Report of the ASEAN Regional Meeting "Developing National Food Safety Emergency Response Plans – Sharing Experiences and Lessons Learnt"

Bangkok, Thailand
(27–28 June 2012)

Food and Agriculture Organization of the United Nations
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Foreword

Food safety emergencies are a cause of great concern all over the world. Countries need to be prepared to deal with all possible food safety emergency situations in order to reduce the possible large scale health, economic and social impacts. There have been many recent cases of food safety emergencies, and countries often find it extremely difficult to manage such emergencies. Various examples of foodborne emergencies have been witnessed in the recent past, such as the *E.coli* novel strain DI04:H4 bacteria in northern Germany in May 2011 which caused a serious outbreak of food borne illness characterized by bloody diarrhea with a high frequency of serious complications. In this outbreak there were 4000 seriously ill patients and 50 deaths. The source of this, after detailed investigations, was identified as sprouts from imported fenugreek seeds. Other examples are the dioxin crisis, the melamine contamination, which are well known, and the radionuclide contamination of food items from Japan.

Planning for such emergencies is important as it enables food safety authorities to focus on prevention and preparedness, thereby ensuring a timely and coordinated response to such emergencies and minimization of the adverse impacts on health and disruption to trade.

To assist member countries prepare themselves to deal with such food safety emergencies, FAO and WHO prepared a framework for developing National Food Safety Emergency Response (FSER) Plans. To support countries in applying the framework, a pilot for the development of a FSER Plan was carried out in Thailand during 2011-2012. FAO also assisted Bangladesh in developing its Food Safety Emergency Response Plan in 2012 under the project Improving Food Safety, Quality and Food Control in Bangladesh. With these two recent experiences of Thailand and Bangladesh in the region, it was decided to share the experiences in developing FSER Plans with other ASEAN countries, including lessons learnt in the process.

The FAD Regional Office for Asia and the Pacific, in collaboration with the Bureau of Food Safety, Extension and Support, Ministry of Public Health, Thailand organized a regional meeting over a period of two days in Bangkok. The regional meeting not only shared the experiences of the two countries, but reported on the status of such plans in other countries as well. This report captures the important discussions as well as the conclusions and recommendations in relation to the establishment of National Food Safety Emergency Response Plans.

I take this opportunity to convey FAD's appreciation to the Bureau of Food Safety, Extension and Support, Ministry of Public Health, Thailand, to the resource persons and to all participants of the workshop for their contribution to this important regional meeting. J hope this report will provide useful guidance to other countries in the region in establishing their National Plans and thereby dealing more effectively with such emergencies.

Hiroyuki Konuma
Assistant Director-General and
Regional Representative for Asia and the Pacific
Food and Agriculture Organization of the United Nations

TABLE OF CONTENTS

	Page
1. EXECUTIVE SUMMARY	6
2. INTRODUCTION	9
3. OPENING SESSION	11
4. OBJECTIVES, OUTPUTS & STRUCTURE OF REGIONAL MEETING	13
5. TECHNICAL PRESENTATIONS	16
6. COUNTRY EXPERIENCES	28
6.1 Thailand	28
6.2 Bangladesh	32
6.3 Japan	35
7. STATUS OF FSER PLANS IN COUNTRIES	37
8. WORKING GROUP SESSIONS	44
9. CONCLUSIONS	47
10. RECOMMENDATIONS	49
ANNEXES	
Annex 1 Welcome Address by Mr Hiroyuki Konuma, Assistant Director General & Regional Representative, FAO Regional Office for Asia and the Pacific	51
Annex 2 OPENING ADDRESS BY H.E. Dr Surawit Khonsomboon, Deputy Minister of Public Health, Thailand	54
Annex 3 Workshop Programme	56
Annex 4 List of Participants	59
Annex 5 Presentations	65

Regional Meeting on

"Developing National Food Safety Emergency Response Plans- Sharing Experiences and Lessons Learnt"

27-28 June 2012, Bangkok, Thailand

1. EXECUTIVE SUMMARY

Food Safety Emergency Response (FSER) Plans are a framework developed which aims at managing a potential or confirmed risk to public health through food through a timely and coordinated response so as to minimize any adverse impact on health and disruption to trade, to meet the international obligations and to reduce the socio-economic and political impact of a large scale food incident, based on "risk analysis concept". Such planning also enables food safety authorities to focus on prevention and preparedness, rather than only on reaction to individual events, and therefore has greater long-term sustainability. The Regional Meeting on "Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt" was organized by FAO Regional Office for Asia and the Pacific (RAP) and FAO Headquarters, in collaboration with Bureau of Food Safety Extension and Support, Ministry of Public Health, Thailand. The objectives of the meeting were to: (1) share the experiences and lessons learnt from two pilot countries (Thailand and Bangladesh) during the development phase of their national FSER Plans, (2) share experiences and lessons learnt from other countries in the region having already implemented their national FSER Plans, and (3) identify existing gaps and capacity building needs in the region with regard to the development of FSER Plans in countries without such a plan or strengthening their FSER Plans. The regional meeting was attended by participants from the ASEAN countries

(Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Vietnam). The welcome address was given by Dr. Hiroyuki Konuma, Assistant Director General and FAO Regional Representative for Asia and the Pacific while the opening address was delivered by Dr. Surawit Khonsomboon, Deputy Minister of the Ministry of Public Health, Thailand. Experts from international organizations namely WHO and OIE, from countries namely FSANZ Australia, Japan, Bangladesh and agencies in Thailand were also invited to share their experiences. Participant countries were also invited to report the status of their countries on the development and implementation of Food Safety Emergency Response Plans.

It was acknowledged that FSER Plans are most important in enabling timely and coordinated response, minimizing adverse impact on health and disruption to trade, meeting the international obligations and reducing the socio-economic and political impact of a large scale food incident, based on "risk analysis concept". Also, such planning enables food safety authorities to focus on prevention and preparedness, rather than only on reaction to individual events, which has less long-term sustainability.

The regional meeting also came out with a set of ten conclusions as well as a number of recommendations at national and regional/ international level. Some of the main conclusions are as follows:

- Countries of the ASEAN region are in different stages of development/ implementation of their national FSER Plans: some have no nationally coordinated FSER Plan at all, but the different agencies involved with food safety collaborate on an ad hoc basis when emergencies occur, some have a more coordinated multi agency approach and very few have a well-developed, well documented and tested FSER plans coordinated at national level.

- Coordination between the different agencies involved in food safety remains challenging, in particular, in countries with decentralized administrative systems at provincial level. Well defined roles and responsibilities in routine activities and during an emergency are important. External international coordination is highly appreciated in order to set up the national multi agency approach

- Capacity strengthening is considered important in terms of technical expertise and in terms of infrastructure development to perform the necessary analysis (laboratory, risk) when a food safety emergency occurs. In addition, it has been highlighted that trainings often focus on theoretical aspects and that they fail to address the practical aspects and hands on experience which would allow the staff to better apply the acquired theoretical knowledge in practice. In particular, risk assessment trainings were sometimes lacking in teaching participants how to translate the theoretical concepts into acceptable risk management options.

