

Biosafety: Public Awareness, Education and Participation

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Living/genetically modified organisms

- “Living modified organism” means any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology
- Novel combination = does not occur in nature; has to be made in the lab

No scientific consensus

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DISCUSSION

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No scientific consensus on GMO safety

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Abstract

A broad community of independent scientific researchers and scholars challenges recent claims of a consensus over the safety of genetically modified organisms (GMOs). In the following joint statement, the claimed consensus is shown to be an artificial construct that has been falsely perpetuated through diverse fora. Irrespective of contradictory evidence in the refereed literature, as documented below, the claim that there is now a consensus on the safety of GMOs continues to be widely and often uncritically aired. For decades, the safety of GMOs has been a hotly controversial topic that has been much debated around the world. Published results are contradictory, in part

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Scientific uncertainties

- Little known about the long-term effects of consuming GM food and foods derived from GMOs
- Gaps in scientific knowledge regarding long-term environmental impacts
- Little independent biosafety research has been conducted, while commercialization is increasing
- Early warnings are emerging – what is the appropriate scientific, policy and regulatory response?

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Precaution as the basis for regulation

- Lack of scientific certainty does not prevent one from taking action to prevent or mitigate potential adverse impacts
- Scientific uncertainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects
- Precautionary Principle is a key principle enshrined and operationalized in the Cartagena Protocol on Biosafety

Cartagena Protocol on Biosafety

- Only international law dealing exclusively with genetically/living modified organisms (GMOs/LMOs)
- Primarily regulates the transboundary movement (import and export), including illegal and unintentional transboundary movements, of LMOs
- Entered into force in 2003
- Currently, 170 Parties, Iran became a Party in February 2004
- The Protocol is a minimum standard; national interpretation and implementation can be more comprehensive and have higher standards

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Significance of the Cartagena Protocol

- For the 1st time in international law, there is a recognition that GMOs are different from other naturally occurring organisms and may carry special risks and hazards and therefore need to be regulated internationally
- Implements 'prior informed consent' through the advance informed agreement (AIA) procedure for intentional introduction into the environment of LMOs

Significance of the Cartagena Protocol

- Decision making based on precaution, which acknowledges scientific uncertainties
- Recognises that GMOs may have biodiversity, human health, and socio-economic impacts; and that these impacts must be risk assessed or taken into account when making decisions
- Places obligations on Parties regarding public awareness, education and participation

Article 23, Cartagena Protocol

- “The Parties shall...
 - Promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of LMOs in relation to the conservation and sustainable use of biological diversity, taking also into account risks to human health...
 - Endeavour to ensure that public awareness and education encompass access to information on LMOs...”
- “The Parties shall, in accordance with their respective laws and regulations, consult the public in the decision-making process regarding LMOs and shall make the results of such decisions available to the public...”

Public awareness and education in biosafety

- Many NGOs, farmers' organizations and indigenous peoples' organizations have been active in raising public awareness
- Collaboration with independent scientists engaged in biosafety research to increase public awareness, education and participation as well as informing policy makers
- Conflicts of interest in industry awareness and education efforts need to be scrutinized

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Access to information

- Public awareness and education should encompass access to information
- Access to information is also necessary for meaningful public participation
- Experience demonstrates that if the public has access to credible science and information, it can easily be engaged and make informed decisions regarding LMOs

Biosafety Clearing-House (Art.20)

- Web portal managed by the CBD Secretariat to facilitate exchange and accessibility of information
- Parties have to make available to the BCH
 - Laws, regulation and guidelines for implementation of the Protocol
 - Bilateral/regional/multilateral agreements
 - Summaries of risk assessments of LMOs, including of products thereof
 - Final decisions regarding import or release of LMOs
 - National reports
- Most Parties have a National BCH that provides this information to the public

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Confidential information (Art. 21)

- Confidential information is only vis-à-vis the public
- Justification has to be provided by the applicant – information has to have commercial value because it is secret
- Regulators can decide what information should be deemed confidential

What cannot be confidential

- Article 21(6):
 - The name and address of the notifier
 - A general description of the LMO
 - A summary of the risk assessment of the effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health
 - Any methods and plans for emergency response

GM Labelling

- Labels generally state the make-up of the product, what it contains and the values (nutritional) or the hazards of the contents
- The label on a GM product usually indicates whether the product, or its ingredients, has been genetically modified
- Labelling of GM products arises *after* the GMO has been risk assessed and allowed on the market by the regulatory authorities

Reasons for GM labelling (1)

