THE GM DISPUTE AT THE WTO:
Forcing GM Foods on Europe?

GeneWatch UK

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The USA, Canada and Argentina have decided to challenge Europe over the moratorium on commercial GM food and crop approvals which it introduced in 1999. These three countries are the largest producers of GM crops and have the most to lose from restrictions on trade in GM crops, and they are claiming that Europe's approach discriminates against them unfairly. They have made their challenge at the World Trade Organisation (WTO) and the outcome of the case will not only have impacts on Europe, but also on whether other countries can regulate GM crops and foods as they see fit. This briefing reviews the WTO and the rules under which it operates with particular reference to the GM case. It also considers other relevant international rules and guidelines on environmental and human health safety of GMOs.

The World Trade Organisation

The World Trade Organisation was established in 1995 and is responsible for regulating international trade. It provides a single institutional framework encompassing the General Agreement on Tariffs and Trade (GATT), which was agreed after the Second World War, and its associated agreements and arrangements. Its main purpose is to remove unnecessary, discriminatory and protectionist barriers to free trade. It has 144 member countries and its headquarters are in Geneva (see www.wto.org).

The WTO, therefore, oversees a set of agreements which form the rules by which trade operates. The agreements under which Europe is being challenged are the:

- General Agreement on Tariffs and Trade (GATT) – intended to prevent discrimination between countries in trade;
- Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) – which provides for restrictions on trade in relation to food safety and animal and plant health if scientifically justified;
- Agreement on Technical Barriers to Trade (TBT) – introduced to ensure that technical standards and certification do not create unnecessary obstacles to trade;
- Agreement on Agriculture (Agriculture Agreement) – aimed at reducing 'trade-distorting' tariffs and subsidies on agricultural products.

The WTO also has a disputes procedure whereby countries can challenge the actions of others if they place unnecessary and protectionist barriers on trade. This procedure has now been invoked by the US and its partners in relation to Europe's handling of the GM issue (see Box A). Deciding upon whether Europe has contravened the WTO's rules will require a decision on issues such as:

Were Europe's actions intended to be protectionist and to favour domestic producers or those of certain favoured countries? WTO rules require that all countries are treated equally in terms of trading opportunities.

Was there scientific justification for Europe's moratorium on approvals of GM crops and food and the new regulations put in place? Essentially, this will be an evaluation of whether the European moratorium was 'necessary'.

Is Europe's approach consistent with international rules governing the safety of GMOs? Under the SPS Agreement, countries have to follow risk assessments laid down in relevant international agreements or guidelines, or develop their own scientifically justifiable approach if these do not exist. Therefore, the Cartagena Protocol and the Codex Guidelines are relevant.

Could the steps taken have been less restrictive on trade? Whilst it is up to individual countries to decide what level of protection they want for human, plant or animal health[1], the approach taken has to be the least trade-restrictive possible. Imposing conditions on a release or import rather than a ban would be one example of this.

It is likely that the challenge to Europe over the moratorium will be the first of several GM trade disputes

Is the precautionary principle an appropriate basis for regulation of GMOs? European rules are designed to take a precautionary approach where action to prevent harm can be taken before scientific certainty of the threat exists. The US are likely to question the extent to which a precautionary approach is justified for GM crops because of lack of clear evidence of harm.

Are GM crops different from their equivalent non-GM crops and so merit special treatment? The WTO does not allow discrimination between countries if the products are 'like'. This will involve not only an assessment of technical differences but will also include the end-uses in a given market, consumers' preferences, and the product's properties and quality[2].

Is the labelling of GM products justified or does this unfairly stigmatise GMOs as different and affect their marketability? It is likely that the challenge to Europe over the moratorium will be the first of several GM trade disputes. The US National Food Processors Association has indicated that it is unhappy with the new labelling regulations and is urging the US to bring a second action at the WTO when the rules come into force in 2004[3].

The role of the WTO has been intensely controversial in recent years. For example, the WTO has been accused of being secretive and acting in the interests of the developed world and their powerful corporations. The WTO's rules, aimed at trade liberalisation, can also make it very difficult for countries to have environmental, health or social protection measures if these restrict trade with certain countries or products even if these may have damaging effects. The GMO case will put a further spotlight on the activities of the WTO because it involves an area which is particularly sensitive politically.