- At the international level, a number of organizations are offering their support to the region. It was underlined that a coordinated international support at ASEAN level is important so that i) the FSER Plans of different countries follow the same guidance and ii) a single regional network can collaborate with different international players INFOSAN, APEC, ARASFF, etc.

The recommendations that emerged were grouped separately to address country level needs as well as regional/ international levels. Some Country Level capacity development needs identified included development of standard operating procedures (SOP's) to manage national FSER Plans; development/enhancement of food safety event surveillance system; bringing out updates on latest laboratory analysis techniques; strengthening in-country INFOSAN coordination; trainings to food inspectors in sampling and HACCP auditing as well as detecting incidents and reporting of these; assisting in setting up traceability systems; developing a national food safety database assembling monitoring and surveillance data; establishing a national food consumption database; running simulation exercises on a regular basis to test the effectiveness of the FSER plan.

Some Regional/ International level recommendations included coordination of the different networks amongst countries in the region (e.g. ASEAN, ARASFF, INFOSAN, APEC) by a central body; roles and responsibilities of the different international players to be clearly defined; collaboration between international organizations in order to clearly plan and coordinate the support for the region; a central body at regional level to facilitate the compilation, analysis, dissemination of data and information sharing; FAO/WHO are encouraged to supervise and support the further development and implementation of national FSER plans in the region.

2. INTRODUCTION

Food Safety Emergency Response (FSER) Plans are a framework developed which aims at managing a potential or confirmed risk to public health through food through a timely and coordinated response so as to minimize any adverse impact on health and disruption to trade, to meet the international obligations and to reduce the socio -economic and political impact of a large scale food incident, based on "risk analysis concept". Such planning also enables food safety authorities to focus on prevention and preparedness, rather than only on reaction to individual events, and therefore has greater long-term sustainability.

While some countries in the Region such as Japan, Malaysia, etc have FSER Plans being implemented, many member states, since the first INFOSAN (the International Food Safety Authorities Network) global meeting held on 16 December 2010 in the United Arab Emirates, had been requesting FAO and WHO to provide technical assistance in the development of their national food safety emergency response plans. To assist their member countries to prepare themselves to deal with such food safety emergencies and develop their national food safety emergency response plans, FAO and WHO jointly developed the "FAO/ WHO Framework for Developing National Food Safety Emergency Response P lans" (http://www.fao.org/docrep/013/i1686e/i1686e00.pdf). Based on this framework, FAO, in 2011, offered support to countries in Asia-Pacific region for development and implementation of a FSER Plan as a pilot in one country in the region and use the pilot for sharing experiences and lessons learnt.

In Thailand, Bureau of Food Safety Extension and Support (BFSES) which formerly was named as Food Safety Operation Center (FSOC) as the central coordinating agency for food safety and national INFOSAN Emergency Contact Point, has been paying attention to development of the national food safety emergency response plan for the ir country. Thus, BFSES put forth a proposal to obtain support from FAO for assistance in the preparation of their national FSER plan. In particular, it was agreed that the results will also be shared with other ASEAN countries in terms of the process and their experiences.

The project on “Developing of the National Food Safety Emergency Response plan” was approved for implementation by FAO Regional Office for Asia and the Pacific through a Letter of Agreement LOA/RAP/2011/34,. The project period was from 1 July 2011 to 31 August 2012, with a total budget of 1,214,400 Thai Baht which was funded by FAO.

In addition, FAO had also recently supported Bangladesh in developing their Food Safety Emergency Response Plan under the project GCP/BGD/038/EC Improving food safety, quality and food control in Bangladesh.

This Regional Meeting was organized for a period of two days on 27 - 28 June 2012 in Bangkok, Thailand to share the experiences of both Thailand and Bangladesh as well as Japan with countries of the Region to enable them to gain from the experiences of these countries including the lessons learnt and make use of the FAO/WHO framework and develop their national FSER Plans and thereby deal more effectively with food safety emergencies based on the experience. Member countries would also be able to formulate more targeted requests to FAO for assistance in responding to food safety emergencies.

This report gives brief overview of the presentations and the discussions that followed. All the power point presentations are given in **Annex 5**.

3. OPENING SESSION

Opening the workshop, Dr. Hiroyuki Konuma, Assistant Director-General and FAO Regional Representative for Asia and the Pacific, welcomed the participants to the Regional Meeting "Developing National Food Safety Emergency Response Plans – Sharing Experiences and Lessons Learnt". He highlighted that many food safety emergencies had been witnessed in the recent past including the *E.coli* novel strain O104:H4 bacteria which caused a serious outbreak of foodborne illness in northern Germany in May through June 2011in which there were 4000 seriously ill patients with 50 deaths; the crisis of milk contaminated with melamine in 2008 due to which there were 6 deaths, 300, 000 illnesses and 115 types of contaminated food products, and others. In view of such instances, it was essential for countries to be prepared to deal with all possible food safety emergency situations in order to reduce the large scale possible health, economic and social impacts.

He explained that this workshop was being organized to share experiences of countries that had recently been supported by FAO to develop Food Safety Emergency Response Plans namely Thailand and Bangladesh as well as those countries that had well developed plans in place namely Japan and Australia so that other countries were able to learn from these experiences in developing their own FSER Plans as well as the lessons learnt in the process. In addition, other international organizations namely the OIE, WHO, FAO would also highlight their activities as related to the area of emergency response which he hoped would be helpful.

Dr. Konuma also emphasized that food safety had been recognized as a priority area for FAO in the latest, namely the thirty first, FAO Regional Conference for the Asia & the Pacific held in March 2012 and FAO was requested to assist member countries to enhance capacity for participation in the design of animal health and food-safety standards, harmonize food safety and quality standards in value chain development and strengthen legal and institutional frameworks that govern food safety and quality in value chain development. Regional collaboration and cooperation has also been noted as crucial to address existing and emerging food safety issues which further brought about the importance of this meeting.

Dr. Konuma elaborated on FAO's activities on food safety in the region which covered on the many aspects of agricultural production technologies, food handling and processing, trade and distribution and the adequate controls required along the food chain. He informed that FAO currently supported around 15-20 projects in various countries of Asia Pacific Region on food safety covering capacity strengthening in aspects of food legislation, food safety and quality policies, laboratories, standards and Codex related activities, Good Practices such as GAPs, FSER Plans, inspection procedures, food-borne illness surveillance, Geographical indications, public awareness and education on food safety and consumers' health; implementing preventative risk-based approach in industry sectors, and others. On the specific area of National Food Safety Emergency Response Plans (FSER plan), FAO provides technical assistance to member countries to formulate and implement emergency response plans based on the FAO/WHO framework. He further mentioned that the main challenge faced during such emergencies i s the multi-disciplinarity of the emergencies and that multi-sectoral cooperation and collaboration of all relevant line ministries, academia, and the private sector was of specific importance for the effective development and implementation of FSER plans.
The full text of the Welcome address delivered by Mr Konuma is reproduced at **Annex 1**.

