Workshop & Roundtable Discussion on Food Safety and Standards

March 4-5, 2014 | Sedona Hotel, Yangon, Myanmar

Organizers

ILSI International Life Sciences Institute Japan

ILSI Southeast Asia Region

Co-organizer

Ministry of Health Myanmar

Supported by

Ministry of Agriculture, Forestry and Fisheries, Japan

Workshop on
Food Safety and Standards

PROGRAM
March 4, 2014

8:00 - 9:00am	Registration
Opening Session	
9:00 - 9:30am	Introduction & Opening Session
	Opening Remarks Mr. Hiroshi Kono, Export Promotion Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries, Japan **Welcoming Speech** Dr. Zaw Win, Food and Drug Administration, Ministry of Health, Myanmar **Introduction and Background** Mr. Hiroaki Hamano, International Life Sciences Institute (ILSI) Japan, Japan
Session 1	**International and Regional Food Safety Framework and Standards**
9:30 - 10:00am	**International Food Standards: Codex Alimentarius and Thailand's Experience** Dr. Namaporn Attaviroj, National Bureau of Agricultural Commodity and Food Standards (ACFS), Thailand
10:00 - 10:30am	**Regulatory Frameworks and Key Challenges of Food Safety in ASEAN Countries** Prof. Dedi Fardiaz, Bogor Agricultural University, Indonesia
10:30 - 11:00am	Morning Tea Break
Session 2	**Food Safety in ASEAN**
11:00 - 11:30am	**Risk Assessment of Food Additives** Prof. Songsak Srianujata, Institute of Nutrition, Mahidol University, Thailand
11:30 - 12:00pm	**Import & Export Control for Food Safety** Ms. Keiko Yamamoto, Department of Food Safety, Pharmaceutical and Food Safety Bureau, Ministry of Health, Labour and Welfare (MHLW), Japan
12:00 - 12:30pm	**Food Safety and Quality Improvement for SMEs – Challenges and Thai Experience** Ms. Chitra Settaudom, Food and Drug Administration, Thailand
12:30 - 2:00pm	Lunch
Session 3	**Communication Strategies for Food Safety and Nutrition Education**
2:00 - 2:30pm	**Risk Communication Strategy for Food Safety** Mr. Halim Nababan, National Agency of Drug and Food Control, Indonesia
2:30 - 3:00pm	**Perspective of Food Labeling Systems in Japan** Mr. Mineo Ando, Food Labeling Division, Consumer Affairs Agency (CAA), Japan
3:00 - 4:00pm	Discussion
4:00pm	Closing

MAFF

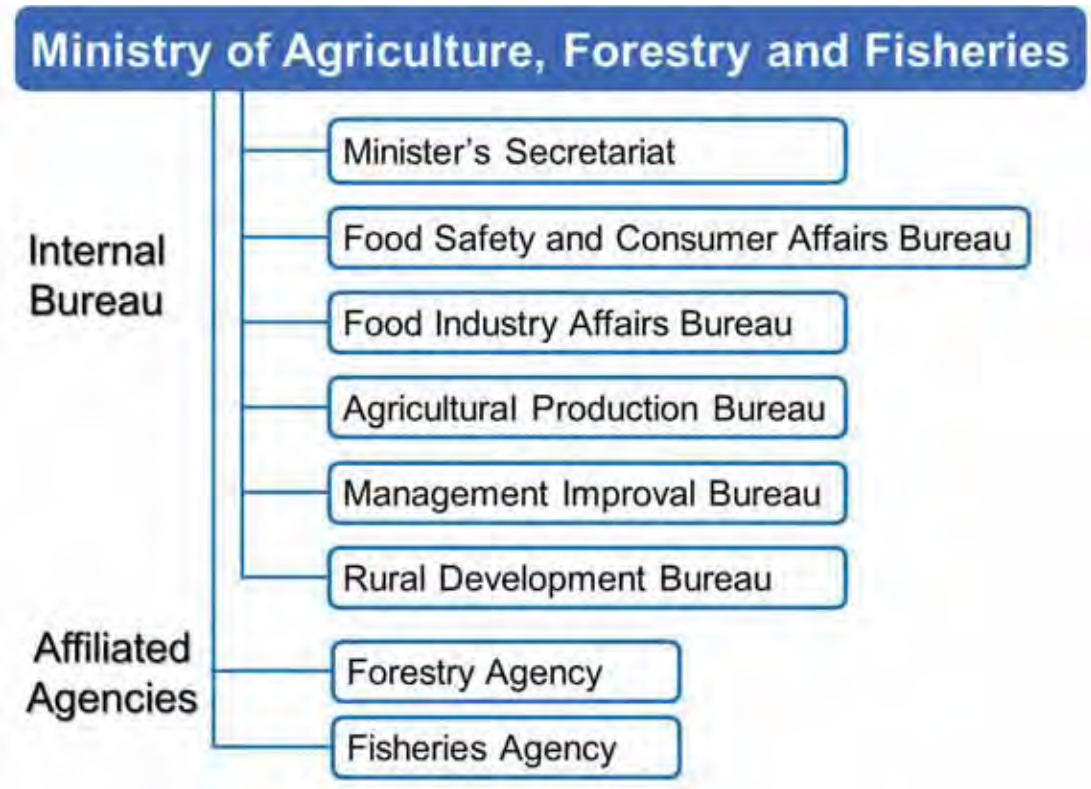
Workshop and Roundtable discussion on Information on Food Safety and Standards

Hiroshi KONO
Export Promotion Division
Food Industry Affairs Bureau
Ministry of Agriculture, Forestry and Fisheries

Mar. 4, 2014

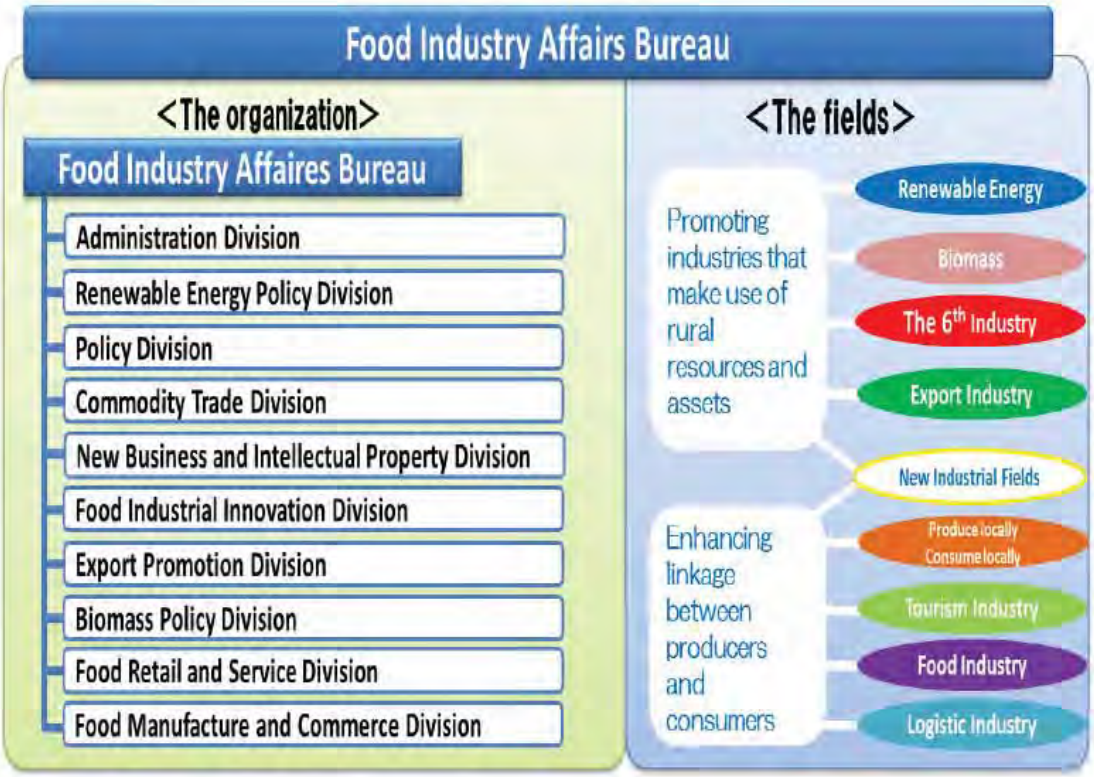
Organization of MAFF

MAFF



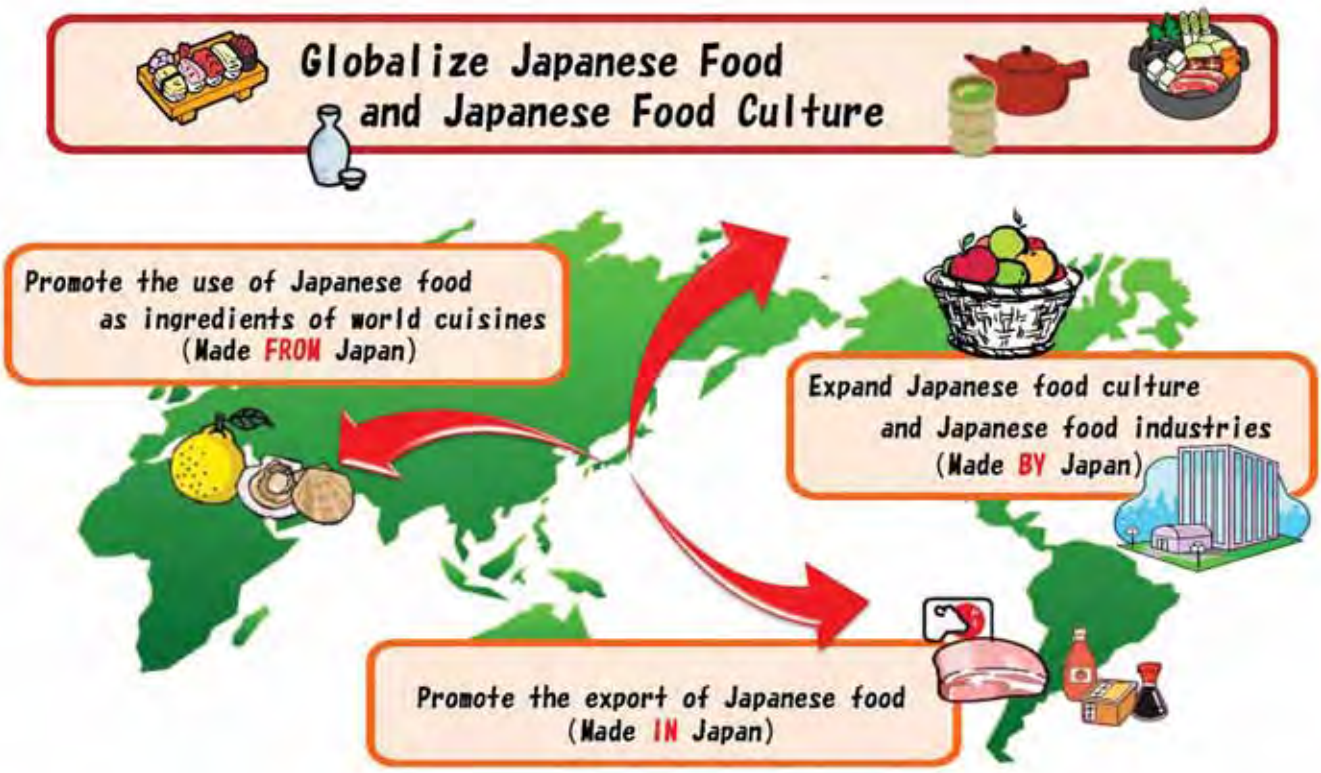
Organization of Food Affairs Bureau

MAFF



Our Policy

MAFF



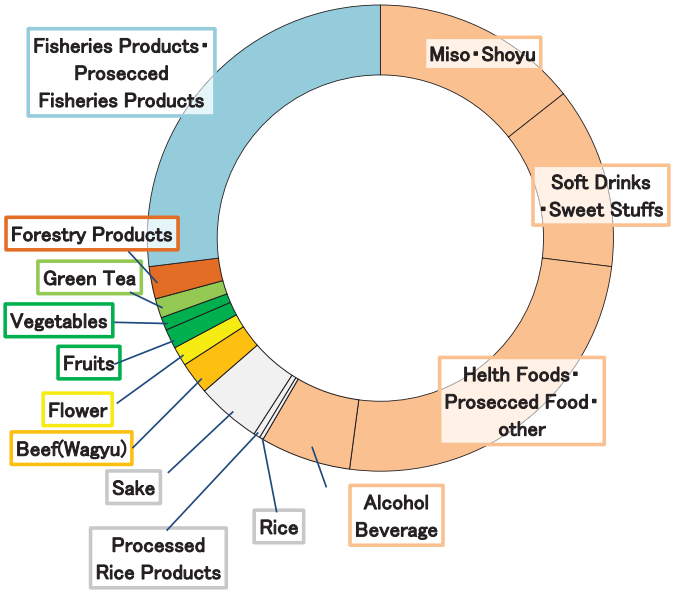
Washoku, Listed As UNESCO's Intangible Cultural Heritage

MAFF

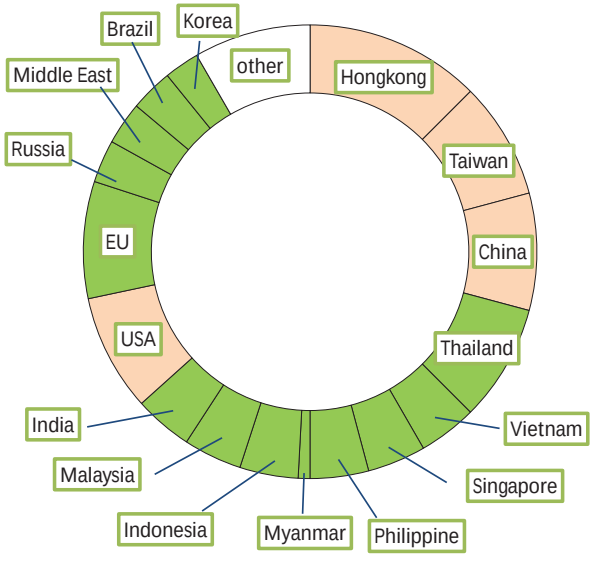
Our Target in 2020

MAFF

Total Amount of Export 1,000 bn.¥



By Item



By Country

History of This Workshop

MAFF

2010	**<1st > Mar./2010 @Tokyo** >food standard	endorsed	**2nd Meeting of ASEAN+3 May/2010 @Tokyo**
2011	**<2nd > Mar./2011 @Bangkok** >analysis method	endorsed	**11th Meeting of AMAF+3 Nov./2011 @Jakarta**
2012	**<3rd > Feb./2012 @Jakarta** >food additive, HALAL	endorsed	**12th Meeting of AMAF+3 Oct./2012 @Bangkok**
2013	**<4th> Feb./2013 @Tokyo** >food additive	endorsed	**13th Meeting of AMAF+3 Sep./2013 @Kuala Lumpur**

ILSI Japan organizes this workshop under the sponsorship of the Japanese Government

Expectations For This Workshop

MAFF

- **Enhancement of food safety**
- **Facilitation of food trade**
- **Expansion of food business opportunity**

MAFF

Thank you for your attention

Workshop and Roundtable Discussion on Food Safety and Standards

Introduction and Background

1. What's ILSI？
2. ILSI Japan / MAFF Project
3. Workshop and Roundtable Discussion on Food Safety and Standards

2014.03.04, Yangon, Myanmar

Hiroaki Hamano, ILSI Japan

What's ILSI?

International Life Sciences Institute（ILSI）

ILSI, established in 1978, is a nonprofit, worldwide organization whose mission is to provide science that improves public health and well-being.

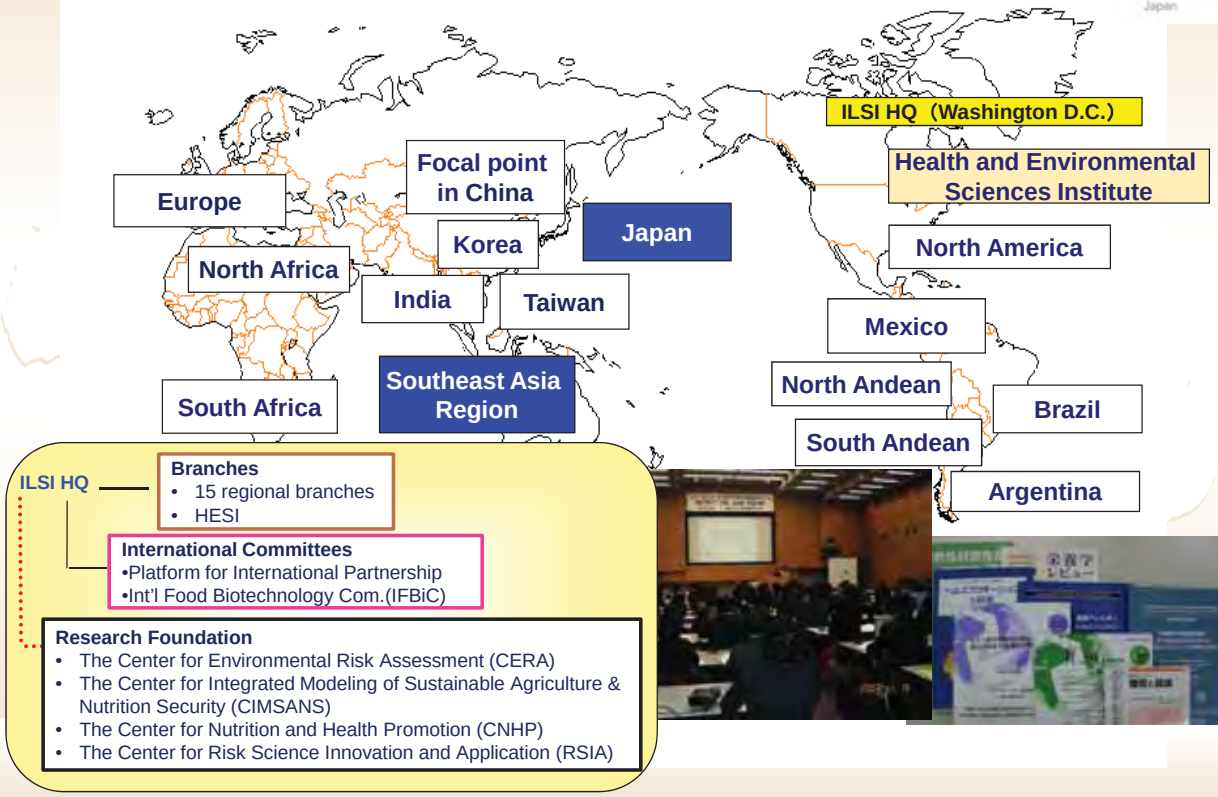
ILSI achieves this mission by fostering collaboration among experts from academia, government, and industry on conducting, gathering, summarizing, and disseminating science.

ILSI's activities focus primarily on nutrition and health promotion; food safety; risk assessment; and the environment.

About ILSI Japan:

ILSI Japan, established in 1981, is a nonprofit organization and branch of the ILSI global research organization. ILSI Japan plays an active role in helping its mission to generate and disseminate scientific information that is relevant both locally within Japan, regionally in Asia, and globally all over the world.

International Life Sciences Institute



JAPAN	64
Europe	63
(HESI)	(47)
North Andean	46
Brasil	34
North America	34
Focal point in China	30
Southeast Asia Region	30
Korea	27
India	27
Taiwan	24
Mexico	21
Argentina	14
South Africa	8
South Andean	8
North Africa	7
TOTAL	484(437)

Regional Leadership

ILSI Japan is a leader in bringing health solutions to many parts of Asia.

Through its Center for Health Promotion (Project PAN, Project IDEA, and Project SWAN), ILSI Japan has built and maintained effective partnerships with local institutions and governments in Cambodia, India, The Philippines, and Vietnam which ensures health programs are culturally appropriate and locally sustainable.

ILSI Japan / MAFF Project

Overall Objectives:

- To investigate Legal Framework on Foods and Food Additives in Asian Countries for the purpose of supporting food industry to expand overseas businesses in the fast-growing markets of emerging countries
- To facilitate harmonization of food regulations /standards and fair trade, and further to help secure food safety within Asian region, by disseminating and sharing those results investigated

ILSI Japan / MAFF Project

Funded by Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan

1st Term: June 2009 – March 2010
- Legal Framework on Foods;
- Commodity Food Standards for Instant Noodles, Carbonated Soft Drinks, Prepared Frozen Foods and Cow's Milk;
- Codex, Japan, Korea, China, Malaysia, Singapore, the Philippines

2nd Term: June 2010 – March 2011
+ Methods of Analysis;
+ Indonesia, Thailand and Vietnam

3rd Term: July 2011 – March 2012
+ Legal Framework on Food Additives;
All Countries listed in the above

4th Term: August 2012 – March 2013
+ India, Bangladesh, Nepal and Sri Lanka;
All Items Investigated in the above;
Web-search System of the Information Collected

Fiscal Year	Investigation Contents	Countries and Organization Investigated	Workshop / International Conference	Date and Place Held
2009 (I)	Legal Framework of Foods; Specification & Standards of Instant Noodles, Carbonated Soft Drinks, and Prepared Frozen Foods	Codex, Japan, Korea, China, Malaysia, Singapore, and Philippines	"Investigation of Commodity Food Standards and Methods of Analysis in Asia"	March 29, 2010, Tokyo Japan
2010 (II)	Plus Cow's Milk, and Methods of Analysis in those Standards	Plus Indonesia, Thailand, and Vietnam	"Sharing Information on Food Standards and Resource and Environmental Conservation in Asia Pacific"	March 4, 2011, Bangkok Thailand
2011 (III)	Plus Legal Framework of Food Additives; Conditions of Use, and Halal System	Same as all the above	"Sharing Information on Food Standards in Asia"	February 21, 2012, Jakarta Indonesia
2012 (IV)	Same as all the above	Plus India, Bangladesh, Nepal, and Sri Lanka	"Regulatory Framework and Case Studies of Foods and Food Additives in India, Bangladesh, Nepal, and Sri Lanka"	February 22, 2013, Tokyo

The 5th ILSI Japan / MAFF Project

5th Term (September 2013 – March 2014):

- Legal Framework of Foods, Commodity Food Standards, Methods of Analysis, Food Additives, and "Functional Foods (incl. Nutrition Labelling and Nutrition/Health Claims, possibly Supplements)"
- All countries investigated and further expand to Brunei, Cambodia, Lao, Myanmar and Taiwan
- "Workshop and Roundtable Discussions on Food Safety and Standards" :

  March 4 & 5, 2014, Sedona Hotel in Yangon, Myanmar

Organization / Region / Country		Legal Framework	Food Standards & Specifications and Methods of Analysis	Conditions for Use of Food Additives	Functional Foods (incl. Nutrition Labelling and Nutrition/Health Claims)
Codex		2009	2009, 2010	2011	2013
Japan					
Korea					
China					
Taiwan		2013			
ASEAN	Malaysia	2009	2009, 2010	2011	
	The Philippines				
	Singapore				
	Indonesia	2010	2010		
	Thailand				
	Vietnam				
	Brunei	2013			
	Cambodia				
	Lao				
	Myanmar				
India		2012	2012	2012	
Bangladesh					
Nepal					
Sri Lanka					

Commodity Food Standards in Japan

Food Sanitation Act

- Standards for Foodstuffs and Additives
  - 22 Specific Food Items
- Milk and Milk Products Concerning Composition Standards
  - 35 Milk and milk products

Ministry of Health, Labour and Welfare (MHLW)

Health Promotion Act

- Food with Health Claims
  - -Nutrient Function Claims
  - -Foods for Specified Health Uses (FOSHU)
- Food for Special Dietary Uses
- Nutrition Labeling

CAA consulted by MHLW

- Name of the Standard
- Scope
- Description
- Essential Composition and Quality Factor
- Food Additives
- Contaminants
- Hygiene
- Weights and Measures
- Labelling
- Methods of Analysis and Sampling

JAS*1 Law

- Quality Labelling Standard for Processed Foods
  - 48 Commodity Food Items
- JAS Standard*2
  - 55 Commodity Food Items

Ministry of Agriculture, Forestry and Fisheries (MAFF)

Measurement Act

Ministry of Economy, Trade and Industry

Act Against Unjustifiable Premiums and Misleading Representations

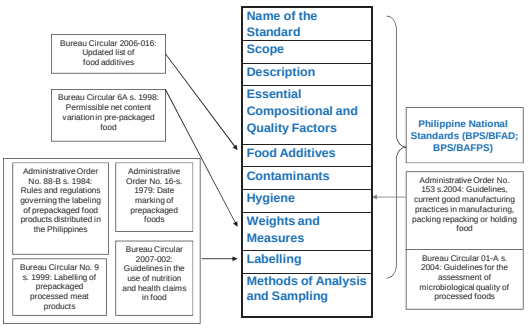
- Fair Competition Code
  - 45 Food & Liquor Items

Consumer Affairs Agency (CAA)

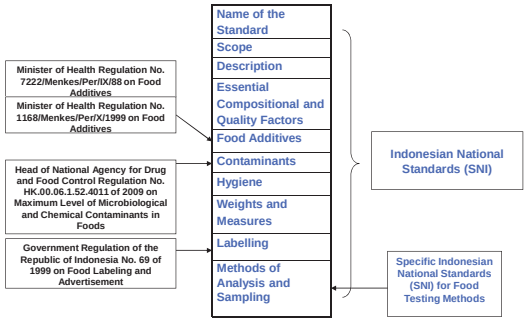
Consumer Affairs Agency*3 covers **Labelling Provision of FSA and JAS (New Food Labelling Act, 2013)**

*1 Law Concerning Standization and Proper Labelling of Agricultural and Forest Products
*2 voluntary (other than organic foods) standard with the certification system to attach the JAS Mark
*3 New governmental organization started in September 2009

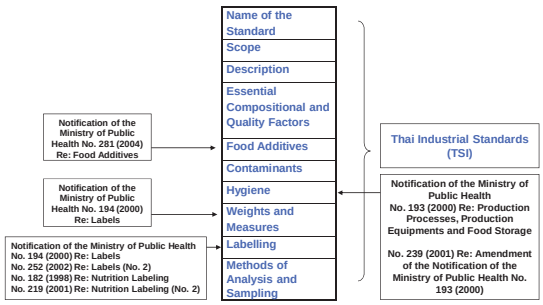
Philippines Commodity Standards



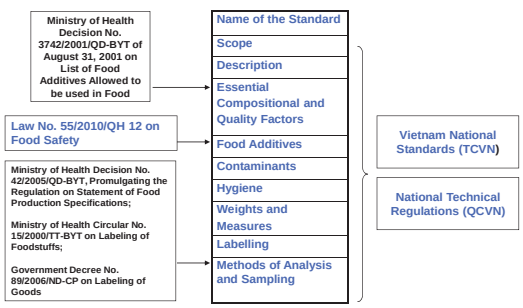
Indonesia Commodity Standards



Thailand Commodity Standards



Vietnam Commodity Standards



Investigation of Regulations on Nutrition Labelling and Nutrition / Health Claims

Codex STANs/GLs on Nutrition Labelling/Health Claims

- **General Standard for the Labelling of Prepackaged Foods** (CODEX STAN 1-1985)
  - Adopted1985, Last amended 2010
  - Scope, Definitions, General Principles, Mandatory Labelling, Additional Mandatory Requirements, Exenmptions/Optional Labelling
- **General Guidelines on Claims** (CAC/GL 1-1979)
  - Adopted1979, Revised1991, Amended 2009
  - Scope & General Principles, Definition, Prohibited/Misleading/Conditional Claims
- **Guidelines on Nutrition Labelling** (CAC/GL 2-1985)
  - Adopted1985, Last revised2011, Last amended2013, Annex (V&M NRVs) adopted2011, Revised2013
  - Scope, Definitions, Nutrient Declaration (NRVs), Legibility, Suppl. Nutrition Info.
- **Guidelines for Use of Nutrition and Health Claims** (CAC/GL 23-1997)
  - Adopted1997, Revised2004, Last amended2013, Annex (Health Claims) adopted2009
  - Scope, Definitions, Nutrition Labelling, Nutrition Claims, Nutrient Content Claims (Low/Free, Source/High), Comparative Claims, Non-addition Claims, Health Claims, Claims related to Dietary Guidelines or Health Claims
- **Guidelines for Vitamin and Mineral Food Supplements** (CAC/GL 55-2005)
  - Adopted2005; Preamble, Scope, Definitions, Composition, Packaging, Labelling

Investigation Format for Nutrition Labelling Regulations-1.1

Nutrition Labelling	Codex	Japan
Relevant Laws/Regulations	CODEX STAN 1-1985 CAC/GL 2-1985	Food Sanitation Act (1947) Health Promotion Act (2002) Food Labelling Act (2013)
Nutrient Reference Values (Definitions, NRVs-R/-NCD)	CAC/GL 2-1985 Article 2.5	Definitions for NRVs List of NRVs
Nutrient Declaration (Application: Mandatory or Voluntary)	Article 3.1 Mandatory	Voluntary, Mandatory when nutrition/health claims made
Food Categories Applied	All Prepackaged Foods	All prepackaged foods
Exemptions (Food Categories)	National Authority	Not applicable
(Size of Food Business Operators)	National Authority	Not applicable
Listing of Nutrients (Nutrients, Order)	Article 3.2	Energy, Protein, Fat, Carbohydrate (Available Carbohydrate and D.F.) and Sodium
Optional Ingredients	Article 3.2.2	Any other nutritional constituent

Investigation Format for Nutrition Labelling Regulations-1.2

Nutrition Labelling	Codex	Japan
Presentation of Nutrient Content (Expression per 100g/ml or serving or package)	Article 3.4	Per 100g/ml, Per package
(Expression in Exact values or Ranges)		Exact values / Range
(Analysis or Calculation Basis)		Analysis Calculation basis allowed
Use of Food Composition Table/ Database for Presentation of Nutrients		Allowed
Food Composition Table/ Database for Presentation of Nutrients		Japanese Food Composition Table
Calculation of Nutrients (Energy/Protein/Carbohydrate/Fat)	Article 3.3	Identical to Codex Guidelines
Tolerances and Compliances (Tolerance Limits)	Article 3.5	Values plus/minus 20%, Specific tolerations defined for certain nutrients, such as V.C
Specific Features of Presentation (Format, %NRV Labelling)	Article 3.4.4, 4.2	Tabular format No %NRV labelling applied
(Front of Package Labelling, FOP)	Article 3.4.4, 4.2	No FOP labelling applied

Investigation Format for Nutrition Labelling Regulations-1.3

Nutrition Labelling	Codex	Japan
Administrations/Compliances for Nutrition Labelling (Governing Authorities/Agencies)	Competent Authorities	Consumer Affairs Agency Local Governments
Inspections and Penalties		Periodical inspections Penalties defined

Investigation Format for Nutrition Claims Regulations-2

Nutrition Claims	Codex	Japan
Relevant Laws/Regulations	CODEX STAN 1-1985 CAC/GL 1-1979 CAC/GL 23-1997	Food Sanitation Act (1947) Health Promotion Act (2002) Food Labelling Act (2013)
Definitions (Nutrient Content/Comparative Claims)	CAC/GL 23-1997 Article 2	Identical to Codex Guidelines
Nutrient Content Claims	Article 5	Conditions defined
Nutrient Comparative Claims	Article 6	Conditions defined
Non-addition Claims (Non-addition of Sugars/Sodium Salts)	Article 7	Conditions defined
Administrations/Compliances for Nutrition Claims (Governing Authorities/ Agencies)	Competent Authorities	Consumer Affairs Agency Local Governments
Inspections and Penalties		Periodical Inspections Penalties defined

