply with the Agreement on the Application of Sanitary and Phytosanitary Measures. The SPS Agreement deals with sanitary and phytosanitary measures that 'may, directly or indirectly, affect international trade' (Article 1.1). These measures include laws, regulations, requirements, procedures, and decrees.

The SPS Agreement is actually an elaboration of the rules for the application of the provisions of GATT 1994 which relate to the use of sanitary and phytosanitary measures, in particular the provisions of Article XX(b).

Annex A of the SPS Agreement provides definitions, including on the sanitary or phytosanitary nature of a measure. A sanitary or phytosanitary measure is any measure applied:

- to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, disease, disease-carrying organisms, or disease-causing organisms
- to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins, or disease-causing organisms in foods, beverages or feedstuffs
- to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests
- to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.

WTO Members are allowed to set their own standards, as long as the measures are applied only to the extent necessary to protect human, animal and plant life or health; are based on scientific principles and maintained with sufficient scientific evidence; are not a disguised trade restriction; do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail (but can discriminate where different conditions prevail); and are not more trade-restrictive than required to achieve an appropriate level of protection, taking into account technical and economic feasibility.

WTO Members are encouraged to use international standards, guidelines and recommendations where these exist, although they may use measures that result in higher levels of protection, if there is scientific justification (i.e. they have conducted an examination and evaluation of

available scientific information and have decided that the international standards are not sufficient to achieve their appropriate level of protection). Alternatively, there needs to have been a risk assessment conducted according to the SPS Agreement provisions as a basis for a sanitary or phytosanitary measure taken, for that measure to be regarded as achieving the appropriate level of protection from the risk concerned.

The SPS Agreement also covers measures relevant to the *operation* of sanitary and phytosanitary measures. These are requirements for the 'operation of control, inspection and approval procedures, including national systems for approving the use of additives or for establishing tolerances for contamination in foods, beverages or feedstuffs'. These operational measures include undue delays in a sanitary or phytosanitary-related approval process.² This was the key issue in the case of *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*.³

3. Agreement on Technical Barriers to Trade (TBT Agreement)

The Agreement on Technical Barriers to Trade covers all industrial and agricultural products, and regulates measures affecting trade which are technical regulations and technical standards (including packaging, marking and labelling requirements) and that are not sanitary or phytosanitary measures as defined in Annex A of the SPS Agreement.

The TBT Agreement tries to ensure that the regulations, standards, testing, and certification procedures (which vary from country to country) do not create unnecessary obstacles to international trade.

It allows a WTO Member to have national regulations, which should not be more trade-restrictive than necessary to fulfil a legitimate objective which includes national security; prevention of deceptive practices; protection of human health or safety, animal or plant life or health or the environment.

WTO Members can take measures necessary to ensure their own standards are met. They are encouraged to apply relevant international standards when these are available, but Members are not required to change their level of protection as a result.

The TBT Agreement covers (i) formulation of technical regulations by governments and these are mandatory; (ii) formulation of standards by the standardizing bodies of governments and these are voluntary standards; and (iii) procedures to assess or determine conformity with these regulations and standards. These are defined in Annex 1 of the TBT Agreement.

4. Relationship between GATT, SPS and TBT Agreements

While there is some controversy over the relationship between the GATT, SPS and TBT Agreements, it is clear under Article 1.4 of the SPS Agreement ('Nothing in this Agreement shall affect the rights of Members under the Agreement on Technical Barriers to Trade with respect to measures not within the scope of this Agreement.') and Article 1.5 of the TBT Agreement ('The provisions of this Agreement do not apply to sanitary and phytosanitary measures') that TBT measures which at the same time are sanitary or phytosanitary measures, are regulated under the SPS Agreement, not the TBT Agreement.

²See SPS Agreement, Article 8 and Annex C.

³DS 291(Complainant: United States)/DS292 (Complainant: Canada)/DS293 (Complainant: Argentina).