This was followed by the Opening address delivered by Dr. Surawit Khonsomboon, Deputy Minister of the Ministry of Public Health, Thailand. Dr. Khonsomboon welcomed all resource persons and participants for coming and thanked FAO for the support given to the Ministry of Public Health of Thailand to organize this meeting. He mentioned that "Food Safety Emergency Response" planning is very important since Thailand is a big food producer of the world and he agreed that the multi-agency collaboration, both domestically and regionally in ASEAN would be required, therefore, Ministry of Public Health, which is the responsible authority to oversee consumer health, food safety, and nutrition, was interested to develop this FSER plan. His Opening address is reproduced at **Annex 2**.

4. OBJECTIVES, OUTLINE & STRUCTURE OF REGIONAL MEETING

The programme commenced with an explanation of the objectives, outline and structure of the programme by Ms Shashi Sareen, Senior Food Safety and Nutrition Officer, FAO Regional Office for Asia and the Pacific. Ms Sareen reiterated the need for developing Food Safety Emergency Response Plans namely enabling timely and coordinated response, minimizing adverse impact on health and disruption to trade, reducing the socio-economic and political impact of a large scale food incident, based on "risk analysis concept" and meeting international obligations. Further, she emphasized that such planning would enable food safety authorities to focus on prevention and preparedness, rather than only on reaction to individual events, which has less long-term sustainability. FAO had, in the very recent past, supported two countries namely Thailand and Bangladesh to establish the national FSER plans leading to the most important output namely the emergency plan for Thailand and a draft plan for Bangladesh, which would guide the countries in dealing with food safety in emergency/crisis events.

In view of the above, the objectives for the workshop and the outputs to be delivered at the end of the workshop were highlighted as follows.

Objectives

i) To share the experiences and lessons learnt from the two pilot countries (Thailand and Bangladesh) during the development phase of their national FSER plans; ii) To share experiences and lessons learnt from other countries in the region having already implemented their national FSER plans; and iii) To identify existing gaps and capacity building needs in the region with regard to the development of FSER plans in countries without such a plan or strengthening their FSER Plans.

Outputs

i) Dissemination of lessons learnt from the pilot projects and from the more experienced countries and other regional organizations; ii) status of FSER Plans in countries and identification of support needed by countries for development/ review of their plans; and iii) a report of the Regional Meeting capturing the status, lessons learnt and the country status including gaps, challenges, support needed and action plans.

The structure of the meeting was explained to participants to enable them to get an overview of the same and is as follows:

Structure of the meeting on 27-28 June 2012

1. Introduction of the FAO/WHO Framework for developing national food safety emergency response plans: Practical Applications of the tool

2. Work of international organizations in relation to food safety in the Region covering FAO and WHO Projects/Activities; and OIE approaches to responding to emergencies including zoonoses

3. Country experiences in developing FSER Plans covering process of development of national plans; issues, challenges and positive experiences as well as presentation of their Plans – both Thailand and Bangladesh experiences were covered and in the case of Japan examples of recent cases in implementation of FSER Plans and lessons learnt were highlighted

4. INFOSAN: The International Network of Food safety Authorities Network

5. Status of FSER Plans in Countries wherein presentations were to be made by all participant countries to cover existence of an emergency plan for food safety; strategies covered under the plan; departments involved; process followed for development of the plan; any plan validation carried out; coordination mechanisms in place; and other relevant plans;

6. Working Group Session covering future of FSER plans in countries covering situation of each country in relation to gaps; challenges; capacity support needed (from their own country; at regional level; and by International organizations); action plans to be prepared and an open discussion on presentation of problems/solutions by groups

7. FAO/WHO Guide for application of risk analysis principles and procedures during food safety emergencies – the framework as well as examples of practical use and application of risk analysis in emergencies

8. An introduction of the FAO/WHO Guide on National Food Recall Systems

9. Recommendations and Conclusions

5. TECHNICAL PRESENTATIONS

5.1 Introduction of the FAO/WHO Framework for developing national food safety emergency response plans: Practical Applications of the tool

The introductory presentation on the FAO/WHO Framework for developing national food safety emergency response plans: Practical Applications of the tool was given by Ms. Shashi Sareen, Senior Food Safety & Nutrition Officer, FAO Regional Office for the Asia & the Pacific. She introduced her presentation with the definition of Food safety emergency and highlighted the Codex definition namely *"A food safety emergency is a situation whether accidental or intentional, that is identified, by a Competent Authority as constituting a serious and as yet uncontrolled foodborne risk to public health that requires urgent action" as given in document CACGL-19.* She also highlighted the definitions of 'food safety emergency' as given by Food Standards Agency of United Kingdom, USFDA, Australia, Bangladesh, Thailand as also under IHR with the aim of identifying the key points emerging from these namely that a situation ranges from minor incident to major crisis, the situation evolves over time, the severity varies and international and trade implications vary. From these emergencies, arises the need for a response plan so as to enable timely and coordinated response; minimize adverse impact on health and disruption to trade; meet international obligations; and reduce the socio-economic and political impact of a large scale food incident. Ms Sareen further highlighted some recent food safety emergencies and showed the spread in the case of melamine contamination leading to the importance of developing a response plan for such emergencies. She then elaborated on the eight Steps for development of FSER Plan, three preliminary steps and five subsequent steps which are also the key elements as follows:

Step 1: Obtain high-level support (& mandate) Step 2: Identify key partners

Step 3: Establish a planning group

Step 4: Collect essential background information

Step 5: Establish or activiate a Multi-Agency Coordination Group (MACG), having representatives from key departments such as MOPH, MOA, Ministry of Information and Communication, Ministry of Commerce, etc

Step 6: Incident identification and management

Step 7: Post-incident review and evaluation

Step 8: Communication

Ms Sareen also elaborated on points which may need to be covered in country s' FSER Plans.

5.2 FAO Projects/Activities on food safety in the Region

The FAO Projects and activities in the area of food safety in the region was presented, by Ms. Shashi Sareen, the highlights of which are given below.

Ms. Sareen initiated her presentation by giving FAOs mission which is "Ensuring sustainable food security for all". She explained that food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Food safety contributes to food security through a number of ways such as contribution to improved nutrition and health status of populations thereby increasing productivity and livelihoods; reducing public health costs through a decrease in food borne illness among vulnerable populations and related social and economic implications; reducing food losses both pre and post-harvest thereby resulting in increased food availability, stability, and utilization; increasing market access, purchasing power which results in beneficial effects on farmers, food businesses and consumers. Food safety is thus linked very closely to food security through the utilization component and is seen to be an integral component of the same. She further explained that FAO is the principal United Nations agency that deals with all aspects of food namely production, storage, transportation, processing and marketing and the development of agriculture and food based programmes to improve nutrition and rural and national economies . In view of the above food safety is an important area of focus for FAO.

FAO during the past few years had been focusing on a number of initiatives on Food safety covering aspects such as provide scientific basis to Codex through independent scientific expert Committees, meetings & consultations; development of guidelines and documents on various subjects of importance; communication & information exchange mechanisms and various capacity building initiatives.

