

2025 Seminar on Safety Governance of Agricultural-Livestock and Fishery Products for Asian Countries

2025년 한-아세안 위생협력 ODA 세미나



360° Food Safety Management in Thailand: balancing Policies, Consumer Protection, and Trade

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Ministry of Food and
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01 Thailand food safety road map and food control system

Thailand Food Safety Road Map

01

Food Safety Road Map

Food safety standards

I. Raw materials + Inputs

- Registration & Inspection of pesticide, fertilizer, vet drug, etc.
- Border control of raw materials, foods, feeds

II. Farm level

Standard implementation & Certification (e.g. GAP/Organic)

III. Food Manufacturing level

Standard implementation & Certification (e.g. GMP/HACCP)

IV. Produce Product

- Product Registration/ Certification
- Product monitoring

V. Market (Domestic & Export)

- Control hygiene of market/retailer
- Consumer communication & Advertising control
- Inspection & Certification of product for export
- SPS/Trade negotiation

Traceability

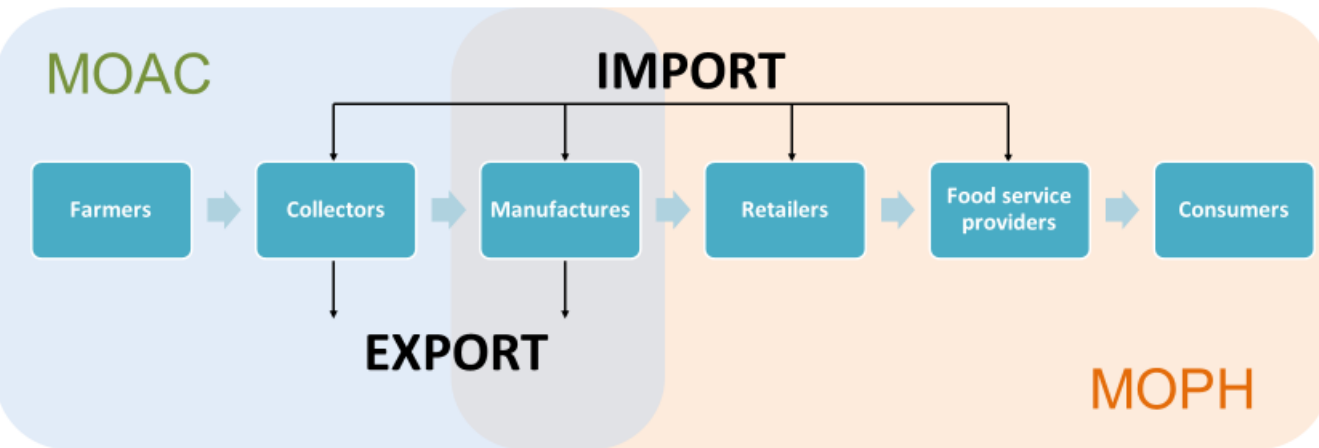
Thailand's Food Safety Roadmap focuses on:

- ❑ Aligning regulations with international standards and scientific risk assessment.
- ❑ Promoting innovation, transparency, and digital transformation in food safety management.
- ❑ Enhancing collaboration among government agencies, private sector, and research institutions.
- ❑ Supporting sustainable food production, traceability, and quality control.
- ❑ Developing future food sectors such as functional foods and health products.
- ❑ Improving consumer confidence through better monitoring, enforcement, and communication.

Thailand Food Control System

01

Food Control in Thailand



Agricultural Standards Act 2008

MOAC (production based)

- ❖ Food production, mainly primary production (safety + quality)
- ❖ Food trade, mainly export
- ❖ Food security
- ❖ ACFS, DLD, DOA, DOF, RD

Food Act 1979

MOPH (Health based)

- ❖ Consumer protection (safety + quality)
- ❖ Some parts of food production related to consumer protection
- ❖ Food trade, mainly import
- ❖ Domestic market, including food service
- ❖ FDA, DMS, DH

Thailand's food control system is governed by the Food Act B.E. 2522 (1979), which gives the governmental authority to regulate domestic production, imports, and exports of food products.

The system is primarily administered by the Food and Drug Administration (FDA) under the Ministry of Public Health (MOPH), with additional oversight by the Ministry of Agriculture and Cooperatives (MOAC) for farm-level production and export commodities.

The system covers:

- Food laws and regulations, including mandatory standards, labeling, and safety requirements.
- Pre-marketing and post-marketing controls, such as licensing, product registration, inspections and surveillance.
- Risk-based supervision, where the level of oversight depends on the food category and production scale.
- Coordination among multiple agencies to ensure food safety from farm to table, including rapid response to food safety incidents.