Investigation Format for Health Claims Regulations-3.1

Health Claims	Codex	Japan
Relevant Laws/Regulations	CODEX STAN 1-1985 CAC/GL 1-1979 CAC/GL 23-1997	Food Sanitation Act (1947) Health Promotion Act (2002) Food Labelling Act (2013)
Definitions (Collective Name of Foods with Health Claims, if applicable)	Article 2	Foods with Health Claims (FHC)
Nutrient Function Claims (Collective Name of the Foods, if applicable)	Article 2	Foods with Nutrient Function Claims (FNFC)*, applicable to all prepackaged foods including Tablet or Capsule type of products
Other Function Claims (Collective Name of the Foods, if applicable)	Article 2	Foods for Specified Health Uses (FOSHU)**, applicable to all prepackaged foods
Reduction of Disease Risk Claims (Collective Name of Foods Applied)	Article 2	Foods for Specified Health Uses (FOSHU)***, applicable to all prepackaged foods
Types of Approval/Certification (Standardized/ Pre-authorized Claims)	Article 8.1.2, 8.2	FNFC: Pre-authorized Claims/Self-determined
(Food Product/Constituent Specific Approval)	Article 8.1.2, 8.2	FOSHU: Product Specific

* List of Nutrient Function Claims Approved/Authorized
** List of Other Function Claims Approved/Authorized
*** List of Reduction of Disease Risk Claims Approved/Authorized

Investigation Format for Health Claims Regulations-3.2

Health Claims	Codex	Japan
Scientific Substantiation of Health Claims	Article 8,	Documentation required****
Process for the Substantiation (Organizational Systems, Governing Authority/Agency/ Commission)	Annex Article 3.1	Consumer Affairs Agency→ Consumer Commission (substantiation)→ Food Safety Commission (safety assessment)→ Ministry of Health, Labour and Welfare → CAA
Criteria for the Substantiation and/or Consideration of the Evidence	Annex Article 3.2, 3.3	Documentation required****
Specific Safety Concerns	Annex Article 4	Documentation required****
Re-evaluation	Annex Article 5	Not Specified
Product Quality Concerns (GMP, ISO, HACCP or Other Measures)		Documentation required****
Adverse Event Reporting System (Mandatory/Voluntary)		Not Specified
Administrations/Compliances for Health Claims (Governing Authorities/ Agencies)	Competent Authorities	Consumer Affairs Agency Local Governments
Inspections and Penalties		Periodical Inspections Penalties defined

**** List of Documentation Required

Investigation Format for Regulations for Supplements-3.3

Health Claims	Codex	Japan
Relevant Laws/Regulations for (Dietary/Food/Health) Supplements	CAC/GL 55-2005	Not specifically defined, Treated in the same manner as foods
Definitions (Dietary Supplements, and/or Food Supplements, and/or Health Supplements)	Article 2	Not specifically defined Treated in the same manner as foods
Administrations/Compliances for the Supplements (Governing Authorities/Agencies)		Not specifically defined Treated in the same manner as foods

Investigation of Nutrition Labelling and Supplements

Nutrition Labelling	Brunei	Cambodia
Nutrient Declaration (Application: Mandatory or Voluntary)	**Voluntary,** except - Certain flour, bakery and cereal products; - Infant formulae; - Special purpose foods	**Voluntary,** Mandatory for all prepackaged foods for which nutrition or health claims, as defined in the Guidelines for Use of Nutrition and Health Claims (CAC/GL 23-1997), are made.
Listing of Nutrients (Nutrients, Order)	- Energy in kcal, KJ or both - Protein (g) - Fat (g) - Carbohydrate (g) - Other nutrients for which nutrition claims are made or any other nutrients to be declared	- Energy value, - Protein, - Available carbohydrate (i.e. dietary carbohydrate excluding dietary fibre), - Fat, - Saturated fat, - Sodium and - Total sugars; - The amount of any other nutrient for which a nutrition or health claim is made
Dietary, Food, and/or Health Supplements	Not specified	Not specified

Investigation of Nutrition Labelling and Supplements

Nutrition Labelling	Indonesia	Lao
Nutrient Declaration (Application: Mandatory or Voluntary)	**Voluntary,** Mandatory only for food: a. accompanied by statement that the food contains vitamin, mineral, and other nutrients added to it; or b. required by virtue of the provisions in applicable rules and regulations in the field of food quality any food nutrition, shall be enriched with vitamin, mineral and or any other nutrients.	**Voluntary,** Mandatory for foods which nutrition claim are made.
Listing of Nutrients (Nutrients, Order)	- Energy - Fat. - Protein. - Carbohydrate(including dietary fibre) - Sodium	- Energy, - Protein, - Fat , - Carbohydrate, - Vitamins and Minerals when claims are made
Dietary, Food, and/or Health Supplements	Food supplements are products intended to supplement the nutritional needs of food, containing one or more ingredients such as vitamins, minerals, amino acids, or other materials (plant or not plant) which have nutritional value and/or physiological effects in concentrated amounts.	Not specified

Investigation of Nutrition Labelling and Supplements

Nutrition Labelling	Malaysia	Myanmar
Nutrient Declaration (Application: Mandatory or Voluntary)	**Mandatory** for a wide variety of processed and packaged foods.	Not specified (**Voluntary**)
Listing of Nutrients (Nutrients, Order)	- Energy - Protein, - Carbohydrate (excluding dietary fibre), - Fat, - Total sugars (for ready-to-drink beverages only), - Nutrients as claimed	Not specified
Dietary, Food, and/or Health Supplements	Not Applicable Claim for dietary/health supplements is regulated by the National Pharmaceutical Control Bureau, Ministry of Health Malaysia	Not specified

Investigation of Nutrition Labelling

Nutrition Labelling	Philippines	Singapore
Nutrient Declaration (Application: Mandatory or Voluntary)	**Voluntary,** Mandatory for -enriched and fortified foods -bottled water as "mineral water" -with nutrition and health claims	**Voluntary,** Mandatory when a nutrition claim is made, and for all prepackaged edible fats and oils (which is in the group of "Edible Fats and Oils" under Regulation 78 to 92 of Food Regulations) for sale or for use as an ingredient in the preparation of foods.
Listing of Nutrients (Nutrients, Order)	- Energy, - Protein, - Fat, - Carbohydrate (excluding dietary fibre)	- Energy, - Carbohydrate, - Protein, - Fat, - Nutrients as claimed - For products carrying the Healthier Choice Symbol, administered by Health Promotion Board, it is compulsory to declare 9 nutrients (energy, protein , fat, saturated fat, trans fat, cholesterol, carbohydrate, dietary fibre, sodium)

Investigation of Supplements

Nutrition Labelling	Philippines	Singapore
Dietary, Food, and/or Health Supplements	A processed food product intended to supplement the diet that bears or contains one or more of the following dietary ingredients: vitamin, mineral, amino acid, herb, or other dietary substance of botanical, animal, artificial or natural origin to increase the total daily intake in amounts conforming to the latest Philippine Recommended Energy and Nutrient Intakes or internationally agreed minimum daily requirements. It is usually in the form of capsules, tablets, liquid, gels, powders or pills and is not represented for use as a conventional food or as the sole item of a meal or diet or a replacement for drugs and medicines.	There is currently no legal definition for the terms "dietary/food/health supplement" in Singapore. However, the Health Sciences Authority has a working definition for health supplements at the 'Guidelines for Health Supplements' under http://www.hsa.gov.sg/publish/hsaportal/en/health_products_regulation/complementary_medicines/supplements.html

Investigation of Nutrition Labelling

Nutrition Labelling	Thailand	Vietnam
Nutrient Declaration (Application: Mandatory or Voluntary)	**Voluntary,** Mandatory for 1) foods include - foods with nutrition claim - for enriched/fortified foods - foods for special dietary use 2) some kind of snack foods (potato chip, popcorn, extruded snack, biscuit/cracker, and filled wafer)	**Voluntary,** Mandatory for functional foods, food supplements, fortified foods and food for children aged 0-36 months (Food Safety Law, Decree No. 38/2012/ND-CP of the Government dated 25 Apr 2012, Section VI: Article 18.2)
Listing of Nutrients (Nutrients, Order)	1) Fully format shall declare: - 4 core nutrients (E, C, P & F) and - Saturated fat, -Cholesterol, - Dietary fibre, -Sugar, - Sodium, - Vitamin A, -Vitamin B1, -V.B2 - Calcium, - Iron, - Nutrient as claimed 2) Simplified format shall declare - 4 core nutrients (E, C, P & F) - Sugar, - Sodium, - Nutrient as claimed	- Energy, - Carbohydrate, - Protein, - Fat

Investigation of Supplements

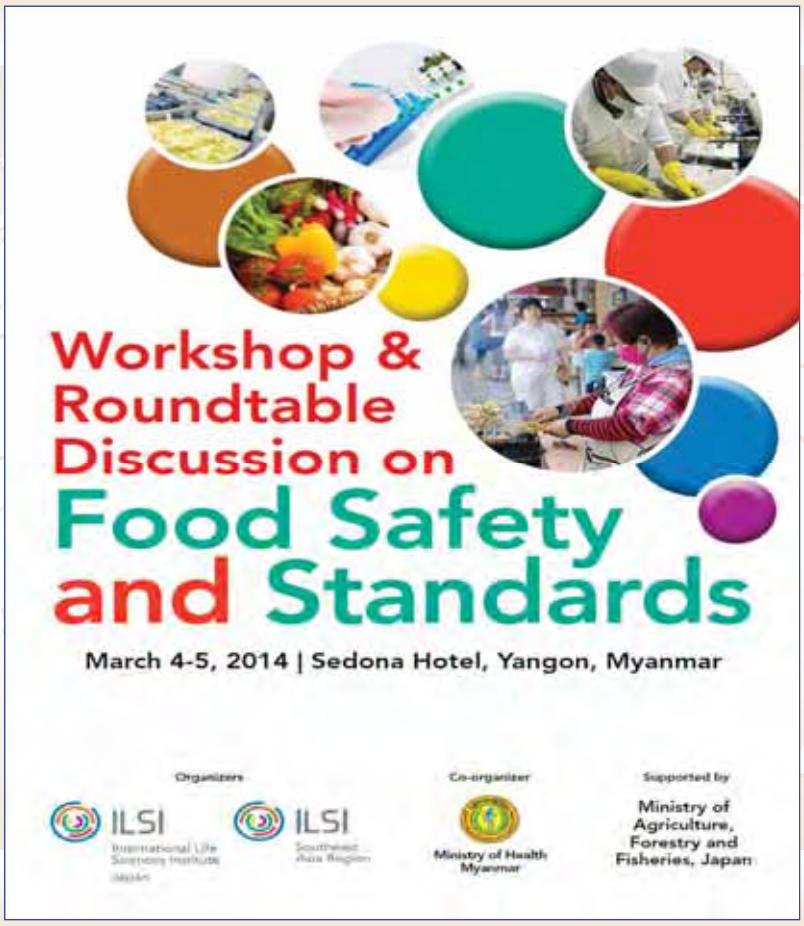
Nutrition Labelling	Thailand	Vietnam
Dietary, Food, and/or Health Supplements	Food supplement means products taken for consume other than conventional foods which contain nutrients or other substances as ingredients, are in forms of tablets, capsules, powders, flakes, liquids or others ; which are not conventional foods for consumers who expect for benefit of health promotion.	Food Safety Law No. 55/2010/QH12 dated 17 Jun 2010.

Workshop and Roundtable Discussion on Food Safety and Standards
March 4-5, 2014, Yangon, Myanmar

Organizer: ILSI Japan and ILSI SEAR
Co-organizer: FDA, Myanmar
Sponsor: Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan

Background: Cambodia, Lao, Myanmar and Vietnam (CLMV) of ASEAN are rapidly developing with more open economies. In view of this, improvements to food safety control systems and standards are increasingly important to ensure fair practices in food trade and to protect public health. The workshop and roundtable discussion therefore aims to build capacity in food safety control systems among CLMV countries and identify further needs for the future.

Objectives:
(1) Share information on international and regional (ASEAN) food safety framework and standards with CLMV countries
(2) Share best practices on risk communication and consumer education in relation to food safety issues with stakeholders from CLMV countries
(3) Discuss and identify capacity gaps in food safety control systems and food safety standardization systems for CLMV countries



PROGRAM
March 4, 2014

8:00 - 9:00am	Registration
Opening Session	
9:00 - 9:30am	Introduction & Opening Session
	Opening Remarks Mr. Hiroshi Kono, Export Promotion Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries, Japan
	Welcoming Speech Dr. Zaw Win, Food and Drug Administration, Ministry of Health, Myanmar
	Introduction and Background Mr. Hiroaki Hamuro, International Life Sciences Institute (ILSI) Japan, Japan
Session 1	**International and Regional Food Safety Framework and Standards**
9:30 - 10:00am	**International Food Standards: Codex Alimentarius and Thailand's Experience** Dr. Namaporn Attawiro, National Bureau of Agricultural Commodity and Food Standards (ACFS), Thailand
10:00 - 10:30am	**Regulatory Frameworks and Key Challenges of Food Safety in ASEAN Countries** Prof. Dedi Fardiaz, Bogor Agricultural University, Indonesia
10:30 - 11:00am	Morning Tea Break
Session 2	**Food Safety in ASEAN**
11:00 - 11:30am	**Risk Assessment of Food Additives** Prof. Songsak Srianujata, Institute of Nutrition, Mahidol University, Thailand
11:30 - 12:00pm	**Import & Export Control for Food Safety** Ms. Keiko Yamamoto, Department of Food Safety, Pharmaceutical and Food Safety Bureau, Ministry of Health, Labour and Welfare (MHLW), Japan
12:00 - 12:30pm	**Food Safety and Quality Improvement for SMEs – Challenges and Thai Experience** Ms. Chitra Settaudom, Food and Drug Administration, Thailand
12:30 - 2:00pm	Lunch
Session 3	**Communication Strategies for Food Safety and Nutrition Education**
2:00 - 2:30pm	**Risk Communication Strategy for Food Safety** Mr. Halim Nababan, National Agency of Drug and Food Control, Indonesia
2:30 - 3:00pm	**Perspective of Food Labeling Systems in Japan** Mr. Mineo Ando, Food Labeling Division, Consumer Affairs Agency (CAA), Japan
3:00 - 4:00pm	Discussion
4:00pm	Closing

TACKLING FOOD SAFETY CHALLENGES
March 5, 2014

Co-chairs:	**Prof. Dedi Fardiaz, Bogor Agricultural University, Indonesia** **Prof. Songsak Srianujata, Institute of Nutrition, Mahidol University, Thailand**
9:00 - 9:10am	**Welcome and Introduction**
9:10 - 10:00am	**Updates on Food Safety Regulatory Frameworks** **Cambodia** - Mr. Sin Sideth Deputy Director, Department of Laboratory, CAMCONTROL Ministry of Commerce, Cambodia **Lao PDR** - Ms. Viengxay Vansilalom Director, Food Control Division, Food and Drug Department, Ministry of Health, Lao PDR **Myanmar** - Dr. Khin Saw Hla Deputy Director, Food Control, Food and Drug Administration, Ministry of Health, Myanmar **Vietnam** - Ms. Nguyen Thi Minh Ha Deputy Director, Codex Office, Vietnam Food Administration, Ministry of Health, Vietnam
10:00 - 10:20am	Morning Tea Break
10:20 - 12:30pm	**Discussion** Key Topics - Food Additive Safety - Consumer Protection - SME Education
12:30pm	Lunch

INTERNATIONAL FOOD STANDARDS: CODEX Alimentarius and Thailand's Experience

Namaporn Attaviroj

National Bureau of Agricultural Commodity and Food Standards (ACFS)

Workshop and Roundtable Discussion on Food Safety and Standards
March 4-5, 2014
Yangon, Myanmar

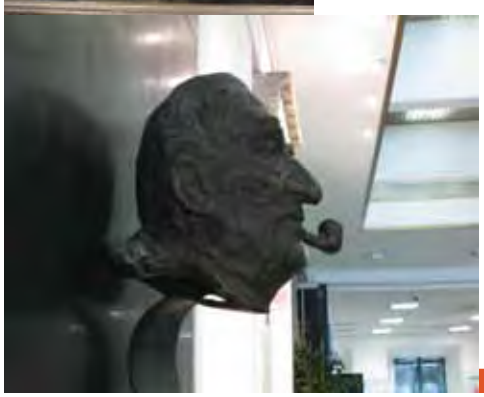
Presentation outline

- History of Codex
  - CAC Mandate and Organization
  - Codex Alimentarius
- Thailand and Codex
  - Working Process for Codex Standard Setting of Thai CCP
  - Participation in Codex

2

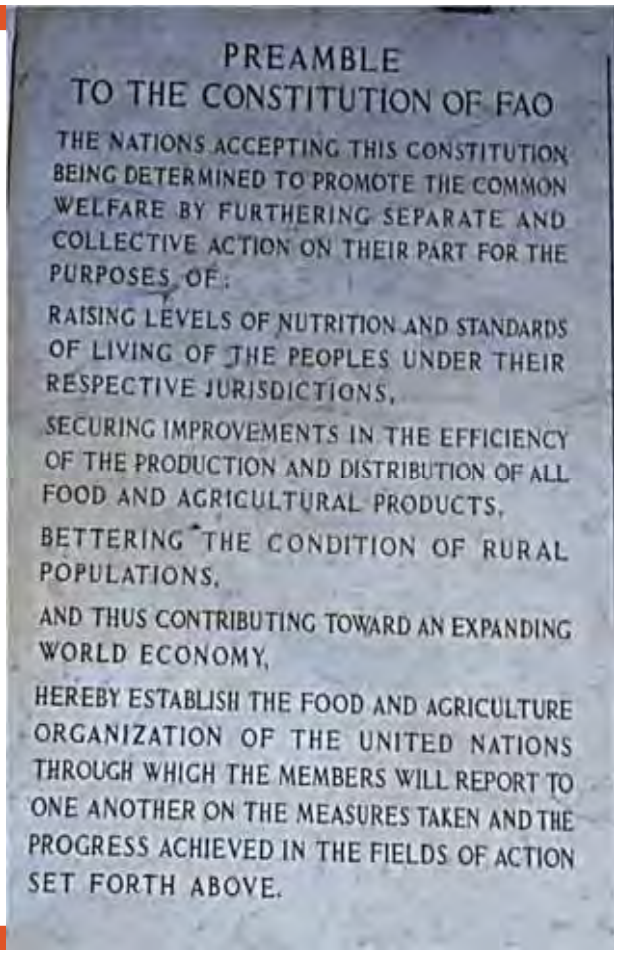
History of Codex

- 1945 : FAO was founded, with responsibilities covering nutrition and associated international food standards.
- 1948 : WHO was founded, with responsibilities covering human health and, in particular, a mandate to establish food standards.



Lord Boyd-Orr
the first D-G of FAO

The Preamble
of FAO
at the
entrance



History of Codex

- 1961: FAO Conference established a Codex Alimentarius Commission (CAC) and requested an early endorsement by WHO of a joint FAO/WHO food standards programme.
- 1962: the Joint FAO/WHO Food Standards Conference requested the CAC to implement a Joint FAO/WHO food standards programme and create the Codex Alimentarius.
- 1963: World Health Assembly (WHA) approved the establishment of the Joint FAO/WHO Food Standards Programme and adopted the Status of the CAC.

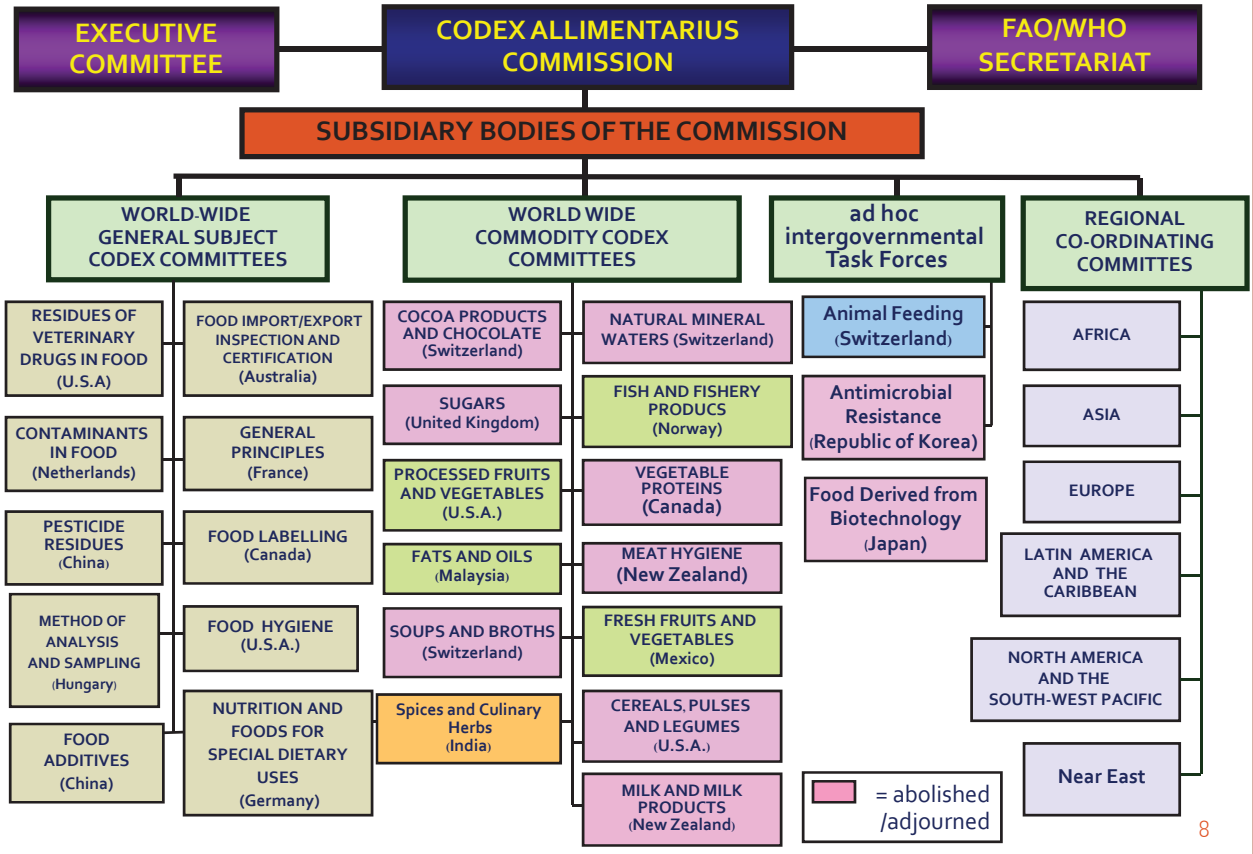
Codex Alimentarius Commission

- Intergovernmental standards-setting body
- 185 Member countries
- 1 Member organization (European Community)
- 220 Codex observers (IGOs, NGOs and UN agencies)

Codex Alimentarius Commission
- its mandate -

- Dual objective:
  - Protecting the health of consumers
  - Facilitating fair practices in food trade
- Non-mandatory in nature

Joint FAO/WHO Food Standards Programme



Codex Alimentarius

The Codex Alimentarius or the food law or code is a collection of:

- Codex standards*…product characteristics (commodity or regulated one i.e. MRLs),
- Codex codes of practices*… i.e. of hygienic practices
- Guidelines*…principles and guidelines
- Other related texts or recommendations

*Collectively, all referred to as Codex standards

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Recognition and status that Codex standards

Since 1995 Codex standards have become international benchmarks for harmonization under the SPS and TBT Agreements of WTO:

- **SPS Agreement** on the application of Sanitary and Phytosanitary Measures
- **TBT Agreement** on Technical Barriers to Trade: pertaining to product description, labelling, packaging and quality descriptors

10

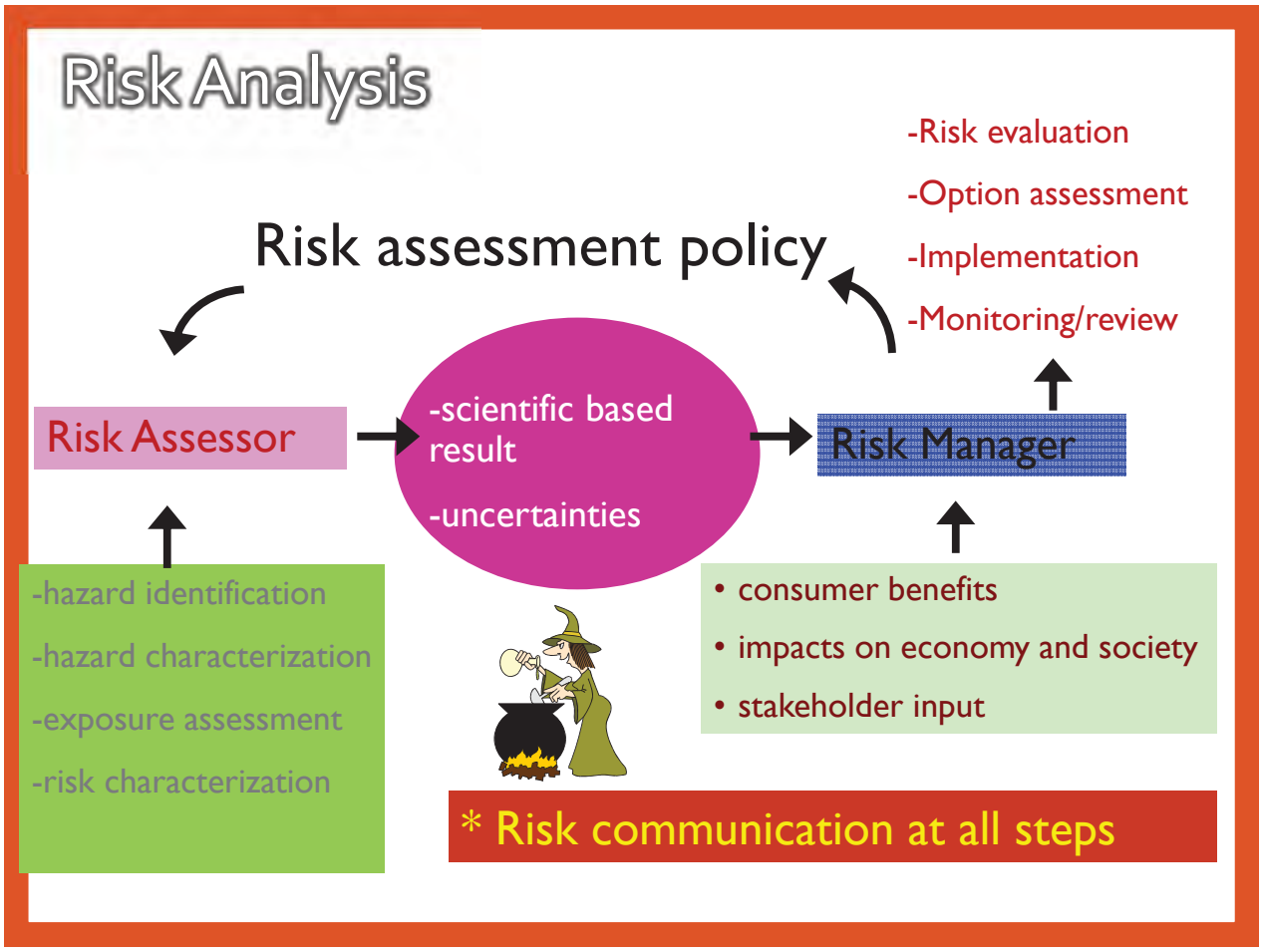
Codex Standards

Codex standards– a valuable international food standards

- Based on risk analysis, sound science (scientific advice), transparency and inclusiveness
- Developed by international consensus of members governments and involvement of stakeholders i.e. IGOs, NGOs and UN agencies
- Contributes to global harmonization of food standards

Type of Text	Availability
Code of Practice	49
Guidelines	70
MRLs	4
Standards	1
Miscellaneous	212
Total	**336**

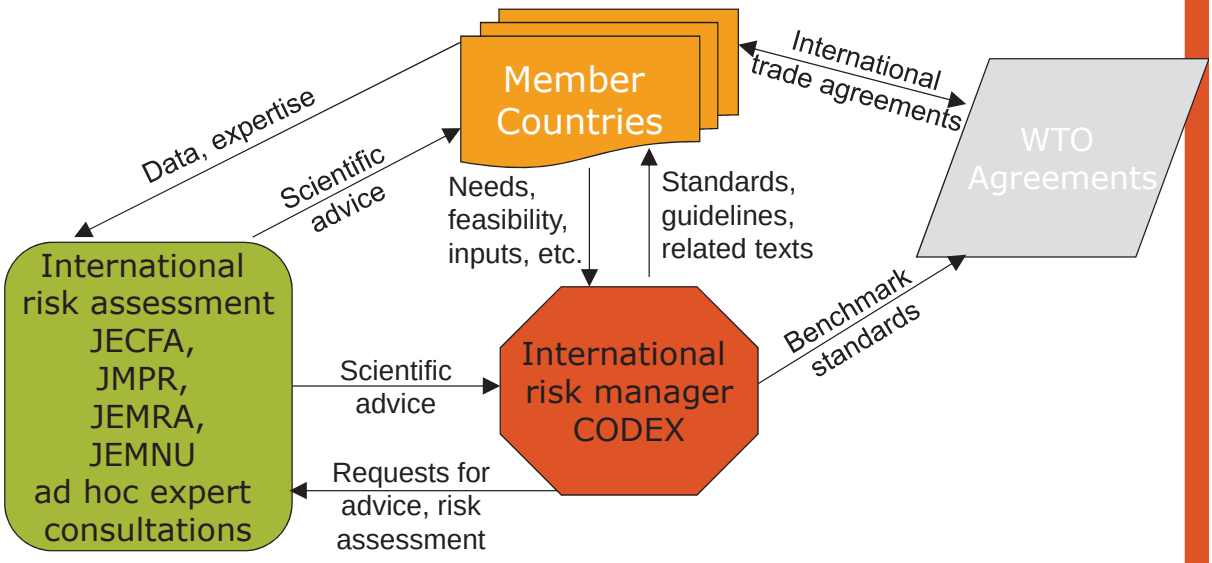
Risk Analysis –the link



Risk Analysis Overview

- Risk analysis as elaborated by FAO/WHO is:
  - An internationally developed and accepted approach for enhancing food control systems
  - A systematic process that facilitates openness, transparency and inclusiveness
  - Facilitates harmonization of food safety approaches
  - Enables preparedness and rapid response

Addressing food safety and quality at global level



Scientific advice

International Risk Assessment

- JECFA (Joint FAO/WHO Expert Committee on Food Additives)
  - food additives, contaminants, residues of veterinary drugs in foods
- JMPR (Joint FAO/WHO Meeting on Pesticide Residues)
  - pesticide residues
- JEMRA (Joint FAO/WHO Expert Meeting on Microbiological Risk Assessment)
  - microbiological hazards
- Ad hoc expert consultations and technical workshops
  - biotechnology, probiotics, veterinary drug residues without ADIs/MRLs
- JEMNU (Joint FAO/WHO Meeting on Nutrition)

CAC in Geneva

CAC Session in Rome, July 2012

CAC Session in Rome, July 2012

Thailand's Experience in Codex

Thailand and Codex

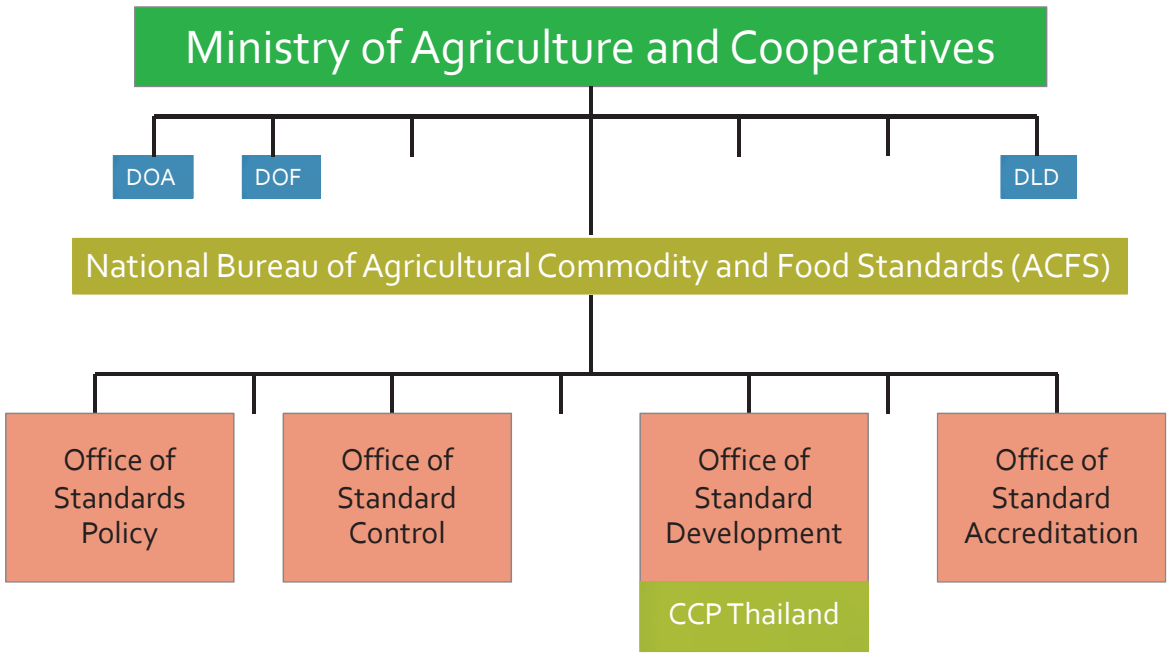
Food Quality and Safety: Key Factors

- National Standard Development
- Standards implementation/enforcement
- Application of risk analysis principles
- Education and communication (governments, academia, industries, farmers, consumers)
- Active participation in Codex and other international meetings