What has been happening in Europe?

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By 1998, there was growing public opposition to GM crops and food across Europe. There was also increasing debate about the risks of genetic modification. In their discussions of applications to import or grow GM crops, a number of Member States were expressing concern at the levels of uncertainty and the potential for harmful effects. Some countries, such as Austria and Luxembourg, utilised a clause in the Deliberate Release Directive allowing a Member State to ban a GMO from its territory if it had new or additional evidence of harm to the environment or human health. At a meeting of the EU Council of Environment Ministers in June 1999, France, Denmark, Greece, Italy and Luxembourg stated that they would effectively block any new authorisations until the Deliberate Release Directive (90/220/EEC) was revised and there was legislation in place to cover the labelling and traceability of GMOs. Austria, Belgium, Finland, Germany, the Netherlands, Spain and Sweden felt that this *de-facto* moratorium would be illegal but stated that they would take a *"thoroughly precautionary approach in dealing with new authorisations and not to authorise the placing on the market of any GMO until it is demonstrated that there is no adverse effect on the environment and human health"* [6].

As a result, no new approvals of GMOs were agreed after 1998 and new environmental and food safety rules for GM crops were negotiated:

- The revised EU Deliberate Release Directive (200118/EC) on environmental impacts came into force in October 2002. This now includes indirect effects in the risk assessment, a requirement for post-market monitoring, and a time-limited approval (for 10 years).
- Two new EU Regulations (Nos 1829/2003 and 1830/2003) concerning the authorisation, traceability and labelling of GMOs and GMO derived products became law in September 2003 and will be in force in April 2004. As well as comprehensive traceability requirements, labelling will now include all GM derived products even if these do not have foreign DNA or protein in the final product.

Since the revision of the Deliberate Release Directive, applications to market GMOs have been resubmitted and over twenty are currently being assessed.

BOX A: The GMO dispute at the WTO

Under the WTO's dispute process, the US, Canada and Argentina first called for consultations on 14th May 2003 concerning Europe's *ad hoc* moratorium on GM crops. However, these talks failed almost immediately and the US called for a Dispute Panel to be established on 8th August 2003. Egypt was also expected to file a complaint with the WTO against the EU and when the Egyptians failed to do so, the US responded by suspending their bi-lateral free trade talks[4].

The countries challenging Europe argue that[5]:

- The moratorium on approvals in Europe and the national bans in France, Greece, Italy and Austria on some GM products which had already been approved in Europe before 1999 have adversely affected imports of agricultural and food products from the US, Argentina and Canada.
- The moratorium and national bans are not allowable under WTO rules because they are not scientifically justifiable and there has been undue delay in assessing applications for marketing.
- The European delays will hinder development of the technology, which has great promise in reducing hunger and improving health worldwide, and will influence other WTO members to take a negative position in relation to GM crops.

Australia, China, Chile, Columbia, El Salvador, Honduras, New Zealand, Norway, Peru, Thailand, Uruguay and Chinese Taipei have registered their interest in the case as third parties affected by the outcome. The position of these countries is not clear. Although they have been referred to by the US as if they were supporting its position, New Zealand has had a moratorium on growing GM crops and China has tight GM food labelling laws. Only Australia has some GM exporting interests.

In its immediate response, the European Commission has insisted that it is establishing an appropriate environment for biotechnology whilst addressing the risks and social issues[5]. Europe also insisted that countries should be free to make their own decisions.

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What happens next?

The Dispute Panel established by the WTO will consider representations from the countries involved and should make a ruling in Spring 2004. However, there have been disagreements over who should sit on the Panel, which has delayed the process. When the Panel has made its decision, either party can appeal and be heard by the WTO's Appellate Board if they disagree, but only on matters of law. Once the decision has been made, if the country challenged does not change its practices to remove the barrier to trade, retaliatory import tariffs may be imposed by the country harmed.

How strong is the European case?

GeneWatch believes Europe has had every justification for the steps it has taken. It was quite clear in the mid-1990s that the regulatory framework was not adequate to deal in a fully precautionary way with the risks of releasing GM organisms, and consumer choice was not provided for. New regulations were needed and new research had to be undertaken. Article 5.7 of the WTO's SPS Agreement allows countries – *"in cases where relevant scientific evidence is insufficient"* - to provisionally adopt measures to protect human or plant health if they take steps to collect the additional information needed. A provisional measure could sensibly include halting approvals.

