FOOD safety at FAO

Low levels of GM crops in international food/feed trade

RESULTS OF THE FAO TECHNICAL SURVEY AND DISCUSSIONS AT THE FAO INTERNATIONAL TECHNICAL CONSULTATION

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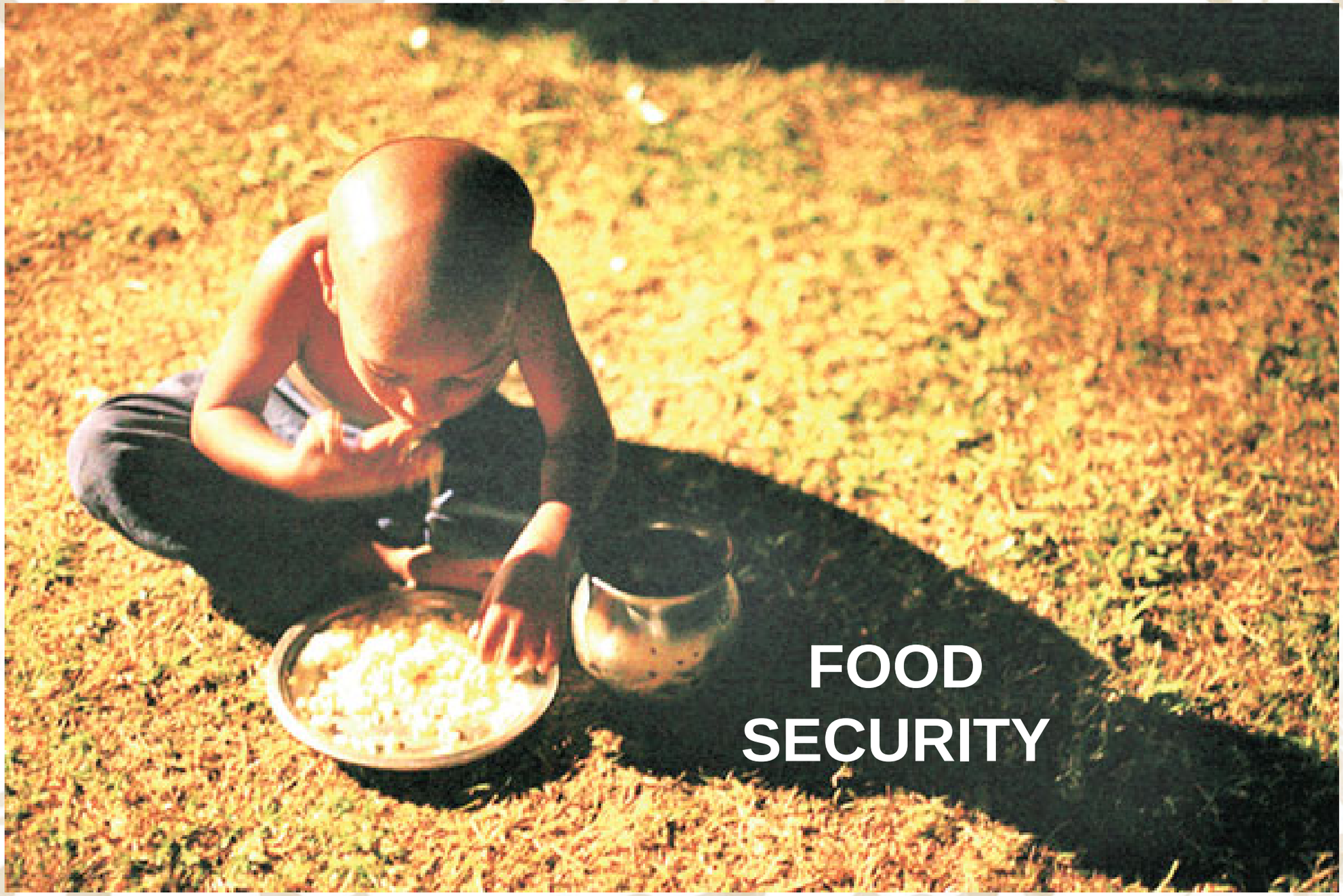
FAO Mandate