Thailand and Codex

- Codex established since 1963
  - Last year is the Codex Golden Jubilee Year
- Thailand is one of 30 countries that became the member of Codex since the establishment in 1963
- Thailand Codex Contact Point also cerebrated Codex Golden Jubilee in Thailand on 28 May 2013

Codex Contact Point of Thailand



Working Process for Codex Standard Setting of Thai CCP

National Agricultural Standard Committee → Governing body and policy setting

Sub-committee on Policy and General Principles

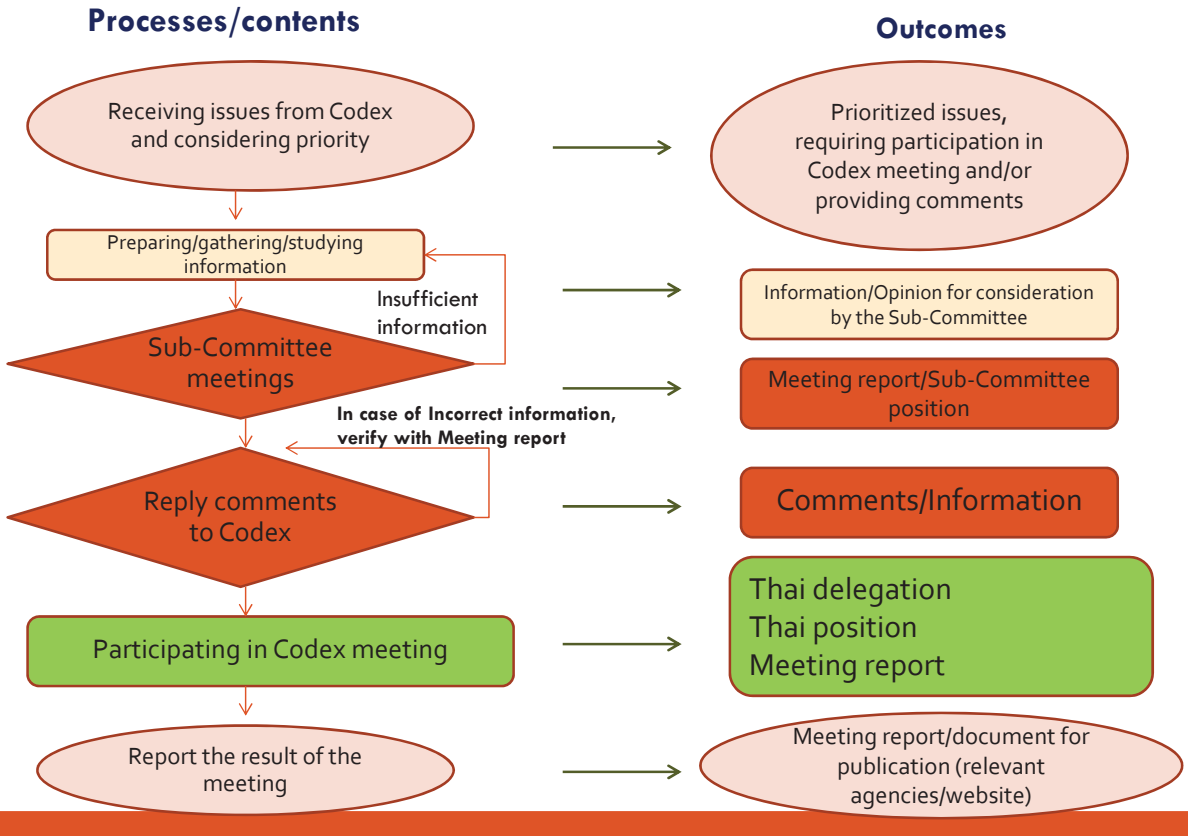
4 Sub-Committees on Commodity Standards

10 Sub-Committees on General Subject Standards

Members of Sub-Committees

- Governments (Agriculture, Health, Trade, Consumer Protection)
- Academics/Experts
- Industries
- CCP Thailand as Secretariat

Thailand Working Process for Consideration of Codex Draft Standard



Participation in Codex Standard Setting

- Provide written comments
- Participate and providing comments in Commission/Committee/Task Force
- Participate in working group (physical/electronic)
- Prepare discussion paper for setting new standard proposed to Codex
- Host Committee/ Task Force/ Physical working group meetings
- Adopt Codex standards as national standards

Draft Codex Standards initiated by Thailand

- Fresh Fruits and Vegetables
  - Standard for Rambutan
  - Standard for Durian (Draft)
- Processed Fruits and Vegetables
  - Standard for Pickled Fruits and Vegetables
  - Standard for Bamboo shoots
  - Asian Regional Standard for Chili sauce
- Fats and Oils
  - Analysis methods of fat in coconut milk
  - Amendment of Standard for Rice Bran Oil
- Fish and Fishery Products
  - Standard for Fish Sauce & Code of Practice for Fish Sauce
  - Nitrogen factor of tilapia in Standard for Quick Frozen Fish Sticks (Fish Fingers)
- Pesticide Residues
  - Study for the establishment of approximately 30 MRLs
  - Co-chair of the CCPR Working Group on Minor Uses and Specialty Crops

Thailand as a host country for Codex meetings

- 34th Codex Committee on Food Hygiene in 2001
- 28th CCNFSDU in 2006
- 20th CCFICS in 2013
- 7th, 11th, and 12th CCASIA in 1990, 1997, 1999
- Chaired the Ad hoc Codex Intergovernmental Task Force on the Processing and Handling of Quick Frozen Foods in 2008
- 18th CCFFV in 2014

Adoption of Codex Standards as National Standards

- **Thailand has adopted Codex Standards as national standards** e.g.
  - Codex General Principles of Food Hygiene
  - Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius
  - Principles for the Establishment and Application of Microbiological Criteria for Foods
  - Principles for the Risk Analysis of Foods Derived from Modern Biotechnology
  - Guideline for the Conduct of Food Safety Assessment of Foods Derived from Recombinant-DNA Plants

Adaptation of Codex Standards as National Standards

- **Thailand has adapted Codex Standards to national standards**
  - Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods
  - Principles for Traceability / Product Tracing as a Tool Within a Food Inspection and Certification System
  - Code of Practice for Fish and Fishery Products
  - Code of Hygienic Practice for Fresh Fruits and Vegetables

Summary

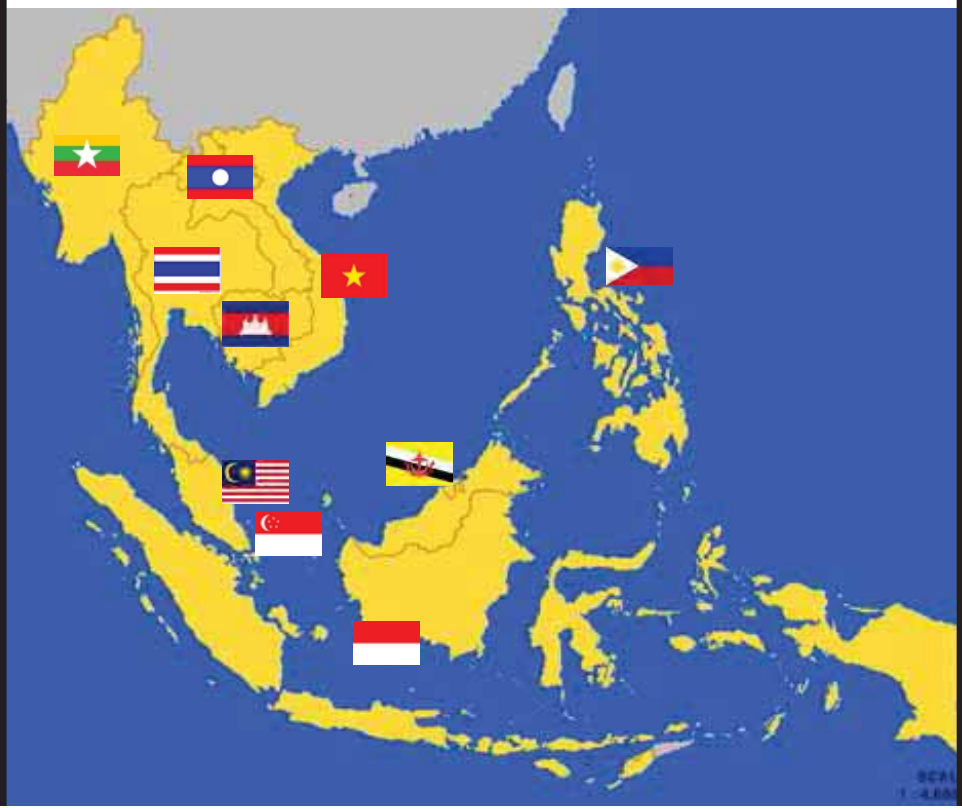
- Thailand was a member of Codex since the establishment in 1963
- Active participation in Codex working processes at global, regional and national is an exceptional learning experience
- Adoption and implementation of Codex standards have been beneficial to consumer protection and enhancement of domestic and international food trades

Regulatory Frameworks and Key Challenges of Food Safety in ASEAN Countries

Dedi Fardiaz
Department of Food Science and Technology
SEAFAST Center, Bogor Agricultural University
Indonesia

"Workshop and Roundtable Discussion on Food Safety and Standards"
Yangon, Myanmar, March 4-5, 2014

ASEAN COMMUNITY 2015



ASEAN COMMUNITY 2015

ASEAN Political-Security Community (APSC)
ASEAN Economic Community (AEC)
ASEAN Socio-Cultural Community (ASCC)

ASEAN Common Food Control Requirements (ACFCR)

1. ASEAN Common Principles for Food Control Systems (ACPFCS)
2. ASEAN Common Principles and Requirements for the Labelling of Prepackaged Food (ACPRLPF)
3. ASEAN Common Principles and Requirements for Food Hygiene (ACPRFH)

ASEAN Common Principles for Food Control Systems

Establishment of Food Control Regulatory Framework and Infrastructure

Proper food control infrastructure and regulatory framework with all the essential components should be in place to ensure effective operation of the food control system. These include:

1. **Food Legislation**
   Food legislation should provide a high level of health protection; and provide for mechanism facilitating food recall in case of non-compliance.
2. **Food Control Management**
   A clear policy that mandates a responsible authority or a well defined coordinated mechanism among all agencies involved should be established.
3. **Inspection Activities**
   The administration and implementation of food laws require implementation of inspection programmes carried out by competent personnel.
4. **Laboratory Services**
   Analytical laboratories providing scientific services are essential components of a food control system.
5. **Information, Education, Communication, and Training**
   An increasingly important role for food control systems is the delivery of information, education and advice to stakeholders. Food control agencies should address the specific training needs for their Food Inspectors and Laboratory Analysts.

ASEAN Common Principles for Food Control Systems

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5. **Information, Education, Communication, and Training**
   An increasingly important role for food control systems is the delivery of information, education and advice to stakeholders. Food control agencies should address the specific training needs of their food inspectors and laboratory analysts as a high priority.

Codex standards, guidelines and codes of hygienic practices have been used by WTO's SPS Agreement for sanitary and phytosanitary measures.

It is in the best interests of ASEAN food control agencies to make use of the Codex standards as benchmark standards for the development of their national standards.

ACPFCS

Codex Commodity (Food) Standards Format

Name of the Standard
Scope
Description
Essential Composition and Quality Factor
Food Additives
Contaminant
Hygiene
Weights and Measures
Labelling
Methods of Analysis and Sampling

still in the process of harmonization using GSFA template

ACPRFH

ACPRLPF

ASEAN Food Reference Laboratory
ASEAN Food Testing Laboratory Committee
ASEAN Food Testing Laboratory Network

Why Food Category System?

The ASEAN Food Safety Standards Harmonization Workshop Series **sponsored by ILSI Southeast Asia Region have been used as a forum for regulators in the region:**

- **to facilitate the exchange of information and scientific updates in food safety and standards;**
- **to discuss and share potential mechanisms for improvement of food safety standards in the ASEAN countries;**
- **to facilitate harmonization efforts towards Codex, where they exist; or towards scientifically-sound regional standards where Codex standards are not in place; and**
- **to identify gaps for exposure data development and risk assessment capacity building.**

Why Food Category System?

- **In the first three workshops, the Working Group agreed on the use of Codex General Standards for Food Additives (GSFA) as the basis for harmonization.**
- **A template following the GSFA Food Category System was used to compare national food safety standards and that of GSFA for similarities and differences.**
- **To further facilitate the harmonization efforts, an online database of ASEAN Food Safety Standards was developed and maintained by ILSI SEA Region, which contains the national data that can be compared with Codex GSFA and provided the harmonization progress.**

Food Category System (GSFA, 2005)

No.	Name of Food
01.0	Dairy products and analogues, excluding products of food category 02.0
02.0	Fats and oils, and fat emulsions
03.0	Edible ices, including sherbet and sorbet
04.0	Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds
05.0	Confectionary
06.0	Cereals and cereal products, derived from cereal grains, from roots and tubers, pulses and legumes, excluding bakery wares of food category 07.0
07.0	Bakery wares
08.0	Meat and meat products, including poultry and game
09.0	Fish and fish products, including mollusks, crustaceans, and echinoderms
10.0	Eggs and egg products
11.0	Sweeteners, including honey
12.0	Salts, spices, soups, sauces, salads, protein products (including soybean protein products) and fermented soybean products
13.0	Foodstuffs intended for particular nutritional uses
14.0	Beverages, excluding dairy products
15.0	Ready-to-eat savouries
16.0	Composite foods - foods that could not be placed in categories 01 - 15.

General Standard for Food Additives

FAST GREEN FCF **INS: 143** **Function: Colour**

Food Cat. No.	Food Category	Max Level
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	100 mg/kg
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	100 mg/kg
02.1.3	Lard, tallow, fish oil, and other animal fats	GMP
03.0	Edible ices, including sherbet and sorbet	100 mg/kg
04.1.2.4	Canned or bottled (pasteurized) fruit	200 mg/kg
04.1.2.5	Jams, jellies, marmelades	400 mg/kg
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soy sauce	300 mg/kg
04.2.2.4	Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	200 mg/kg
05.3	Chewing gum	300 mg/kg

Welcome to the ASEAN Food Safety Standards Database

This database contains National Food Safety Standards of ASEAN countries and the comparison with Codex GSFA, to support the harmonization efforts in the region. This database is maintained and periodically updated by ILSI Southeast Asia Region Food Safety and Risk Assessment Task Force.

Online Food Safety Standards Database generated by ILSI SEA Region:

- **Consists of Codex GSFA and 10 ASEAN countries' standards;**
- **Facilitate systematic review and periodical updating by participating ASEAN countries; and**
- **Helpful tool to track harmonization status.**

Food Additive: Fast Green FCF

Food Cat. No.	Food Category	GSFA	B	C	I	L	M	M	P	S	T	V
01.1.2	Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)	100 mg/kg										
01.7	Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt)	100 mg/kg										
02.1.3	Lard, tallow, fish oil, and other animal fats	GMP										
03.0	Edible ices, including sherbet and sorbet	100 mg/kg										
04.1.2.4	Canned or bottled (pasteurized) fruit	200 mg/kg										
04.1.2.5	Jams, jellies, marmelades	400 mg/kg										
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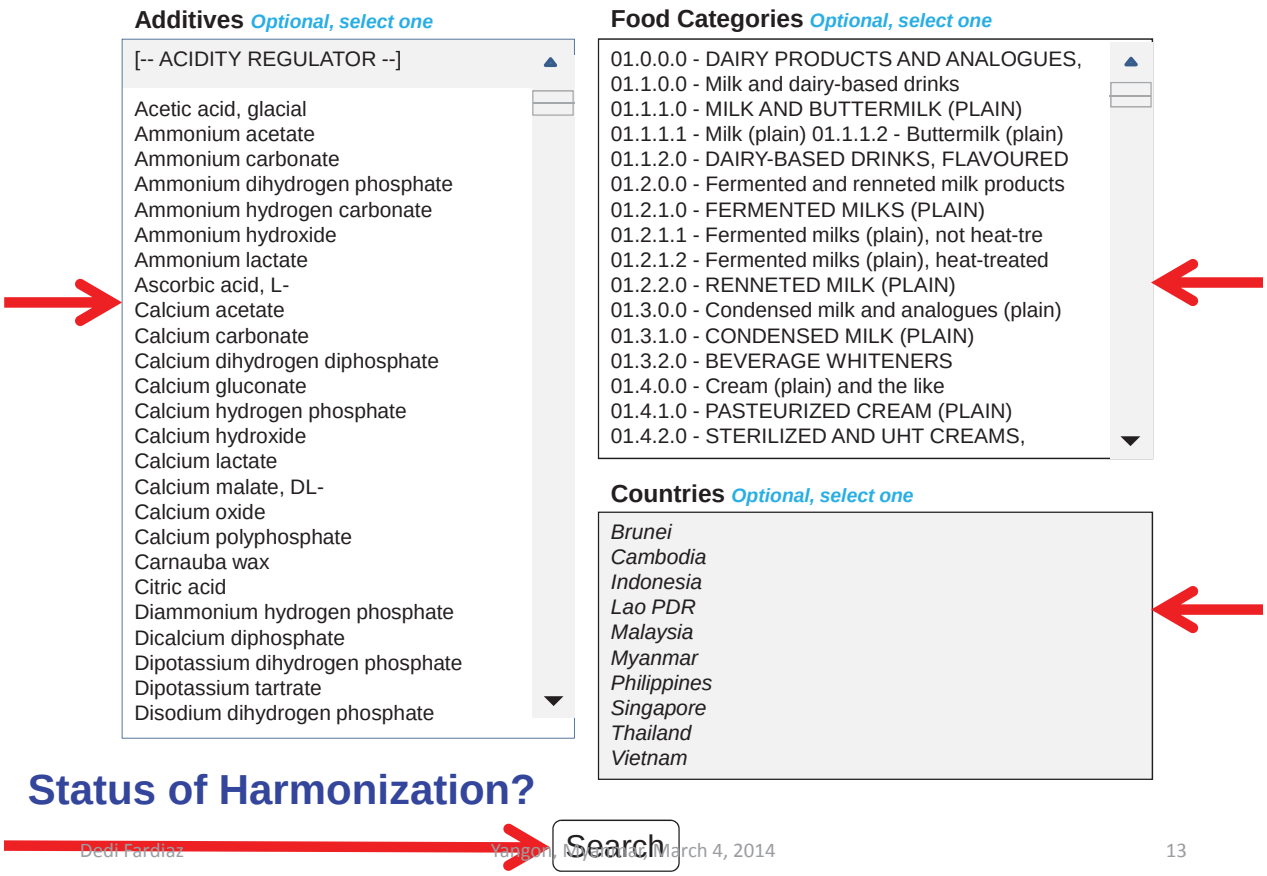
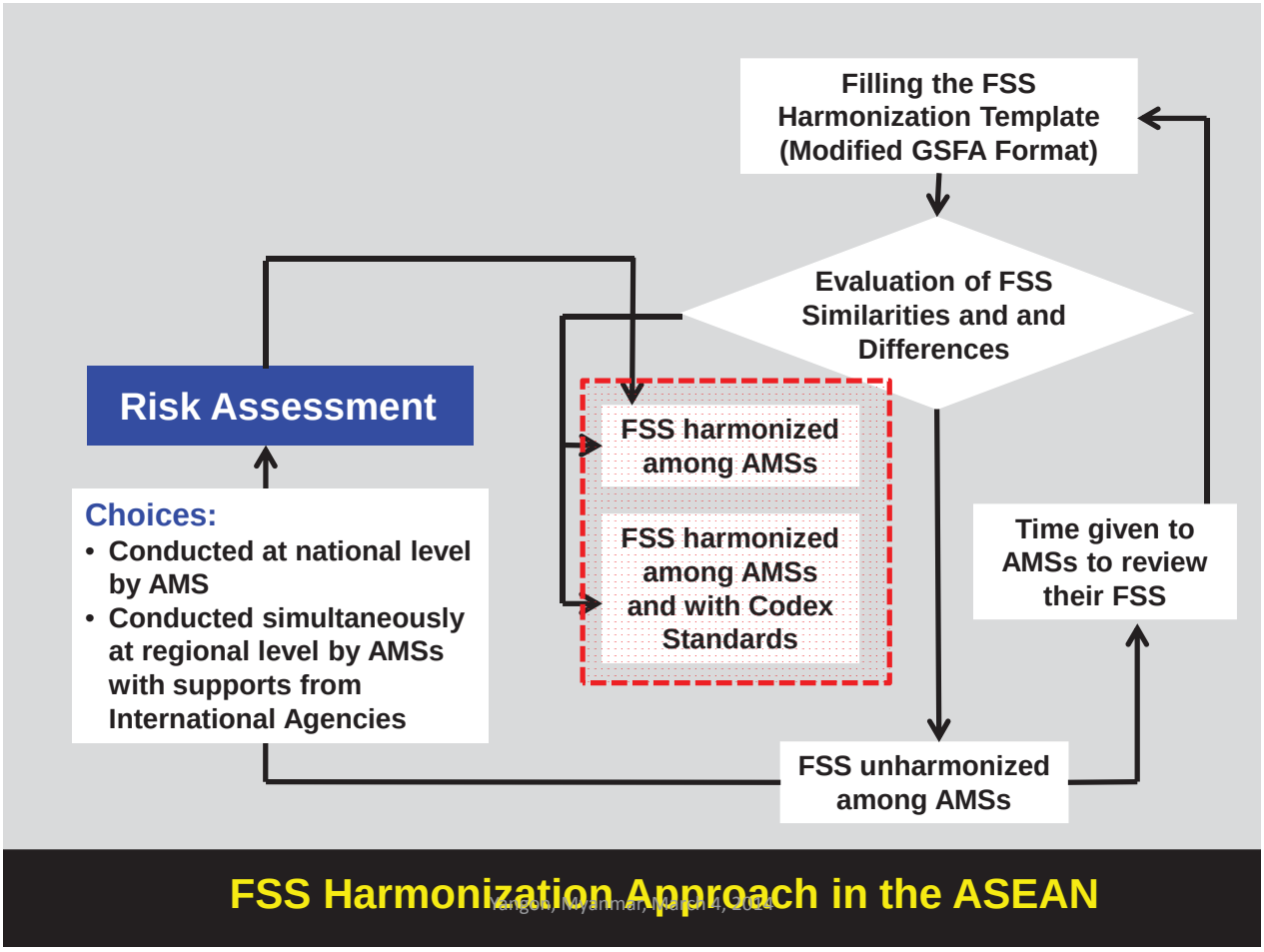
05.3	Chewing gum	300 mg/kg										


Additives Optional, select one
[-- ACIDITY REGULATOR --]
Acetic acid, glacial
Ammonium acetate
Ammonium carbonate
Ammonium dihydrogen phosphate
Ammonium hydrogen carbonate
Ammonium hydroxide
Ammonium lactate
Ascorbic acid, L-
Calcium acetate
Calcium carbonate
Calcium dihydrogen diphosphate
Calcium gluconate
Calcium hydrogen phosphate
Calcium hydroxide
Calcium lactate
Calcium malate, DL-
Calcium oxide
Calcium polyphosphate
Carnauba wax
Citric acid
Diammonium hydrogen phosphate
Dicalcium diphosphate
Dipotassium dihydrogen phosphate
Dipotassium tartrate
Disodium dihydrogen phosphate
Food Categories Optional, select one
01.0.0.0 - DAIRY PRODUCTS AND ANALOGUES,
01.1.0.0 - Milk and dairy-based drinks
01.1.1.0 - MILK AND BUTTERMILK (PLAIN)
01.1.1.1 - Milk (plain) 01.1.1.2 - Buttermilk (plain)
01.1.2.0 - DAIRY-BASED DRINKS, FLAVOURED
01.2.0.0 - Fermented and renneted milk products
01.2.1.0 - FERMENTED MILKS (PLAIN)
01.2.1.1 - Fermented milks (plain), not heat-tre
01.2.1.2 - Fermented milks (plain), heat-treated
01.2.2.0 - RENNETED MILK (PLAIN)
01.3.0.0 - Condensed milk and analogues (plain)
01.3.1.0 - CONDENSED MILK (PLAIN)
01.3.2.0 - BEVERAGE WHITENERS
01.4.0.0 - Cream (plain) and the like
01.4.1.0 - PASTEURIZED CREAM (PLAIN)
01.4.2.0 - STERILIZED AND UHT CREAMS,
Countries Optional, select one
Brunei
Cambodia
Indonesia
Lao PDR
Malaysia
Myanmar
Philippines
Singapore
Thailand
Vietnam
Status of Harmonization?
Search


Future ASEAN Single Market supported
The Trade Intra ASEAN facilitated
The ASEAN Food Safety Standards Harmonization Workshop Series
ACCSQ Prepared Foodstuff Product Working Group
Task Force on Harmonization of Food Safety Standards for Prepared Foodstuff was established
at the 8th ACCSQ PFPWG Meeting (Palembang, Indonesia, 21-22 August 2008)



Key Challenges of Food Safety in ASEAN Countries

Principal stages of the food supply chain (FAO, 2006)

- Supply of agricultural inputs (fertilizers, pesticides, animal feeding stuffs, veterinary drugs, etc.)
- Primary production (farmers, fisherfolk, fish farmers, etc.)
- Primary food processing (on-farm, dairies, abattoirs, grain mills, etc.)
- Secondary food processing (fermenting, baking, canning, freezing, drying, etc.)
- Food distribution (national/international, import/export)
- Food retailing (shops, supermarkets, etc.)
- Food catering (restaurants, street foods, hospitals, schools, etc.)
- Domestic food preparation

How to improve hygienic practices in the whole food supply chain?

How to eliminate the misused of prohibited chemicals in food?

How to raise food safety awareness of food producers and consumers?

Dedi Fardiaz FAO, Hanoi, 25-26 May, 2011 16

Guidelines for risk categorization of food and food establishments applicable to ASEAN countries

2011, FAO ROAP, Bangkok, Thailand
www.FAO.org/docrep/015/i2448e/2448e00.htm

Fish contaminated by Fish-borne Zoonotic Trematodes (**FZT**s) such as *Clonorchis* and *Ophisthorchis* (liver flukes) cause liver infections. The contaminated fish will pose a health risk to people that commonly consume raw, inadequately cooked, or pickled fish.

Listed food safety concerns in ASEAN countries (FAO/WHO regional workshop, Bali, Indonesia, 18-20 November 2010)

- *Salmonella*, *E coli* in raw vegetables and meat products.
- Non-permitted color in street-foods, and sudan red in chilli sauce.
- Borax in meat and meat products including fish.
- Formalin in tofu and wet noodles.
- Aflatoxins in nutmeg and peanuts.
- Pesticide residues in vegetables and fruits.
- Veterinary drug residues in prawn and other fishery products.

17

Photos taken from www.flickr.com

Common Risk Factors

- cross contamination
- food from unsafe sources
- inadequate cooking
- improper holding temperatures
- contaminated equipment
- poor personal hygiene
- food handlers' health status
- water quality
- presence of pests

Dedi Fardiaz

Should we give special attention to food-supply-chain commonly practiced in ASEAN countries?

Examples:

- Small farmers
- Small fishermen

- SMEs (processors)
- Hosehold food industries

- Traditional markets
- Streetfood vendors
- SMEs (Caterers, restaurants, etc)

Summary

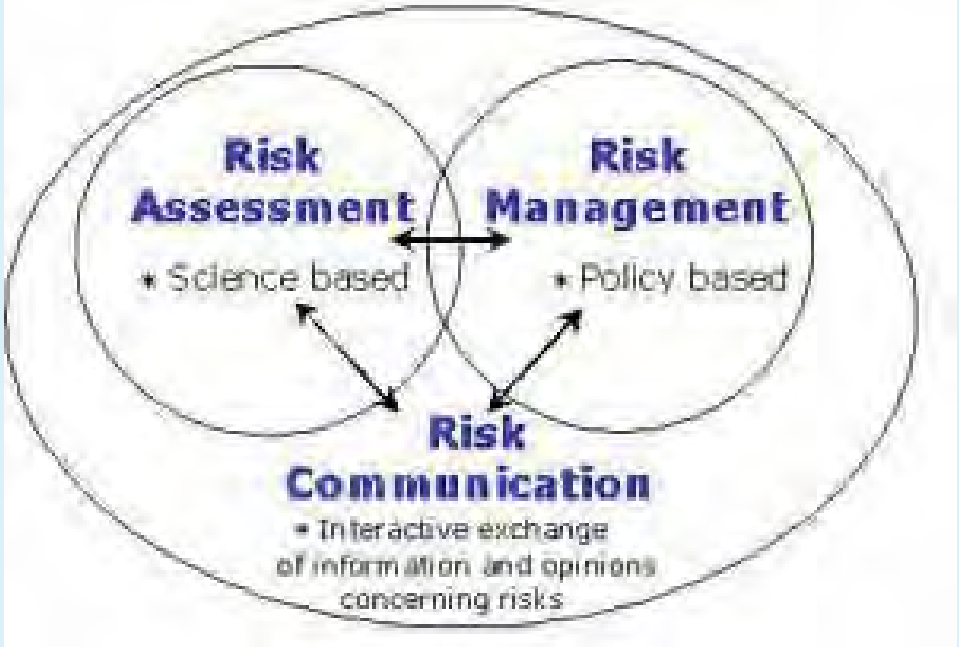
- Facing an ASEAN Economic Community in 2015, various efforts have been made nationally by AMSs and regionally through ASEAN cooperation. Among others is the development of ACFCR *(ASEAN Common Food Control Requirements),* a guideline for strengthening national food control systems in AMSs.
- Harmonization of food safety standards is another effort that will facilitate the trade intra ASEAN and support the future ASEAN single market. Decision tree approach has been developed as a mean for food safety standards harmonization.
- Key challenges in improving food safety in ASEAN: (a) How to improve hygienic practices in the whole food supply chain?; (b) How to eliminate the misused of prohibited chemicals in food?; and (c) How to raise food safety awareness of food producers and consumers?