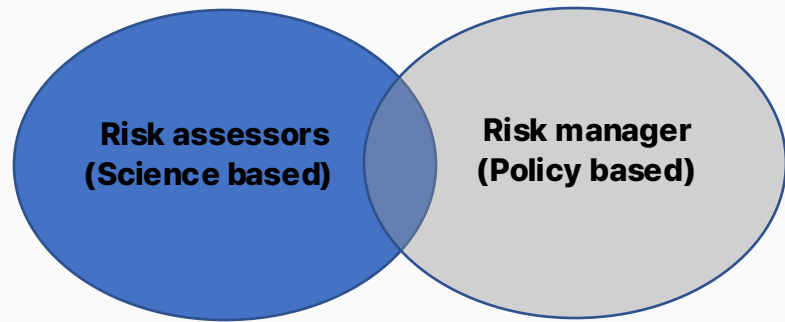
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02 Thailand's food management: integrating risk analysis for safety

Thailand's Food Management: Integrating Risk Analysis for Safety

02



Risk communication

**Thailand's food management system
integrates risk analysis**

Risk Analysis in Thailand's Food Management:

- ❑ **Risk Assessment:** Scientific evaluation of hazards related to food production, including chemical, biological, and physical risks, is conducted to identify potential threats to food safety and public health. This involves research on agricultural inputs, food processing, and environmental factors.
- ❑ **Risk Management:** Based on risk assessments, Thailand implements control measures such as standards, regulations, and inspection protocols. Agencies like the Food and Drug Administration (FDA) and Ministry of Agriculture enforce these measures to reduce or eliminate identified risks in food production and distribution.
- ❑ **Risk Communication:** Effective communication among government agencies, producers, processors, retailers, and consumers is vital. Thailand promotes transparency and education to raise awareness about food safety risks, enhancing consumer protection and compliance within the food industry.

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03 Thailand's food safety management balances policies, consumer protection and trade

Thailand's food safety management balances policies, consumer protection and trade

03

Thailand's food safety management balances policies, consumer protection, and trade

by implementing a comprehensive regulatory system that covers the entire food chain from farm to consumer, based on:

- ❑ A strong legal framework including the Food Act B.E. 2522 and other sector-specific laws, administered mainly by the Ministry of Public Health and the Ministry of Agriculture and Cooperatives. These laws establish food committees, licensing, inspection, and penalties to ensure compliance.
- ❑ The management system integrates risk-based supervision and scientific risk assessment to prioritize food safety controls, focusing on hazards that pose the greatest risk to consumers while supporting sustainable production and trade. This approach helps Thailand maintain high standards for both domestic food safety and international export requirements, facilitating market access and consumer confidence.
- ❑ Consumer protection is ensured through strict regulations on food hygiene, labeling, advertising, and monitoring of food premises, with active involvement of multiple agencies for inspection and outbreak response. At the same time, food safety management promotes trade competitiveness by encouraging voluntary adoption of internationally recognized standards such as HACCP, especially for export-oriented businesses.



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04 Updates and Revisions to the National Food Safety Regulatory System (Last 3 Years)

1. Inspection of domestic food (the last three years)

04

	Category	Inspection sample cases by Government	(The total number of non-compliant food(adulterated) samples under inspection)
2024	Food	Pre-marketing safety assessment* of starch and products (total 220 samples)	Non-compliant (18 or at 8.18%): benzoic acid (18)
	Agricultural & fisheries products	Survey cadmium in durians (total 11 samples)	All samples are complaint. MRL for Cadmium is at 0.05 mg/kg.
	Livestock products	Pre-marketing safety assessment of eggs (total 43 samples)	All samples are complaint.
2023	Food	Pre-marketing safety assessment of ready-to-cook Foods and ready-to-eat foods (total 149 samples)	Non-compliant (4 or at 2.68%): Microbiological contamination (<i>Bacillus</i> spp. And <i>Salmonella</i> spp.), additives (benzoic acid ,ascorbic acid)
	Agricultural and fisheries products	Survey drug residues in tilapia and giant river prawn (total 174 samples) tilapia = 99 giant river prawn = 77	All samples are complaint. Tilapia: not detectable. Giant river prawn: Oxytetracycline (only 2 samples) but not exceed Thai MRL (which is at 200 µg/kg).
	Livestock products	Monitoring of B-agonist at farms (total 8,952): Sampling: swine =8,476 (compliant: 99.59%) beef cattle =476 (compliant: 98.74%)	Non-compliant (10 or at 0.11%): Swine: 4 (0.05%), Beef cattle: 6 (1.28%)

*Food analysis has been conducted by Department of Medical Sciences (MOPH) for controlling the quality and safety of food before it is released to the market. Products that fail to meet quality or safety standards must be segregated or destroyed to prevent distribution to consumers.