On the provision of Provide **scientific basis** to Codex through independent scientific expert Committees, meetings and consultations the role of the scientific expert bodies under FAO/WHO namely Joint FAO/WHO Expert Committee on Food Additives (JECFA), Joint FAO/WHO Meetings on Pesticide Residues (JMPR), Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) and Joint FAO/WHO Committee on Nutrition (JECN) were mentioned.

Some guidance documents and tools developed and published in the last few years of relevance to this workshop included Strengthening national food control systems: guidelines to assess capacity building needs (published 2006); Risk-based food inspection manual (published 2008); FAO/WHO guidelines for developing Food safety Emergency Response Plans (published 2010); FAO/WHO guide for application of risk analysis principles and procedures during food safety emergencies (published 2011); Guidelines for Risk categorization of food and food establishments applicable to ASEAN countries (published 2011); FAO/WHO Guide for developing and improving national food recall systems (published 2012)

Ms. Sareen also expressed that around 150 projects on food safety/quality are delivered by FAO globally which address country's capacity development needs and broadly cover the following areas:

1) SPS/Codex capacity development and food standards which cover official food control systems for food safety that support an integrated food chain approach that address i**nstitutional, policy and legal frameworks** including Food safety regulation, inspection as well as testing capacity and design of programmes in the area

2) Commodity issues covering programmes to promote adherence by food producers/ businesses of safety and quality across specific value chains (such as meat, seafood, fresh fruits and vegetables) and in conformity with market requirements.

3) Other issues such as Food safety emergency management

Ms Sareen also highlighted that food safety had been identified as a focus area in both the twenty ninth as well as in the latest namely, the thirty first FAO Regional Conference for the Asia & the Pacific held in March 2009 and 2012 respectively which were represented by the Agriculture Ministers of various countries in the Region. Regional collaboration and cooperation was noted as crucial to address existing and emerging food safety issues.

The current projects and forthcoming activities in the region in the area of food safety were also highlighted.

5.3 WHO Projects/ Activities on food safety in the Region - Regional Action Towards Improving Food Safety

The WHO Projects presentation, the highlights of which are given below, was given by Ms Jenny Bishop**,** Regional Adviser for Food Safety, WHO Regional Office for the Western Pacific, Philippines

Foodborne disease and food contamination constitute a growing public health concern. WHO estimates that globally foodborne and waterborne diarrheal diseases cause the deaths of about 2 .2 million people annually, 1 .9 millions of them children. In addition, chemical contamination causes a significant amount of foodborne disease. During the Regional Committee meeting in 2011, health representatives from the Western Pacific Region endorsed the Western Pacific Regional Food Safety Strategy 2011-2015 and urged Member States to use the Strategy as a framework for the strengthening of national food control systems to effectively protect public health, prevent fraud, avoid food adulteration and facilitate safe and healthy food. Advances in food safety have been made during the meeting as follows: Improvement in coordination along the food chain, Development of food law and regulations, Increased laboratory capacities, Greater understanding of the need to be prepared for food safety incidents and emergencies.

In addition to providing a national framework, the strategy defines the work of the food safety programme in the WHO Western Pacific Region for the next five years.

The strategy is made up of the following 7 themes:

- Improved food control and coordination throughout the food chain continuum and adequate funding
- Risk-based regulatory frameworks
- Improved availability of food safety data to better guide policy and risk analysis
- Inspection services
- Food safety training and education
- Capacity to detect, assess and manage food safety incidents and emergencies
- Enhanced cooperative planning

The protection of public health, through the provision of safe food, is the objective of national food control systems. However, even with the most developed food control system, such systems fail from time to time and unsafe food is sold, leading to foodborne disease. In some cases, emergencies will arise because of the severity of the disease, the extent of the distribution and/or volume of the contaminated food, or the system's inability to effectively manage the situation. To limit the public health, economic and societal impacts of food safety emergencies, national governments must be able to detect, assess and manage food safety incidents and emergencies. These capacities are also considered core capacities, as defined by the International Health Regulations (2005). Theme 6 of the Strategy; ' Capacity to detect, assess and manage food safety incidents and emergencies' aims to assist Member States develop capacities in this critical area.

"*The IHR specify that the national core capacities must be established 'as soon as possible but no later than five years from the entry into force….'. For the majority of State Parties this is 15 June 2012*" introduced by Ms. Jenny Bishop.

The WHO Western Pacific Regional Office will work on the development of guidelines outlining standard responses for food safety components, for modification and implementation at the national level. Ms. Bishop mentioned that "Food safety emergency response plans in place are needed to test and update as in Member States of the WHO Western Pacific Region." To identify incidents and emergencies, food safety emergency response plans should be developed and linked to other emergency plans where appropriate, or actively participate in INFOSAN, through the timely communication of information relating to food safety incidents and emergencies of international interest. The test of such plans through national and international food safety emergency including risk analysis capacities and food traceability and recall systems should be also simulated.

5.4 OIE approaches to responding to emergencies including zoonoses

Dr. Andrew Davis, OIE - Programme Coordinator, introduced the World Organization for Animal Health presentation that outlined the OIE approach and specific activities that contribute to strengthening Member Country s' emergency response focusing on zoonoses, as follows:

The World organization for Animal Health's (OIE) core mandate is 'the improvement of animal health, veterinary public health and animal welfare world-wide' with net positive consequences for human health (including for food safety) and net benefits for economic development, poverty alleviation and food production. OIE Member Countries are committed to notify the OIE on diseases, infections and any other significant epidemiological events as per their obligations described in the Terrestrial Code; OIE then disseminates the information to other countries who can then take the necessary preventive action. The OIE also develops normative documents relating to rules that Member Countries can use to protect themselves from the introduction of diseases and pathogens without setting up unjustified sanitary barriers. The OIE provides technical support to Member Countries requesting assistance with animal disease control and eradication operations, including diseases transmissible to humans. The OIE considers the Veterinary Services as a Global Public Good and their bringing into line with international standards as a public investment priority.

The role of the Veterinary Services has traditionally extended from the farm to the slaughterhouse, including both epidemiological surveillance of animal diseases and ensuring the safety and suitability of meat. The Terrestrial code outlines standards as they relate to Food Safety in the Veterinary Services including risk-based management systems from the farm level through meat inspection and certification of animal products for international trade. The Codex Alimentarius Commission (CAC), Food and Agricultural Organization of the UN (FAO) and World Health Organization (WHO) are key partners of the OIE in the field of recommendations for veterinarians and livestock producers, and in particular on risk analysis of residues of veterinary drugs in food products of animal origin and methods for the analysis of these products.

OIE is engaged in preventing antimicrobial resistance worldwide through different actions including through the promotion of responsible and prudent use, harmonisation of national antimicrobial resistance surveillance and monitoring programmes, and

implementation of international coordination programmes. The OIE recommends permanent risk assessment is carried out in parallel with the use of antibiotics which ensure the health and welfare of animals, in the context of a growing demand for noble proteins worldwide.