Thank You Very Much

Risk Assessment of Food Additives

Songsak Srianujata, Ph.D.
Senior Advisor
Institute of Nutrition, Mahidol University

Risk Analysis Framework



RISK ANALYSIS PRINCIPLES APPLIED BY THE CODEX COMMITTEE ON FOOD ADDITIVES (From procederal manual of Codex)

The application of risk analysis principles by the Codex Committee on Food Additives (CCFA) and the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

Some principles:

- CCFA shall endorse maximum use levels only for those additives for which

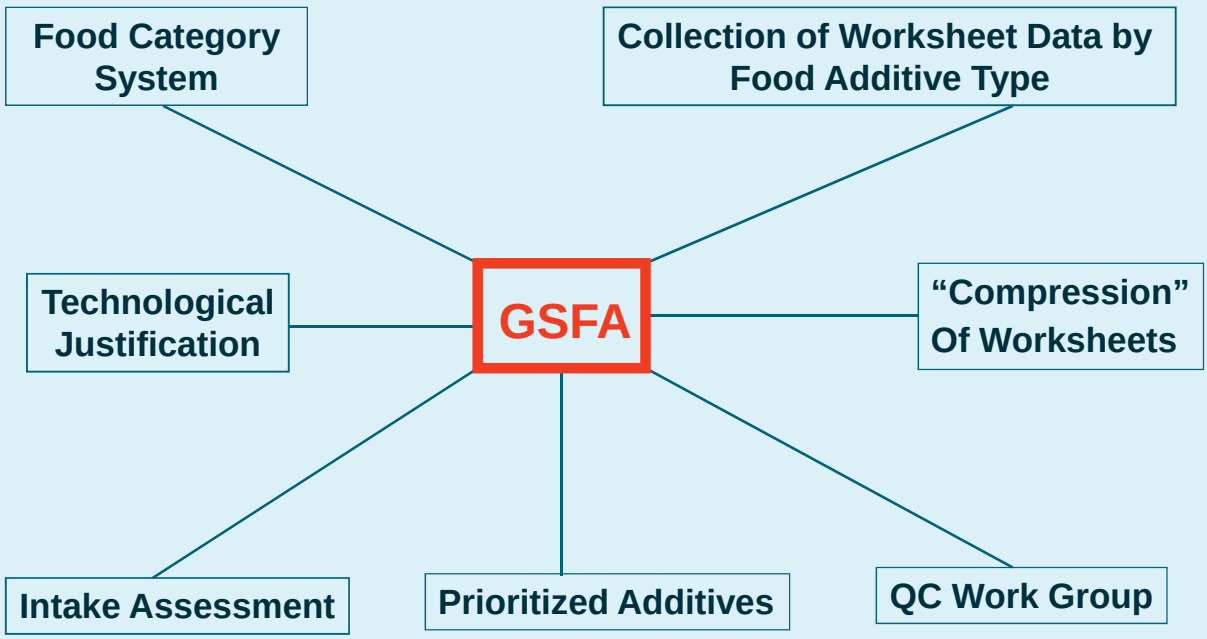
(i) JECFA has established specifications of identity and purity; and

(ii) *JECFA has completed a risk assessment and established a health-based guidance value.*

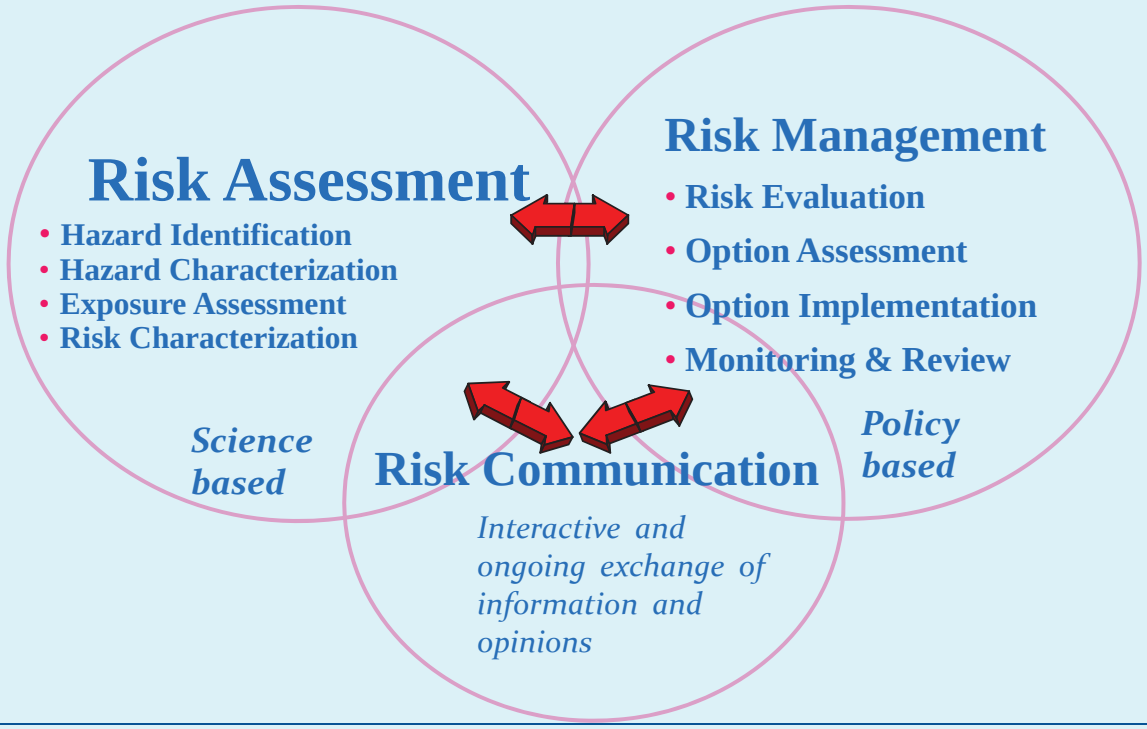
- JECFA is primarily responsible for performing the risk assessments upon which CCFA and ultimately the CAC base their risk management decisions.
- JECFA should strive to provide CCFA with science-based risk assessments that include the four components of risk assessment as defined by CAC and safety assessments that can serve as the basis for CCFA's risk management discussions.

- JECFA should strive to base its risk assessments on global data, including data from developing countries. These data should include epidemiological surveillance data and exposure studies.
- JECFA is responsible for evaluating exposure to additives.
- When evaluating intake of additives during its risk assessment, JECFA should take into account regional differences in food consumption patterns.

"Tools" for Developing the GSFA Tables



Components of Risk Analysis



Codex Alimentarius Commission
CODEX PROCESS

Relationship of RA and RM

JECFA → ADI, PTWI

CCFA → Food Additives → MLs

CCCF → Contaminants → MRLs

CCRVDF → Vet. Drug Res. → MRLs

Risk Analysis Process

- **Risk Assessment**
  - *Hazard Identification*
    - Toxicity study - Acute (LD50)
      - Long term (NOEL)
  - *Hazard Characterization*
    - **Quantitative toxicity**
      - NOEL
      - ADI
      - PTWI
  - *Exposure Assessment*
    - Total intake, Total uptake

Risk Analysis Process

- *Risk Characterization*

$$\text{Risk} = \frac{\text{Intake}}{\text{ADI}}$$

- Risk Management
- Risk Communication

Risk Assessment

- Hazard Identification
- Hazard Characterization
- Exposure Assessment
- Risk Characterization

Science based

1. Hazard Identification

Is there any hazard?

What is (are) the hazard?

In what situation?

Basic Toxicology in Food Safety

Toxicity : Inherent property of agent can cause adverse effect

Hazard : Inherent property of an agent or situation having the potential to cause adverse effects when an organism, system or (sub)population is exposed to that agent.

Risk : The probability of an adverse effect in an organism, system or (sub)population caused under specified circumstances byexposure to an agent.

Animal studies

- Animal study information can be two areas
  - Biochemical study and
  - Toxicological study

  (Global information, can be done in any internationally certified laboratory)

Toxicological studies

- Acute toxicity
- Short-term toxicity
- Long-term toxicity
- Carinogenicity toxicity
- Reproductive & Developmental toxicity
- Genotoxicity
- Others: neurotoxicity, Eye and skin irritation, skin allergic reactions

2. Hazard characterization

threshold approach:

Determine the level of hazardthat is acceptable as;

- **Acceptable daily Intake (ADI or RfD) for safety in long term intake or exposure สำห(long-term study)**
- **Acute reference dose (Acute RfD) For safety in short term intake or exopsure (acute)**

$$\text{ADI หรือ RfD} = \frac{\text{NOAEL}}{\text{Safety factor (Uncertainty Factors)}}$$

โดย NOAEL = No Observed Adverse Effect Level from toxicity testing in animal or in human

NOAEL = No Observed Adverse Effect Level

Highest level that produces no adversed effect

Safety Factor (Uncertainty Factor)

In general = 100

10 = difference among species (animal and human)

10 = individual variation

May be more or less than 100

- Depend on quality and quantity of data

No threshold level

- Carcinogen
- Genotoxic

Use ALARA

(As Low As Reasonably Acchievable)

3. EXPOSURE ASSESSMENT

In general condition, exposure may be by

1. Inhalation through respiratory system
2. Ingestion through gastrointestinal tract
3. Penetration through skin

Exposure INTAKE

Oral exposure
(Dietary exposure, Daily dietary intake)

Hazardous substances
- Food contaminants
- Food additives
- Pesticide residues
- Veterinary drug residues

Vehicles
- **Foods**
- **Drinks**
- **Water**
- Soil or dirt

Methods for collecting food consumption data

Assessment	Method
Individual	Food diary, weighed intake Duplicate portion studies Dietary recall Food frequency
Population	Food disappearance method - household - national

SELECTION OF METHODS FOR FOOD CONSUMPTION DATA

Factor - age
- educational level
- motivation of the target population
- costs and resources available

DIETARY RECALL

- **Recollect the types and amounts of food consumed**
- **Usually in the past 24 hours**
- **Need a trained interviewer**
- **May be by telephone**
- **Parents or caretakers response for children < 5 yrs.**
- **Problems with diets that are more varied**
- **Best for large scale studies**

FOOD FREQUENCY

- Usually pattern of consumption for individual types of food
- List of commonly consumed foods
- Indicating number of times per day, week, month
- Not require a high education of respondent
- Useful for retrospective data in epidemiological studies
- Information of specific food types

NATION FOOD DISAPPEARANCE METHOD

Insufficient resources for food consumption survey

Estimated from food balance sheets

National food balance

= food production +food imported
+food taken from stocks
- food added to stocks
- food exported
- food used for seed
- food used for non-edible purpose
-food loss from harvest to kitchen
-animal feed

Divided by the number of people in the country

4. Risk Characterization

Intake or exposure
= (concentration of additive used) X (food Intake)

Comparison between exposure and reference dose (ADI, RfD)

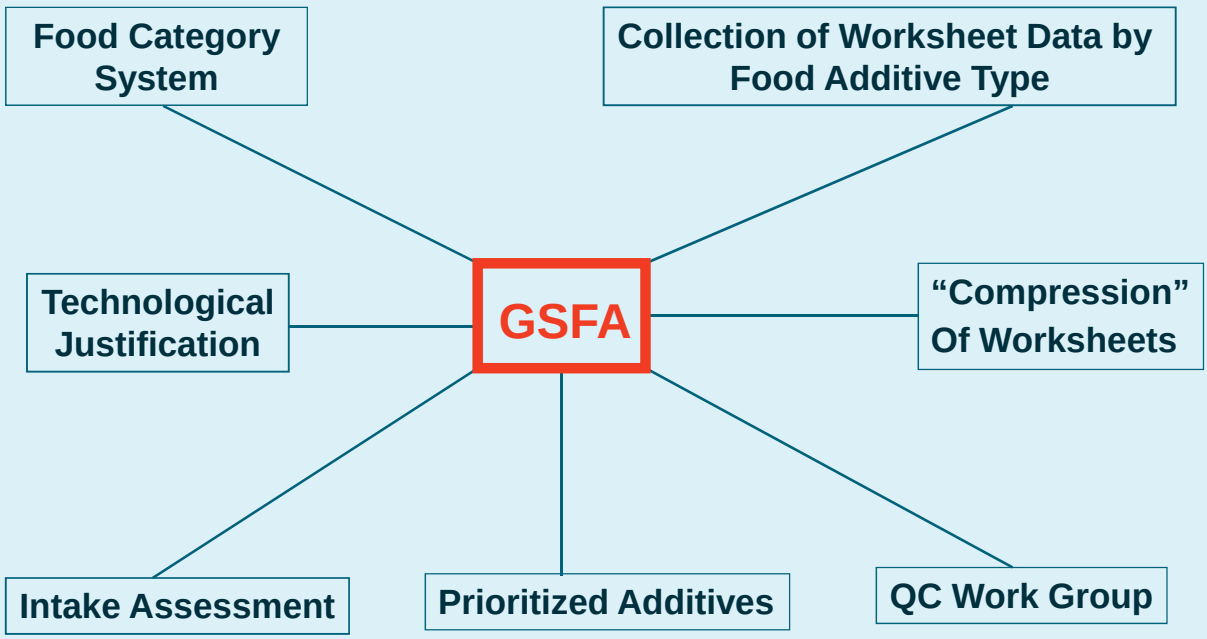
$$\text{Risk} = \frac{\text{Exposure (Intake)}}{\text{ADI or RfD}}$$

Safe = High Risk when Risk $\geq$ 1
Low Risk when Risk < 1

Decision on the ADI Assignment

1. Threshold level is available
   an "ADI" is assigned
2. Low level of risk or no health concern
   "ADI not specified" is assigned
3. No threshold is available
   recommend the additive should not be used

"Tools" for Developing the GSFA Tables



Example of result of risk assessment of Food Additives

1. With "ADI not specified"
2. With assigned "ADI" Thailand assessment

JECFA and Glutamate

- Evaluation begun in 1969
- Specification and ADI established in 1970
- Further review in 1973 and 1987
- Toxicological and specifications monographs published in periodic JECFA publications updates
- ADI applies to added glutamates, since many foods naturally contain glutamate

JECFA Glutamate Recommendations

Safety- “ADI not specified”, meaning use at good manufacturing practice levels in various foods

as with all additives, ADI applies to all foods except foods for infants of under 12 weeks of age

Specification and Methods of Analysis

JECFA Toxicological Monograph

- Sets ADI- Not specified
- ADI a group ADI for L-glutamic acid and its ammonium, calcium, monosodium and potassium salts
- Monograph discussion includes information on and finds scientifically unfounded putative glutamate risks of possible neurotoxicity and idiosyncratic intolerance

US FDA and EC and glutamate

- US FDA- glutamates accepted at GMP level and classified as Generally Recognized as Safe (GRAS)
- EC/EU- Scientific Committee for Food And EC rules classify glutamates as "ADI Not Specified"

ADI and Specification of food additives-sweetener

ADI of sweeteners

Sweeteners	ADI (mg/ kg bw/day)
Food sweeteners not included in notification No. 281	
1. Aspartame	0 – 40
2. Acesulfame K	0 – 15
3. Sucralose	0 – 15
4. Saccharin	0 – 5

Provisions of food color and sweeter uses

Examples

Food Cat. No.	Food category Codex* (FFQ**)	Maximum Use Level (ML) of Allura red (mg/kg)											Comment from expert
		Codex		TML	Thai FDA	EU	ANZ	ASEAN					
		ML	Note					INA	MAS	PHI	SIN	VIE	
01.6.4.2	Ed cheese	200 step 6		1067		100	290	GMP	NP*	NP*	GMP	NP*	GMP
09.3.3	Fish egg Semiprocessed	500 step 6		1067	1000	300	290	GMP	NP*	500	NP*	NP*	GMP
14.1.4.1	Carbonated drinks	100 step 6		125	30	50	290	GMP	GMP	NP*	GMP	NP*	100

Exposure assessment of sweeteners

Example: sweeteners

Additive type	ML (mg/kg)	% of ADI				
		3-5.9 yr	6-18.9 yr	19-64.9 yr	>65 yr	>3 yr
Acesulfame K ADI=0-15 mg/kg bw/day	Codex (adopt)	0	0	0	0	0
	Codex(all steps)	102	57	23	13	44
	First Consideration	102	57	23	13	44
Aspartame ADI=0-40 mg/kg bw/day	Codex (adopt)	1	1	0	0	0
	Codex(all steps)	94	53	28	14	43
	First Consideration	94	53	28	14	43

Additive type	ML (mg/kg)	% of ADI				
		3-5.9 yr	6-18.9 yr	19-64.9 yr	>65 yr	>3 yr
Saccharin ADI=0-5 mg/kg bw/day	Codex (adopt)	0	0	0	0	0
	Codex(all steps)	229	139	63	36	101
	First Consideration	227	137	61	36	99
Sucralose ADI=0-15 mg/kg bw/day	Codex (adopt)	1	1	0	0	1
	Codex(all steps)	80	47	19	12	36
	First Consideration	80	47	19	12	36

Calculation of Maximum Use level (Final consideration)

MLs of food sweeteners were modified as final consideration of those that were above ADI (> 100% of ADI). The MLs of sweeteners in those food that consumed high as the result it has high % contribution of intake compared to ADI. The % contribution should be less than 70% of ADI.

Thank You for your attention

ขอบคุณครับ

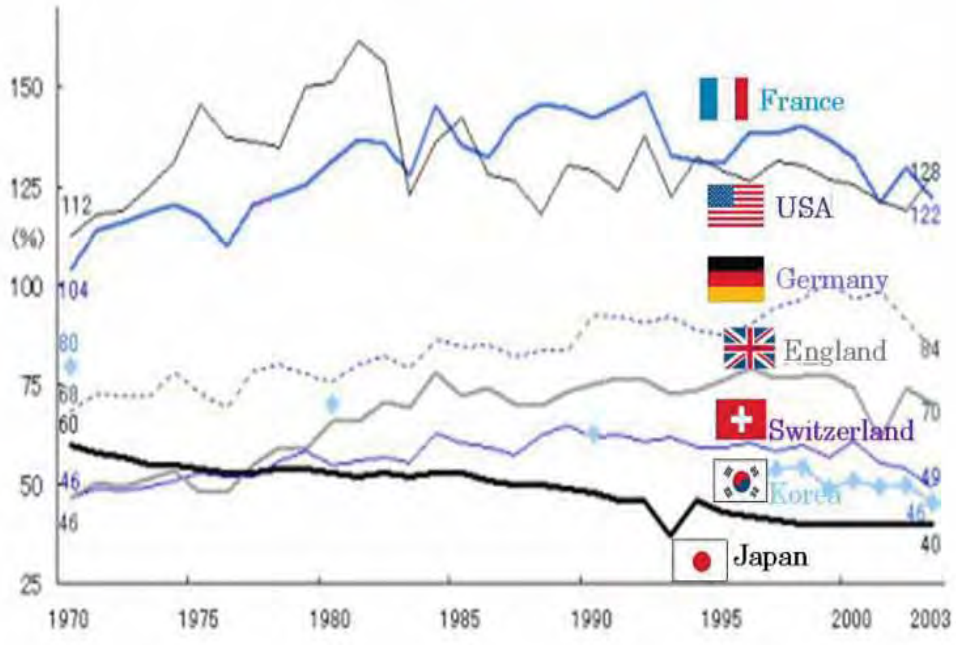
Food Safety Administration in Japan
~Import & Export Control for Food Safety~

Keiko Yamamoto, M.D., MPH
Deputy Director
Planning and Information Division, Department of Food Safety, Pharmaceutical and Food Safety Bureau,
Ministry of Health, Labour and Welfare

Today's Topics

- Organization Structure
- Related Laws
- National and Local Governments
- Setting of Standards
- Import Check
- Export from Japan
- Audit

food self-sufficiency rate



3

Recent developments in Japan's food safety administration

<Main events, etc.>

March 1996	Following outbreak of BSE in the UK, imports of British beef and processed beef foods were prohibited.
May 1996	Major outbreak of food poisoning caused by O-157.
June 2000	Snow Brand Milk Products Co. food poisoning case
June 2001	Confirmation of the first BSE infected cow in Japan
February 2002	Detection of residual agricultural chemicals exceeding standard in Chinese frozen spinach
December 2003	Confirmation of first BSE infected cow in the US, and prohibition of US imports
June 2007	The Meat Hope Co. false labeling incident
December 2007	Food poisoning caused by Chinese frozen gyoza
September 2008	Tainted rice distribution incident
March 2011	TEPCO Fukushima Daiichi Nuclear Power Station accident
April 2011	Food poisoning from raw meat

<Administrative response>

May 1996	Partial revision of the Food Sanitation Act (introduction of HACCP, etc.)b
October 2001 June 2002	• Total ban on bone-and-meat feed (MAFF) • Start of 100% inspection of beef cattle • Enactment of the BSE Special Countermeasures Law
August 2002	Partial revision of the Food Sanitation Act (creation of system for blanket prohibition of imports and sales)
May 2003	Enactment of the Food Safety Basic Law
May 2003	Partial revision of the Food Sanitation Act (introduction of positive list for residual farm chemicals, etc., introduction of system for renewing general sanitation management process approval facilities, implementation of monitoring and guidance plans, etc.)
July 2003	Launch of the Food Safety Commission
September 2009	Launch of the Consumer Agency
March 2011	Response to radioactive material in food
October 2011	Standards set for meat for raw consumption

1

Role sharing of Food Safety (Risk Analysis)

Risk Analysis

○ Risk analysis is the process of preventing accidents and minimizing risk as much as possible, for protecting the health of the people, when there may be exposure to certain hazards, and not for clearing up the aftermath.

Risk Assessment

Food Safety Commission

- Implementation of risk assessment
  Assess the probability and extent of adverse impacts of hazardous substances in food.

Food Safety Basic Law

Risk Management

MHLW

- Sets criteria for inclusion in foods.
- Watches over conformity to the criteria.

Food Sanitation Act, etc.

MAFF

- Sets criteria for use agricultural chemicals and levels in feed and fertilizer.
- Control on veterinary drugs, etc.

Agricultural Chemicals Regulation Act
Act on Safety Assurance and Quality Improvement of Feeds, etc.

Consumer Agency

- Sets criteria on food labeling.
- Watches over conformity to the criteria.

Food Sanitation Act
Health Promotion Law
JAS Law, etc.

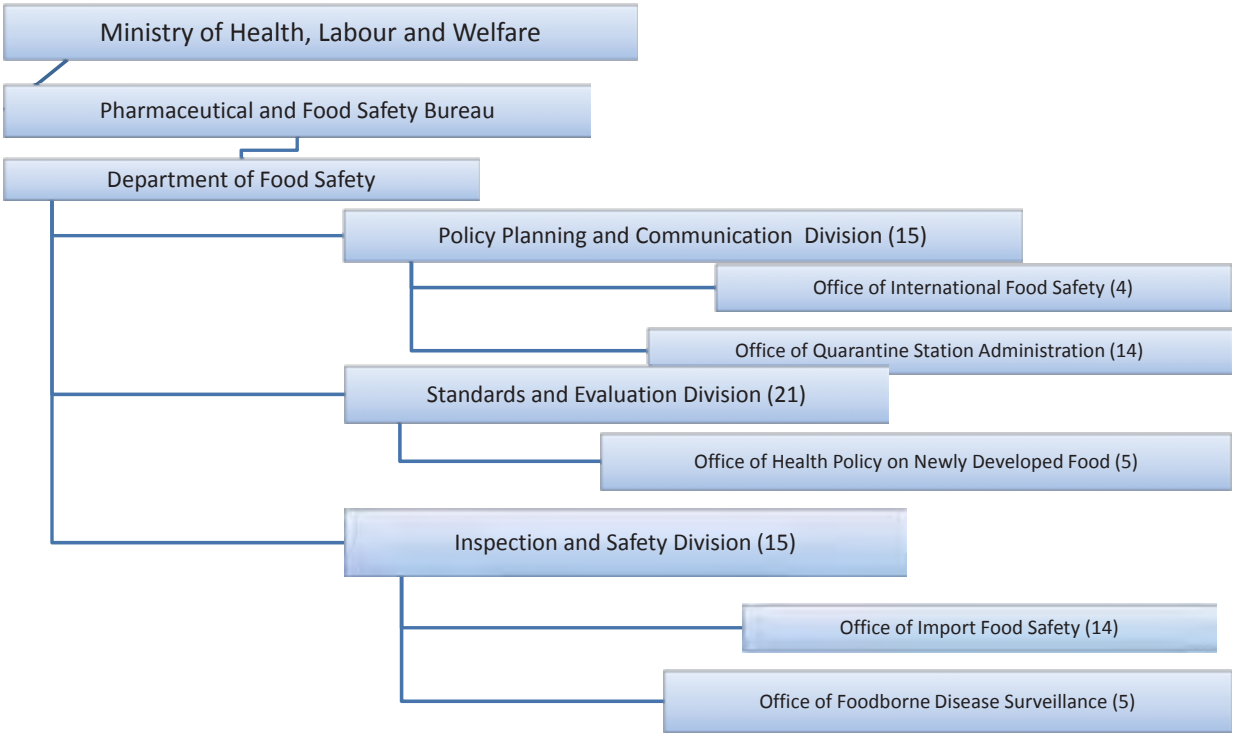
Risk Communication

General coordination by the Consumer Agency

- Disclosure of food safety related information
- Opportunities for the consumers to express their views

3

Organization Structure of Department of Food Safety



(Number of the officials) As of Nov. 2013

Relevant Laws on Food Hygiene

- Food Safety Basic Act
- Food Sanitation Act
- Ministerial Ordinance on Milk and Milk products Concerning Compositional Standards, etc.
- Abattoir Law
- Poultry Slaughtering Business Control and Poultry Inspection Law
- Law on special Measures Against Bovine Spongiform Encephalopathy

Food Sanitation Act (measures)

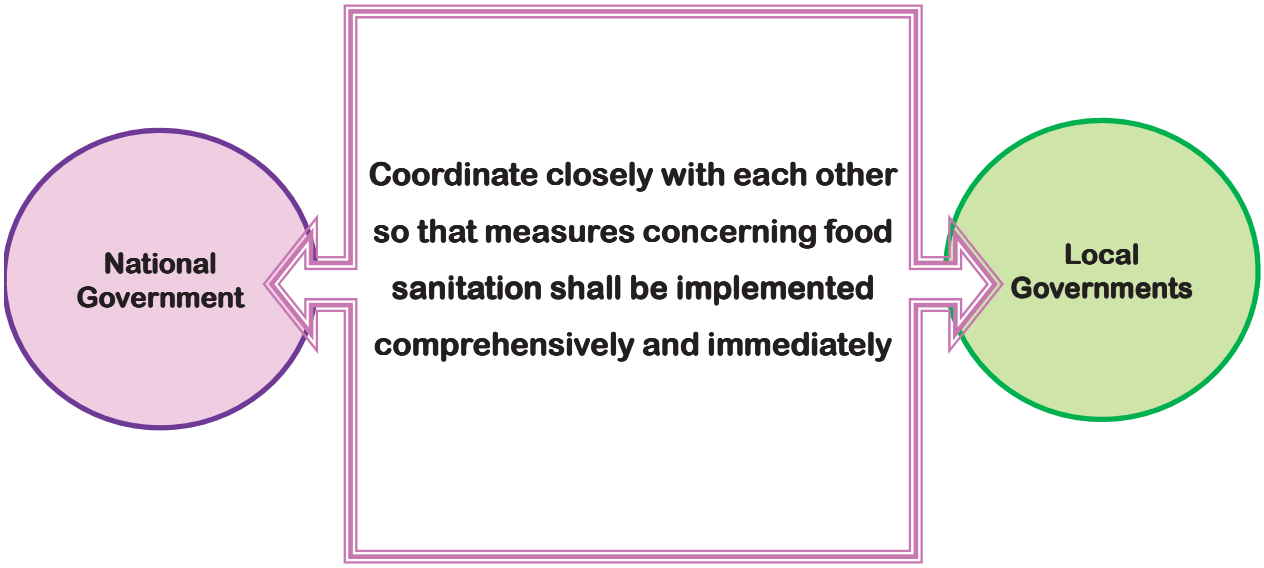
■Standards■

Criteria and Standards of food, food additive, apparatus, container and packaging (Article 11, 18)

■Monitoring and guidance■

- **Guideline of monitoring and guidance and plan of those(Article 22, 23, 24)**
- **Inspection order (Article 26)**
- **removal for testing (Article28)**

Responsibility of National and Local Governments



Responsibility of National Government

(Article 2) ※

- ◆Disseminate the correct knowledge
- ◆Collection, compilation, analysis and provision of information
- ◆Promote research
- ◆Enhance inspection capabilities
- ◆Foster the human resources and enhance their capabilities
- ◆Develop a system for conducting collection of information, carrying out research, and making inspections on imported foods, etc.
- ◆Ensure international coalition
- ◆Technical assistance for local governments

※Food Sanitation Act

Responsibility of Local Governments

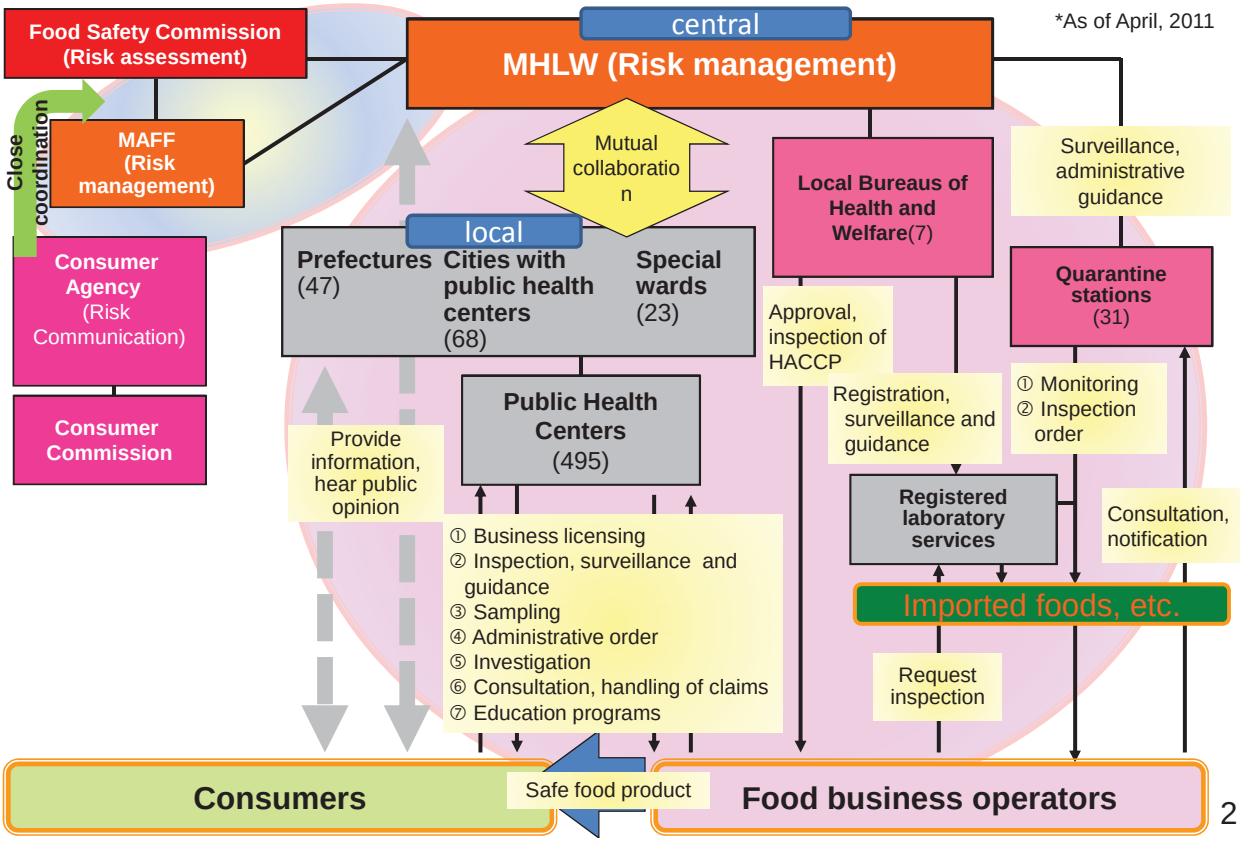
（Article 2）※

◆Disseminate the correct knowledge
◆Collection, compilation, analysis and provision of information
◆Promote research
◆Enhance inspection capabilities
◆Foster the human resources and enhance their capabilities

◆Approval of the business(Article 52)※
◆Slaughter inspection 【based on other laws】
（cattle, horses, swine, sheep, goats and poultry）

※Food Sanitation Act

Administrative Structure for Food Safety



2

Overall picture of regulations and control under the Food Sanitation Act

- Setting restrictions and standards for food/additives, apparatus, containers and packaging, etc.
- Monitoring and guidance
- Administrative penalties on violations

Administrative penalties on violations

An administrative penalty will be imposed on a violation of a law

- disposal order
- cancellation of the business license and prohibition/suspension of business, etc.
- fine

Guidelines and plans for monitoring and guidance

(in the context of Articles 22 to 24)

Guidelines for monitoring and guidance on food sanitation

Monitoring and Guidance plan For imported food

Local government plan for monitoring of and guidance on food sanitation

Formulation, Modification→ Gather opinions of the public and residents
The progress of the implementation of the plan → Publicizing

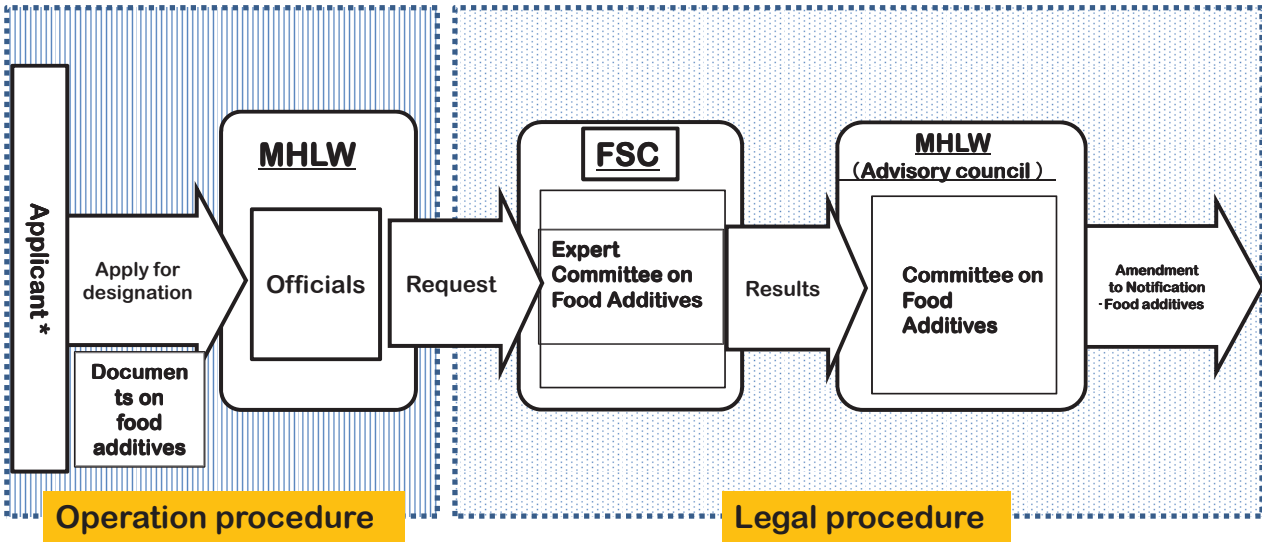
Monitoring and guidance are planned on a yearly basis at both national and prefectural government levels and are implemented in accordance with the plans.