Furthermore, Article 2.4 of the SPS Agreement presumes that measures that are compatible under the SPS Agreement conform to GATT 1994: 'Sanitary or phytosanitary measures which conform to the relevant provisions of this Agreement shall be presumed to be in accordance with the obligations of the Members under the provisions of GATT 1994 which relate to the use of sanitary or phytosanitary measures, in particular the provisions of Article XX(b). This is not necessarily true in the reverse, so GATT-compatible measures may violate the SPS Agreement. There is thus a hierarchy to the WTO Agreements related to biosafety, with seeming priority given to the most specific agreement applicable to any given measure. The SPS Agreement is the most specific agreement, dealing with plant, animal and human health protection. The TBT Agreement is less specific in that it regulates measures affecting trade which are technical and industrial standards (including packaging, marking and labelling requirements), and that do not fall under the SPS Agreement, GATT 1994 is much more general and overarching, and applies to all measures affecting any product in international trade, including GMOs and GM products. A country that is a WTO Member would need to examine the compatibility of its biosafety measures under each Agreement. Which Agreement applies to a biosafety measure would depend on the objective of that measure. For example, in the case of labelling of GM food, if the policy objective is to protect human health, then this is an SPS measure, so it would fall under the purview of the SPS Agreement. If it is not an SPS measure, then one would have to ask whether it is a TBT measure (e.g. if a measure's objective is to prevent deceptive practices by informing the consumer) and if so, it would come under the TBT Agreement. If a measure does not fall specifically under the TBT Agreement, it would still have to comply with GATT 1994, especially Article XX.

5. Biosafety measures

Biosafety measures include pre-marketing approval procedures, monitoring obligations, restrictions and conditions, and bans or moratoria. These could be considered sanitary or phytosanitary measures, if their purposes relate to the protection of human, plant or animal life or health, and so fall under the SPS Agreement.

WTO Members need to ensure that any biosafety measure that is put in place to protect human, animal or plant life or health is consistent with the SPS Agreement.

Article 3.2 of the SPS Agreement states that sanitary and phytosanitary measures which 'conform to international standards, guidelines or recommendations shall be deemed to be necessary to protect human, animal or plant life or health, and presumed to be consistent with the relevant provisions of this Agreement and of GATT 1994'. The international technical standard-setting bodies that are expressly recognized by the SPS Agreement are the Codex Alimentarius Commission for food safety, the International Office of Epizootics (known by its French acronym, OIE, and now known as the World Organization on Animal Health) for animal health and zoonoses, and the International Plant Protection Convention (IPPC) for plant health. According to the WTO Appellate Body in European Communities – Hormones, 4 a WTO Member's measure that conforms to international standards, guidelines and recommendations are presumed to be WTO-consistent (although it is a rebuttable presumption). This measure should embody the international standard completely. If a Member imposes a measure that adopts some, but not necessarily all, of the elements of the international standard (i.e. 'based on'), it may not benefit from the presumption of consistency set up in Article 3.2.

⁴Appellate Body report on EC-Hormones, paragraphs 170–172.

Standards/guidelines relevant to biosafety have already been set by the Codex Alimentarius Commission (Codex Principles for the Risk Analysis of Foods Derived from Modern Biotechnology; Codex Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants; and Codex Guideline for the Conduct of Food Safety Assessment of Foods Produced using Recombinant-DNA Microorganisms), and the IPPC (International Standards for Phytosanitary Measures No. 11: Pest Risk Analysis for Quarantine Pests, Including Analysis of Environmental Risks and Living Modified Organisms).

Article 3.1 of the SPS Agreement says that SPS measures should 'be based on international standards, guidelines or recommendations, where they exist', except as otherwise provided for. In particular, Article 3.3 states that Members may introduce or maintain SPS measures 'which result in a higher level of sanitary or phytosanitary protection than would be achieved by measures based on the relevant international standards, guidelines or recommendations'.

In other words, while the adherence to international standards, guidelines or recommendations is encouraged, a Member still has the right to set higher standards. This is possible 'if there is a scientific justification', or 'as a consequence of the level of sanitary or phytosanitary protection a Member determines to be appropriate' in accordance with certain criteria as contained in Article 5 (which deals with assessment of risk and determination of the appropriate level of protection), as discussed in the following, Sections 6–8.