It has been consumer pressure on food producers to remove GM ingredients, not failure to give regulatory approval, which has led to reduced imports into Europe of some crops

One example of where relevant scientific evidence was lacking was in the indirect effects resulting from the use of the first GM herbicide tolerant crops. Even the biotechnology industry agreed that more research was needed and in 1998, in the UK, entered into a voluntary agreement with the UK government not to commercialise GM herbicide tolerant crops until after 'farm-scale evaluations' had been completed. These were intended to investigate indirect effects on biodiversity and particularly farmland wildlife[7,8]. Evidence emerging through the late 1980s and 1990s had shown how intensive agriculture was having an adverse impact on biodiversity in arable farming systems[9].

The findings of the farm-scale evaluations with GM herbicide tolerant oilseed rape, sugar beet and maize (which are among the first GM crops that could be grown in Europe) have indicated that the use of the GM oilseed rape and sugar beet with the herbicides to which they are tolerant leads to adverse effects on a range of biodiversity indicators. These include certain bees and butterflies, and weed species that produce seeds which are important in the diets of some farmland birds[10]. If such research had not been done, these GM crops may have been allowed to be grown and the environment damaged as a result.

Equally important to Europe's case is that it has been consumer pressure on food producers to remove GM ingredients, not failure to give regulatory approval, which has led to reduced imports into Europe of some crops[11], as even the US Department of Agriculture has acknowledged[12].

Finally, the approach being adopted by Europe in its revised risk assessments is fully consistent with both the Codex guidelines and the Biosafety Protocol (see below).

Should trade liberalisation and the WTO be dominant or environmental protection and the precautionary approach of the Cartagena Protocol?