Guidelines for monitoring of and guidance on food sanitation

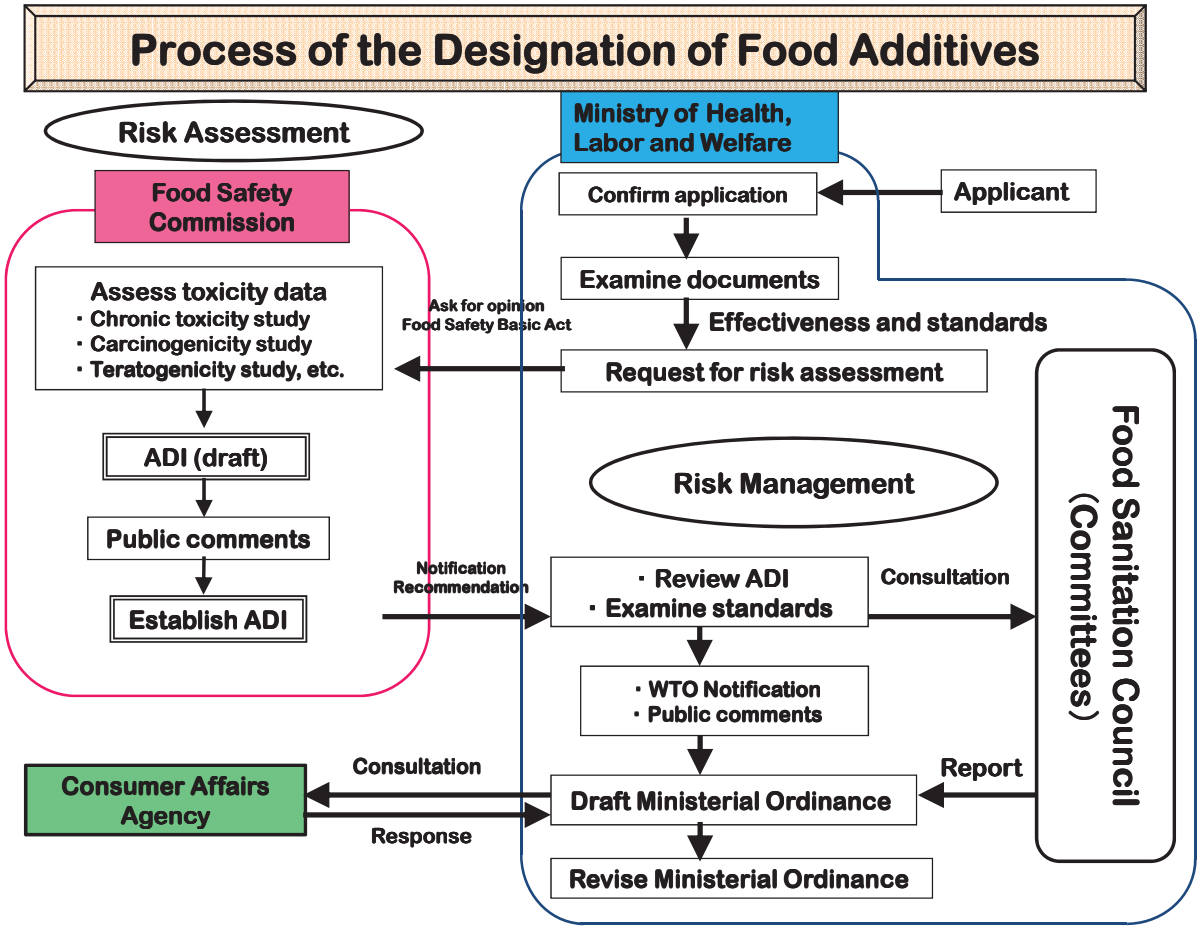
(Article 22)

- Basic directions
- Monitoring and guidance items to be particularly focused on
- Basic monitoring and guidance items
- Important issues concerning the implementation of monitoring and guidance

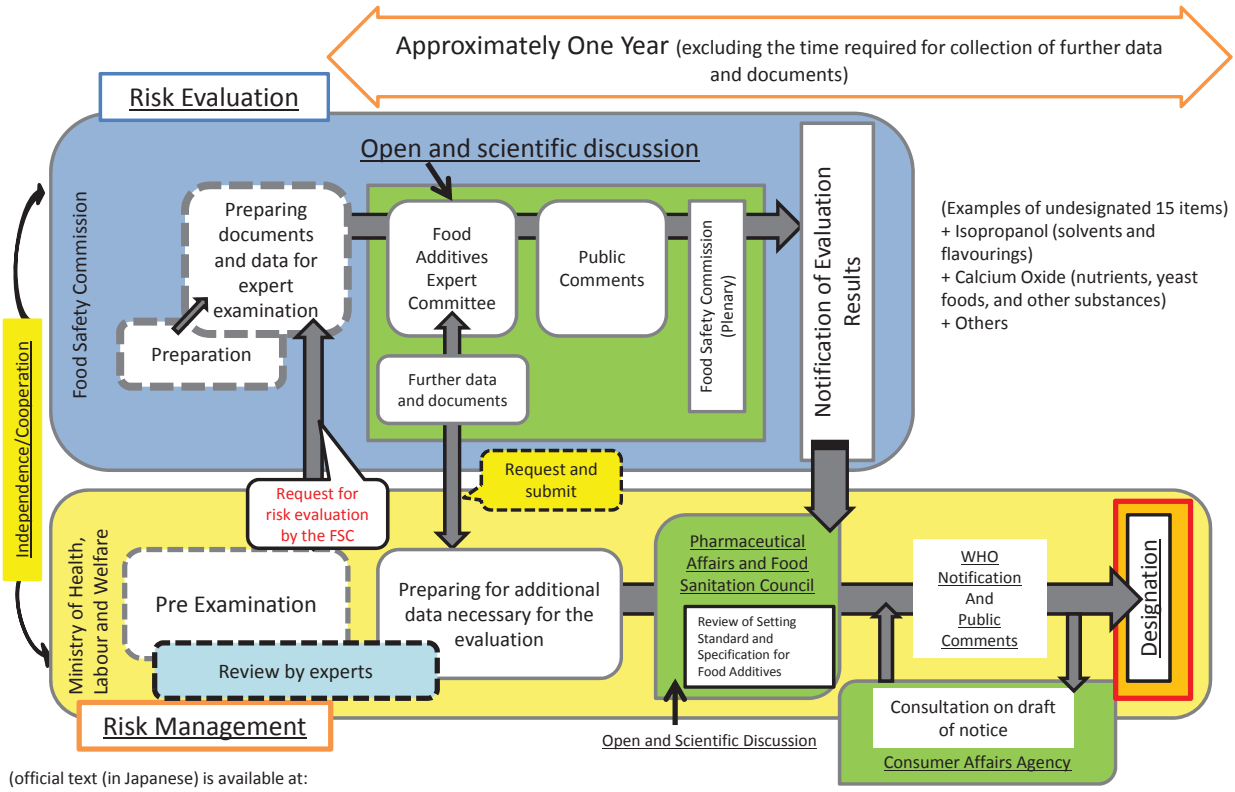
Procedure for the Designation of Food Additives



Process of the Designation of Food Additives



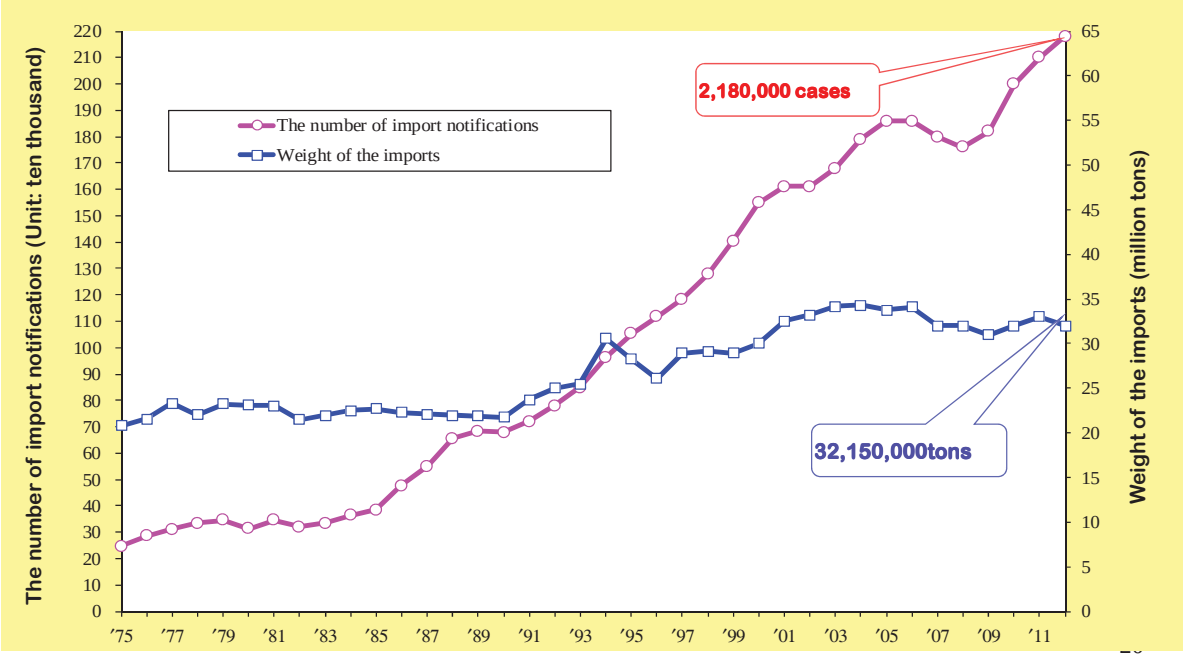
Designation Process for internationally commonly used food additives (Road Map)



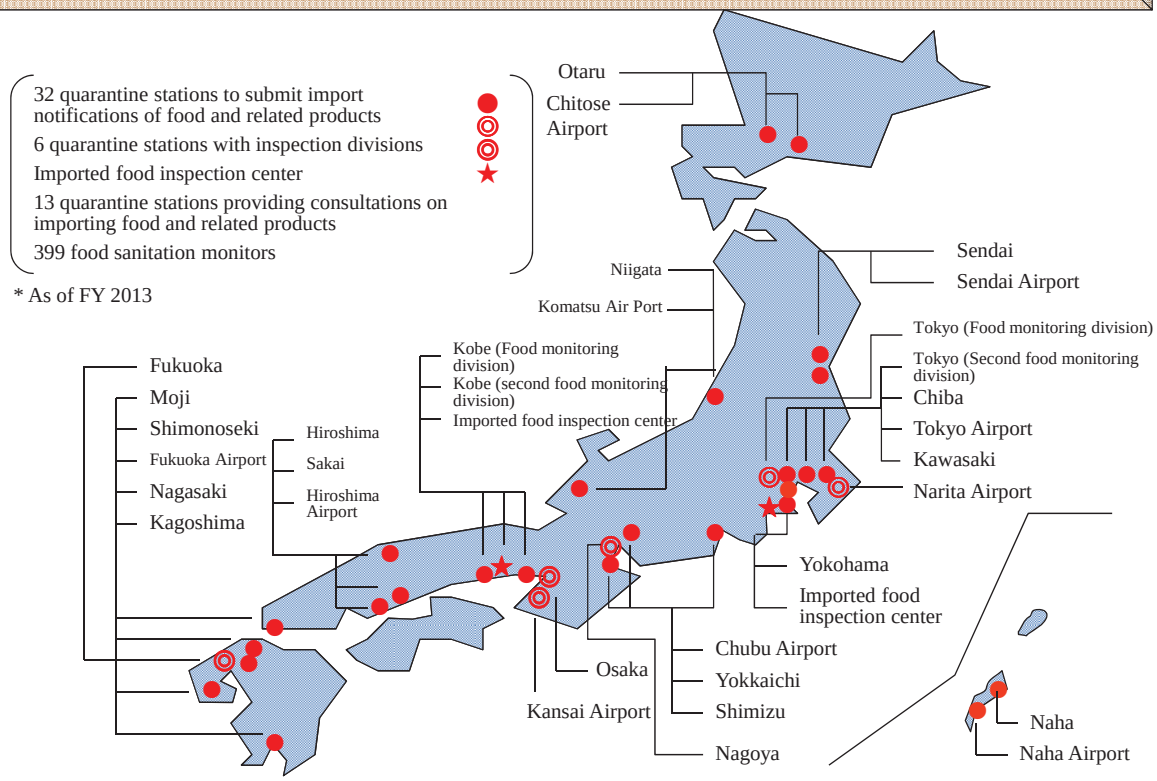
(official text (in Japanese) is available at:
http://www.mhlw.go.jp/seisakunitsuite/bunya/kenkou_iryou/shokuhin/syokuten/dl/120912-1.pdf.)

Current status of food import

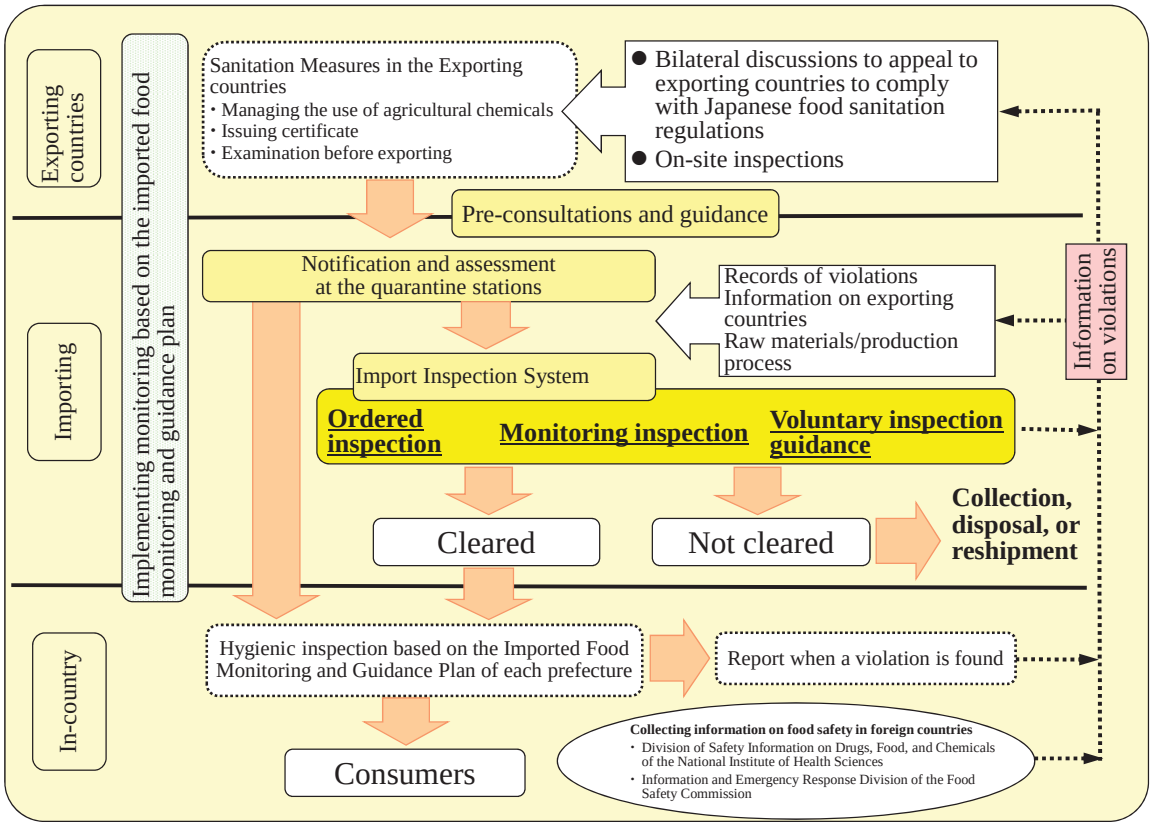
- The number of notifications of food imports is on the rise. The latest data shows approximately two million items notified.
- Imported food accounts for about 60% of food in Japan.
  *Japan's self-sufficiency is about 40% (on a caloric basis.)



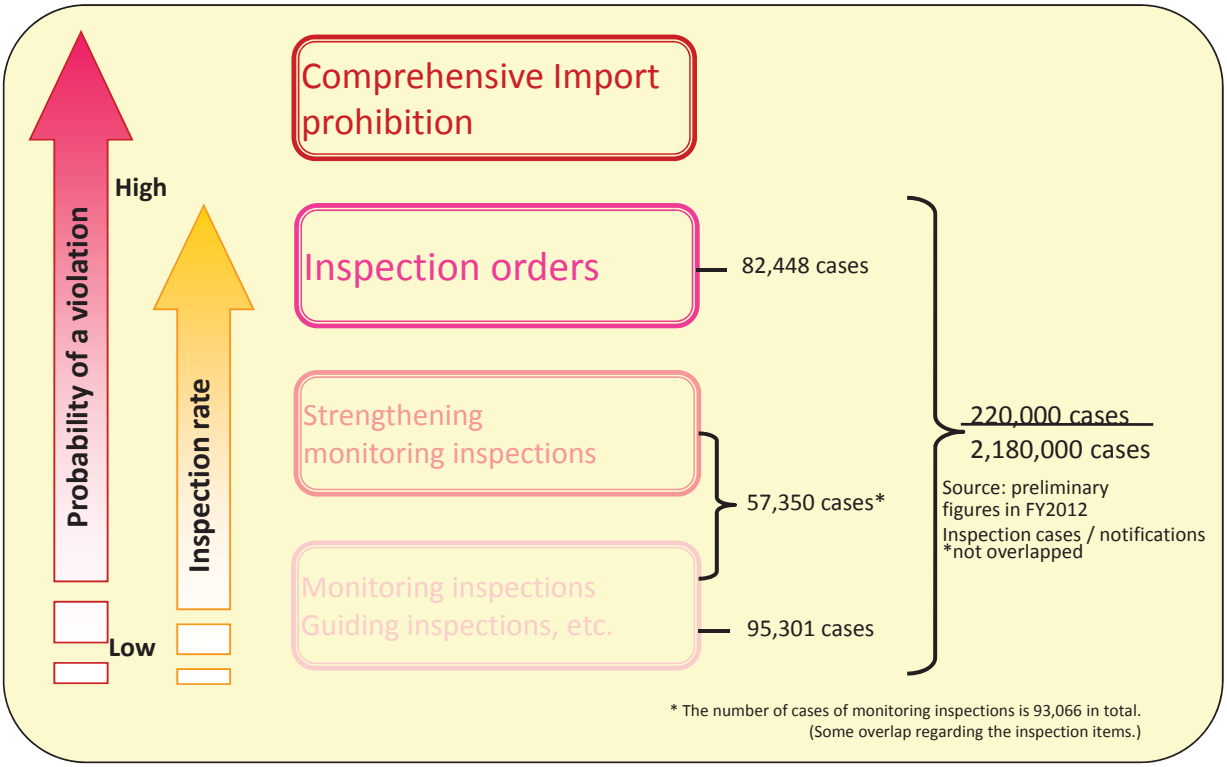
Places to Submit Import Notifications of Foods and Related Products



Outline of the Monitoring System for Imported Food



Outline of the Import Inspection System



Inspection Orders by the Minister of Health, Labour and Welfare

Requirements for ordering inspections

Emergence of health hazards / **Danger of health hazards**

Caused by the same producing country, manufacturer, or food processing company regarding the same imported food (Example: E. coli O-157, Listeria, Aflatoxin, etc.)

Violation → **Order inspection immediately**

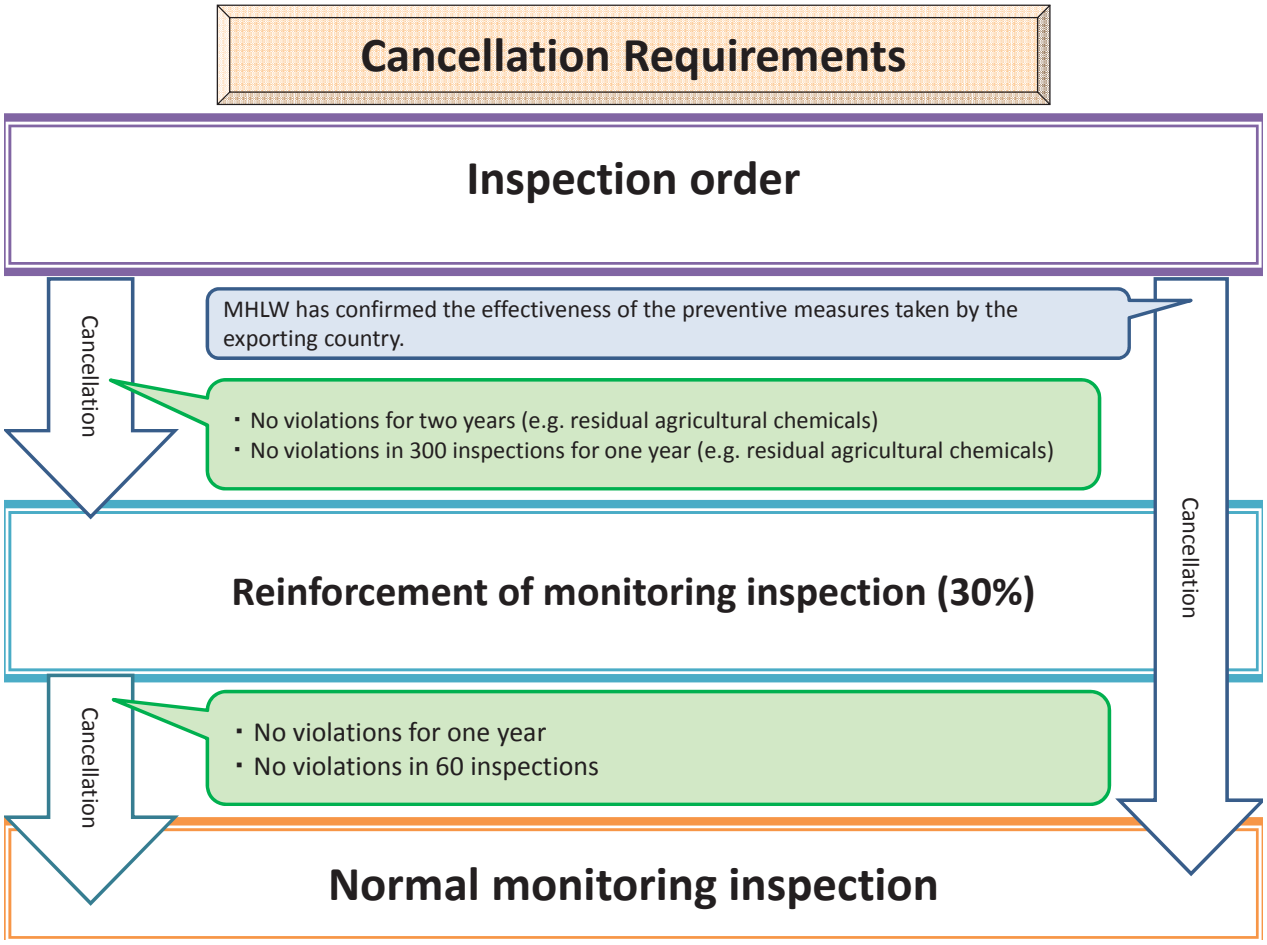
Pesticide residue
Veterinary medicine

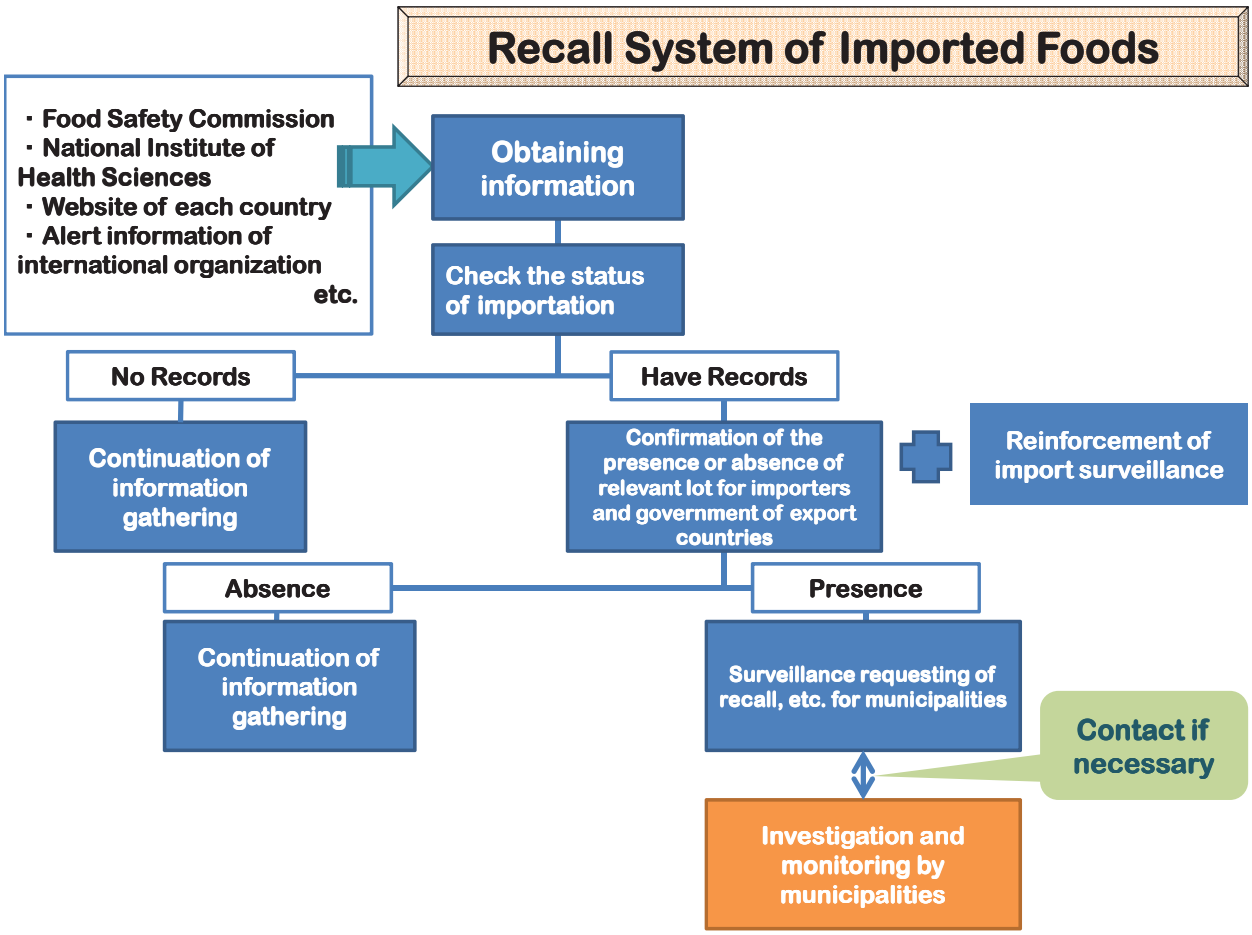
Violation → **Increase the frequency of monitoring inspections**

Violation → **Order inspection** if violation is assumed highly probable

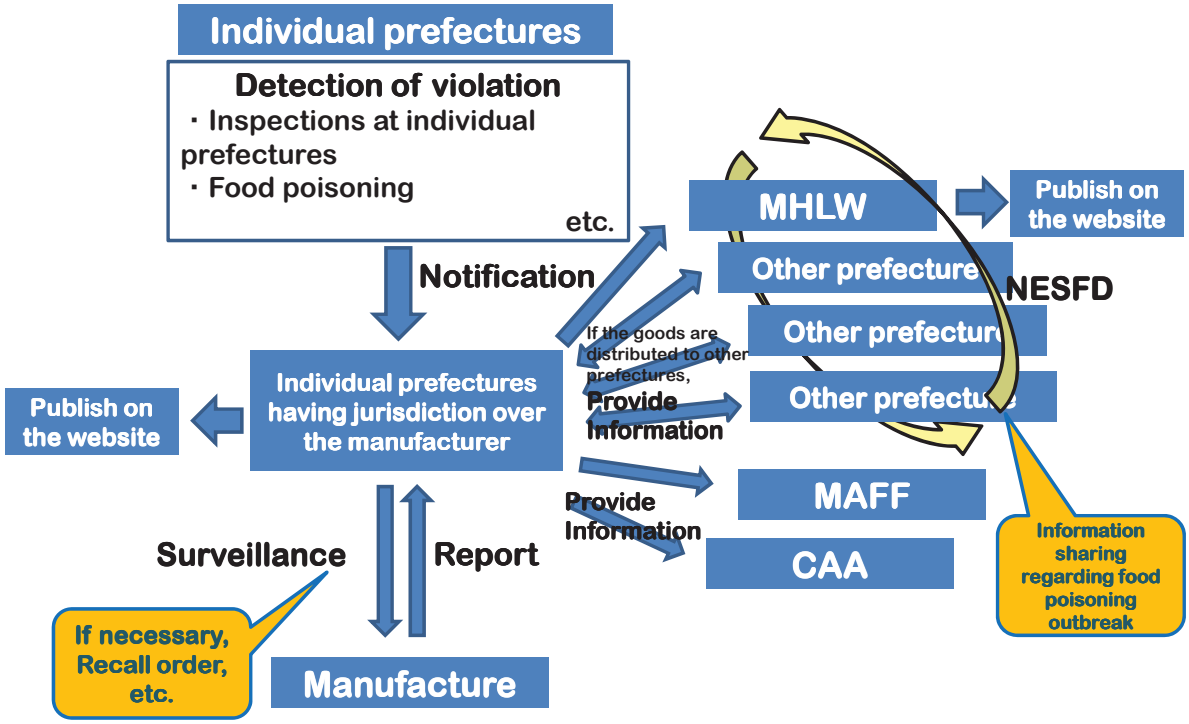
Dropping inspection orders

The exporting country has established measures against a recurrence.
It is confirmed that the violated food is not going to be imported again.

