International Legislation and GM Trees

In spite of the risks posed by genetic modification of trees, there is no international legislation specifically relating to GM trees. Instead, legislation has been produced with GM food crops and seeds in mind, and does not necessarily cover the problems presented by long-lived GM plants such as trees.

International law covering GMOs is at present focussed on issues relating to trade. There are two institutions which provide rulings covering international trade in GMOs: the Convention on Biological Diversity (CBD) and the World Trade Organisation (WTO).

The member countries of the CBD adopted the Cartagena Protocol on Biosafety in January 2000. The Protocol provides regulations for transboundary movements of GMOs and is based on the precautionary principle.

Although three major exporters of GMOs (USA, Canada and Argentina) have not ratified the Cartagena Protocol, the Protocol recognises a government's right to ban imports of GMOs when insufficient information is available to carry out an assessment of the risks. The burden of proof of safety is thus pushed back to the country exporting the GMOs.

However, under the WTO, governments can be penalised for putting in place legislation, such as a ban on GMOs, which the WTO rules is a barrier to international trade.

The WTO also has an Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) covering food safety and animal and plant health regulations. In setting their laws, to comply with the SPS Agreement, governments must assess the risks involved, rather than use the precautionary principle.

Mariam Mayet, director of the African Centre for Biosafety in South Africa, points out that the Cartagena Protocol skips the issue of whether it takes precedence over WTO rules, by stating that the two should be "mutually supportive".

That the two sets of legislation are not mutually supportive was illustrated in May 2003 when the US, Canada and Argentina filed a complaint with the WTO about the European Union's legislation on GM foods.

Tewolde Egziabher, Director General of the Environmental Protection Authority in Ethiopia, was one of the architects of the Cartagena Protocol. In response to the US complaint to the WTO he wrote, "We in African countries, who have fought long and hard for the agreement and ratification of the Biosafety Protocol, feel that US actions are intended to send a strong and aggressive message to us: that should we choose to implement the Protocol and reject the import of GM foods, we may also face the possibility of a WTO challenge. We cannot help but perceive that US actions are a preemptive strike on the Biosafety Protocol and developing country interests."

Forestry scientists are clear that genetic pollution from GM tree plantations is inevitable. "Genes will eventually get out" as Oregon State University's Steven Strauss puts it.

Apart from the ecological risks involved, the prospect of GM trees crossing with wild relatives, resulting in feral GM trees containing patented genes growing outside plantations, raises a number of legal questions. Will the company that owns the patent on the gene have ownership rights (or any other rights) over any trees which contain this gene? Might forest owners find that the trees on their land in fact belong to International Paper or Meadwestvaco because they contain the company's patented genes?

Who will be liable, if gene pollution proves to have damaged trees in forests? Will it be the plantation manager, the company that sold the GM tree seedlings, the company that developed the GM tree using the patented gene, or will it be the owner of the patent on the gene?

How is "damage" to trees in forests to be determined? Who will decide what constitutes damage? Trees and forests are sacred in some cultures and although superficially there may appear to be no harm done, changing the genetic makeup of wild trees could be considered to be genetic vandalism.

Tree pollen can travel huge distances. Seeds can be (and are) easily smuggled across borders. No legislation in the world will prevent this from happening. If GM trees were to become weedy and start invading forest ecosystems as a result of smuggled seeds, who would be liable?

In May 2004, the Canadian Supreme Court ruled that Monsanto had the right to prosecute farmers who have crops containing Monsanto patented genes on their land. Pat Mooney, director of the Action Group on Erosion, Technology and Concentration, explains the implications of this ruling: "They can now say that their rights extend to anything its genes get into, whether plant, animal or human. Under this ruling spreading GM pollution appears to be recognized as a viable corporate ownership strategy."