Food and Agriculture Organization of the United Nations

Your Right to Know: GM Food Safety & Public Trust in ASEAN

A framework for transparent decision-making, effective communication, and regional cooperation

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The majority of the visuals included in the presentation were created using AI.

Future challenges in Agrifood Systems

The next 20-50 years will bring unprecedented challenges requiring innovative solutions

Environmental Pressures

Radical population growth will strain resources, intensify extreme weather events, and increase environmental impacts from agriculture.

Health & Security Threats

Expect more livestock zoonoses and epidemics, the risk of additional pandemics, and geopolitical conflicts affecting global food and feed trade.

Socioeconomic Challenges

These include worsening food insecurity, widening gaps between rich and poor, and complex situations requiring diverse solution sets.

Innovation and transformation are critical to address these challenges.

ASEAN: The Current Landscape

Public perception of GM food remains mixed across ASEAN, with significant variations in:

Regulatory Frameworks

While Malaysia and the Philippines mandate GM labeling, implementation and enforcement vary widely across the region

Information Access

Transparency gaps exist in how GMO approval decisions are communicated to the public

Trust Factors

Public confidence is influenced by cultural values, information quality, and stakeholder engagement practices

The Trust Challenge: Transparency & Information

Current Challenges

- Inconsistent labeling enforcement across ASEAN
- Limited consumer understanding about GMOs
- Varied public access to decision-making processes
- Misinformation spreading through social media

Trust-Building

- Review regional labeling approaches
- Digital transparency tools
- Cross-sectoral dialogue platforms
- Science communication training for officials

Building on Global Good Practices

FAO GM Foods Platform

Leverage the Codex-based FAO's global data sharing infrastructure to enhance ASEAN's regional information exchange

Stakeholder Dialogues

Create structured engagement between scientists, regulators, farmers, consumers, and industry representatives

Empathic Communication

Acknowledge public concerns while providing evidence-based information through trusted channels

> "Safety is non-negotiable, but innovation needs active fostering through transparent, inclusive processes that build public confidence"

FAO GM Foods Platform Status

An online platform that facilitates global information sharing on safety assessments of foods derived from recombinant-DNA plants.