Definition of Food Security

"Food security exists when all people, at all times, have physical, social and economic access to **sufficient**, **safe** and **nutritious** food"

[FAO World Food Summit, 1996]

CODEX ALIMENTARIUS

International Food Standards

www.**codex**alimentarius.net

FAO
FIAT PANIS

World Health Organization

What is Codex Alimentarius

- Intergovernmental Standards-setting Body established by FAO and WHO in 1961/63

- Approx.190 Member Countries + 1 Member Organization (European Community)

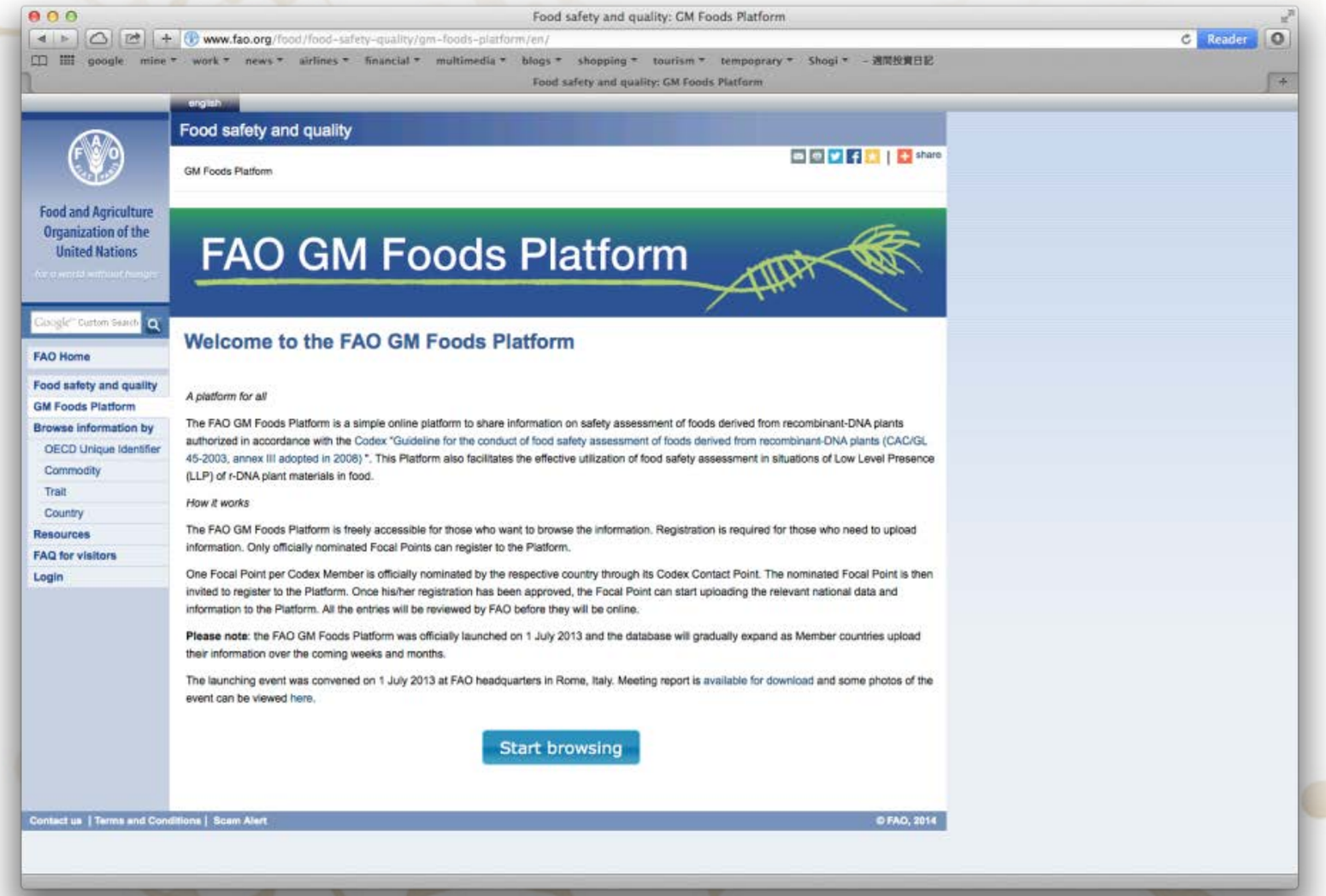
- “Harmonization” is key

- http://codexalimentarius.org/

Codex ad hoc Intergovernmental Task Force on food derived from biotechnology

- 2 terms
  - 2000 – 2003 (4 years, 1st – 4th sessions)
  - 2005 – 2007 (3 years, 5th – 7th sessions)
- 4 key documents related to GM food safety assessment
  - Principles for the risk analysis
  - **Plants guideline**
  - Microorganisms guideline
  - Animals guideline (including fish)
- Technical annexes to the Plant guidelines (Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants)
  - allergenicity
  - nutrition/health aspects
  - **LLP situations**

FAO GM Foods Platform
www.fao.org/gm-platform



As of 13 November 2015

- 171 countries participating (out of 186 Codex Members)
- Platform hosts 764 records
- 16 countries are actively sharing records on safety assessment of GM foods

FAO Technical Consultation on LLP

- To facilitate international dialogue
- To present the results of relevant FAO technical survey analyses

Scope

- Technical and exploratory
- A forum for experts to present the results of their research findings on the issue
- Prerogative of participants to consider the findings for relevant national policies, regulations and guidelines