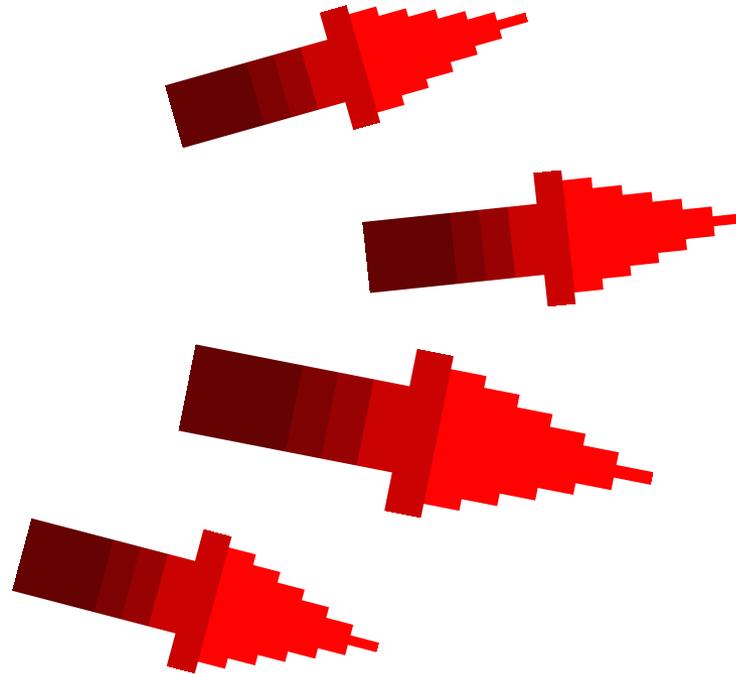
- To provide information to consumers, based on the consumers' right to know; enhances consumer awareness and empowers consumers to make better-informed choices
- To provide crucial information for those who have legitimate health concerns, because of possible unintended effects of GMOs
- To inform consumers of intentional nutritional changes and of any potential health effects as well as the GMO content

Reasons for GM labelling (2)

- To inform consumers about the content in cases where there may be religious, ethical or moral concern
- To provide incentive for GMO exporting countries to segregate their GM and non-GM crops, in order to meet any regulatory requirements
- To allows GMOs to be identified in food and animal feed products at all stages of their placing on the market (traceability)

Why Public Participation?

WHY



Who?

When?

In What?

How?

Why Public Participation?

- The first, and most important question!
 - To achieve a pre-defined goal?
 - To produce a better result?
 - Because it is the right thing to do?
- Is it for
 - Opening up or closing down debate?
 - Reaching a consensus or highlighting areas of contestation?
 - Coming up with recommendations or alternative options?

Why is Public Participation important?

- Scientific reasons
 - members of the public have useful knowledge
 - to ensure informed policy and decisions
 - different perspectives are important for handling uncertainties
- Social reasons
 - helps include consideration of socio-economic, cultural impacts
 - provides a more contextual approach to risk
 - allows for debate on what constitutes acceptable risks

Why is Public Participation important?

- Ethical reasons
 - people have a right to be involved in things that affect them
- To promote public awareness of biodiversity and biosafety issues
 - information sharing
 - identify social and ecological changes

Why is Public Participation necessary?

- Legal reasons
 - Rio Principle 10
 - Aarhus Convention
 - Cartagena Protocol: Public Awareness and Participation (Article 23)

Who should participate?

- Who is “the public”?
 - There are many different groups and types of people
 - Ranging from the lay person with no knowledge or interest in an issue to stakeholder group with an interest or that will be affected
 - Need to mobilize sections of the public that are more marginalized
- Who is “an expert”?
 - Who defines who is an expert?

How?

- Different models for participation
 - Written submissions
 - Advisory committees
 - Focus groups
 - Scenario workshops
 - Participatory rural appraisals
 - Public hearings/debates
 - Consensus conferences
 - Citizen juries
 - Etc.

When? or In What?

- Identification of problems, needs, priorities and options
- Development and commercialisation of technology
- National biosafety frameworks, policies, laws
 - Development
 - Implementation
 - Review
- Risk assessment and risk management
- Decision-making on specific applications
- Monitoring – environmental impacts, social implications, unintentional transboundary movement
- Review of assessments and decisions
- Biosafety research funding, issues

Where?

- Level
 - Local
 - National
 - Regional
 - Global
- Universal vs context specific approaches

Example of Aarhus Convention and GMOs

- Convention on access to information, public participation in decision making and access to justice on environmental matters
- Expressly covers information and decisions on GMOs
- On GMOs, provides right to information, requires public participation on GMO decision (deliberate release) and access to justice regarding GMOs

Aarhus Convention GMO Amendment

- Not in force yet
- On public participation in decisions on the deliberate release into the environment and placing on the market of GMOs; requires:
 - Early and effective information and public participation
 - A reasonable time frame in order to give the public adequate opportunity to express opinion on proposed decisions
 - Summary of notification and assessment report to be made public in adequate, timely, effective manner
 - That some information cannot be held confidential
 - Transparency of decision making procedures
 - Endeavouring to take due account of outcome of public participation
 - Text of decision and reasons to be released

Making Participation Happen

- Legal avenues and obligations
- Constitutional provisions (rights to information, participation, legal redress)
- Proper channels and possibilities for participation
- Training/culture of officials
- Access to information
- Enabling processes – translation, means of communication, resources, terminology
- Transparency, accountability, responsiveness

Challenges

- The public is often at a disadvantage in terms of resources and political influence compared to the proponents of genetic engineering that include some of the largest multinational corporations in the world
- The public does not always have access to information including raw scientific data; such information is often withheld as 'confidential'
- Putting in place a clear decision-making process regarding LMOs : what has (or has not) been taken into account and why; regular feedback to those who participate; and, open and respectful attitudes by all concerned

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Some Lessons

- Early involvement of public
- Independence
- Transparency
- Access to information
- Resources and time
- On-going process
- Broad, open-ended, dynamic, responsive

Thank you!

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