1. Inspection of domestic food (the last three years)

	Category	Inspection sample cases by Government	(The total number of non-compliant food(adulterated) samples under inspection)
2022	Food	Pre-marketing safety assessment of bread (total 243 samples)	Non-compliant (2 or at 0.28%): ascorbic acid and benzoic acid
	Agricultural and fisheries products	Survey of banned pesticides in fresh fruits and vegetables (total 20 samples)	All samples are complaint: chlorpyrifos, paraquat and glyphosate were not detectable.
	Livestock products	Monitoring of B-agonist at farms** (total 13,642): Sampling: swine = 13,548 (compliant: 99.72%) beef cattle = 2,967 (compliant: 80.85%)	Non-compliant (56 or at 0.41%): swine: 38 (0.28%), beef cattle: 18 (23.68%)

** Department of Livestock Development controls the use of beta-agonists in livestock by monitoring these prohibited substances (e.g. salbutamol) at farm level. Animal feed is also sampled.

2. Policy and Legislation on Food safety(the last three years)

	Updated legal document	Improved policies and systems
2025	(Draft Ministry of Public Health Notification (MOPH), No. ... B.E. ..., entitled "Food Containing Pesticide Residues (Pesticide Residues in Food) (No. 5)" Note: SPS/TBT notification No. G/SPS/N/THA/781 (circulation for WTO members' comment on 21 January 2025)	1) The revision will apply a risk assessment framework focusing on both short-term (acute) and long-term (chronic) exposure, based on Thai food consumption data and information from field trials. 2) Revision of MRL/EMRL values in Appendices 2 and 4 of the Ministry of Public Health notification. 3) Revision of Default values according to Appendix 3 of the Ministry of Public Health notification. 4) Addition of the provision: "In cases other than those specified in Appendices 2 and 4 and Codex, pesticide residue levels in food must not exceed the MRL values set by ASEAN."

2. Policy and Legislation on Food safety(the last three years)

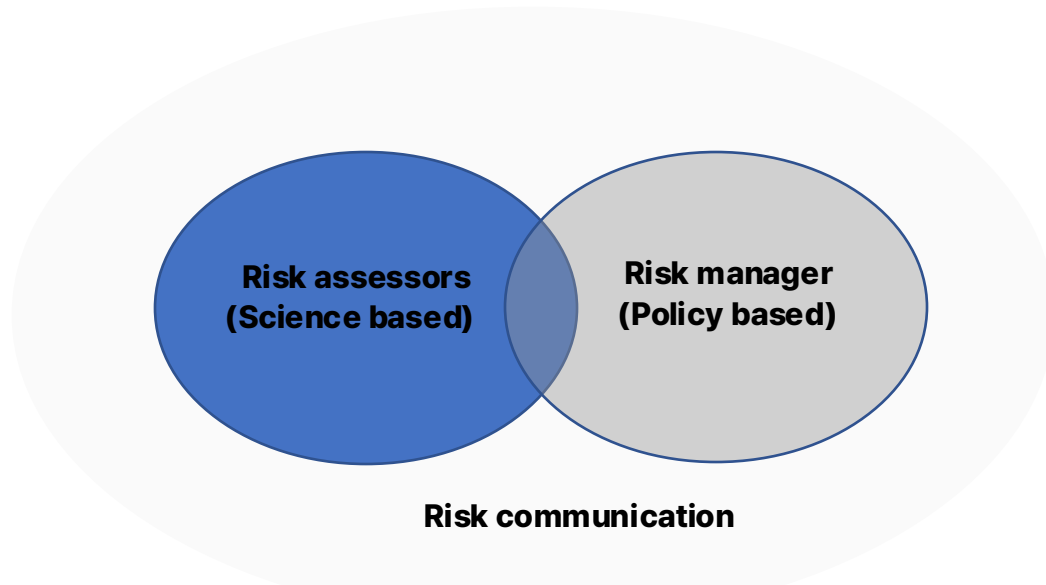
	Updated legal document	Improved policies and systems
2024	(Draft) Ministry of Public Health Notification (MOPH), No. ... B.E. ..., entitled "Import requirements and conditions for food with risk from Bovine Spongiform Encephalopathy" Note: The Ministry of Public Health Notification (No. 377) B.E. 2559 (2016) entitled "Re: Designation of Requirements and Conditions for Import Food with Risk from Bovine Spongiform Encephalopathy ", dated 11st July B.E. 2559 (2016) will be repealed.	1) BSE risk status of the exporting country are listed in the attachment of notification, which are based on the World Organisation for Animal Health (WOAH). 2) Certification of the safety of bovine meat products is required to show that there is no contamination with Specified Risk Materials (SRM). If official certificates cannot be issued by the competent authority in the exporting country, especially for health supplements. Alternative evidence demonstrating a Quality Assurance System equivalent to international standards may be used, e.g. Pharmaceutical Inspection Co-operation Scheme: PIC/S GMP