Note that for the purposes of Article 3.3, there is a scientific justification if, on the basis of an examination and evaluation of available scientific information, a Member determines that the relevant international standards, guidelines or recommendations are not sufficient to achieve its appropriate level of sanitary or phytosanitary protection.

6. Tests for biosafety measures

Articles 2 and 5.1 of the SPS Agreement stipulate that while Members have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health, such measures have to be applied only to the extent necessary to protect human, animal or plant life or health, are based on scientific principles, and are supported by scientific evidence. Sanitary and phytosanitary measures must be based on a scientific risk assessment, including consideration of the risks of the use of a product under real-life conditions.

The risk assessments that are undertaken are specific to the product in question. For example, a risk assessment would not be for all GMOs, but for a specific transgenic event in a specific GM crop. Minority opinions can be taken to account. The Appellate Body of the WTO has cautioned that a 'risk assessment' need not come to a 'monolithic conclusion':

We do not believe that a risk assessment has to come to a monolithic conclusion that coincides with the scientific conclusion or view implicit in the SPS measure. The risk assessment could set out both the prevailing view representing the 'mainstream' of scientific opinion, as well as the opinions of scientists taking a divergent view. Article 5.1 does not require that the risk assessment must necessarily embody only the view of a majority of the relevant scientific community. ... In most cases, responsible and representative governments tend to base their legislative and administrative measures on 'mainstream' scientific opinion. In other cases, equally responsible and representative governments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources.⁵

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⁵EC-Asbestos Dispute, page 64.

Thus, the risk assessment need not necessarily be based on a majority opinion, and minority opinions can also be taken into account. Dispute settlement panels have not insisted that the science relied upon represents a mainstream scientific opinion, as long as it is based on respected and qualified sources. This is because the WTO does not decide on scientific issues, as its main task is to prevent unfair trade practices.

Under the SPS Agreement, there needs to be a rational relationship between a risk assessment and a biosafety measure. This arguably means that a mandatory pre-marketing approval procedure on a case-by-case basis would not violate the SPS Agreement. However, a general ban on GMOs may, in all likelihood, violate the SPS Agreement, as such a general ban is not product specific. This step may only be taken if it can be argued and supported by scientific evidence that GMOs are inherently dangerous.

6.1 Non-discrimination

A key trade principle that operates in the WTO is that of non-discrimination. The SPS Agreement, in Article 2.3, states that 'Members shall ensure that their sanitary and phytosanitary measures do not arbitrarily or unjustifiably discriminate between Members where identical or similar conditions prevail, including between their own territory and that of other Members. Sanitary and phytosanitary measures shall not be applied in a manner which would constitute a disguised restriction on international trade'.

Under the National Treatment principle, biosafety measures must not distinguish between foreign and domestic products. Likewise, under Most Favoured Nation treatment, Members should not apply a measure that would constitute a means of arbitrary or unjustifiable discrimination among WTO Members. Thus, biosafety laws should not distinguish between different Members, i.e. an importing country cannot ban GM products from, for example, the US, but allow for the import of the same products from, for example, the EU.

Furthermore, Article 5.5 of the SPS Agreement states that Members should 'avoid arbitrary or unjustifiable distinctions in the level it considers to be appropriate in different situations, if such distinctions result in discrimination or disguised restriction on international trade'. With regard to biosafety measures, different levels of protection apply in different situations, i.e. between a GM product and its conventional counterpart. As such, it must be ensured that these do not result in discrimination or disguised restriction on international trade.

In a situation where a product is derived from a GMO, but is chemically similar to, and indistinguishable from, its conventional counterpart, the question may arise as to whether different levels of protection should apply. However, what is important here is that the 'like products' test should be applied. (See discussion in Section 9 on 'like products'.) A biosafety measure that is specifically aimed at discrimination, i.e. intentional protectionism, would violate the SPS Agreement. If it can be shown that a measure is not intended to protect markets, then this would not violate the non-discrimination principle.

6.2 Necessity

Any biosafety measure will also be questioned as to whether it is the least trade-restrictive measure. Article 5.6 of the SPS Agreement states that measures should be 'not more trade-restrictive than required to achieve their appropriate level of sanitary or phytosanitary protection'. Under the SPS Agreement, the measure is not more trade restrictive than required unless there is another measure reasonably available, taking into account technical and economic feasibility, that achieves the appropriate level of sanitary or phytosanitary protection and is

significantly less restrictive to trade. There must be a reasonable relationship between the risk assessment and the design of the measure.