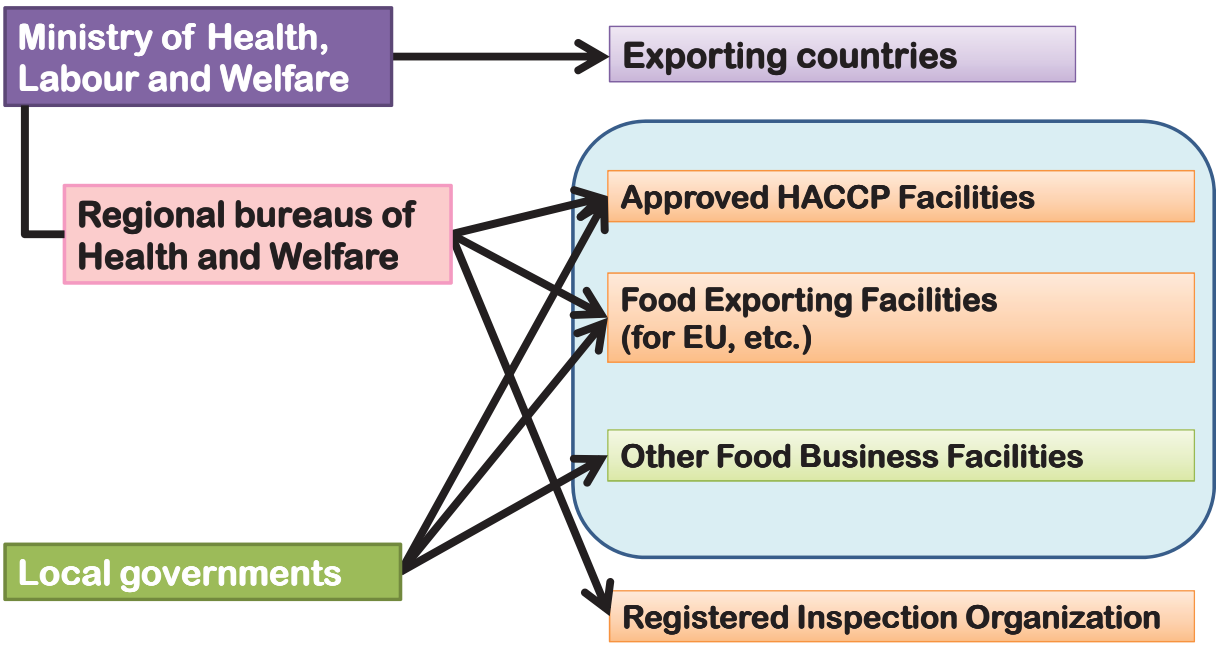

Cancellation Requirements
Inspection order
MHLW has confirmed the effectiveness of the preventive measures taken by the exporting country.
Cancellation
・No violations for two years (e.g. residual agricultural chemicals)
・No violations in 300 inspections for one year (e.g. residual agricultural chemicals)
Cancellation
Reinforcement of monitoring inspection (30%)
Cancellation
・No violations for one year
・No violations in 60 inspections
Normal monitoring inspection


Recall System of Imported Foods
・Food Safety Commission
・National Institute of Health Sciences
・Website of each country
・Alert information of international organization
etc.
Obtaining information
Check the status of importation
No Records
Have Records
Continuation of information gathering
Confirmation of the presence or absence of relevant lot for importers and government of export countries
Reinforcement of import surveillance
Absence
Presence
Continuation of information gathering
Surveillance requesting of recall, etc. for municipalities
Contact if necessary
Investigation and monitoring by municipalities

Recall system of violated foods in Japan



Audit related to Food Safety



Overview of food safety administration (summary)

Assuring safety of food, taken in by all the people of Japan in their everyday life, thereby protecting their health

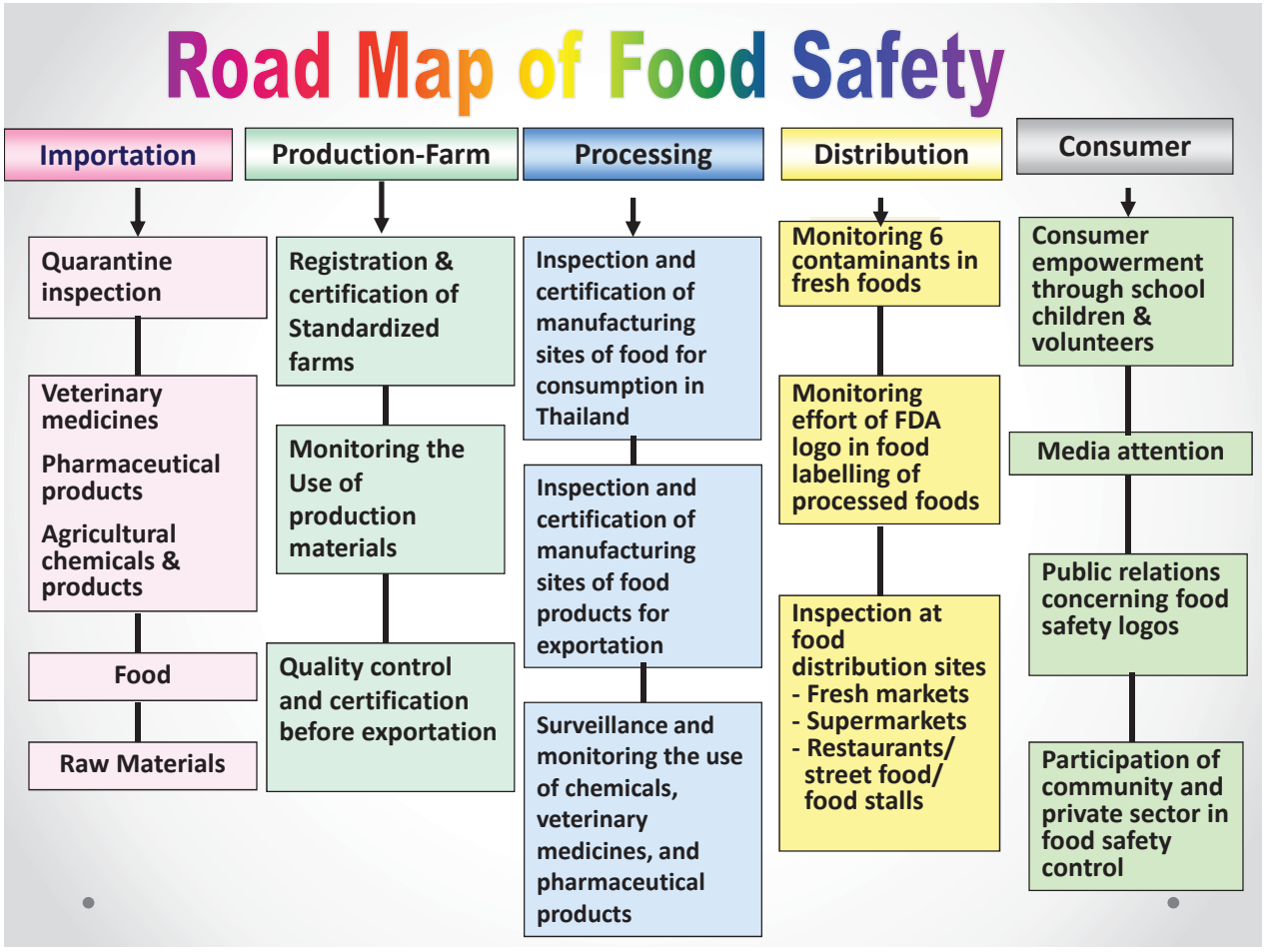
◆ **Response based on the latest scientific findings**
→Risk analysis
(Risk assessment, risk management, risk communication)

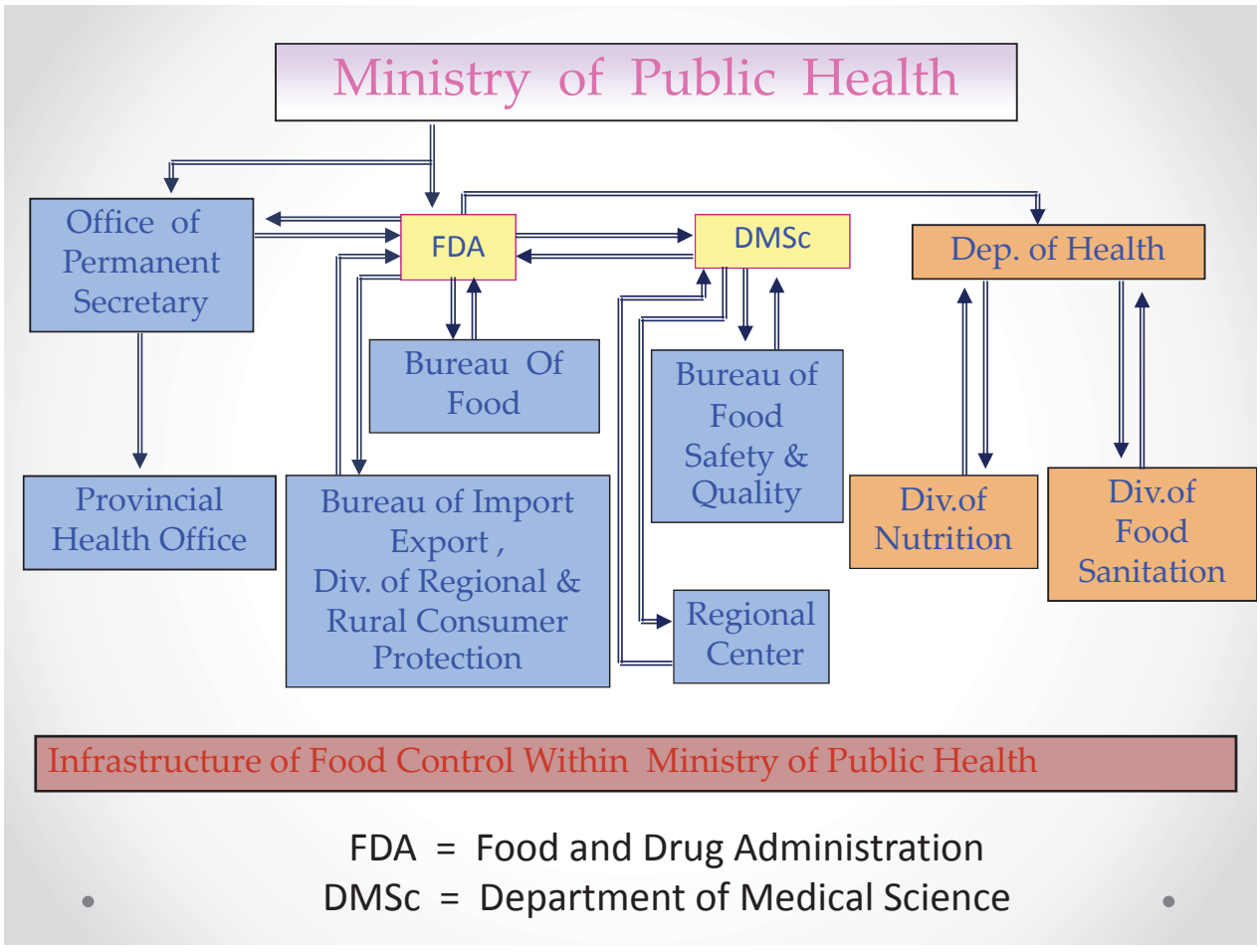
◆ **Initiatives based on mutual collaboration among diverse stakeholders, including the national government, municipalities, food-related business operators and consumers.**
→Easy-to-understand communication, interactive opinion exchange

◆ **Sanitation control based on laws (e.g., the Food Sanitation Act)**
→Scientific references, planned monitoring and guidance (PDCA), recall instructions, etc.

THANK YOU FOR YOUR ATTENTION

Food Control System in Thailand


Road Map of Food Safety
Importation
Production-Farm
Processing
Distribution
Consumer
Quarantine inspection
Veterinary medicines
Pharmaceutical products
Agricultural chemicals & products
Food
Raw Materials
Registration & certification of Standardized farms
Monitoring the Use of production materials
Quality control and certification before exportation
Inspection and certification of manufacturing sites of food for consumption in Thailand
Inspection and certification of manufacturing sites of food products for exportation
Surveillance and monitoring the use of chemicals, veterinary medicines, and pharmaceutical products
Monitoring 6 contaminants in fresh foods
Monitoring effort of FDA logo in food labelling of processed foods
Inspection at food distribution sites
- Fresh markets
- Supermarkets
- Restaurants/ street food/ food stalls
Consumer empowerment through school children & volunteers
Media attention
Public relations concerning food safety logos
Participation of community and private sector in food safety control


Ministry of Public Health
Office of Permanent Secretary
FDA
DMSc
Dep. of Health
Bureau Of Food
Bureau of Food Safety & Quality
Provincial Health Office
Bureau of Import Export , Div. of Regional & Rural Consumer Protection
Regional Center
Div.of Nutrition
Div.of Food Sanitation
Infrastructure of Food Control Within Ministry of Public Health
FDA = Food and Drug Administration
DMSc = Department of Medical Science

Roles and Responsibility of Thai FDA

Health Products include; Foods, Drugs, Psychotropic Substances, Narcotics, Medical devices, Volatile Substances, Cosmetics and Hazardous Substances

1. Legislate Notifications of Ministry of Public Health
2. Pre-Marketing Control
3. Post -Marketing Control
4. Surveillance
5. Support & Cooperate Technical Knowledge
6. Disseminate Knowledge & Develop Consumer Behavior

Key Player under Thai Food Act 1979

Food Committee (Minister Consultants)

Sub-committee: Risk assessment, Risk management, Risk communication

Minister

Notifications

Raw Materials/ Products

Process/ Premises

Advertisements

- Safety
- Quality
- Benefits

FDA

Authority:
- License Approval
- Withdraw/Prohibit
- Appoint Officers

Producer/Importer

Roles:
- Submit for Production License
- Comply with Notifications
- Cooperate with Officers

Rights:
- Receive Production License

Officers

Roles:
- Control/Monitor
- Inspect

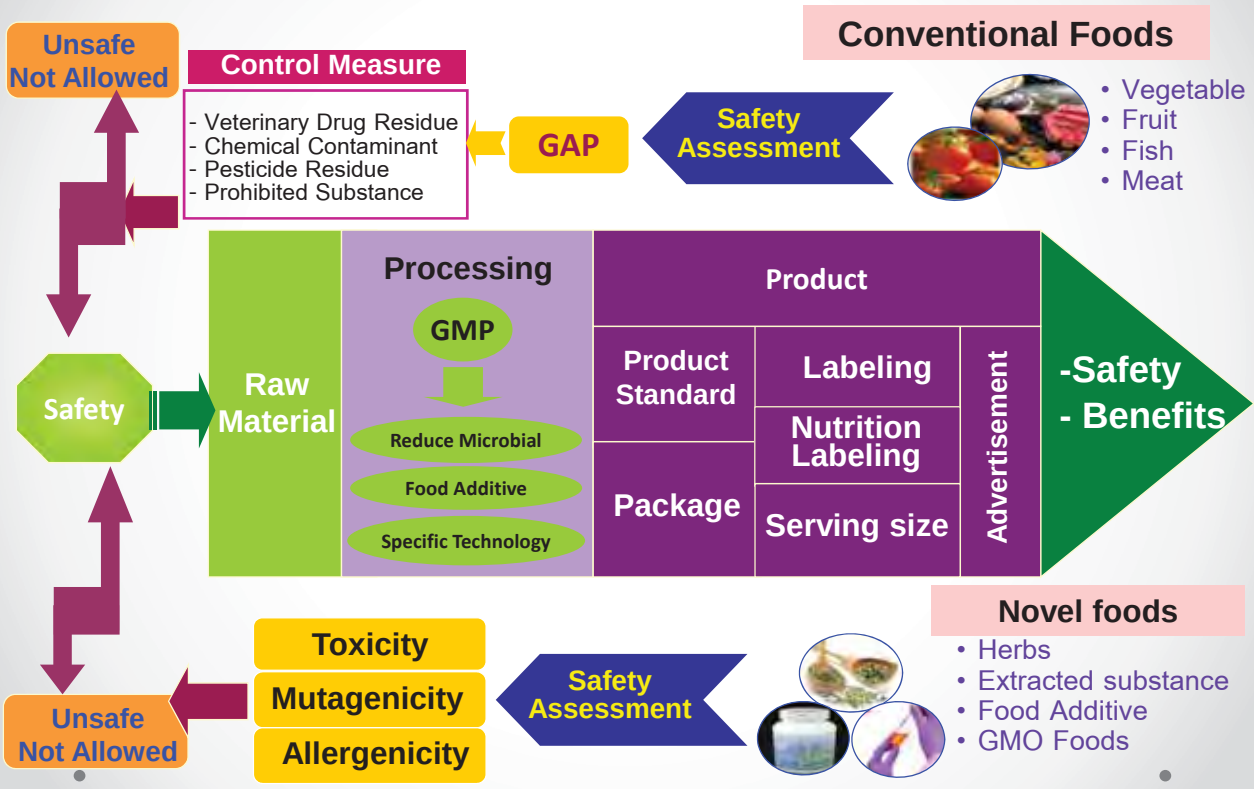
Rights:
- Cooperate with producer/importer
- Inspect Premises/Documents/Products

Punishment

- Withdraw/ Prohibit /Suspension (in accordance with the criteria)
- imprison/ fine (in accordance with the criteria)

6

Food Safety Management base on Risk



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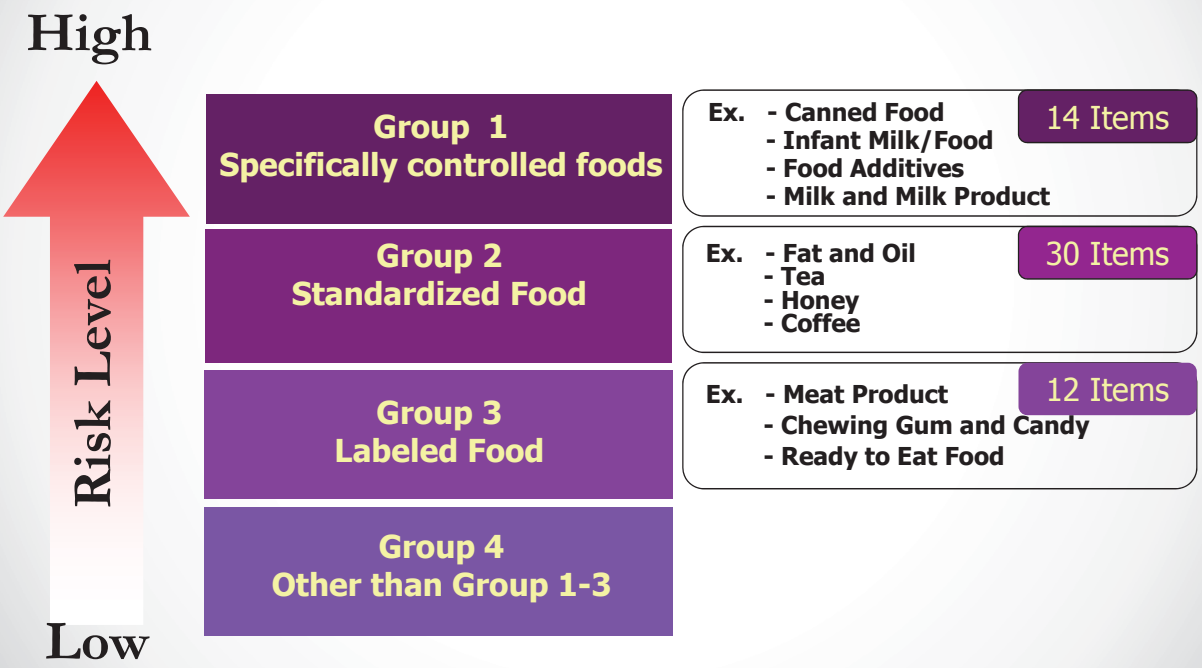
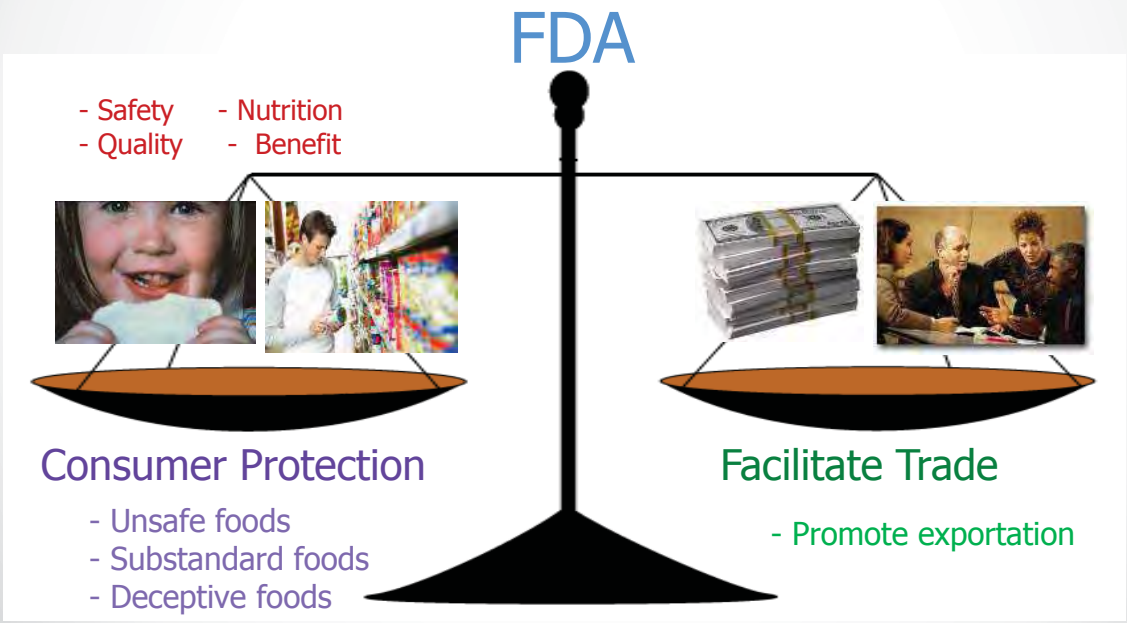
8

According to the Food Act (1979) food products are classified into 4 groups

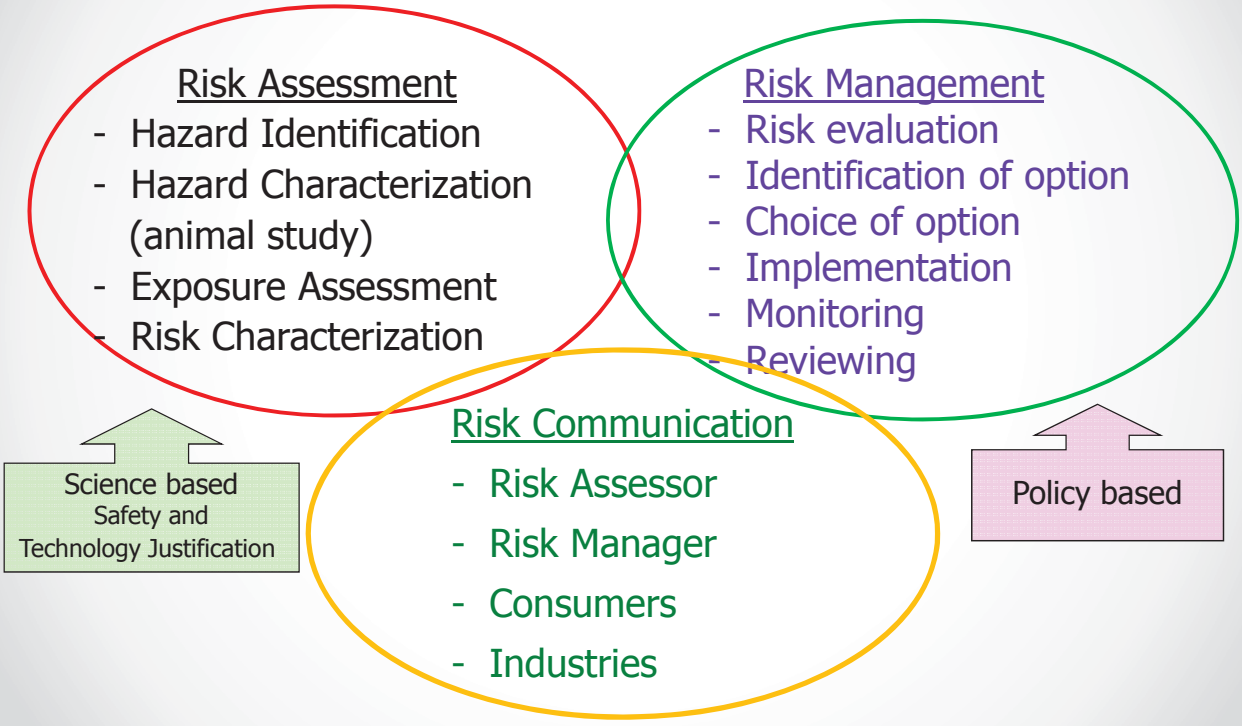


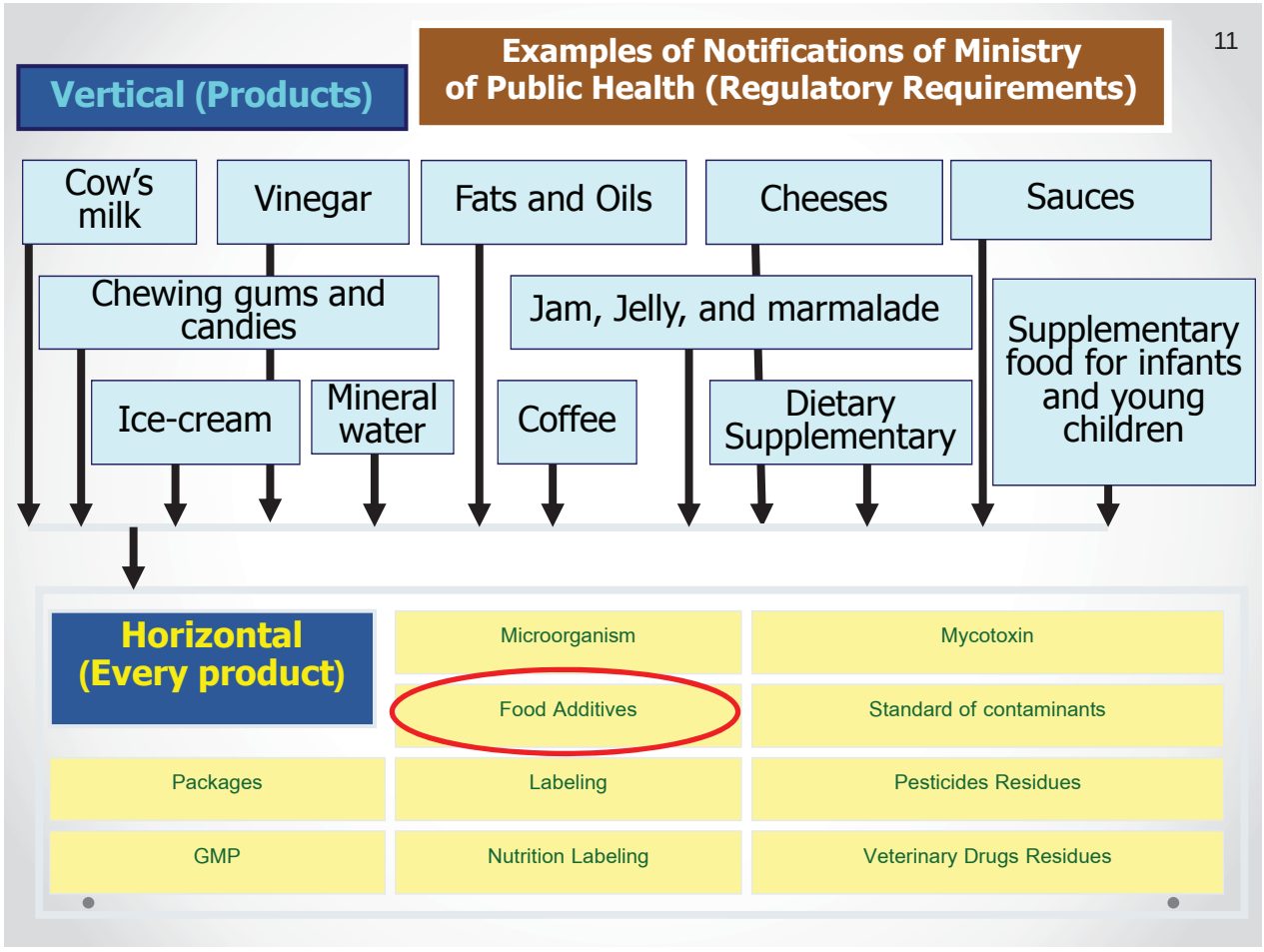
Legislation of Food Standard

Current: Food Act B.E. 2522 (1997)



RISK ANALYSIS



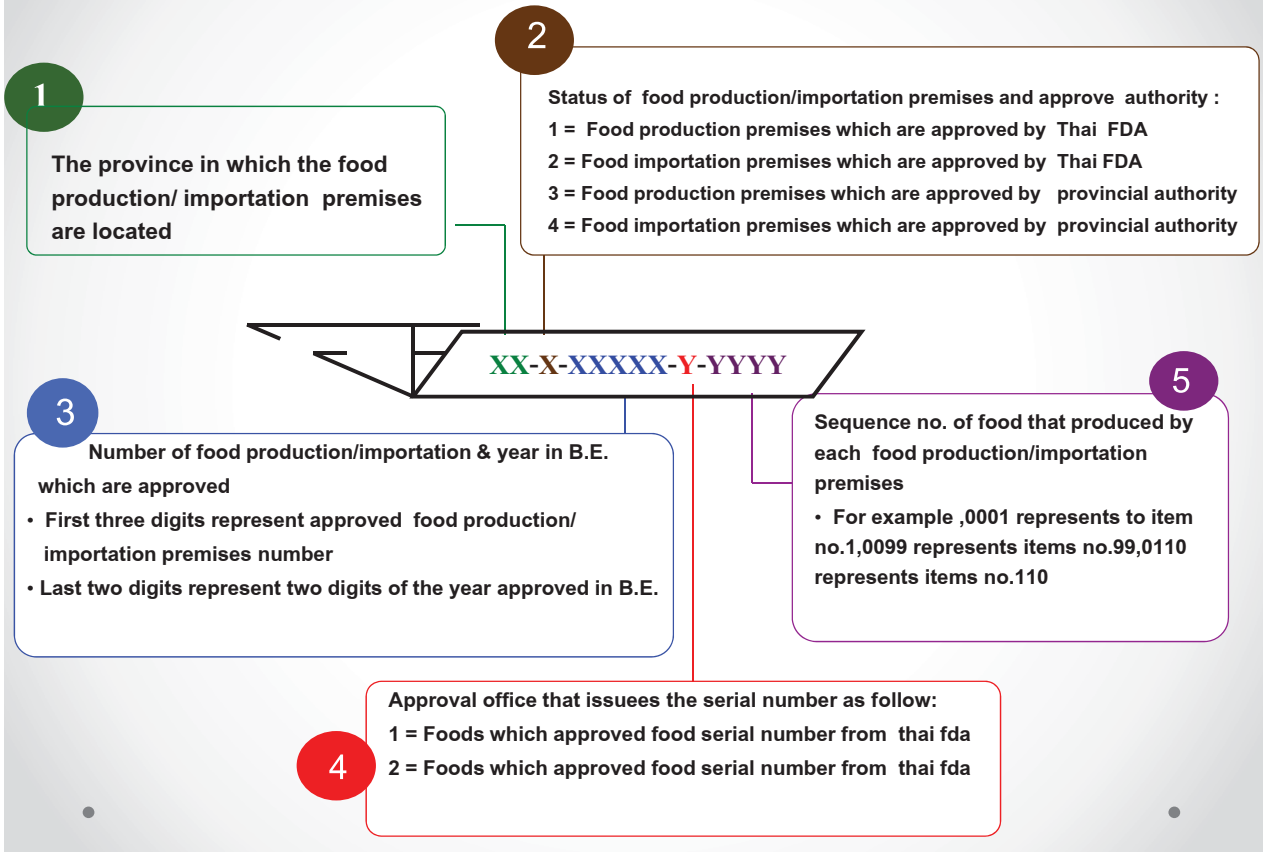

11
Examples of Notifications of Ministry of Public Health (Regulatory Requirements)
Vertical (Products)
Cow's milk
Vinegar
Fats and Oils
Cheeses
Sauces
Chewing gums and candies
Jam, Jelly, and marmalade
Supplementary food for infants and young children
Ice-cream
Mineral water
Coffee
Dietary Supplementary
Horizontal (Every product)
Microorganism
Mycotoxin
Food Additives
Standard of contaminants
Packages
Labeling
Pesticides Residues
GMP
Nutrition Labeling
Veterinary Drugs Residues


Thai FDA Food Safety Control System
• Notification of MOPH
• Specification
Pre-marketing Officers
Post-marketing Officers
Approval
Surveillance
Raw Material
Premise
Product
Advertisement
Producer
Produce/Import/Distribute
Apply the Notification of MOPH to Food Producing
Raw Material
Premise
Product
Advertisement
Consumer
expectation
Safety
Benefit
Wholesomeness
Thai Food and Drug Administration
Ministry of Public Health
12

Food Categories and How to Apply for Product Approval

Categories	Domestic/Imported Food
A. Specific Controlled Food	1. Apply for Manufacturing/Importation License 2. Register for Approval Number
B. Standardized Food	1. Apply for Manufacturing/Importation License 2. Notify for Approval Number*
C. Labeled Food 1. Notify standard labeled food	1.1. Apply for anufacturing/Importation License 1.2. Notify for Approval Number*
2. Non-notify standard labeled food	2.1 Apply for Manufacturing/Importation License 2.2 --

Food Serial Number



Food safety and quality improvement for SMEs – Challenges and Thai Experience

Manufacturing Procedures, Production Equipment and Appliance, and Food Storage of

Prepackaged

Processed Foods

Pre-packaged Processed Foods → **Household and Community Production**

Vision: Systematically develop and strengthen Pre-packaged Processed Foods, marketing, logistic and supply chain, including management system in order to create a positive image and value added products.