3. Examples of Thailand's food safety management system

04

Aflatoxins in peanut kernels:

Implementation of Thailand's food safety management system based on risk analysis



Key regulatory measures include:

- ❑ **Maximum Aflatoxin Limit:** The total aflatoxin level in dried peanut kernels must not exceed 20 µg/kg.
- ❑ **Control Measures for Producers:** Peanut producers, including shellers, collectors, packers, and warehouse operators, are required to implement control measures such as sorting out moldy, broken, or damaged kernels before distribution. These defective kernels must be clearly separated and not marketed for human consumption.
- ❑ **Testing Requirements:** Shelling manufacturers must test aflatoxin levels in each lot of peanut kernels prior to distribution. Collectors, packers, and warehouse operators must conduct random aflatoxin testing during storage, maintaining records for at least two years for inspection by authorities

Thailand regulates aflatoxin levels in peanuts primarily through the Thai Agricultural Standard (TAS 4702-2014), which is a mandatory standard, under the Agricultural Standards Act, B.E. 2551 (2008).



3. Examples of Thailand's food safety management system

04

Aflatoxins in peanut:

Implementation of Thailand's food safety management system based on risk analysis



แอฟลาทอกซิน
สารพิษจากเชื้อราในอาหารแห้ง

แอฟลาทอกซิน (Aflatoxin) สารก่อมะเร็งอันตรายชนิดหนึ่ง ซึ่งพบได้จากเชื้อราบางกลุ่มที่ปนเปื้อนในอาหาร โดยเฉพาะอาหารที่เก็บไว้นานและอับชื้น

อาหารที่พบแอฟลาทอกซิน
อาหารหรือผลิตภัณฑ์ที่ทำจากถั่วลิสง ข้าวโพด มันสำปะหลัง ผักและผลไม้แห้ง ปลาแห้ง กุ้งแห้ง เนื้อสัตว์แห้ง หัวหอมแห้ง กระเทียมแห้ง พริกแห้ง พริกไทย พริกป่น จา เม็ดมะม่วงหิมพานต์ และถั่วอื่น ๆ

อันตรายจากแอฟลาทอกซิน

บริโภคในปริมาณมาก ทำให้เกิดอาการอาเจียน ท้องเดิน

บริโภคเป็นเวลานานต่อเนื่อง จะเกิดพิษสะสม กระทั่งต่อการทำงานของตับ ทำให้ตับอักเสบเรื้อรัง และเสี่ยงเกิดมะเร็งตับ

วิธีการป้องกันสารแอฟลาทอกซิน

การเลือกซื้อ

- ต้องอยู่ในบรรจุภัณฑ์ที่สมบูรณ์
- มีมาตรฐานความปลอดภัยที่น่าเชื่อถือ
- อยู่ในสภาพใหม่ สะอาด
- ไม่มีเชื้อรา
- ไม่มีกลิ่นเหม็นอับ
- ไม่ควรซื้อมากเกินครั้งละมาก ๆ

การเก็บรักษา

- ควรนำอาหารหรือวัตถุดิบแห้งไปตากแดดจัด ๆ
- เก็บในที่แห้งสนิท ไม่อับชื้น
- ไม่ควรเก็บไว้นานเกินไป

หากอาหารมีราขึ้น ควรทิ้งให้หมด ไม่ควรตัดทิ้งเฉพาะบางส่วน

Key regulatory measures include:

- ❑ **Certification for Export:** Exporters must provide evidence that peanut kernels are produced by licensed and certified producers complying with the standard and accompanied by test results confirming aflatoxin levels are within the permitted limit.
- ❑ **Good Manufacturing Practices:** Good manufacturing practices and international guidelines such as the Codex Code of Practice for Prevention and Reduction of Aflatoxin Contamination in Peanuts ensure comprehensive control throughout the supply chain.
- ❑ **Additional Food Safety Regulations:** The Thai Food and Drug Administration also enforces maximum aflatoxin levels (20 µg/kg) in peanut oil and related food products under the Food Act to further protect consumer health.
- ❑ **Risk communication:** Raising awareness about aflatoxin hazards and control measures for all stakeholders reduce exposure and protect consumer health while supporting compliance with national and international food safety standards.
- ❑ **Thailand Rapid Alert System for Food and Feed (THRASFF):** Enables timely notification and coordinated response among government authorities, producers, importers, and exporters prevent unsafe products from reaching consumers.



สำนักงานคณะกรรมการอาหารและยา
Food and Drug Administration

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ผลิตโดย กองพัฒนาศักยภาพผู้บริโภค



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