



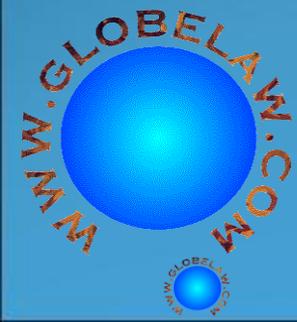
Convention on
Biological Diversity



Joint Aarhus Convention/Cartagena Protocol on Biosafety workshop on public awareness, access to information and public participation regarding living modified organisms/genetically modified organisms

8-9 October 2010, Nagoya, Japan

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4(a) Public participation: good practices, needs and challenges

- Public participation in LMO/GMO risk assessment procedures, including the public's role (including environmental NGOs and other civil society organizations) in evaluating
 - (i) LMO/GMO related socio-economic risks and
 - (ii) Other characteristics which might be different from environmental impact assessment procedures regarding non-LMO/GMO decisions.

Cartagena Protocol

- Article 23 PUBLIC AWARENESS AND PARTICIPATION

1. The Parties shall:

- (a) Promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms in relation to the conservation and sustainable use of biological diversity, taking also into account risks to human health. In doing so, the Parties shall cooperate, as appropriate, with other States and international bodies;
 - (b) Endeavour to ensure that public awareness and education encompass access to information on living modified organisms identified in accordance with this Protocol that may be imported.
2. The Parties shall, in accordance with their respective laws and regulations, consult the public in the decision-making process regarding living modified organisms and shall make the results of such decisions available to the public, while respecting confidential information in accordance with Article 21.

Art 26 SOCIO-ECONOMIC CONSIDERATIONS

1. The Parties, in reaching a decision on import under this Protocol or under its domestic measures implementing the Protocol, may take into account, consistent with their international obligations, **socio-economic considerations arising from the impact of living modified organisms on the conservation and sustainable use of biological diversity, especially with regard to the value of biological diversity to indigenous and local communities.**
2. The Parties are encouraged to cooperate on research and information exchange on any socio-economic impacts of living modified organisms, especially on indigenous and local communities.

MOP Decisions

Decision [BS-II/12](#)

Urges Parties, other Governments and relevant organizations to provide more emphasis to research on socio-economic impacts of living modified organisms and to allocate resources for that purpose

Decision [BS-II/13](#),

- *Encourages* Parties and other States, as part of their efforts in implementing Article 23, paragraph 1 (a), to seek and leverage opportunities for cooperation with other Parties, other States and relevant international bodies at subregional, regional and international levels,
- *Urges* Parties and other States to develop and implement national programmes for public awareness, education and participation, including public access to information, concerning the safe transfer, handling and use of living modified organisms;

Decision [BS-IV/16](#)

Invites Parties, other Governments and relevant organizations to continue to share their research, research method and experience in taking into account socio-economic impacts of living modified organisms, through the Biosafety Clearing-House, where it could be retrievable using the search term "socio-economic";

Aarhus Convention

3. “Environmental information” means any information in written, visual, aural, electronic or any other material form on:
 - (b)... cost-benefit and other economic analyses and assumptions used in environmental decision-making;
 - (c) The state of human health and safety, conditions of human life, cultural sites and built structures, inasmuch as they are or may be affected by the state of the elements of the environment or, through these elements, by the factors, activities or measures referred to in subparagraph (b) above;

Socio-economic risks

- Little support from governments or otherwise to carry out the assessments necessary
- Governments can take into account socioeconomic impacts (article 26), but due to the lack of resources socio-economic impact assessment remains the poor stepchild of environmental risk assessment and management
- E.g. NZ: tribunals commonly find that field trials mean escape is unlikely so the adverse effect of economic loss is minimal. No assessment of cumulative effects.

New Zealand Statutory Requirements

Hazardous Substances and New Organisms Act 1996

2. **Environment** includes—

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- **(d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs [\(a\)](#) to [\(c\)](#) of this definition or which are affected by those matters:**

Statutory Requirements

- 4. The purpose of this Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms.

Statutory Requirements

5 Principles relevant to purpose of Act

All persons exercising functions, powers, and duties under this Act shall, to achieve the purpose of this Act, recognise and provide for the following principles:

- (a) The safeguarding of the life-supporting capacity of air, water, soil, and ecosystems:
- **(b) The maintenance and enhancement of the capacity of people and communities to provide for their own economic, social, and cultural wellbeing and for the reasonably foreseeable needs of future generations.**

8 All persons exercising powers and functions under this Act shall take into account the principles of the [Treaty of Waitangi \(Te Tiriti o Waitangi\)](#).

Statutory Requirements

- HSNO Section 6:
- All persons exercising functions, powers, and duties under this Act shall, to achieve the purpose of this Act, take into account the following matters:
 - (a) The sustainability of all native and valued introduced flora and fauna:
 - (b) The intrinsic value of ecosystems:
 - (c) Public health:
 - (d) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, valued flora and fauna, and other taonga:
 - (e) the economic and related benefits and costs of using a particular hazardous substance or new organism.
 - (f) New Zealand's international obligations.
- Primary test to be applied by ERMA is a balancing of beneficial effects of having an organism in containment against the adverse effects of the organism and any inseparable organism: s 45(1)(a)(ii). The second is that s 45(2) states that an approval under s 45 must include controls to provide for matters specified in Schedule 3 to the HSNO Act and may include controls that provide for any other matters in order to give effect to the purposes of the HSNO Act

Statutory Requirements

- Primary test to be applied by ERMA is a balancing of beneficial effects of having an organism in containment against the adverse effects of the organism and any inseparable organism: s 45(1)(a)(ii).