Objective: To develop both domestic and foreign trade of Pre-packaged Processed Foods, **leading to market-driven mechanism with the cooperation from all sectors, both public and private.**

Primary Good Manufacturing Practice (Primary GMP)

Goal

To serve as a tool for improve the standards and quality of local / SMEs products, moving forward to AEC 2015 and becoming as a "Kitchen of the World"

18

19

According to the Food Act (1979)
food products are classified into 4 groups

High

Risk Level

Low

Group 1 Specifically controlled foods	Ex. - Canned Food - Infant Milk/Food - Food Additives - Milk and Milk Product	14 Items
Group 2 Standardized Food	Ex. - Fat and Oil - Tea - Honey - Coffee	30 Items
Group 3 Labeled Food	Ex. - Meat Product - Chewing Gum and Candy - Ready to Eat Food	12 Items
Group 4 Other than Group 1-3		

Goal : Improve quality of Thai food products with the primary GMP

- Reduce the risk of foodborne diseases/illness
- Improve the standards and quality of food premises/factory
- Strengthen the measures of overseeing food products, both imported and exported
- Prepare for the opening of the ASEAN Community
- Enhance the ability of SMEs to improve their potential for moving forward to international

Thai Food to World Kitchen

GMP/ HACCP → GROUP 1

GMP → GROUP 2-3

Primary GMP → GROUP 4
Household and Community Production

Specific Controlled Food(group1)

- **Beverage in Sealed Container**
- **Infant Formula and Follow-on Formula**
- **Infant Food and Follow-on Food for Infant and Children**
- **Supplementary Food for Infant and Children**
- **Flavored Milk**
- **Cultured Milk**
- **Cow's Milk**
- **Other Milk Products**
- **Ice cream**
- **Food Additives**
- **Food for Weight Control**
- **Food in Sealed Containers**

Horizontal standard (food additive ,pesticide residue,labeling …)
Vertical standard in each prouct → REGISTER FOR APPROVAL

Prescribed Food to have Quality or Standard(group2)

- **Coffee**
- **Fat and Oil**
- **Coconut Oil**
- **Cheese**
- **Tea**
- **Peanut Oil**
- **Butter Oil**
- **Ghee**
- **Vinegar**
- **Palm Oil**
- **Butter**
- **Margarine**
- **Semi Processed Food**
- **Soybean Milk in Sealed Container**
- **Jam, Jelly, and Marmalade in Sealed Container**
- **Royal Jelly and Royal Jelly Product**
- **Seasoning Products from hydrolysis or fermentation of Soybean Protein**
- **Chocolate**
- **Honey**
- **Fish Sauce**
- **Particular Sauces**
- **Ice**
- **Salt**
- **Fortified Rice**
- **Mineral Water**
- **Quicklime Soaked Egg**
- **Electrolyte Drink**
- **Drinking Water**
- **Herbal Tea**
- **Dietary Supplement Product**

Horizontal standard (food additive pesticideresidue,labeling …)
Vertical standard in each prouct → NOTIFY FOR APPROVAL NUMBER

Prescribed Food to have Label (group3)

- **Bread**
- **Processed Agar and Jelly Dessert**
- **Sauce in Sealed Containers**
- **Chewing Gum and Candy**
- **Brine for Cooking**
- **Brown Rice Flour**
- **Ready to Cook and Ready to Eat**
- **Meat Product**
- **Irradiated Food**
- **Flavoring agent**
- **Food for Special Purpose**

Horizontal standard (food additive ,pesticide residue,labeling …)

NOTIFY FOR APPROVAL NUMBER

"Pre-packaged Processed Foods" are defined as foods that have passed through processing procedures such as trimming, roasting, drying, fermenting, or foods that have passed through processing procedures resulting in characteristic changes or foods which have passed through manufacturing processes **and been packed into pre-packaged containers for sale to the consumer excluding specific controlled foods, standardized foods, and foods that require specific labeling** as enforced by the Ministry of Public Health (MOPH) "Production Processes, Production Equipment, and Food Storage."

Manufacturers of food products as stipulated in Clause 2 shall comply with (GMP)manufacturing procedures, production and appliance, and food storage of processed foods, and prepackaged processed food products

Importers of food products as stipulated in Clause 2 **shall provide certificates of guarantee** of standards for (GMP) manufacturing procedures, production equipment and appliance, and foodstorage of processed food products

Good Manufacturing Practice(GMP)

1. Location and manufacturing building
2. Tools , machinery , and manufacturing equipment
3. Control of manufacturing process
4. Sanitation
5. Maintenance and cleaning
6. Personal and hygiene of workers

Location and manufacturing building

Location

- - surroundings must not be accumulation unused thing ,a place for breeding animals
- - away from area that has unusually high level dust

Manufacturing building

- ***- suitable size***
- - easy for maintenance and cleaning
- - measures to prevent animals and insects
- - ***enough space for install tools and equipment***

Tools , machinery , and manufacturing equipment

- made from materials which do not react with the food
- the tables must made from materials that are free from rust and cleaned easily
- *design and installation must be appropriate ,cleaned easily ,and thoroughly*
- *sufficient quantity*

Control of manufacturing process

- raw materials and ingredients
- the food containers must be in proper condition
- water used in food process must be of the qualityand standard under notification of ministry of public health
- ***must prepare documents and records***

Sanitation

- the water used must be clean
- lavatory and hand-washing sink must be in good hygienic ,away from manufacturing area , sufficient number
- measures to prevent and dispose of animals and insects
- provided effective and suitable drainage way to release water

Maintenance and cleaning

- manufacturing building ,tool ,machinery , and equipment must be cleaned
- regular checked and maintained
- the chemical used for cleaning must be safe and proportionately ,separate ,safety stored

Personal and hygiene of workers

- must not be suffering from any kind of communicable disease
- wear clean and suitable clothes ,hat ,hair netting
- wash their hand
- ***training for workers***

Mandatory for food hygiene

- **Location and building**
- **Production area**
- **Personal hygiene**
- **Tool , machinery , and manufacturing equipment**

Food producer Education

Objective: To promote, supervise and develop the food products quality though improvement of production practices

Working area: All over the country according to the problem

Learning Centre

Provincial Public Health

Collaboration between academia and regulators

Educational Institute / Academia ⟺ **Thai FDA**

- **Knowledge**
- **Budget**
- **Public relations**

Output

- New products (1 product/centre)
- Learning Centre with basic equipment and tools needed
- Standard Operating Procedure (SOP)

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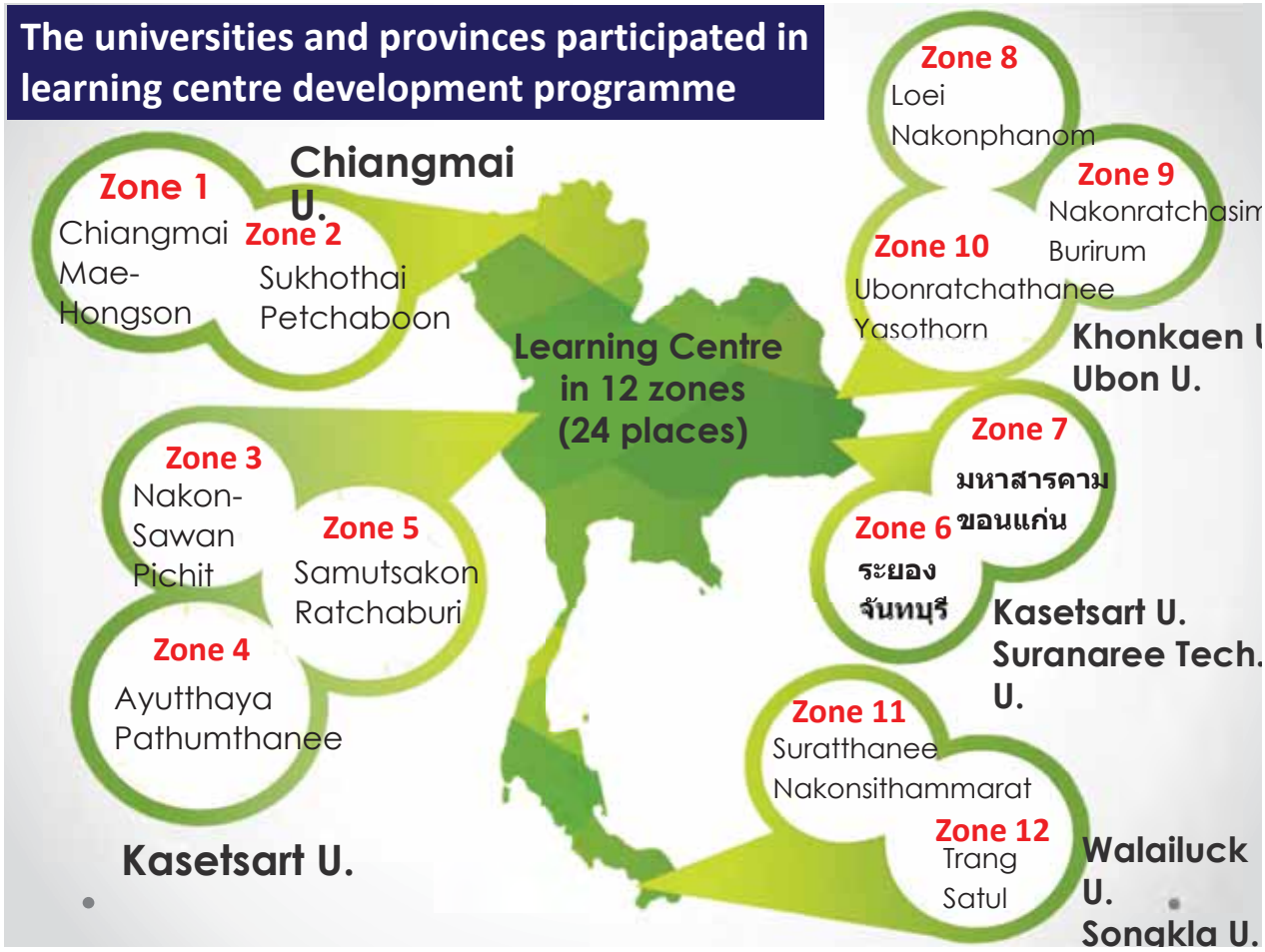

Technical Support

In put: Master plan, Budget support, Online data base system, Training and Technical support

Out put: Food safety situation of the country.

Working area: 26 center (in 5 regions of Thailand)



Outcome

Enhance the Strength

- Improve product safety and quality
- Develop new products
- Implement standards

Eliminate the weakness

- Value added and increase sales volume
- Acceptability and Sustainability

Reduce obstacles Create opportunity

- Create a market niche
- Increase in communities' incomes

Thailand will become "World Kitchen"

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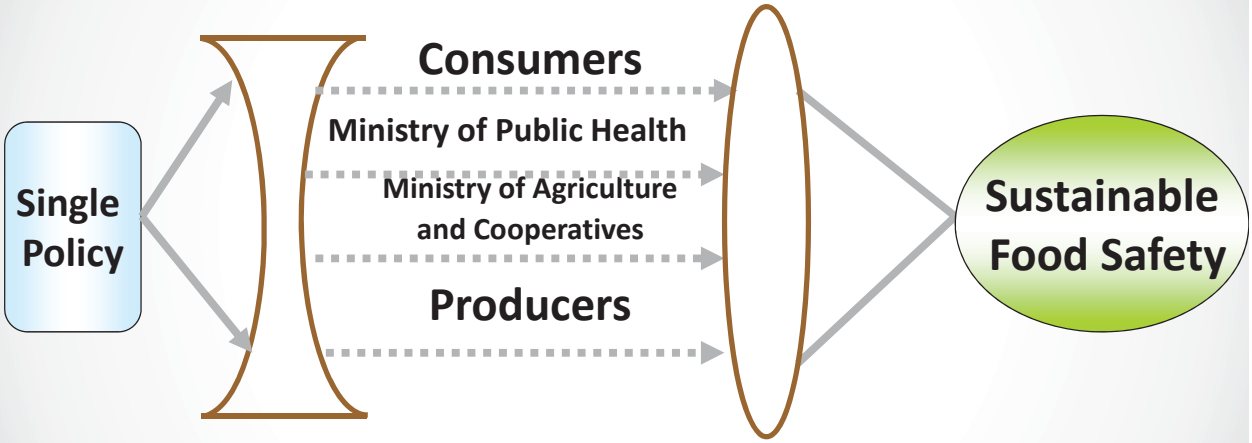
Stakeholders

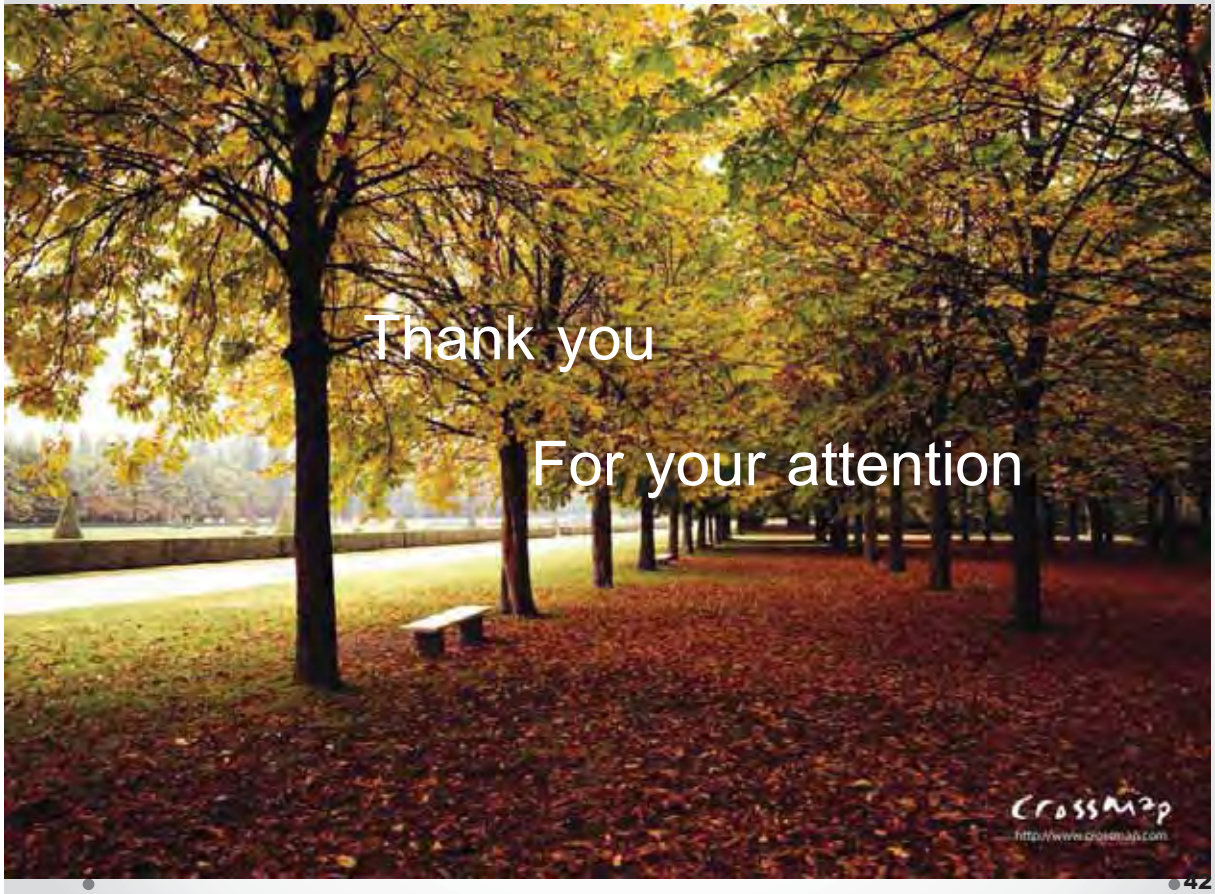


"Lessons learned"

1. Participation of all related sectors in food safety control.
2. Working as an integrated system towards the same goal of the single governmental policy.
3. Strengthening of capacity building
4. Technical development (e.g. labs)
5. Consumer empowerment
6. Media influence

'Food Safety'

→ Consumer Health Protection and Health Promotion



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RISK COMMUNICATION STRATEGY FOR FOOD SAFETY IN INDONESIA

Halim Nababan
National Agency for Drug and Food Control
Republic of Indonesia

Presented on:
Workshop and Roundtable Discussion on Food Safety and Standards
Yangoon, Myanmar, 4-5 March 2014

PRESENTATION AGENDA

- Introduction
- Risk Analysis and Communication
- Examples of Food Safety Issues
- Conclusions

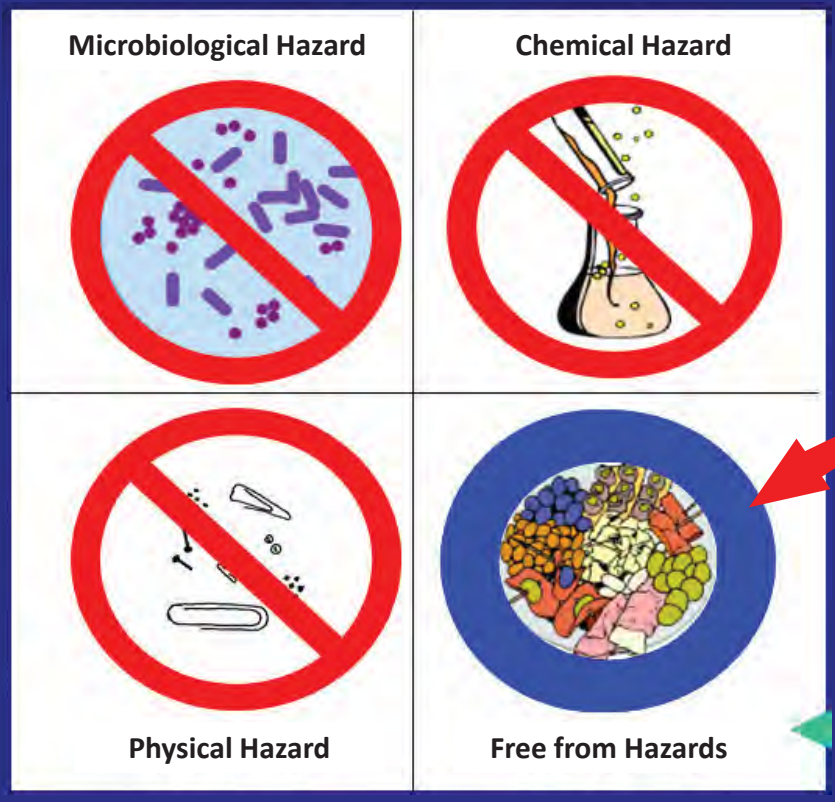
PRESENTATION AGENDA

- Introduction
- Risk Analysis and Communication
- Examples of Food Safety Issues
- Conclusions

Food safety is an essential part of food security

Indonesian Food Law No 18/2012 Article 1 : Food Security is the fulfillment of Food for the state up to the individuals, that is reflected by Food availability that is sufficient, both in quantity and quality, safe, diverse, nutritious, prevalent and affordable as well as not conflicting with religion, belief and culture, to live healthy, active and productive in a sustainable manner.

SAFE FOOD: CONTAMINATION FREE



INDONESIAN FOOD LAW NO 18/2012, Article 68:

(1) Government and Regional Government guarantee implementation of Food Safety on every Food chain in an integrated manner.

(2) Government set the norm, standards, procedures, and criteria for food safety.

Explanation of the law:

(2) The setting of norms, standards, procedures, and criteria of food safety among others, the risk based analysis. The risk analysis is a decision-making prosess is done in a systematic and transparant based on scientific information covering risk management, risk assessment, and ris communitaion

PRESENTATION AGENDA

- Introduction
- ✓ Risk Analysis and Communication
- Examples of Food Safety Issues
- Conclusions

RISK ANALYSIS

"Risk analysis must be the foundation on which food control policy and consumer protection measures are based"

(Guideline for strengthening National Food Control System, FAO/WHO, 2003)

RISK ANALYSIS

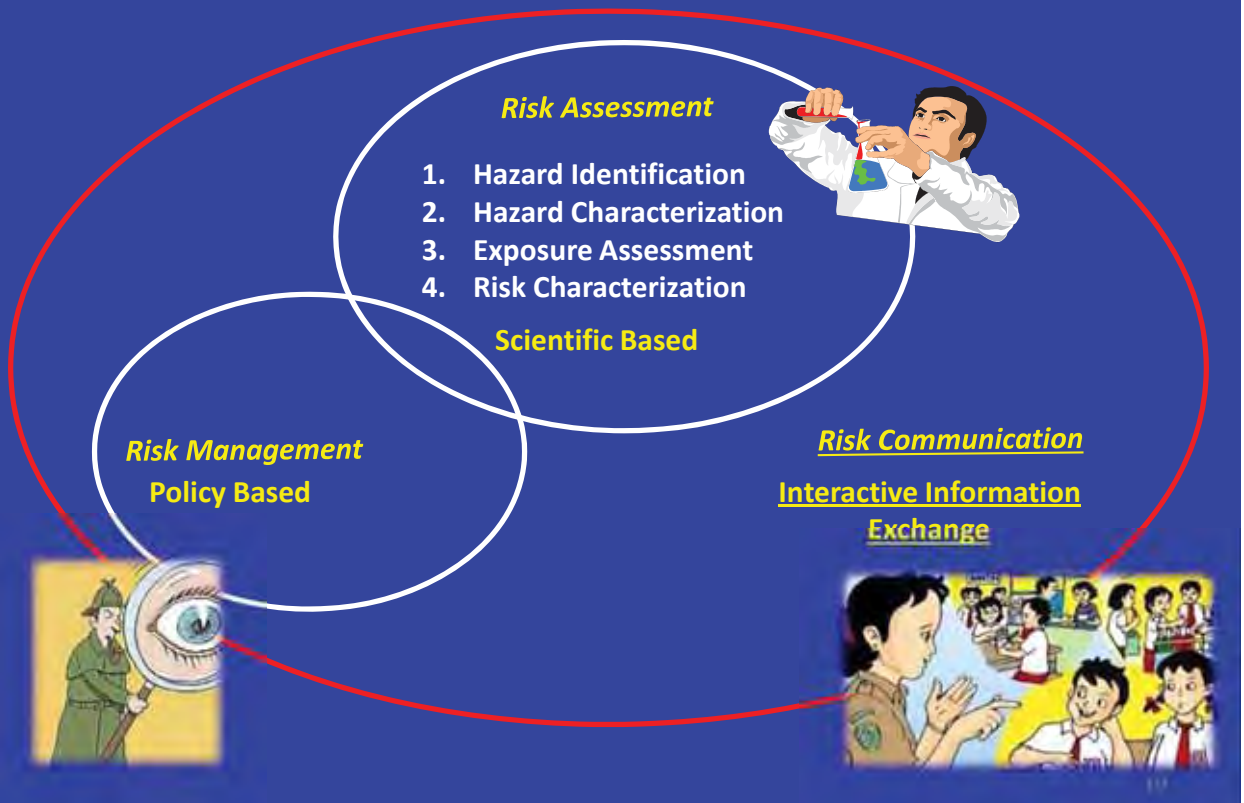
The CAC defines risk analysis as a process composed of three components:

- ***Risk assessment*** - a scientifically based process consisting of the following steps: (i) hazard identification; (ii) hazard characterization; (iii) exposure assessment; and (iv) risk characterization.

- ***Risk management*** - the process, distinct from risk assessment, of weighing policy alternatives, in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and, if needed selecting appropriate prevention and control options.

- ***Risk communication*** - the interactive exchange of information and opinions throughout the risk analysis process concerning hazards and risks, risk related factors and risk perceptions, among risk assessors, risk managers, consumers, industry, the academic community and other interested parties, including the explanation of risk assessment findings and the basis of risk management decisions.

SCHEMATIC CONCEPT OF RISK ANALYSIS



Risk Communicators' important roles

Risk assessment by experts

HAZARDS

Risk evaluation by risk communicator

INFORMATION

Risk evaluation by society

RESPONDING AND UNDERSTANDING

PRESENTATION AGENDA

- Introduction
- Risk Analysis and Communication
- ✓ Examples of Food Safety Issues
- Conclusions

REPUBLIC OF INDONESIA

Challenges:

1. Wide coverage area of control and large diversity of foods, including imported products
2. The need improving knowledge and skill to produce high quality and safe foods (SMEs in particular)
3. The need to increase the number of competent food inspectors
4. A large number of consumer with Low Level of Awareness in Food Safety

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EXAMPLES OF FOOD SAFETY ISSUES

2010-2013

- Illegal Foods
- Instant Noodles
- Packaged Drinking Water
- Food Consumed by School Children

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ILLEGAL FOODS

Issues:

Raw materials contained contaminants caused food rejection in exporting countries.

Examples:
- Ketchup containing sulphite carried from brown sugars
- Aflatoxin in peanut butter
- Rhodamine B in fried rice seasoning and bottled sauces
- Cyanide in snack

- **Coffee containing drugs chemicals**
- **Sibutramine in candies**

Brown sugar containing formaline and sulphyte

ILLEGAL FOODS

PROBLEMS	CAUSED
1 Complaint from domestic producers	• Different perception among stakeholders • **Missed communication** and less coordination with stakeholders • **Lacking partnership** with law authorities • Weak Sanction
2 Public concern	
3 Complaint from several ministries	
4 Competitiveness of domestic products decline	

Solutions

- **Improving coordination and communication** with stakeholders
- **Improving partnership** through Task Force for Combating Illegal Drug and Food

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INSTANT NOODLE

	PROBLEMS	CAUSE
1	Difference in food standards	• Different perception among public and government /scientist about hazard and risk • **Lack of risk communication** • Sampling and analysis • Limited of laboratory capacity
2	Public concern	
3	Food authority reputation	
4	Producers concern	
5	Indonesian food reputation in international level	

SOLUTIONS

- SOP of Crisis Management is needed
- Improving sampling and analysis
- Improving laboratory capacity
- **Strengthen risk communication including consumer education**
- Strengthen coordination with exporter

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PACKAGED DRINKING WATER

	PROBLEM	CAUSE
1	Consumer association findings (YLKI)	• **Lack of communication** with consumer association • **Lack of risk communication** • **Weak coordination** among stakeholder on producers education and food control
2	Public concern	
3	Producers concern	
4	NADFC reputation	

SOLUTIONS

- All findings were followed up
- **Strengthen coordination** among related stakeholders
- Capacity building for food inspector.
- Evaluation of Code of practice for food control

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FOOD CONSUMED BY SCHOOL CHILDREN (FCSC)

- School children are **highly exposed to FCSC**.
  - 48% respondents : often buy (4 times /week)
  - 51% respondents : rarely buy (1 times/week)
  - 1 % respondents : never buy
    (N=108,000 respondents, The National Monitoring and Verification of Foods Consumed by School Children, 2008)
- FCSC plays important roles as **one of important nutrient sources** for school children, e.g. they contribute to 36% of energy requirement for school children

However, FCSC possess risks due to: **(1) nutrient imbalance; (2) the potential usage of illegal chemicals and excessive additives ; (3) chemical and microbial contamination, as well as (4) unhygienic practices in the preparation and production of the foods**

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THE NATIONAL MOVEMENT OF FOOD SOLD AND CONSUMED BY SCHOOL CHILDREN(FCSC)

- Unsafe FSCS may lead to **acute or chronic adverse health** effects to the students.
- There were **many ministries involve in controlling the safety of FSCS**
- **Commitment of competent authorities are necessary** to improve the safety of FSCS is necessary

It is necessary to **initiate a clear and systematic plan** of action where related authorities contribute comprehensively and integrated on improving the safety, quality and nutrition of FSCS