If one can argue that a ban on GMOs or GM products is necessary because there is, for example, a serious risk to human health, and support this claim with scientific evidence, then this should be WTO-consistent. However, if the objective of a measure is to protect a consumer's right to know, the WTO may conclude that labelling is a less strict measure than a ban.

Again, what is an 'appropriate level of protection' can be higher than the standards set by international organizations (see Section 5 in this chapter) as long as the sanitary and phytosanitary tests are satisfied.

7. What biosafety measures are allowed under the SPS Agreement?

Considering the discussion so far in this chapter, the establishment of a mandatory pre-marketing approval procedure will arguably comply with the SPS Agreement, if it fulfils the following requirements: a case-by-case scientific risk assessment, non-discrimination, and is not more trade restrictive than necessary.

A general import ban on GMOs or GM products will likely violate the SPS Agreement, unless it can be scientifically demonstrated that GMOs are inherently dangerous. Individual bans may be justified if the scientific evidence and risk assessment call for it. In general, a WTO Member would have to demonstrate that any import bans (i) have a rational basis, (ii) are in support of a legitimate policy objective, (iii) are no more trade restrictive than necessary to achieve that objective, and (iv) are not being applied in an arbitrary or discriminatory manner. Temporary bans are allowed if they are provisional measures as allowed for under Article 5.7 of the SPS Agreement, which is, in essence, the Precautionary Principle in action. A precautionary measure, which must be applied provisionally, may be taken subject to the following specific conditions:

- (i) It must be imposed in respect of a situation where relevant scientific information is insufficient
- (ii) It must be adopted on the basis of available pertinent information
- (iii) The Member must then seek to obtain the additional information necessary for a more objective assessment of the risk
- (iv) The WTO Member taking the measure must review the measure within a reasonable period of time.

Whether or not a general ban on GMOs or GM products can be allowed under Article 5.7 is uncertain. However, it is arguable that individual product bans of specific GMOs can be justified, if there is a rational relationship between a risk assessment and such a biosafety measure. The Appellate Body in *Japan-Agricultural Products II*⁷ said that these four requirements are cumulative in nature and equally important for determining consistency with this provision.

Biosafety First (2007) Traavik, T. and Lim, L.C. (eds.), Tapir Academic Publishers

⁶·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 relevant international organisations 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'.

⁷Appellate Body Report on Japan-Agricultural Products II, paragraph 89. In this case, the Panel examined whether the measure at issue met with these four requirements. See Panel Report on Japan-Agricultural Products II, paragraphs 8.56, 8.57 and 8.60.

Whenever *one* of these four requirements is not met, the measure concerned is inconsistent with Article 5.7.

With regard to the final obligation, the WTO Appellate Body has accepted that this should be established on a case-by-case basis depending upon the specific circumstances of the case, including the difficulty of obtaining the additional information necessary for the review, and the characteristics of the measure. Thus, it does not seem to imply a fixed or necessarily brief period for review, but rather the time it takes for new scientific knowledge to become available and this would arguably be different for each case.

8. Economic considerations

Risk assessment under the SPS Agreement can involve a mix of scientific and economic considerations. Procedures under the SPS Agreement will differ, depending on whether the risk is to animal or plant life or health, or instead to human life or health. When assessing risks to animals and plants, Members are to take into account relevant economic factors (Article 5.3). There is no similar reference to economic concerns in relation to impacts on human health.

Article 5.3 of the SPS Agreement reads as follows: 'In assessing the risk to animal or plant life or health and determining the measure to be applied for achieving the appropriate level of sanitary or phytosanitary protection from such risk, Members shall take into account as relevant economic factors: the potential damage in terms of loss of production or sales in the event of the entry, establishment or spread of a pest or disease; the costs of control or eradication in the territory of the importing Member; and the relative cost-effectiveness of alternative approaches to limiting risks'.

Moreover, Annex A (Definitions) of the Agreement defines risk assessment as 'The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences; or the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs'.