- Not intended to make any recommendation for any decisions or policies that national authorities make

FAO Technical Survey and Technical Consultation

- **2011-12**: Several countries requested FAO to look into the trade incidents associated with low levels of GM crops

- **2013**: FAO technical survey to understand current situations and LLP/AP incidents (**75 Members responded: 40% response rate**)
  - Results are available at http://www.fao.org/good-food-safety-quaoity/a-z-index/biotechnology/LLP

- Two types of analyses:
  - Trade and economic analysis
  - Analysis on food/feed regulatory issues
    - Both are available at http://www.fao.org/food/food-safety-quality/a-z-index/biotechnology/LLP/ (6 languages)

- FAO was also requested to facilitate international discussion on the issue
  - Technical consultation was held on 20-21 March **2014**
    - Report available at http://www.fao.org/food/food-safety-quality/a-z-index/biotechnology/LLP/

Working definitions:

Low Level Presence (LLP)

- LLP refers to:
  - The detection of low levels of GM crops that have been approved in at least one country.
  - Approval is on the basis of a food safety assessment according to the relevant Codex guidelines.

Adventitious Presence (AP)

- AP refers to:
  - Detection of the unintentional presence of GM crops that have not been approved in any countries.

FAO Technical Survey: Has your country faced situations of LLP or AP in imports in the last 10 years?

"Last 10 years" was interpreted from 2002 to 2012, but some countries have reported incidents in 2013 as well.

LLP/AP incidents in the last 10 years	
Response option	**Response (%)**
Yes	**35%**
No	50%
Being evaluated	1%
Not applicable	1%
No response	9%
No information	3%