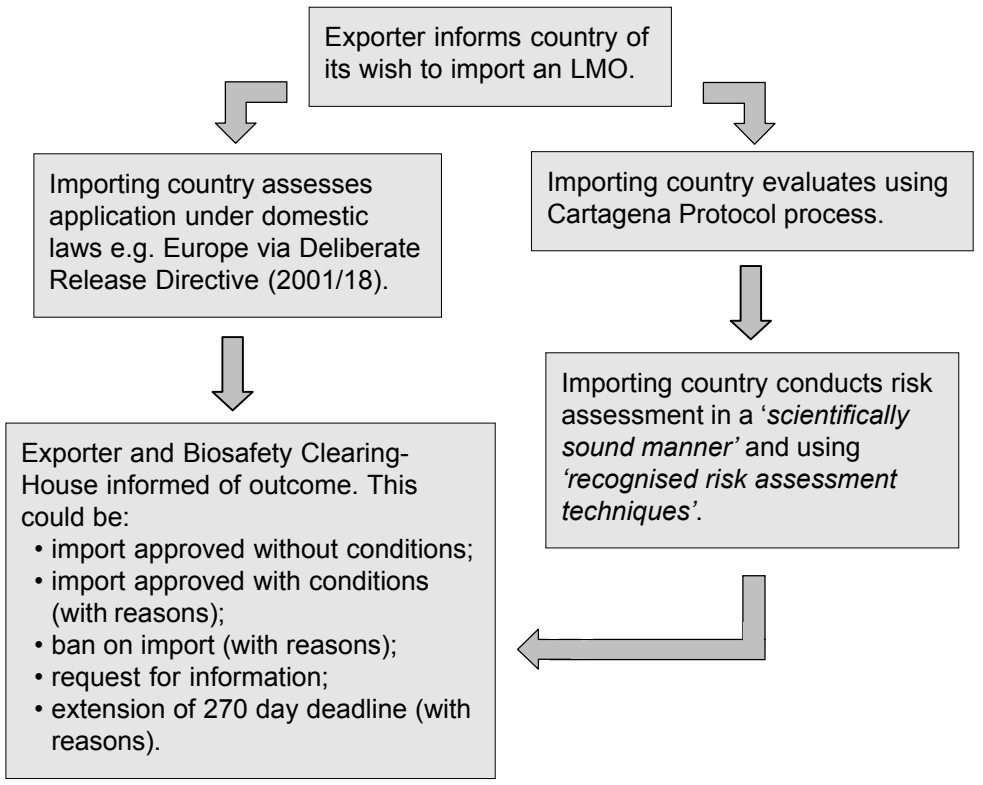
The Cartagena Protocol on Biosafety

The Cartagena Protocol on Biosafety regulates the environmental safety aspects of international trade of GMOs, although these are referred to as 'Living Modified Organisms' (LMOs) in the Protocol. Because it deals with trade and the environmental impacts of GMOs, it is directly relevant to the WTO and its SPS Agreement, which requires a risk assessment consistent with international rules or guidelines. However, questions remain over which agreement has superiority – should trade liberalisation and the WTO be dominant or environmental protection and the precautionary approach of the Cartagena Protocol[13]?

The Protocol was agreed in 2000 by member countries of the Convention on Biological Diversity and came into force on 11th September 2003 after 50 countries had ratified it. The first Meeting of Parties (made up of those

countries who have ratified the Protocol) will take place in February 2004. The Protocol requires anyone wishing to export a GMO into another country to gain the permission of the importing country under a procedure known as Advance Informed Agreement (see Box B). There are some exceptions however. For instance, LMOs which are intended for food, feed or processing (LMO-FFPs), rather than growing, have to comply with a less rigorous notification system. Also, pharmaceutical GMOs are not covered if there are other international agreements that apply to them, and neither are GMOs in transit or intended for contained use in a laboratory. A Biodiversity Clearing-House has been established to collect and disseminate information about decisions on imports[14].

BOX B: The Cartagena Protocol's Advance Informed Agreement Procedure[15]



The Cartagena Protocol is a very progressive piece of international law but is not without its weaknesses

In many ways, the Cartagena Protocol is a very progressive piece of international law. It puts the precautionary principle into operation by explicitly stating that: *"Lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a living modified organism ….shall not prevent that Party from taking a decision, as appropriate, …to avoid or minimise such potential adverse effects" (*Article 10). This means that countries should be able to ban or have strict controls on GMOs even if harm has not been proved to have occurred but the potential for it exists. The precautionary principle applies when there are potentially serious or irreversible threats to the environment and is enshrined in Principle 15 of the Rio Declaration adopted in 1992 at the UN Conference on Environment and Development. It is intended to prevent the claim that science is uncertain or that there is 'no evidence' of harm being used to obstruct measures to prevent harm arising.

Despite its strengths, there are also some weaknesses in the Cartagena Protocol. Most obvious is the limited notification required for LMO-FFPs (Article 11). This separate, less rigorous system only requires countries to notify the

Clearing-House when they have made decisions about allowing the use of a GMO in their own country and to supply certain information about it. Gaining explicit agreement from each country that the LMO-FFP may then be imported to is not required, although countries may still decide not to allow imports. This exemption from Advance Informed Agreement was negotiated by the 'Miami Group' – the GMO exporting countries, including the USA, Canada, Argentina and Australia, who had most to gain from weak regulations in this area.

The Cartagena Protocol has no strict format for the risk assessment to be followed in evaluating imports of GMOs

However, the Cartagena Protocol does allow countries to have their own national requirements for the import of LMO-FFPs – which is the approach adopted in Europe, where all releases of GMOs have to be given specific approval. There is also no strict format for the risk assessment to be followed in evaluating imports of GMOs, just that they be defensible and consider the areas included in Annexes to the Protocol – these include identifying any characteristics of the GMO which may harm the environment and how the GMO will be used. It would therefore appear that the Cartagena Protocol endorses the approach taken by Europe. Since Article 23 of the Protocol calls for the promotion and facilitation of public participation in issues surrounding trade in GMOs, the improved public consultation procedures in the revised Deliberate Release Directive and attention to the views of the public in Europe are also consistent.

The Codex guidelines on GM food safety

The Codex Alimentarius Commission (Codex)[16] is a UN World Health Organisation (WHO) and Food and Agriculture Organisation (FAO) body which was created in 1963 to develop harmonised international food standards and guidelines which protect consumer health and ensure fair trade practices. Codex is specifically referred to in the WTO's SPS Agreement as an international body with competence to set international guidelines (Annex A 3(a)). Codex established a task force to develop risk assessment guidelines for the food safety aspects of GM foods[17], which were agreed by Codex in July 2003, and these should now be followed internationally[18].

