NGO perspective: Low levels of GM crops in international food/feed trade

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Low levels of GM crops in international trade

- Unauthorized/unapproved GMOs found at “low levels” in shipments of non-GM crops, in shipments of approved GM crops or in food products
- How does it happen?
  - Co-mingling due to nature of commodity grain trade
  - Gene flow e.g. seed or pollen movement
  - Human error
- **Scenario 1**: Unapproved GM crop in both countries of export and import (adventitious presence, AP) e.g. LL601, Monsanto HT wheat, Bt10
- **Scenario 2**: Unapproved GM crop in country of import, but may be authorized in country of export (low level presence, LLP), e.g. MIR162, HT alfalfa
Potential risks

- Unauthorized GMOs would not have undergone a risk or safety assessment in the country of import.
- In case of LLP, risk or safety assessment may or may not have been done in the country of export.

=> Circumvention of national and international laws that preserve the right of importing countries to prior informed consent and decision-making based on risk assessment.

- Possibility of untested GMOs in field trials (e.g. LL601, Bt11, Monsanto HT wheat) or GM crops with higher risk levels entering food and feed supply (e.g. StarLink maize).
Relevant policy and regulatory means to address issue

• Codex Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants (CAC/GL 45-2003)
  • Annex 3 on Food Safety Assessment in Situations of Low-Level Presence of Recombinant-DNA Plant Material (CAC/GL 45-2008)
• Cartagena Protocol on Biosafety
  • Article 17: Unintentional transboundary movements and emergency measures
  • Article 18.2(a): Documentation accompanying LMOs intended for direct use as food or feed, or for processing
  • Article 25: Illegal transboundary movements
• Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress: If damage occurs
Considerations for Exporting countries (1)

• Stringent controls of field trials and commercial plantings, including monitoring
• Ensure clear identification in the documentation accompanying shipments

⇒ Article 18.2(a) of the Cartagena Protocol on Biosafety
⇒ Para 4(a), Decision BS III/10: In cases where the identity of the living modified organisms is known through means such as identity preservation systems, that the shipment contains living modified organisms that are intended for direct use as food or feed, or for processing
Considerations for Exporting Countries (2)

- Segregation, identify preservation and testing to ensure that no unauthorized GMO enters the food/feed chain
  ⇒ Decision BSIII/10 adopted in 2006, Para 4
  c) That the living modified organisms are not intended for intentional introduction into the environment;
  d) The common, scientific and, where available, commercial names of the living modified organisms;
  e) The transformation event code of the living modified organism or, where available, as a key to accessing information in the Biosafety Clearing-House, its unique identifier code;
  f) The internet address of the Biosafety Clearing-House for further information
Considerations for Exporting Countries (3)

- Compliance with importing country’s domestic regulations, including zero tolerance policies
  => Decision BSIII/10 adopted at COP-MOP3 (2006)
  => Annex 3 of Codex Guideline: “Does not eliminate ... responsibility of industries, exporters and, when applicable, national competent authorities to continue to meet importing countries’ requirements, including in relation to unauthorized recombinant-DNA plant material” (Para 6, Annex 3, CAC/GL 45-2008)
- To avoid cases of adventitious presence, ensure conduct of a safety assessment consistent with the Codex guideline, for all GM crops in research and field trials
Considerations for Exporting Countries (4)

- If there are cases of ‘unintentional transboundary movement’, notify affected or potentially affected countries and provide available relevant information
- Consult affected or potentially affected countries to enable determination of appropriate responses and action, including emergency measures

=> Article 17 of the Cartagena Protocol on Biosafety

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Considerations for Exporting Countries (5)

- Data and information on GM crops should be made available to a publicly accessible FAO database, including “where detection method protocols and appropriate reference material … suitable for low-level situations may be obtained” Para 28(i)

- “Product applicant should provide further information and clarification … [including] a validated protocol for an event-specific or trait-specific detection method suitable for low level situations and appropriate reference materials” Para 31

⇒Annex 3 of Codex guideline (CAC/GL 45-2008)

⇒Decision V/9 Para 5: Invites Parties to nominate national and international reference laboratories with the view to establishing, through the Biosafety-Clearing House, an electronic network of laboratories to facilitate the identification of living modified organisms as well as the sharing of information and experiences.
Considerations for Importing Countries (1)

• Sovereign right to decide on policy, including zero tolerance, and require that all GM crops be risk assessed prior to approval
• Full flexibility for a country to require zero tolerance of unapproved GM crops

=> Article 25 of Cartagena Protocol on Biosafety

=> Measures to ensure that the GMOs destined for food or feed, or for processing are “authorized in accordance with domestic regulatory frameworks” and documentation is “in compliance with the requirements of the country of import” (Decision BSIII/10)

=> Annex 3 of Codex guideline (Para 6, CAC/GL 45-2008)
Considerations for Importing Countries (2)

• Conduct a safety assessment in accordance with Annex 3 of Codex Plant Guideline (CAC/GL 45-2008):
  • “Does not preclude national authorities from conducting a safety assessment according to the Codex Plant Guideline” Para 6
  • “countries can decide when and how to use Annex” Para 6
• Ensure capacity building for testing and detection
• Determine appropriate responses, initiate necessary action, including emergency measures
  => Article 17 of Cartagena Protocol on Biosafety
• May request source, to dispose, at own expense, of the LMO in question by repatriation or destruction
  => Article 25 of Cartagena Protocol