OIE is a partner in the FAO/OIE/WHO Global Early Warning System (GLEWS) which is joint system that builds on the added value of combining and coordinating the alert and disease intelligence mechanisms of OIE, FAO and WHO for the international community and stakeholders to assist in prediction, prevention and control of animal disease threats, including zoonoses. The Crisis Management Centre (CMC) is a collaborative effort by FAO and OIE with a mandate of rapid response to transboundary epizootic and zoonotic diseases and emerging disease threats; there is also partnership agreement for official WHO collaboration. For assistance in contributing to this mechanism, the OIE draws upon its network of Collaborating Centres and Reference Laboratories which constitutes the core of OIE's scientific expertise and excellence. The contribution of these institutes to the OIE work also ensures that the standards, guidelines and recommendations are scientifically sound and up-to-date. Through voluntary contributions to the OIE via the EU Regional Cooperation Programme on Highly Pathogenic Emerging and Re-emerging animal diseases (HPED) in Asia, OIE is able to provide emergency supplies of vaccines for avian influenza; foot and mouth disease; rabies and may possibly expand this initiative to other pathogenic emerging and re-emerging transboundary diseases.

OIE does not elaborate emergency management standards, but rather expects that Members will develop and/or have in place contingency planning arrangements. Through capacity building within the OIE PVS Pathway, voluntary contributions to OIE through specific projects, for example AusAID through the Programme for Strengthening Veterinary Services (PSVS), OIE provides additional support to Member Countries to develop emergency response plans. For some Member Countries, contingency plans are shared through the OIE website providing examples and templates for other Member Countries to learn from. Through the OIE information system, countries may report on simulation exercises to avoid, amongst other things, trade disruptions. This mechanism is used to disseminate on the web announcement received from Members on disease introduction simulation exercises taking place in their countries and these simulation exercises are also disseminated to OIE's Delegates and to the subscribers of the OIE-Info Distribution List before their implementation.

5.5 INFOSAN: The International Network of Food safety Authorities Network

Dr. Caroline Merten's introduction started very interesting discussions on the subject. The points raised are summarized below:

The International Food Safety Authority Network (INFOSAN) is a voluntary network of food safety authorities from around the world, launched in 2004 and managed jointly by WHO and FAO. Its aim is to prevent international spread of contaminated food and foodborne disease and strengthen food safety systems globally. At national level INFOSAN collaborates with one emergency contact point (ECP) (e.g. food Safety authority) and, ideally, with one or more focal points (FPs) (e.g. Agriculture, Trade, Fisheries, Veterinary Services, Industry and Standard and Health Department). The main task of the ECP is to report food safety events, to assist INFOSAN secretariat in the verification and assessment of these events and to coordinate the emergency at national level. As food safety requires multidisciplinary expertise additional FPs are requested to be designated by the respective national authorities. Both, ECP and FPs collaborate with the INFOSAN secretariat to share and disseminate food safety related information like INFOSAN notes and FAO/WHO guidelines. The INFOSAN secretariat is assisted by an advisory board which provides input to the INFOSAN strategic plan and work plan. INFOSAN engages in collaborative partnerships with other international networks whose ambit covers food safety. The first global meeting of INFOSAN was held in December 2010 in Abu Dhabi. As a follow p of this meeting a more user friendly and secure community website has been developed and members can communicate among them and with the INFOSAN secretariat via this platform. In case of Emergency Activities, INFOSAN identifies, verifies and shares information on food safety-related events of contaminated foods in ternational commerce or foodborne illness outbreaks, not limited to one country. INFOSAN Secretariat will provide technical assistance to national governments in managing food safety and food production-related events or emergencies. Future activities should focus on strengthening further national coordination, regional collaboration and on formalizing partnerships.

5.6 FAO/WHO Guide for application of risk analysis principles & procedures during food safety emergencies

The risk analysis principles and procedures during food safety emergencies were presented by Ms Jenny Bishop. The highlights of presentation and FAO/WHO Guide for application of risk analysis principles are given below.

FAO/WHO publication provides "*guidance on applying risk analysis principles and procedures during food safety emergencies*." It highlights the importance of utilising existing Risk Analysis approaches and it links to existing. The guidelines aim to assist national authorities to assess the risk, make risk management decisions and communicate risk in the time of emergencies.

Risk Analysis provides the information and evidence needed for effective and transparent decision- making, contributing to better food safety outcomes and improvements in public health. It is an essential part of the Food Safety Emergency Response which is the process of assessing the risk, making risk management decisions, and communicating risk in the face of time constraints, lack of data and knowledge gaps. Through this process, a systematic approach to estimating risks, in order to identify and implement appropriate measures to control the risks and to communicate information about the risks and the control measures applied. It is important to ensure transparency, although, they are separate, the components are highly integrated. Throughout risk analysis there is an almost constant interaction occurring between risk managers and risk assessors within an environment characterized by risk communication.

In addition**,** Ms. Jenny recommended the participants to read the "*FAO/WHO guidance on applying risk analysis principles and procedures during food safety emergencies* ." in conjunction with "*FAO/WHO FSER guidelines*" and *"FAO/WHO Food safety risk analysis: a guide for national food safety authorities"*

5.7 Framework; Practical use/application of risk analysis in emergencies-Example of Australian system

The Australian system presentation, the highlights of which are given below, was given by Dr. Paul Brent Chief Scientist, FSANZ Australia.

In 2003, the Australian Federal Government recognized that a timely, appropriate, consistent and coordinated response to a national food incident can best be achieved through an agreed protocol that formalizes the approach to coordinating a response to a national food incident.

A number of food emergency response plans and protocols have been developed by Australian Government and State and Territory Government food, agriculture and health agencies. The National Food Incident Response Protocol (the Protocol) does not override these existing plans and protocols but provides the linkage between health and agriculture plans developed by Australian Government and State and Territory Government agencies to enable an integrated, whole of government response in the event of a national food incident. The Protocol is only concerned with managing the food supply chain and does not include controlling animal or human illness and disease outbreaks.

The Protocol provides guidance on the response to national food safety incidents linked to microbiological, chemical, radiological, physical or unknown hazards. In the case of outbreaks of foodborne illness, health authorities are responsible for managing the outbreak investigation, while this Protocol aids in the response of food regulatory agencies in those incidents in which there has been a potential or confirmed link to food.

Where a food incident is associated with human illness, the Protocol may be activated as a result of activity under the National Guidelines for Managing National Outbreaks of Foodborne Illness. The Protocol may also be activated via the Agricultural Emergency Plan or Australian Veterinary Plan in the event of a zoonotic disease being detected in food-producing animals or via the National Counter-Terrorism Plan in the event of a terrorist threat.

Food Standards Australia New Zealand is the single coordination point through which the response to a national food incident is coordinated. Since government endorsement of the Protocol in 2007, more than fifteen food incidents have been managed under the Protocol.

Dr. Brent presented a case study on hepatitis A linked to the consumption of semi-dried tomatoes, which will illustrate different aspects of the processes involved in executing the Protocol and the need for a well-coordinated, national and international response.

The value of having the National Food Incident Protocol in place has been fully endorsed each time Australia has addressed a national and/or international food safety event. Key lessons learnt throughout recent incidents include: the importance of effective communication (national and international); the need to engage with industry early on and a need to understand the relevant production and supply chain (to assist with identifying risk factors and possible control measures).