2,214

Records Shared

Comprehensive safety assessment data from around the world

84%

Active Participation

160 of 189 Codex Members actively engage with the platform

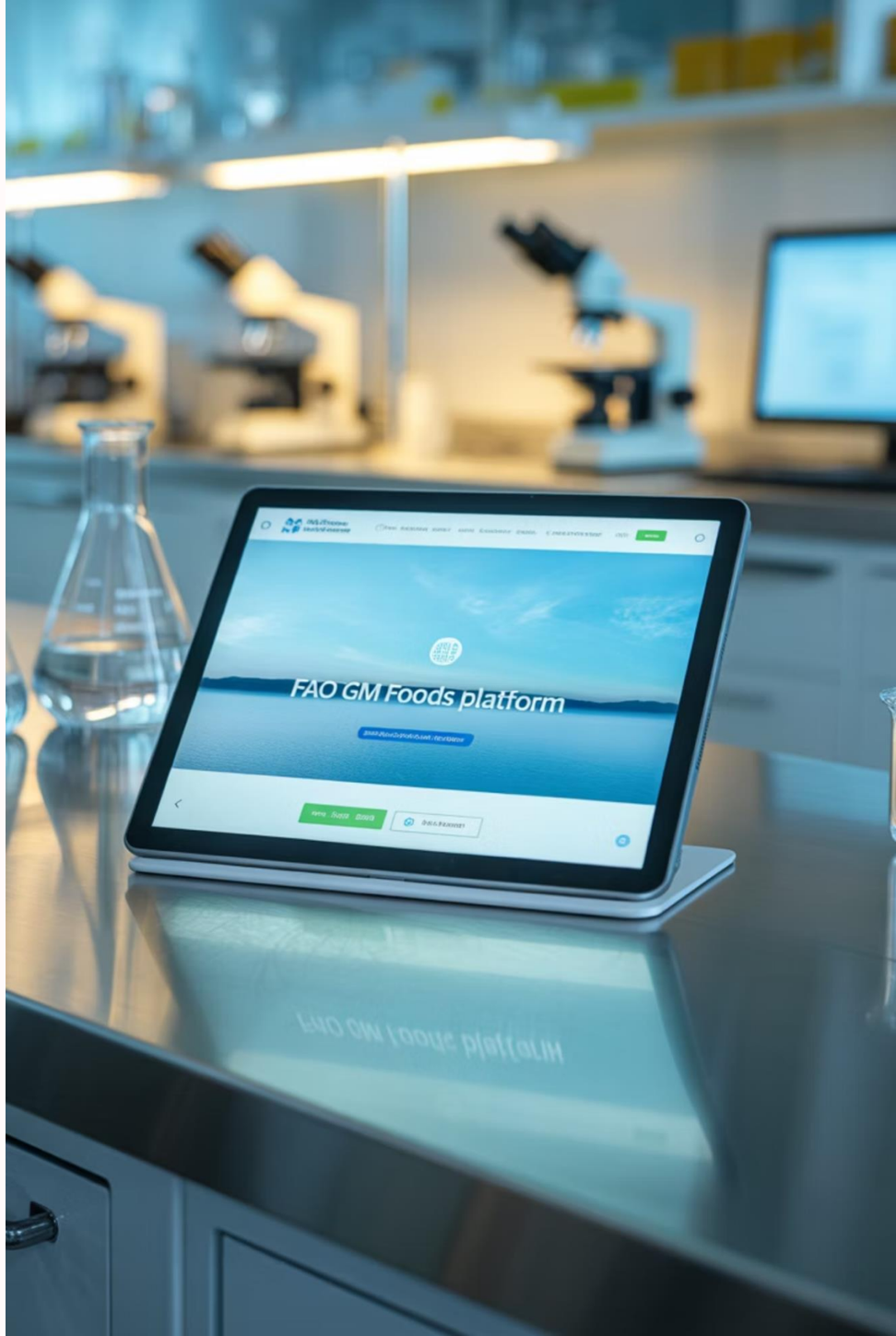
51

Countries Sharing Assessments

Including EU and EU member states (27% of Codex Members)

> "We don't have a trade problem now because the Platform exists" - said Dr Hiroshi Yoshikura, former Chairperson of the Codex ad hoc Intergovernmental Task Force on Foods derived from Biotechnology

https://www.fao.org/gm-platform



Malaysia: Leading in GM food safety data sharing

Malaysia stands out as a pioneering nation in actively contributing to the FAO GM Foods Platform. Their consistent sharing of detailed safety assessment data is crucial for fostering global confidence and enabling informed regulatory decisions on genetically modified foods.

This significant collaboration exemplifies Malaysia's dedication to ensuring a safe and sustainable food supply worldwide, setting a benchmark for other countries in promoting transparency and scientific rigor in food safety.

New food production systems

Gene Editing and Food Safety

Technical document explaining scientific principles, regulatory considerations, and global status of gene-edited foods.

Cell-based Food Safety

Comprehensive hazard identification across four production phases, with over 40 potential hazards identified.

Precision Fermentation

Reviews on nomenclature, production processes, and global regulatory frameworks.

Global Regulatory Working Group

Informal network of 35+ countries and 100+ public-sector experts sharing pressing issues and national activities.

New frontiers in food safety assessment

Leveraging cutting-edge science and technology is paramount for future food safety, extending beyond current capabilities:

AI & Predictive Analytics

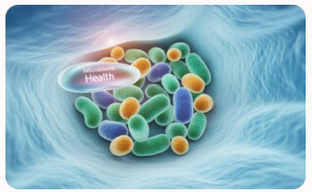
Utilizing artificial intelligence and machine learning for predictive risk assessment, early detection of contaminants, and optimizing food supply chain traceability.

Advanced Omics Technologies

Moving beyond Whole Genome Sequencing to embrace metagenomics, transcriptomics, and metabolomics for a holistic understanding of microbial communities and food authenticity.

Safety in Controlled Environments

Addressing unique food safety challenges and opportunities presented by modern indoor farming, vertical farms, and cellular agriculture, ensuring safety in novel production systems.



Microbiome & Foodborne Disease

A deeper understanding of the food microbiome and its interaction with human health to identify beneficial microorganisms, mitigate pathogens, and enhance food preservation.

These advancements are crucial for proactive food safety management in a rapidly evolving global food system.

For ASEAN Policymakers

Scientific-Social Balance

How can we balance rigorous scientific assessment with public values in GMO governance?

Meaningful Choice

What does genuine consumer choice look like in our diverse regional context?

Information Transparency

What GMO information should be publicly accessible, and through which channels?

Trust Building

How can we strengthen assessment protocols to enhance public confidence?

These questions form the foundation for developing more effective GMO governance frameworks across ASEAN.

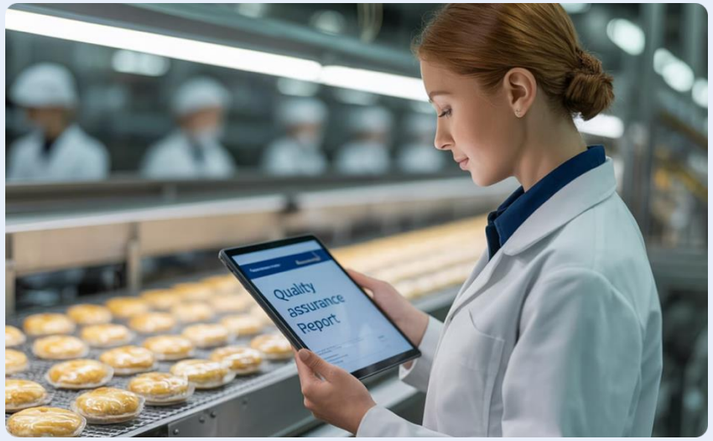
Key messages: Balancing innovation and food safety

Recognize the Potential

Leverage new scientific discoveries, technical innovations, and digital technologies to create more efficient and resilient food systems globally.

Ensure Equal Accessibility

Support countries in gaining access to scientific advances that enhance food production and safety, fostering sustainable and more equitable development.



Prioritize Safety

Promote responsible approaches and global policies for technology transfer, ensuring food safety remains the primary consideration.

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