9. GM product labelling and the TBT Agreement

The purpose of any biosafety labelling obligation will determine whether it comes under the TBT or SPS Agreements. There could be two purposes for labelling; the first is to inform consumers to prevent deceptive practices, and the second is to inform consumers who suffer from certain allergies (as an example of health impact). The second category may be an SPS measure as it aims to protect human health, while the first purpose clearly falls under the TBT Agreement. The European Community's regulation on traceability and labelling is an example of a labelling scheme which has the purpose of informing consumers. It does not deal with safety considerations as GM products on the market would have already gone through a pre-market safety assessment.

The key question of any labelling regime will be whether it is WTO-compatible. To be WTO-compatible, the measure must meet the criteria as stipulated under Article 2.1 of the TBT Agreement:

Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country.

This means that the principles of National Treatment, Most Favoured Nation and 'like products' apply.

Products should not be accorded less favourable treatment than 'like' products. There is considerable case law as regards the issue of 'like products'. The WTO has developed tests to determine if a product is 'like' another, based on the following criteria: (i) the physical properties of the product (e.g. detectable versus undetectable GM products); (ii) the extent to which the product is able to serve the same or similar end uses; (iii) the international classification of products for tariff purposes.

These criteria applied to some of the GM products would imply that they are alike to conventional products (e.g. GM soybean oil where the GM DNA is undetectable could be considered as being 'like' conventional soybean oil).

However, WTO panels have insisted on a fourth criterion – the extent to which consumers perceive and treat the product as an alternative means of performing particular functions in order to satisfy a particular want or demand. This implies that consumer perception is of considerable importance when it comes to deciding whether a product is different from or like another product. If the product is like another, with no physical difference, but consumers perceive it as different, then under WTO law, Members may treat it as different. This implies that Members can treat GM soybean oil differently from conventional soybean oil. Consumer perception could be demonstrated by data showing that consumers do view the products differently, for example, through opinion polls and surveys.

The Appellate Body has also found that 'evidence relating to the health risks associated with a product may be pertinent in an examination of 'likeness'' (*European Communities –Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R, Report of the Appellate Body adopted 5 April 2001, paragraph 113).

Furthermore, it is arguable, that as the Cartagena Protocol on Biosafety gains wide acceptance internationally, it may provide a basis for concluding that GMOs, or certain GMOs, are not 'like' their non-GMO counterparts.

Article 2.2 of the TBT Agreement also stipulates that 'technical regulations shall not be more trade-restrictive than necessary to fulfil a *legitimate objective*'. This means that the necessity of the measure must be shown. Nonetheless, the legitimate objectives are, inter alia, national security requirements, *prevention of deceptive practices*, protection of human health or safety, animal or plant life or health, or the environment. The legitimate objective of prevention of deceptive practices indicates that consumer information labelling of GMO products is consistent with the TBT Agreement.

10. WTO-Biosafety Protocol relationship

The general issue of the relationship between the WTO Agreements and multilateral environmental agreements remains unclear. The WTO Committee on Trade and Environment is the only inter-governmental forum that has discussed the issue for a number of years.

The WTO Agreements were adopted before the Cartagena Protocol on Biosafety was adopted and entered into force. Under international law, the interpretation of treaties is governed by the Vienna Convention on the Law of Treaties. The rule is that a later agreement supercedes an earlier one, and an agreement on a specific subject prevails over a general one. Since the

Cartagena Protocol on Biosafety was enacted after the WTO Agreements and deals specifically with biosafety, in a conflict of laws, it could be argued that the Protocol as a more specific agreement, and a more recent law, overrules the WTO Agreements.

However, due to the compromises made during the Protocol's negotiations, the language in relation to the Protocol's relationship with other international agreements is ambiguous. While the Protocol does not address this issue in its substantive provisions, the Preamble of the Protocol recognizes that trade and multilateral environmental agreements should be mutually supportive. This reflects a general rule of treaty interpretation that agreements between the same States and covering the same subject matter should be interpreted in such a way that promotes their compatibility.