Need for Public Information

AFFCO NZ Ltd v Far North District Council (No 2) [1994] NZRMA 224 at 234-5:

“... [146] ...Advisers to consent authorities and would-be submitters should not themselves have to engage in detailed investigations to enable them to assess the effects. It is an applicant's responsibility to provide all the details and information about the proposal that are necessary to enable that to be done. The proposal and the supporting plans and other material deposited for public scrutiny at the consent authority's office should contain sufficient detail for those assessments to be made.”

Example: NZ GE Animal Application

- To import into containment, and genetically modify in containment, new GMOs comprising Modify Cattle, Buffalo, Goat, Sheep, Pig, Deer, Llama, Alpaca, Horse, Rat, Mouse, Rabbit, Possum, Chicken, Hamster, Guinea pig, Monkey, Human
- Livestock outdoors.
- Sought approval for an indefinite period of time, sought approval for an almost unlimited range of genetic modifications, Did not specify what scientific techniques or methods were to be used - any or all techniques for genetic modification, whether existing or yet to be invented.
- Did not specify the location of facilities
- The two applications state that, because of the generic nature and duration of the application, “it is not possible to identify at the time of the application the techniques which will be used to genetically modify each line of transgenic animals which will be developed if the approval sought is granted”.
- Both applications then state that AgResearch is seeking approval to modify/develop organisms “using any technique available”.
- GE Free New Zealand argued a failure to enforce information requirements effectively precludes meaningful public participation. Without sufficient information, a submitter can only comment on the desirability of genetic modification

NZ High Court decision

GE Free NZ in Food & the Environment Inc v Environmental Risk Management Authority (ERMA) & Anor HC Wellington CIV 2008-485-002370, 5 June 2009) Clifford J:

- NZ High Court granted judicial review holding that the applications did not comply with the requirements of the section because they were too generic to enable ERMA to undertake the risk assessment required by s 45 of the Act.
- [145] “In my judgment, there is considerable strength to GE Free's point that the information necessary for effective public input here has not been made available (via the Applications or otherwise) given, if nothing else, the breadth and generic nature of the Applications.”
- “[148]...To enable effective public participation, sufficient particularity is required at the application stage.”
- [149] “I have concluded that in this instance the Applications are simply too generic to enable the risk assessment called for by HSNO to be meaningfully undertaken.”

NZ Court of Appeal

AgResearch Limited v G E Free NZ in Food and the Environment Inc [2010] NZCA 89 (Court of Appeal)

- The Court of Appeal reversed. Held that The decision to register an application under s 40 is essentially mechanical.
- ERMA had no statutory obligation to reject an application under s 40 if not satisfied that it strictly complied with the statutory requirements. It had to satisfy itself prior to determining under s 45 whether the application, as modified or clarified in the course of ERMA's consideration, fell within s 40 and could be approved.
- In reaching that decision under s 45, ERMA has power to seek further information (s 48) and to obtain reports (s 58).

NZ Supreme Court

GE Free NZ in Food and the Environment Inc. v Agresearch and ERMA SC 38/2010 [2010] NZSC 71

- Supreme Court refused leave to appeal (June 2010)
- Held: nly be in the rarest of cases that it would be appropriate for the High Court's review discretion to be exercised on insufficiency of information grounds ahead of ERMA's consideration of the substance of the application, whatever the apparent inadequacy of the application might be on its initial filing.
- The statute expressly contemplates that the sufficiency of information question will be addressed by the Authority as part of its decision making process, not as a preliminary matter.

Examples

GMF03001 (2003): GM Onions

- Opportunity Cost: allocation of research funds to this line of research means an opportunity cost is incurred through funds not being available for other, potentially more useful, areas of research.
 - Assessed risk as non-negligible
- Public rejection / abhorrence of genetic engineering of food crops and of use of taxpayer funded research to develop genetically modified foods, dominance of agriculture by multinationals, clean/green image
 - Assessed risk as negligible

GMF 06001 (2007): GM Brassica

- *no potentially significant beneficial effects on the environment, human health and safety, the relationship of Maori to the environment, Te Tiriti o Waitangi/Treaty of Waitangi, or the market economy.*

Case Study

- GE salmon proposed to be introduced into Panama. Introduction is principally for export to other countries.
- Impacts could be socioeconomic first, environmental perhaps later.
- Possible socio-economic impacts.
 - Displacement of food production for land-based aquaculture.
 - Displacement of food production may mean loss of traditional varieties usually grown in that region.
 - Could be loss of natural biodiversity in the regions where large scale aquaculture takes place Displacing farmers means displacing the human means to conserve and steward local agricultural biological diversity.

Some Recommendations

- **Intergovernmental:** under the [strategic plan](#) of the Protocol: need for development of guidance on socioeconomic decision-making
- Art 26(2): need more research and information exchange on socioeconomic impacts.
- **National:** need capacity to do socioeconomic research as part of risk assessment and management information that is developed.
- **Public participation:** public needs **adequate** information. Socioeconomic impact studies must be done so that this information is part of the package of information debated by the public
- Access to justice also requires national level policies toward food security and food sovereignty to prevent transnational GE food production from threatening domestic food production and land tenure.