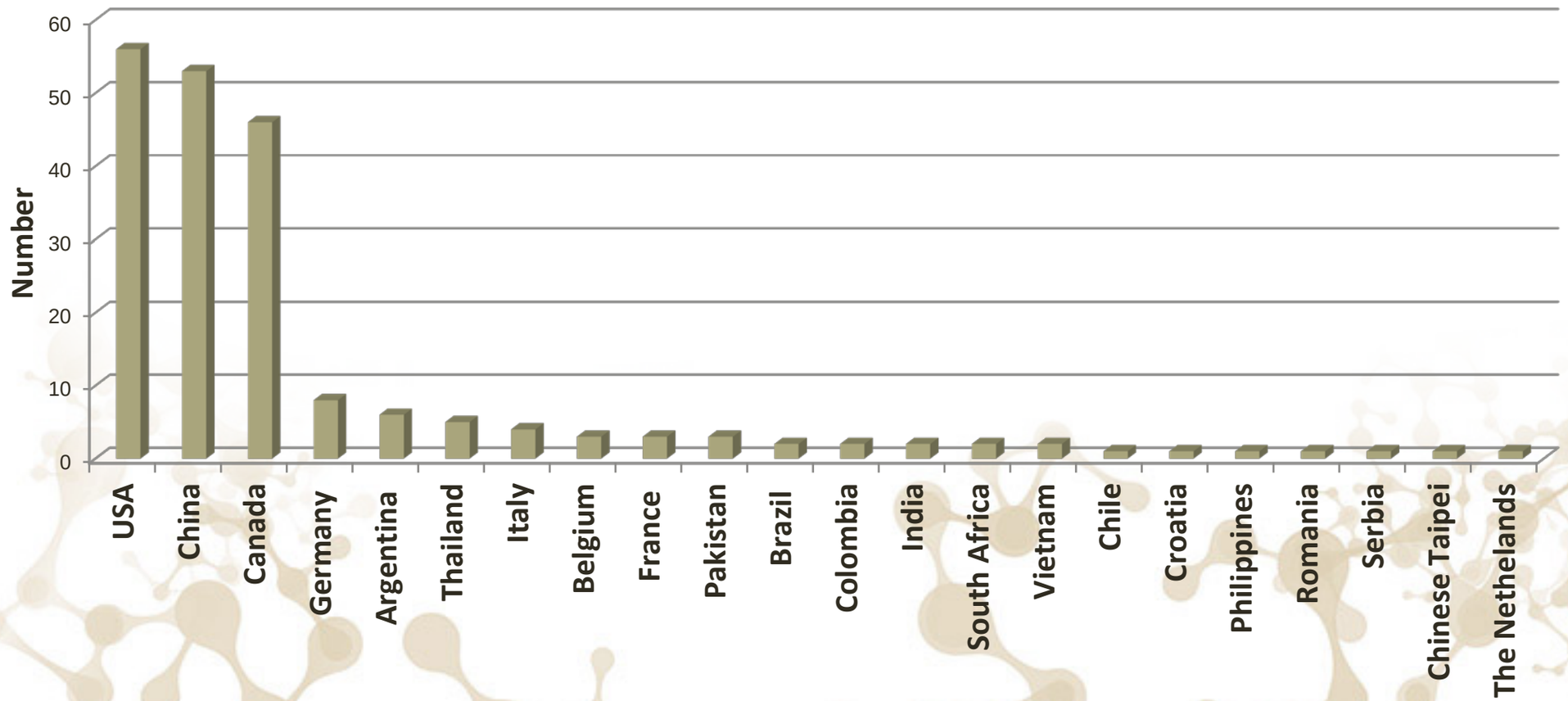
LLP/AP incidents by country of origin

2001/2 – 2009 (8 years): **60** incidents

2009 – 2012/3 (latest 5 years): **138** incidents

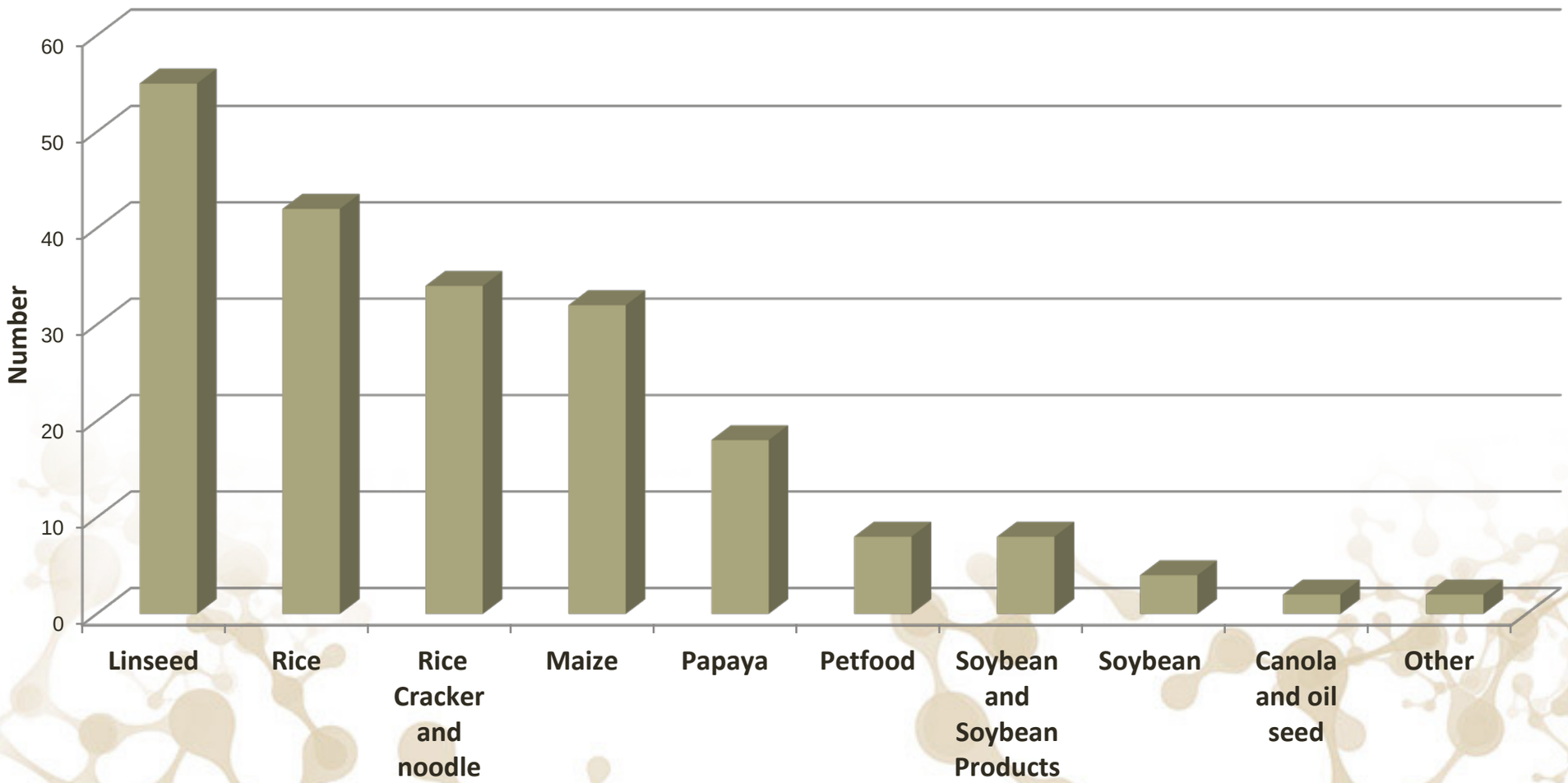
Number of countries reported LLP/AP incidents: **25** countries (out of 75 respondents)

Number of LLP/AP incidents by country of origin



LLP/AP incidents by commodity

LLP/AP incidents by commodity



Key issues discussed

- **Occurrence of LLP/AP**
  - A steady increase of LLP/AP incidents globally
  - No asynchronous LLP Incidents have been reported in the EU since 2009. What does it mean?
  - LLP is likely to occur even with careful management of the commercial production of approved GMOs.

- **Factors contributing to LLP/AP incidents**
  - AP: factors may include a lack of clear field trial policies and protocols, ineffective regulations on field trials , ineffective enforcement, human error
  - LLP/AP: factors may include a failure to implement good practice and monitoring; and different methods used for detection.
  - LLP: factors may include: asynchronicity; asymmetry; divergence among national authorization processes; different/no policy and regulations; and different inspection regimes.