Furthermore, the need to educate and reinforce the responsibilities of producers, processors and importers with regards to full traceability of product was highlighted through the HAV in semi-dried tomatoes case study. Finally, it was recognized that human enteric viruses are an emerging foodborne disease issue which requires the attention of the international food incident response community.

5.8 Introduction of the FAO/WHO Guide on National Food Recall Systems

Dr. Caroline Merten, Food Safety Officer, FAO HQ, introduced the FAO/WHO Guide on National Food Recall Systems. The highlights of the presentation are given below.

Food recall is defined as the action to remove food from the market at any stage of the food chain and is a fundamental tool to respond to food safety incidents and emergencies. This guide aims to support countries in establishing and implementing an effective national food recall system and draws on best practices. It targets mainly national food safety authorities with responsibility for food recalls. This guide outlines preliminary steps for developing national food recall systems. Some countries still lack effective recall systems. Further, it outlines the main elements to establish and maintain a national food recall system. Essential tools of this system were presented. Elements to manage a food recall were briefly discussed. In addition, examples of recall scenarios and templates of recall activity flows and checklists were shown in the presentation. The information to be collected included trade notification form, newspaper advertisement, recall report, Phone call/personal visit template/worksheet and, Public warning template. Globalization of food safety emergencies, therefore, pose new challenges to conduct recalls, trace-back and trace-forward activities to support countries in establishing and implementing an effective national food recall system to respond to food safety emergencies and events.

6. COUNTRY EXPERIENCES

6.1 Thailand

Mrs. Jongkolnee Vithayarungruangsri, Director of Bureau of Food Safety Extension and Support shared experience on developing FSER plan of Thailand. She gave the definition of food safety emergency in term of Thailand as follows:

"Any incident of food safety, whether accidental or intentional, caused by chemical, biological and physical food hazards, which render severity uncontrollable in a normal food control system and would cause risks and impacts to lives, public health, trade, societies, economy and politics, at both national and international levels, that require an urgent and integrated action among concerned agencies"

Food safety emergencies occur due to either intentional or accidental contamination, whether caused by chemical, biological or physical hazards which are unable to be controlled in the normal food control system. This may cause risks to public health, trade and socio-economic at both national and international levels that require an urgent and integrated action among relevant agencies. National guideline for Food Safety Emergency Response plan is a document intended as a guideline for the main food safety agencies involved in preparation of an emergency response plan. Food Safety Operation Center, currently named "The Bureau of Food Safety Extension and Support" had obtained support from the FAO Regional Office for Asia and the Pacific (FAO RAP) to develop the Thailand FSER plan to use in emergency/crisis of food safety events. The command action on food safety management system in Thailand using the existing food control system is to exchange information on food alert systems at all levels. In order to screen an emergency event, Incident commander should follow the "Decision tree for the assessment and notification of events that may constitute a Food Safety Emergency Response". Multiagency collaboration among all food safety agencies, both domestically and internationally ensures an effective response in incident management as shown in the Figure 1.

Incident Management pattern was divided into 3 parts to achieve 3 objectives (1) Control and monitoring of the implemented measures, (2) Coordination and resources management for effective response, and (3) Follow-up and measure adjustment via command system. The communication approach also leads to key successes to easy and timely understanding by all groups involved namely food safety agencies, stakeholders, and International Organizations.

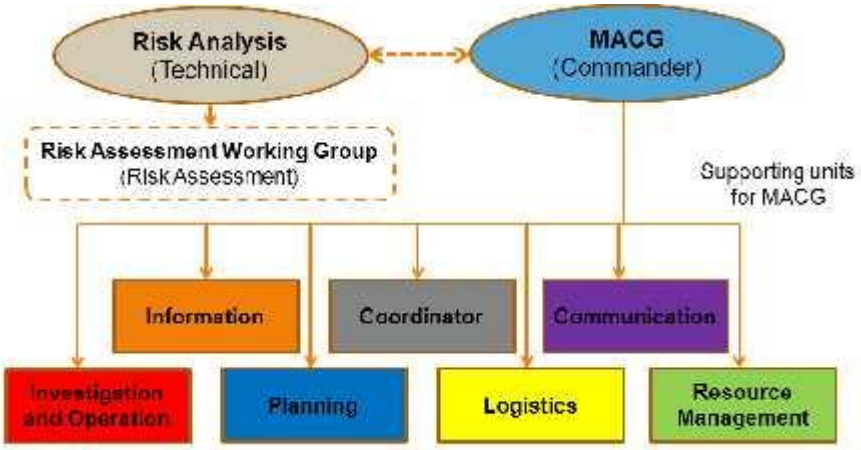

Figure 1: Multiagency collaboration among all food safety agencies (supporting units)

The FSER guideline is consistent with international food safety requirements including the requirement of IHR, 2005, which all countries including Thailand have to follow. Implementation of IHR core capacities monitoring framework requires a self-assessment against the 21 questions. IHR focal point and INFOSAN emergency contact point which work as per the IHR (2005) requirement, work in close collaboration and inform each other of events. In Thailand, The Bureau of Food Safety Extension and Support (Food Safety Operation Center) responses work as the main focal point to communicate, to collect and to analyze data for INFOSAN Secretariat in Geneva, Switzerland. The developed national guideline for Food Safety Emergency Response plan may, therefore, ensure effective and coordinated communication between federal, state, and local responders, authorities, and the public by having an MOU or SOP among IHR and INFOSAN as well.

6.2 Bangladesh

Dr. Shah Mahfuzur Rahman, National Food Inspection Advisor, FAO Food Safety Project in Bangladesh, shared experiences on how Bangladesh developed the Draft National FSER Plan. The Draft Plan of Bangladesh defines food safety emergency in terms as;

"A situation arising from intentional or unintentional contamination of food with biological, chemical, radionuclear or physical hazards that is identified, by a Competent Authority (National Food Safety Emergency Coordination Committee) as constituting an uncontrolled foodborne risk to public health, economy and trade that requires urgent action

Bangladesh framed the scope of FSER Plan as "The plan applies to any biological, chemical, radionuclear and physical hazards that could arise along the food chain and cause potential or real threat to food safety, public health and domestic or international trade of foods of different origin" under the purposes as follows;

- To clearly describe the process for identifying and assessing food safety emergencies using an effective co-ordination mechanism
- To guide and coordinate efforts of various authorities during food safety emergencies
- To conduct post-emergency response review and evaluation; recommend and implement corrective actions, and share these with policy makers
- To enhance the safety of foods produced in Bangladesh resulting improved public health and facilitates trades

In the Draft Plan, provision has been kept to establish a National Food Safety Emergency Coordination Committee (NFSECC), comprising members from 5 core ministries i.e. Ministry of Health and Family Welfare, Ministry of Fisheries and Livestock, Ministry of Agriculture, Ministry of Food and Disaster Management and Ministry of Industries to assess food safety events that could result in potential food safety emergencies (FSE) as well as provide guidance for declaring alerts and managing the emergency. NFSECC is composed of two committees namely FSE Policy Group (PG) a top level decision making entity, and FSE Technical Group (TG)-a separate but complementary entity. The procedures of FSER are as described in Figure 2;

The PG, chaired by the Director General of Health Services will meet immediately upon being notified by TG on food safety event that could become a potential FSE. Based on the assessment and recommendations of TG, the PG will make a decision on declaration of FSE and will appoint the department to manage the events or emergencies and the jurisdiction of the same. TG have to establish linkage with Institute of Epidemiology, Disease Control and Research (IEDCR) which should immediately notify both Co-chairs of TG upon receiving a notification of an event. Co-chairs will call TG meeting within 12-24 hours, conduct initial risk assessment and provide key recommendations to PG. TG may seek advice from various technical experts from their expert roster, if needed and PG will assess the situation and appoint respective jurisdiction and departments according to food safety legislative framework of Bangladesh.