The Protocol further emphasizes, on the one hand, that it shall not be interpreted as implying a change in the rights and obligations of a Party under existing international agreements and, on the other, that this is not intended to subordinate the Protocol to other international agreements; these anticipate cases where the spirit of 'mutual supportiveness' is not sufficient to avoid or resolve a conflict between the Protocol and any 'existing' or 'other' international agreement. The two paragraphs counterbalance each other, and leave little specific guidance as to how to resolve any conflict that may arise between the Protocol and other international agreements, particularly the WTO Agreements.

As the language is relegated to the Preamble, it carries far less weight than a substantive provision. Preambular language in international agreements, however, sets the framework for their interpretation.

There are also specific provisions in the operative text of the Protocol that refer to 'other international obligations'. For example, Article 2(4) on the right of Parties to take more protective domestic biosafety action qualifies this right – such action has to be 'in accordance with its other obligations under international law'. Article 26 of the Protocol on socio-economic considerations also makes reference to consistency with the other international obligations of Parties.

Thus, the relationship between the Protocol and other international agreements is not really addressed. If a country is Party to both the WTO and the Protocol, then mutual supportiveness between the two must be ensured, though in practice tensions may be expected. If a country is Party to one agreement but not to the other, then mutual supportiveness is even more elusive. A lot will depend on the forum where any dispute is arbitrated. The United States, the largest producer and exporter of GMOs and their products, cannot be a Party to the Protocol as it is not a Party to the parent convention, the Convention on Biological Diversity (CBD). Since it is unlikely that the United States will ratify the CBD, any dispute initiated by it may ultimately be brought to the WTO, as has been the case in *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*. Although the Panel in this specific case chose not to consider the Protocol, it is still an open question as to the extent to which the WTO will take into account the Cartagena Protocol on Biosafety.

At the same time, the Compliance Committee that was set up at the First Conference of the Parties serving of the Meeting of the Parties to the Protocol in 2003 will be important in overseeing the implementation of the objectives and principles of the Protocol, and in providing a forum for arbitration or dispute resolution. The CBD itself provides for a dispute resolution procedure, which is also applicable to the Protocol.

11. Some conclusions

While the broader issue of the relationship between the WTO Agreements and multilateral environmental agreements is still unclear, the WTO Agreements do allow some biosafety measures to be taken, as long as certain criteria are met, i.e. the measures are based on scientific evidence (with risk assessment); are not discriminatory; and are not more trade-restrictive than necessary.

Where scientific evidence is insufficient, provisional biosafety measures may be taken on the basis of available pertinent information, provided additional information is subsequently sought for a 'more objective assessment of risk' and the measures are reviewed 'within a reasonable time'.

Standards or phytosanitary measures which conform to international standards, guidelines or recommendations set by the relevant international standard setting bodies (such as Codex, IPPC, OIE) are presumed to be consistent with the SPS Agreement and GATT 1994. The provision of consumer information through labelling of GM products is WTO-consistent if it serves to prevent deceptive practices and, in the case of undetectable GM products, if consumers perceive such products as being different from the conventional counterparts.

Any country faces challenges at the national level when implementing a wide range of international instruments, which may sometimes seem competing. It is important that countries understand what the WTO Agreements say, what their obligations are, what exceptions are available and what the opportunities for biosafety are. Equally important is an understanding of the rights of a sovereign country, including those as afforded under the Cartagena Protocol on Biosafety. This will help to avoid the WTO's 'chilling effect', whereby Members are reluctant to act strongly for environment and health for fear of allegations of being 'WTO-inconsistent' and the WTO's binding dispute settlement mechanism. Countries would also have to coordinate their internal mechanisms to meet their obligations, not just under the Cartagena Protocol on Biosafety but also under the international standard setting bodies that are dealing with biosafety, such as the Codex Alimentarius, IPPC and OIE, which are given a prominent role in the WTO and which actively shape national responses.

At the international level, the political landscape is also important. There are efforts currently being made by many developing countries to reform the WTO and to assert their rights under the various Agreements. The debate on biosafety is benefiting from increasing scientific inputs specifically targeted at biosafety, and international law is being made and implemented as the debate progresses. As more countries become more knowledgeable on biosafety and cooperate to implement biosafety measures, this will shape the discourse on biosafety and the interpretation of the relevant international instruments.

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