- **Management of LLP/AP**
  - Different views were expressed on distinguishing or not distinguishing LLP and AP.
  - AP is a safety issue, so most countries consider zero tolearance for AP to be an appropriate response.
  - The need for capacity development in implementing management options was discussed.

Key issues discussed, cont.

- **Testing, detection and monitoring**
  - Widely different views were expressed on whether or not priority should be given to testing and detection in the absence of the consideration of risk.
  - The issue of risk versus resources was discussed.
  - Needs for capacity development in testing and detection were raised by several countries, but different views were expressed.
  - The increasing trend in stacked events will make detection more difficult and complicated.

- **Communications**
  - The importance of being informed was highlighted – for regulators, traders and consumers.
  - There is a need for developers to inform regulators of the latest developments.
  - Communication of "who is producing what" may mean that trade risks can be minimized.

- **Access to data/information**
  - International information sharing platforms include: FAO GM Foods Platform (http://fao.org/gm-platform); OECD BioTrack Product Database; and Biosafety Clearing House.
  - The adequacy of the information available to support decisions?

Key issues discussed, cont.

- **Considerations for developing countries**
  - Developing countries are seeking guidance from international organizations and countries that have more experience.
  - Knowledge gaps have been highlighted.
  - The issue of the costs of compliance was highlighted.
  - There is limited capacity to: develop and/or implement national policy and regulations; test and detect GMOs if available; and conduct GM food safety assessment and/or LLP food risk assessment.

- **Overall issues**
  - The demand for food and the volume of agriculture will grow.
  - New/emerging technologies may contribute to the LLP/AP issue.
  - It is difficult to predict the future LLP/AP trend: more information and data are needed.
  - In-depth future projection with econometric analysis might be useful.
  - Further studies on relevant policies and their feasibility of implementation might be useful.
  - There may be an increase in asymmetry issues (mostly in developing countries).
  - Capacity development in developing countries is essential, particularly to facilitate development of science-based regulatory policies and in training to facilitate the use of the FAO GM Foods Platform.

Next steps

- FAO GM Foods Platform (http://fao.org/gm-platform) is being further strengthened in accordance with the various suggestions made during the Technical Consultation

- Possible technical assistance to be provided to developing countries who are in the process of developing their relevant biosafety policy/regulations

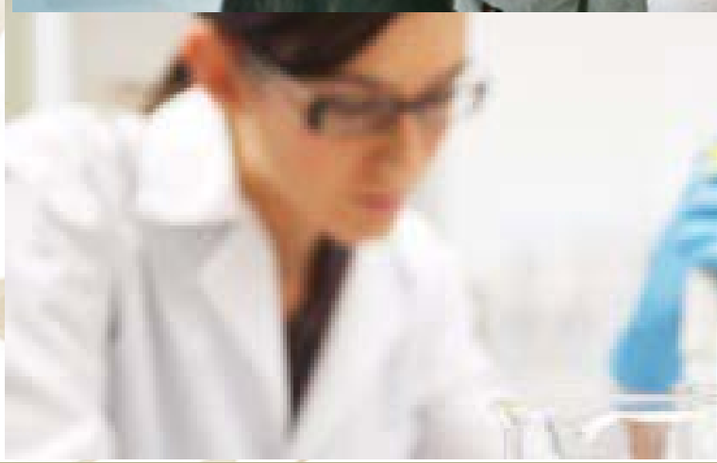
- Possible support to be provided to developing countries who need technical assistance on GM food safety assessment

For more information

- FAO – Food Safety and Quality website:
  http://www.fao.org/food/food-quality-safety/
  food-quality@fao.org

- FAO – Low levels of GM Crops website:
  http://www.fao.org/food/food-safety-quality/a-z-index/biotechnology/LLP/ (6 languages)

- FAO GM Foods Platform:
  http://fao.org/gm-platform/
  GM-Platform@fao.org



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