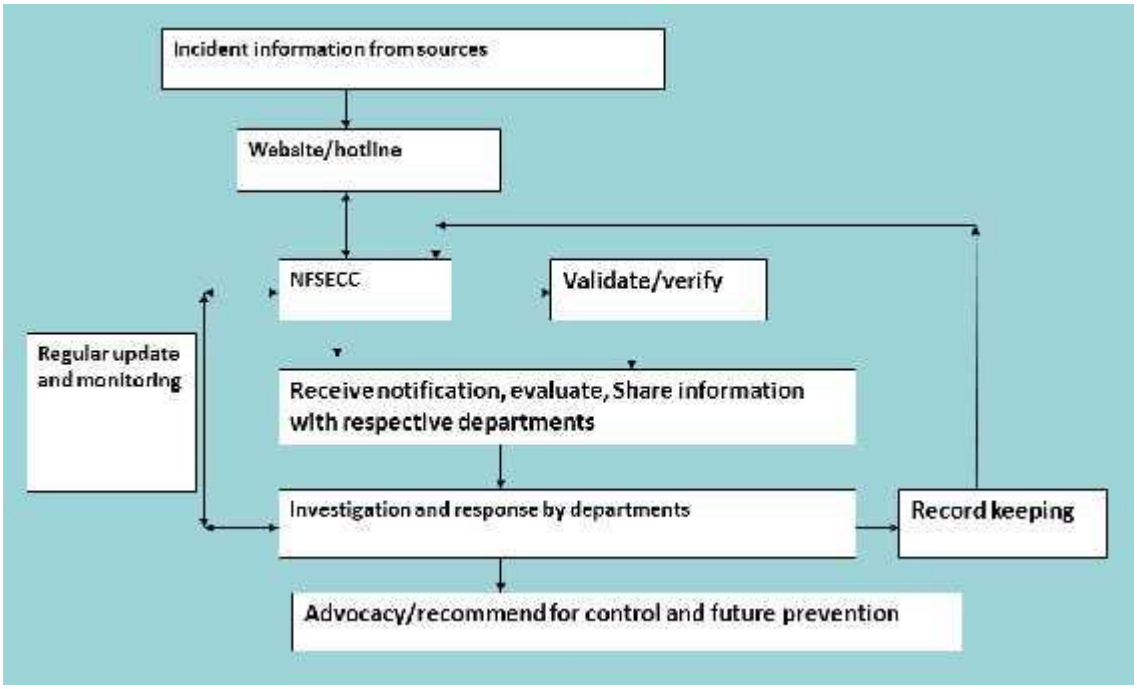

Figure 2 FSER Procedure of Bangladesh

As outlined in the Draft Plan, the management process of the Food Safety Emergency includes three phases viz. (1) Alert Phase: *Food Safety event is identified and communicated*, (2) Action Phase: *TG convenes meeting, assesses and recommends to PG*, (3) Scale down Phase: *Response no longer required but team remains alert. Post event/emergency reviewed and evaluated*.

It was expected that the Draft Plan would be finalized through further consultations and feedback from the stakeholders, and be submitted to the Government by the end of 2012, with the support of the new FAO/Government Cooperative Programme entitled "*Improving Food Safety in Bangladesh*", to be started from the July 2012, under the National Nutrition Services of the Health, Population and Nutrition Sector Development Programme (HPNSDP) of the Ministry of Health and Family Welfare, supported by the Government of the Kingdom of the Netherlands.

6.3 Japan

Dr. Hajime Toyofuku (Senior Researcher, National Institute of Public Health, Ministry of Health, Labour and Welfare, Japan) made his presentation on 'Implementation of national food safety emergency response plans – examples of recent cases and lessons learnt', as follows.

1) Response after the Yukee (raw beef) outbreaks in May 2011

The topic of Risk Assessment and Management for raw beef and heat treatment of beef to-be-eaten raw was presented. For detailed information, the Ministry of Health Labor and Welfare (MHLW) indicated that the microbiological criteria and processing standard does not guarantee hundred percent safety of raw beef for consumption. Basically raw beef consumption needs to be avoided, especially by high risk population including children and elderly people who are advised not to eat any raw, undercooked meat and internal organs (e.g. liver). If heat treatment is introduced and implemented, the risk reduction is obvious, and there is no need to perform any risk assessment.

2) Food safety control measures associated with radioactive contamination after Fukushima power plant accident.

Dr. Hajime Toyofuku explained the administrative system for food safety in the situation of nuclear emergency in Japan, as illustrated in Figure 3**.** After the Fukushima power plant accident, the Food Sanitation Commission (FSC) of the Pharmaceutical Affairs and Food Sanitation Council announced that, under the present situation, the provisional regulation values set based on the Food Sanitation Law should be maintained in the light of the "Emergency Reports" issued by the Food Safety Commission. From the results of this accident, the method of setting provisional regulation values for radioactive cesium " Maximum permissible dose (5mSv/year) was allocated equally to five food categories, namely drinking water, dairy products, vegetables, grains, other foods (fish, eggs, meat), which assign 1mSv/y to each food category. Japan set provisional regulation values of radioactive materials in food in accordance with the Food Sanitation Law and notified the local government. Japan inspects radioactivity in food

every day, and restricts distribution of food that fails to meet provisional regulation values taking into consideration the spread of contamination. The concept of radionuclides is regulated for "General Foods", Inspection of radioactive materials in food, Concept of setting regulation values for food.

Japan has implemented new standard limits for radionuclides in foods based on the intervention exemption level used as the basis for the Codex standards. The new standard came into effect this April and is designed to deal with the contamination in the long term[1].