National Movement of FSCS

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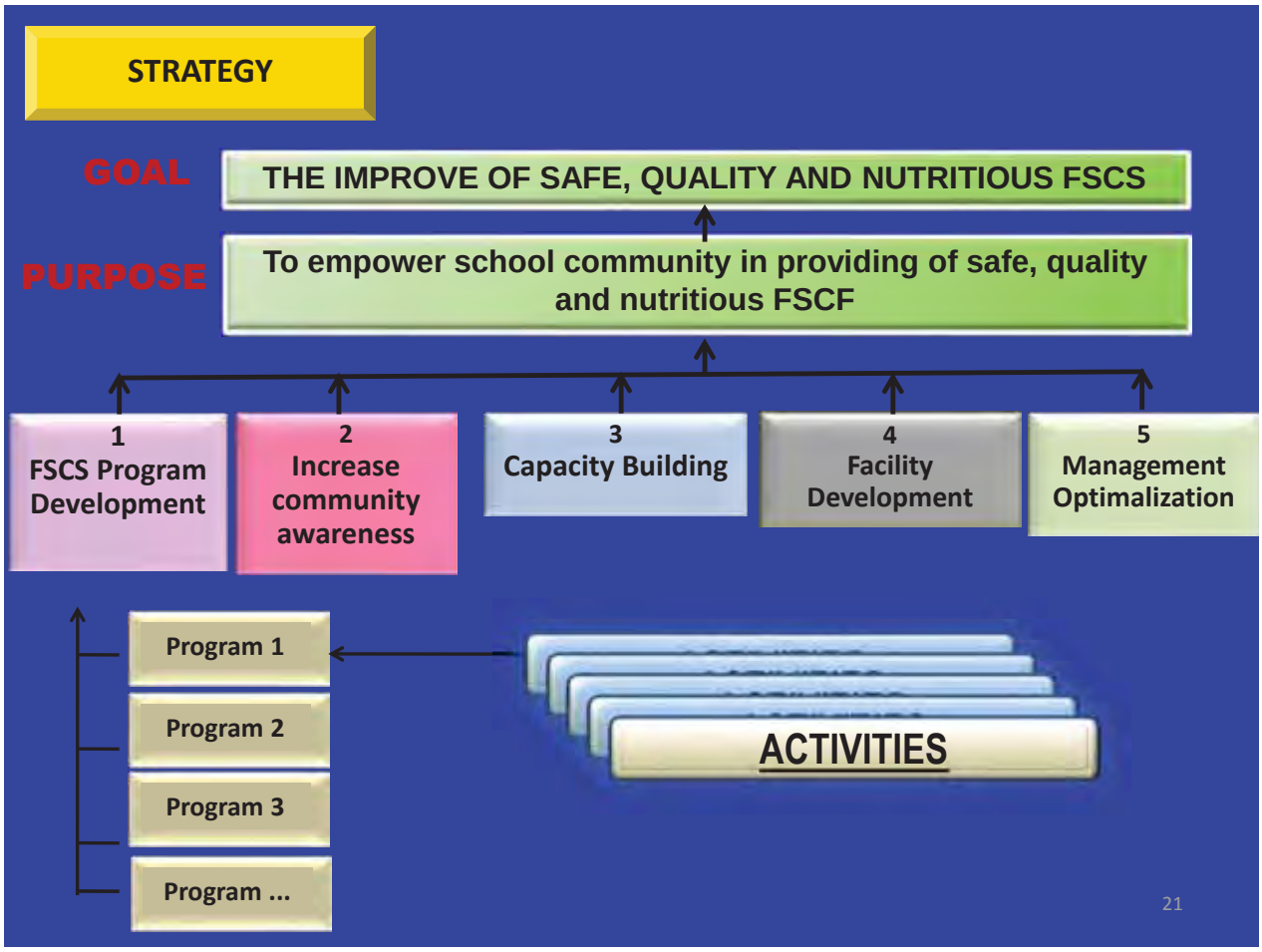
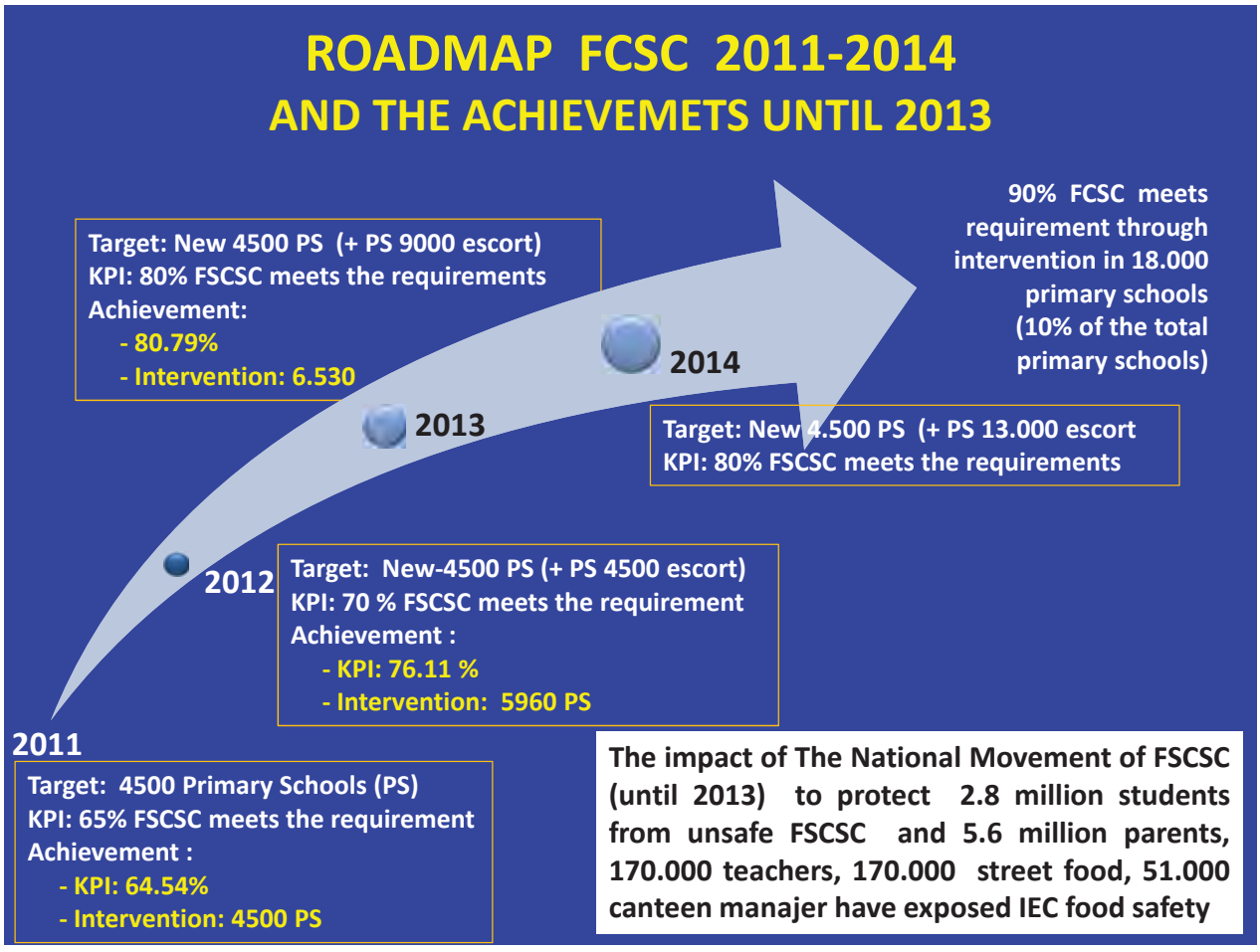
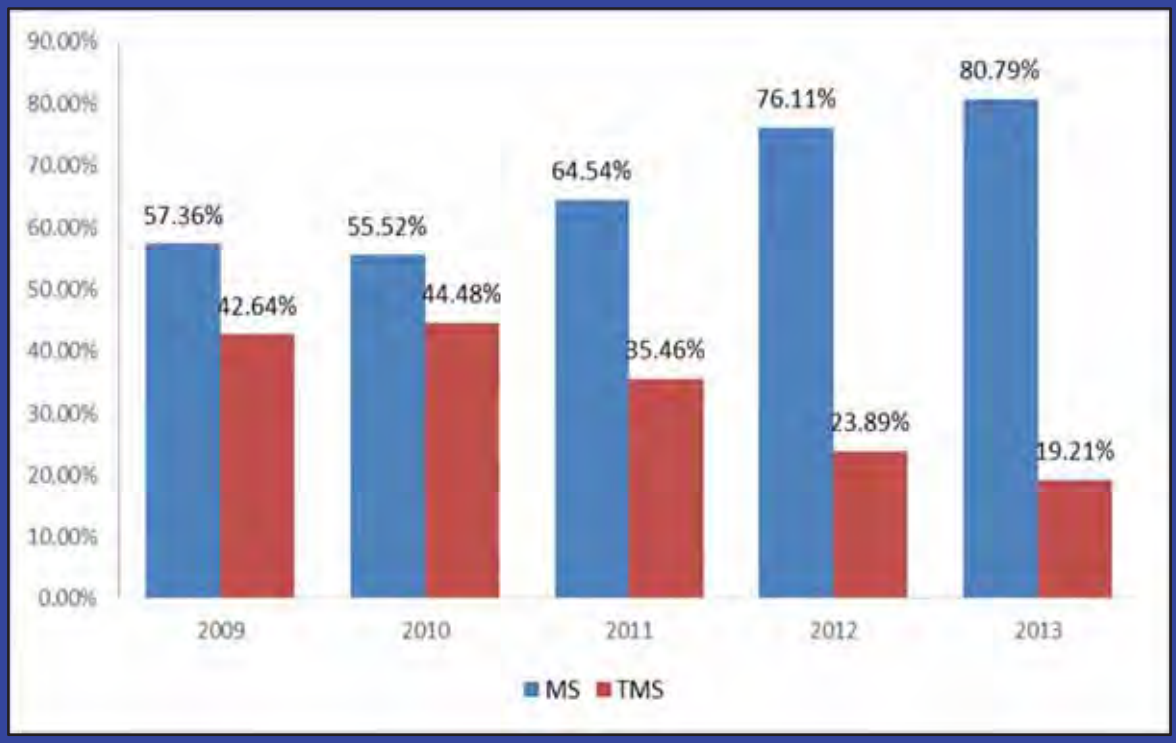

STRATEGY
GOAL
THE IMPROVE OF SAFE, QUALITY AND NUTRITIOUS FSCS
PURPOSE
To empower school community in providing of safe, quality and nutritious FSCF
1
FSCS Program Development
2
Increase community awareness
3
Capacity Building
4
Facility Development
5
Management Optimalization
Program 1
Program 2
Program 3
Program ...
ACTIVITIES
21


ROADMAP FCSC 2011-2014
AND THE ACHIEVEMETS UNTIL 2013
Target: New 4500 PS (+ PS 9000 escort)
KPI: 80% FSCSC meets the requirements
Achievement:
- 80.79%
- Intervention: 6.530
90% FCSC meets requirement through intervention in 18.000 primary schools (10% of the total primary schools)
2014
2013
Target: New 4.500 PS (+ PS 13.000 escort
KPI: 80% FSCSC meets the requirements
2012
Target: New-4500 PS (+ PS 4500 escort)
KPI: 70 % FSCSC meets the requirement
Achievement :
- KPI: 76.11 %
- Intervention: 5960 PS
2011
Target: 4500 Primary Schools (PS)
KPI: 65% FSCSC meets the requirement
Achievement :
- KPI: 64.54%
- Intervention: 4500 PS
The impact of The National Movement of FSCSC (until 2013) to protect 2.8 million students from unsafe FSCSC and 5.6 million parents, 170.000 teachers, 170.000 street food, 51.000 canteen manajer have exposed IEC food safety

TREND OF FSCSC MEET FOOD SAFETY REQUIMENTS 2009 - 2013



EXAMPLE OF RISK COMMUNICATION ACTIVITIES AS PART OF EDUCATION FOR CONSUMERS

klubpompi.pom.go.id

BADAN POM RI

5 KUNCI KEAMANAN PANGAN

UNTUK ANAK SEKOLAH

ISBN 978-602-8781-09-1

THE CAMPAIGN OF 5 FOOD SAFETY KEYS FOR SCHOOL CHILDREN

5 FOOD SAFETY KEYS FOR SCHOOL CHILDREN

KEY 1: RECOGNIZE SAFE FOOD

KEY 2: PURCHASE SAFE FOOD

KEY 3: READ LABEL CAREFULLY

KEY 4: KEEP CLEAN

KEY 5: RECORD WHAT YOU'VE FOUND AND REPORT

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EXAMPLE OF RISK COMMUNICATION ACTIVITIES FOR SCHOOL CHILDREN

E-NOTIFICATION

What is e-notification?

An information system between school community and klubpompi to facilitate quick information sharing on positive and negative aspects related to the safety of food sold and consumed by schoolchildren

It is placed under link klubpompi.pom.go.id

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FUTURE WORKS

To achieve better understanding of food safety for the society, in the near future, other risk communication strategies will be launched (starting 2014):

1. Food Safety in Villages
2. Indonesia Food Safety Month
3. National Education for Food Safety

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CONCLUSIONS

- Risk communication is very important part of risk analysis.
- Lack of communication often becomes the source of food safety problem
- Risk communication plays important roles when making solutions for food safety problems
- Risk must be communicated for related stakeholders, including consumers in such a way to achieve proper understanding of risk
- Consumers education as one of food safety intervention strategy to prevent food safety problems

thank you

Perspective of Food Labelling Systems in Japan

Mineo ANDO

Food Labelling Division,
Consumer Affairs Agency,
Government of Japan

Topics

- About Consumer Affairs Agency
- Perspective of Food labelling
  - Current acts concerning food labelling
  - A newly promulgated act: the Food Labelling Act of 2013
  - Introduction of mandatory nutrition labelling
- Labelling System for Genetically Modified Foods in Japan

Topics

- About Consumer Affairs Agency
- Perspective of Food labelling
  - Current acts concerning food labelling
  - A newly promulgated act: the Food Labelling Act of 2013
  - Introduction of mandatory nutrition labelling
- Labelling System for Genetically Modified Foods in Japan

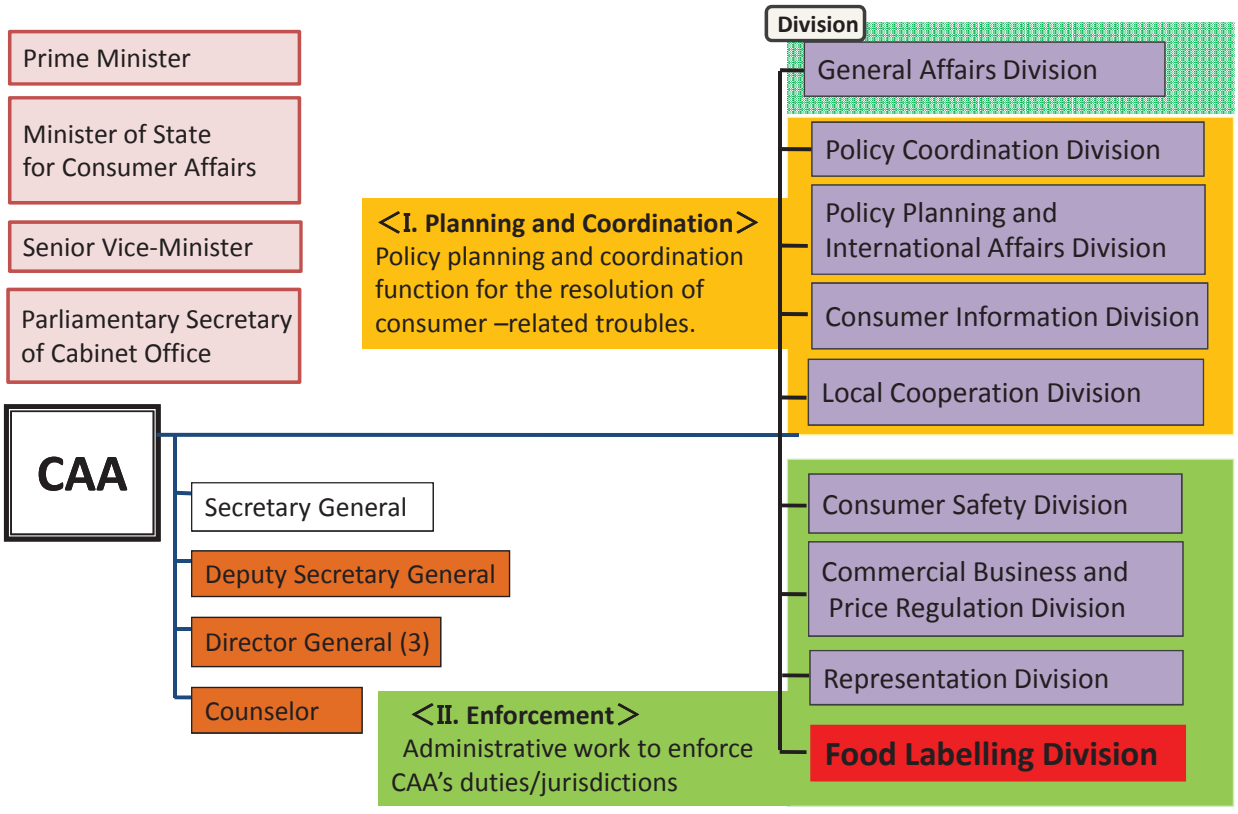
3

Consumer Affairs Agency (CAA)

- An external organ of the Cabinet Office
- Established on September 1, 2009

Our mission

- To protect and promote consumer's interest and benefit
- To ensure the voluntary and rational choice of goods and services
- To ensure fair labelling of the goods closely related with consumers' life



Topics

- About Consumer Affairs Agency
- Perspective of Food labelling
  - Current acts concerning food labelling
  - A newly promulgated act: the Food Labelling Act of 2013
  - Introduction of mandatory nutrition labelling
- Labelling System for Genetically Modified Foods in Japan

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Current Acts concerning food labelling in Japan

Issue 1: There has been a number of various notifications under the three Acts.

Food Sanitation Act	Japan Agricultural Standard Act*	Health Promotion Act
【Purpose】 • To prevent the sanitation hazards resulting from eating and drinking	【Purpose】 • To improve quality of agricultural and forestry products •To help consumers choose products by enforcing proper quality labeling of them	【Purpose】 • To improve nutritional status and promote health
•Establishment of the necessary criteria for the labeling of food to serve for the purpose of marketing (Article 19)	• Enactment of labeling standards to be observed by Manufacturer, etc. (Article 19-13) • Compliance with Standards for Quality Labeling (Article 19-13-2)	• Enactment of nutrition labeling standards (Article 31) • Compliance with Standards (Article 31-2) etc.
• Enforcing the regulations concerning Food and Additives, Apparatus and Containers and Packaging • Prohibition of the sales for the products which do not conform to the standards and/or criteria •Giving approval to a person who intends to conduct business from the prefectural governor	• Enactment of Japanese Agricultural Standards • Grading in accordance with Japanese Agricultural Standards etc.	• Set a general policies • Implementation of the national health and nutrition survey • Prevention of passive smoking • License pertaining to Food for Special Dietary Uses etc.

Concerning food labelling

Other concerns

*Act on Standardization and Proper Quality Labeling of Agricultural and Forestry Products

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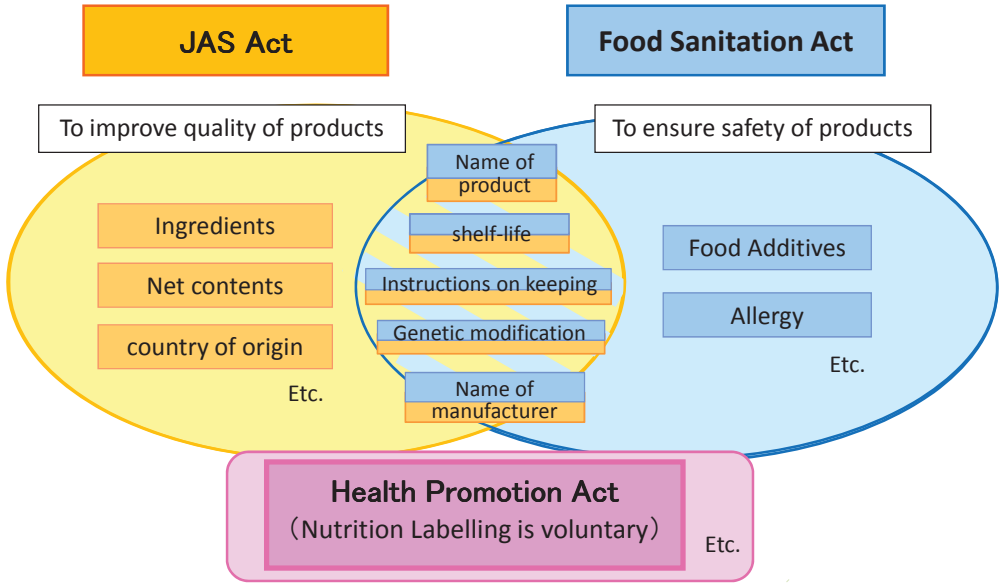
Diagram of the current Acts concerning food labelling in Japan

Issue 2: Several definitions differ among the three Acts.

Issue 3: Nutrition labelling is voluntary in the current system.



JAS Act: Japan Agricultural Standard Act

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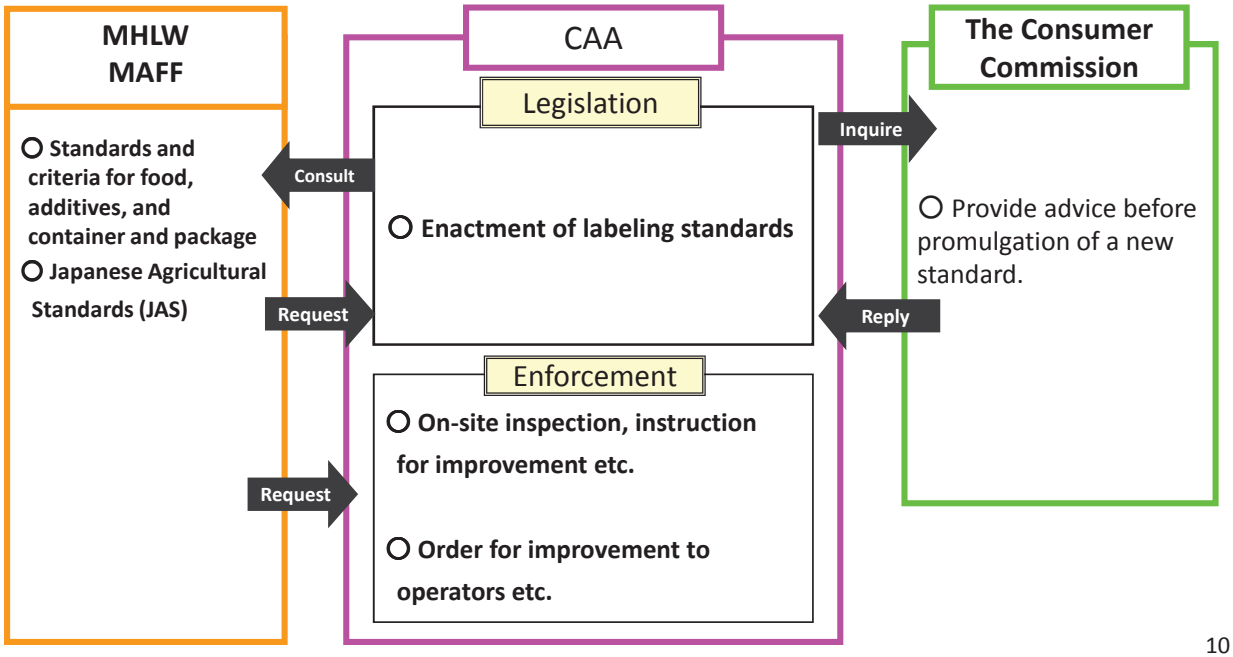
Current Food Labeling

- CAA is responsible to all kinds of administrative work regarding to labeling regulation regarding JAS, Food Sanitation Act and Health Promotion Act.
- CAA is in charge of planning and drafting labeling standards.
- CAA has fine collaboration with other relevant ministries and a commission for the enforcement



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Progress toward a new Act

To address these issues in:
1. Some different definition among Acts
2. Many and various notifications under Acts
3. Voluntary nutrient labelling

⇩

One-year roundtable discussion
(From Sep. 2011 to Aug. 2012)

⇩

Report
(Aug. 2012)

⇩

⇩

Food Labelling Bill

⇩

Cabinet approval
(June 14, 2013)

⇩

Proclamation
(June 28, 2013)

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The New Food Labelling Act

Objectives:

- To ensure food safety while eating and drinking
- To ensure general consumers' opportunities to select food subjectively and rationally

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The New Food Labelling Act (Cont.)

Areas of focus:

- Establishment of a comprehensive system regarding food labelling
  : some different definitions among Acts are standardized
  (e.g. “fresh food” and “processed food)
- Introduction of mandatory nutrition labelling

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Specific rules under the new Act

Food Labelling Standard
(By June 2015)

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Mandatory nutrition labelling

Points of discussion, which Consumer Affairs Agency has been considering on:

1. Which nutrients should be mandatory?
2. What kinds of food should be exempted?
3. What kinds of manufacturers should be exempted?

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Points of discussion (cont.)

4. Whether breakdown of the declarations should be introduced or not?

Energy **Protein** **Fat** **Carbohydrate** **Sodium** **Saturated Fatty Acid**	OR	**Energy** **Protein** **Fat** **Saturated Fatty Acid** **Carbohydrate** **Sodium**

5. Whether amounts of sodium should be declared as sodium or salt equivalents?
6. Reviewing Nutrient Reference Values (NRVs)

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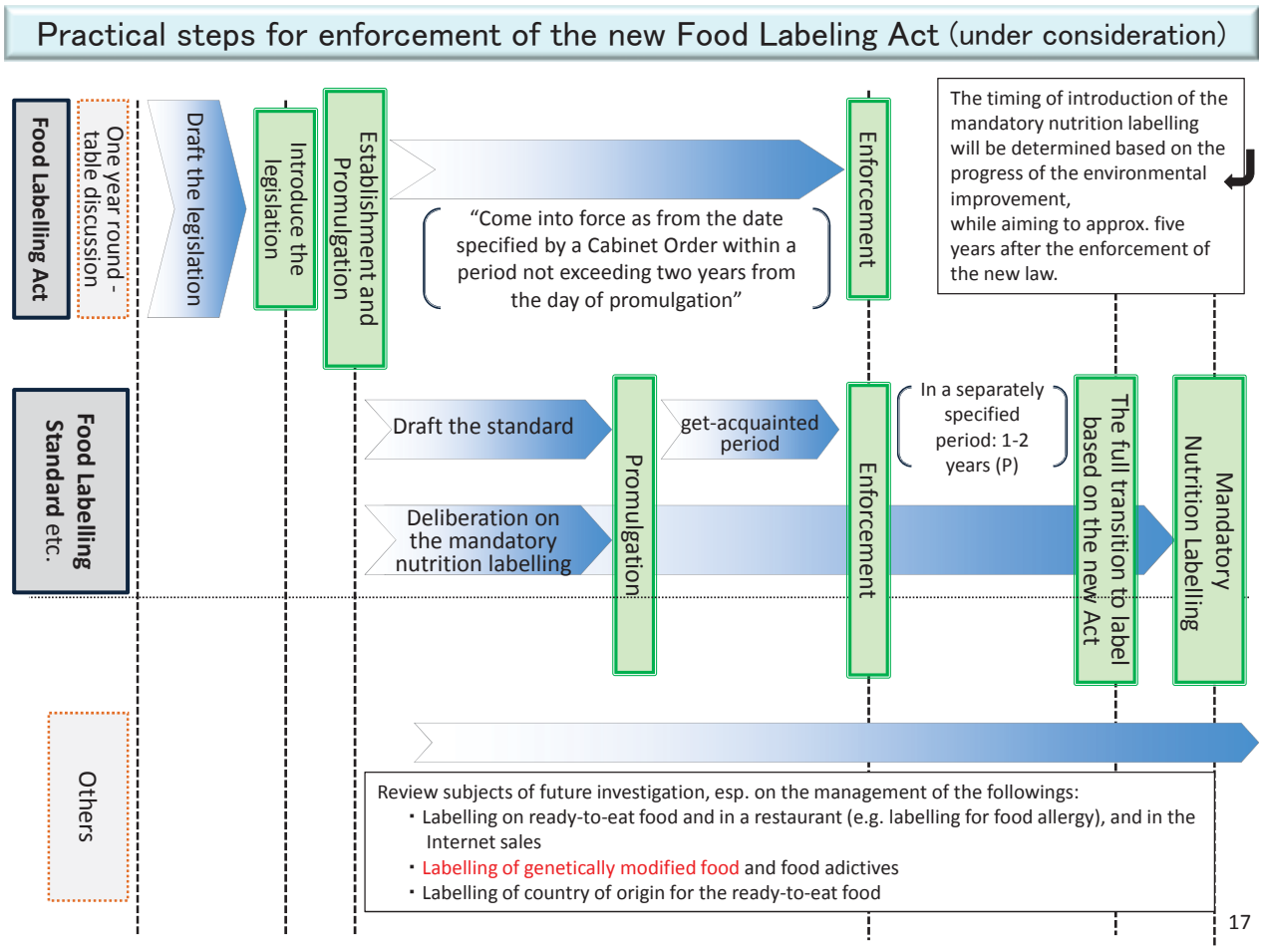

Topics

- About Consumer Affairs Agency
- Perspective of Food labelling
  - Current acts concerning food labelling
  - A newly promulgated act: the Food Labelling Act of 2013
  - Introduction of mandatory nutrition labelling
- Labelling System for Genetically Modified Foods in Japan

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Labeling of GMO

○ 8 kinds of agricultural products and their processed foods including GMO are required to notify, "GMO" or "GMO is not separated" mandatorily, and " non-GMO" voluntarily.

＜How to label GMO product＞

＜8 Agricultural Products Required for GMO Labeling＞

- Soybean
- Corn
- Potato
- Alfalfa
- Sugar beet
- Rape seed
- Cotton seed
- Papaya

Application of Identity Preservation is performed.

Mandatory 「Soybean（GMO）」

No application of Identity Preservation is performed

Mandatory 「Soybean (GMO is not separated)」

＜How to label a non-GMO product＞

Application of Identity Preservation is needed.

Optional 「Soybean (non-GMO）」

「Soybean（non-GMO is sorted）」

Examples

Name: Tofu Ingredients: Soybean（GMO is not separated）, …… Weight…… ……	Name: Miso（rice） Ingredients: Soybean（non-GMO）, …… Weight…… ……

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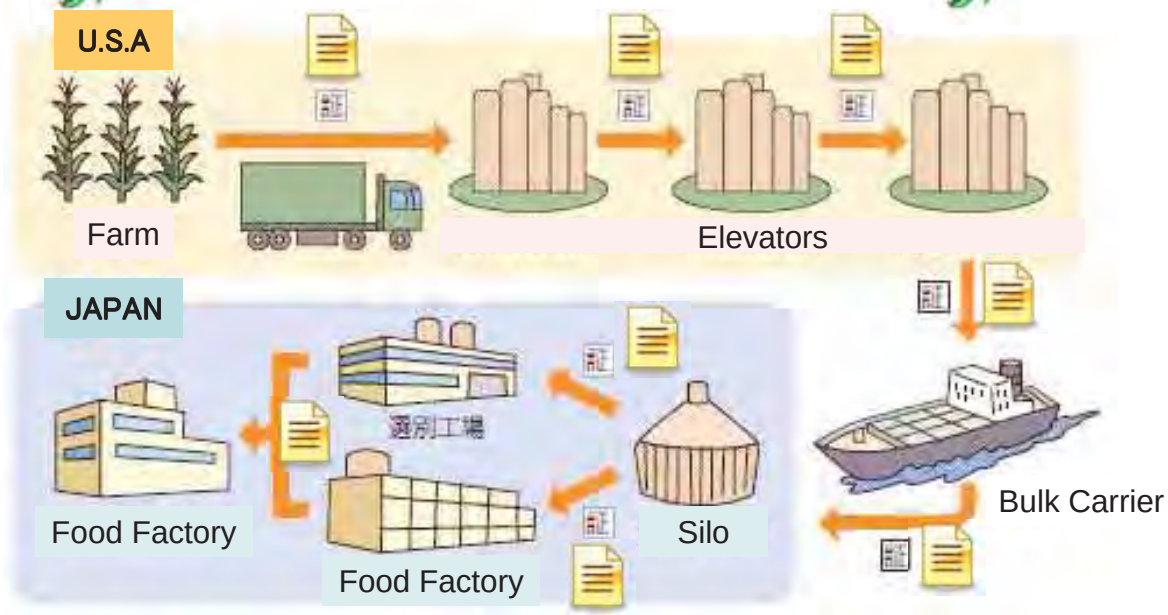
Identity Preserved(IP) Handling

Identity Preserved (IP) Handling is a procedure where genetically modified products and non-genetically modified products are handled separately in order to prevent these two types of products from being mixed, and a written certificate will be issued.

Examples of the IP handling: usage of corn imported from USA



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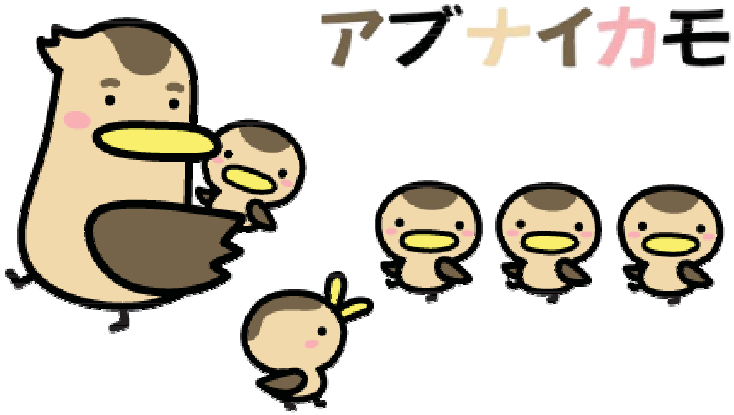
Thank you very much for your attention.



Official mascot of Consumer Affairs Agency