The Codex guidelines recognise that risk assessment systems are not completely comprehensive and uncertainties will remain

The guidelines recognise the necessity for risk assessment of foods produced using genetic modification and require a *"pre-market safety assessment of...both intended and unintended effects, identifying new or altered hazards and identifying changes relevant to human health"*. The risk assessment explicitly requires information that would only be relevant to a GM plant, including a description of the host plant, the donor (of the genetic material transferred) and a detailed description of the modification – where the gene has been inserted, the number of copies and so on. Whilst the guidelines note that the approach adopted in the assessment could be applied to other novel foods not produced via genetic modification, it is only when GM is applied that these specific areas of information are relevant. This is because, according to a WHO expert, *"for plants generated by recombinant technology, unanticipated effects may additionally arise from the process of introducing foreign genes or as a result of the effects of environmental factors/genetic background"* [19].

The Codex guidelines also recognise that risk assessment systems are not completely comprehensive and uncertainties will remain. For example, it says that: *"At present, there is no definitive test that can be relied upon to predict allergic response in humans to a newly expressed protein"*[20]. This means that judgements have to be based on a combination of indirect testing techniques. Furthermore, the Codex guidelines include the analysis of indirect and unintended effects and, like the new European GM food and feed regulations, the Codex guidelines acknowledge that substantial equivalence is not a

sufficient basis on which to evaluate the safety of novel foods. Europe has explicitly abandoned that approach - which was previously adopted in the Novel Foods Regulation No 258/97 - thus ensuring a more robust and scientifically defensible approach[21].

Therefore, the new Codex guidelines seem to endorse the approach to GM food safety assessment which has been adopted in Europe. The Codex Commission is still discussing issues of labelling and traceability and is not expected to reach agreement until 2004.

Conclusions

The US challenge at the WTO seems inappropriate given the movement Europe is making in its assessments of marketing applications of GM crops, food and feed – the first marketing consents could be granted in early 2004. One of the main complaints of the US is that the delays in assessing GMO applications have been unnecessary. However, it is clear from the time take to agree both the Codex guidelines (4 years) and the Cartagena Protocol (4 years) that taking five years to revise regulations and put them into operation in Europe is not unreasonable. The European approach to risk assessment is also consistent with both the Codex guidelines and the Cartagena Protocol. The WTO will lose further confidence if it does not recognise the relevance of these other agreements and states' rights to take a precautionary approach and consider wider socio-economic issues and public preferences.

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If GM crop approvals had gone ahead in the late 1990s - before recently acquired information on gene flow and biodiversity impacts had been more fully understood - environmental harm would have arisen. For example, research in the UK has revealed that earlier, small-scale research had underestimated the likelihood of gene flow from GM oilseed rape to its relative, wild turnip[22]. If GM oilseed rape was grown, bacterial and viral genes from the crop could be introduced into the gene pool on a scale greater than previously anticipated. With this new information, it is possible to consider whether certain areas should be excluded from growing GM crops.

It is also difficult to see how Europe's actions can be considered protectionist. Rather, the intention has been to establish systems to ensure European consumers have choice and that steps can be taken to ensure a rapid response to evidence of environmental or human health effects. It has been consumer pressure, not regulatory delays, which have damaged the exports of GM crops from North America.

The real reasons behind the US's case, at a time when political relationships with Europe are strained, are more complex than some of the particulars of the case reveal. Firstly, the USA intends to send a message to other countries not to try and introduce strict regulation of GM or to consider bans. Many such countries would be unwilling to risk the prospect of a challenge at the WTO and the remote possibility of retaliatory measures. As such, the European challenge is a very effective bullying tactic to facilitate extension of the biotech industry. Secondly, the US administration had to be seen to appease the huge farming and biotech interests which are involved with GM crops and which were opposed to Europe regulating in the interests of its own consumers.

The USA's European challenge is a very effective bullying tactic to facilitate extension of the biotech industry

Therefore, whilst Europe may win the day at the WTO, the USA and its industry may succeed in its bullying, particularly because many countries are currently developing their own GMO regulations now that the Cartagena Protocol is in place. Society's fundamental right to make choices about how, whether and under what conditions we adopt a technology is at stake.

For ongoing information about the WTO dispute, see the special pages on the GeneWatch web site at www.genewatch.org.

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