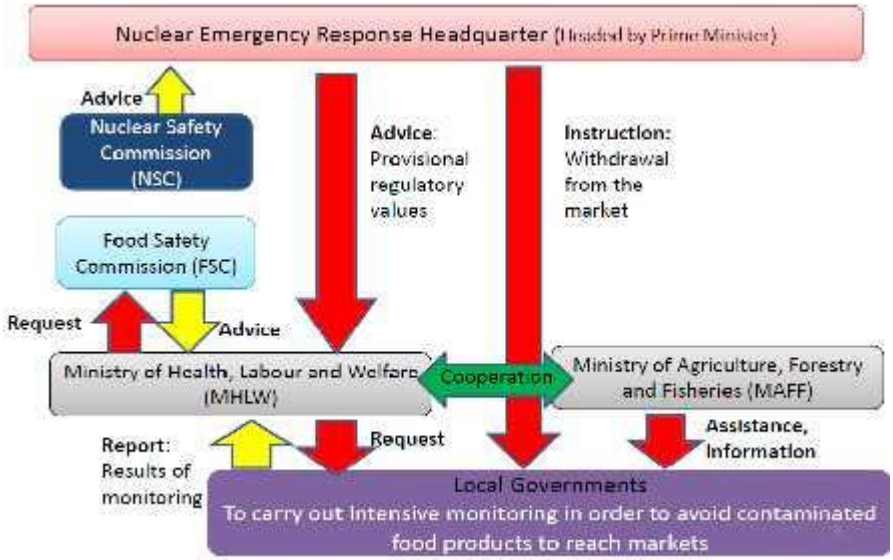

Figure 3: Administrative System for Food Safety in the Situation of Nuclear Emergency in Japan

[1] For Japan's new Standard Limits for Radionuclides in Foods: http://www.mhlw.go.jp/english/topics/2011eq/dl/new_standard.pdf

7. STATUS OF FSER PLANS IN COUNTRIES

CAMBODIA

A National Food Safety Emergency Response Plan is needed to be developed in Cambodia. The National Multi-agencies Committee has not been set up yet due to the lack of development in food law and regulations. The agencies involving in food control are divided into two levels: National Level and 24 Provincial Health Departments.

The food safety emergency response sector supervised by the Food Safety Bureau collects the food borne disease outbreaks information from domestic and international sources and it has role to disseminate the information to relevant internal and external counterparts, and take emergency action. Food Safety Bureau cooperates with the Department of Communicable Disease Control in early warning and response system. In this system, there are 2 detection mechanisms: case-basedsurveillance and event-based surveillance. Cambodian delegate expressed that they had good relation with customs.

Challenges for Cambodia

- Not yet set up the National Committee for FSER
- Lacking in the capacity and capability of a food laboratory
- Lacking coordination by relevant agencies
- Not have sufficient documents in food traceability (no food registration)
- Lacking in human and financial resources
- Not yet develop food laws and regulations
- Not yet conducted risk assessment in food
- Lacking in food control system

Future plans

- Continue to provide training to food handlers and producers
- Publish food safety promotional materials
- Develop food safety emergency response regulations
- Put the risk assessment program for food in the university curriculum
- Conduct risk assessment in food
- Establish a committee on food safety emergency response.

- Drafting of food safety policy is in progress
- Referring to the draft on food policy, Cambodia is also preparing a food safety strategy for a period of 5 years.

INDONESIA

Indonesia established Integrated Food Safety System (IFSS) which provides a logical framework to strengthen the national food safety program. The system involves various government institutions, and universities dealing with food safety as well as associations of food industries and consumers. Three involved National Food Safety networks, consisting of Food Intelligence Network, Food Control Network, Food Safety Promotion Network, are involved in work relating to risk analysis concepts. Collaboration among the three networks plays an important role in development of the Indonesia Rapid Alert System for Food and Feed (INRASFF). The development of the system was initiated by preparing a draft of national TOR on RASFF in 2010 and creating Standard Operational Procedure (SOP) for reporting and exchange of information in the system in 2011. The implementation of national RASFF system trial in 2012 is integrated by formalizing Food Safety Emergency Response (FSER) in INRASFF.

Challenges for Indonesia

Some challenges identified and that require support of the stakeholders and partners at national, regional, and international levels are as follows:

- To strengthen synergic coordination between stakeholders
- To develop human capacity
- To develop laboratory capacity and facilities
- To develop referral laboratory network for important cases/ incidents
- To empower food service establishments and provide consumer awareness

Future plans

- Strengthen risk analysis during food safety emergency responses (FSER)
- FSER is integrated with INRASFF, Indonesia can contribute to ASEAN Rapid Alert System for Food and Feed (ARASFF).

LAO PDR

Food Safety Control has been developed by getting commitment of all key ministries of Lao to address food safety along the length of the food chain. Laos adopted a National Food Safety Policy to guide the management of food safety throughout the food chain, including a "coordinated national response to potential food borne emergencies, including tracing food products and their recall in case of problems." The National Food Safety Action Plan is in line with the Food Law No. 04/NA (dated 15 May 2004) and serves as a practical guide to implement the essential elements and strategies outlined in the National Food Safety Policy (028/PM; 03 February 2009).

National Food Safety Emergency Response Plans was developed since 2008 with the basic principles and elements outlined in the FAO/WHO Draft Guidelines. Ministry of Health (MoH) led the development and drafting of the plan. The Food and Drug Advisory Committee (FDAC) is responsible for the plan at the Ministerial level. The FDAC acts as the central coordinating unit for all sectors with regard to food safety management. Although, the National Food Safety Action Plan of Lao has been developed, the constraints for emergency response are presented below.

Challenges for Laos

- Limited numbers of qualified staff (all levels) to well understand on food safety issues and identify emergency/incidence issues such as melamine contamination, radionuclide, and other contaminations.
- Limited operational costs/resources
- Limited supplies and equipment
- Limited capability of laboratory facilities for necessary chemical and microbiological contaminants and also for confirmation of some viral and bacterial infectious diseases
- Limited funds for trainings inspectors

Future plans

- Raising the importance of the FSER to the existing committee (Task force & Emergency team) with the requisite information/lessons learnt.
- Revising and strengthening the existing FSER plan
- Conducting a simulation exercise of FSER planning
- Reporting the progress to the authorities concerned (FDAC) / Ministry of Health
- Enhancing INFOSAN contact points by strengthening capacity for food safety information exchange and emergency response

- Support development of a web-based system in order to provide the scientific basis for health related decisions
- Strengthen cooperation and collaboration of technical assistance to develop regulations and standard operation procedures (SOPs)

MALAYSIA

Currently, National food safety emergency response plans is in the second draft version and awaiting finalization. However, the senior Director of Food Safety and Quality Division established a National Food Safety Emergency Committee in partnership with other key stakeholder. When any events are implicated as emergency, the committee will have the right to activate the Food Safety Emergency Response plan at national, state or district level. The agencies also collaborate and coordinate with industries and other relevant government agencies and describe the line of action in the prevention and management of food safety emergencies. In addition, Malaysia is a member of INFOSAN since 2005. Senior Director of Food Safety and Quality Division has been appointed as the Focal Point as well as the Emergency Contact Point for INFOSAN in Malaysia.

Challenges for Malaysia

- Lack of cooperation of related government agencies and non-government organizations (NGOs) during food safety emergencies
- Feedback during food safety emergency so as to improve the flow of relevant information to the respective target group

Future plans

- An accurate, timely, comprehensible information through the use of appropriate technology and channels of communication during food safety emergencies.
- Coordinate flow of information to internal and external stakeholders in the prevention and control of food safety emergencies. This includes relevant government agencies, NGO's as well as the food industries.

MYANMAR

In Myanmar, a National Food Safety Emergency Response plans still needs to be developed and the surveillance system is also insufficient. To ensure efficient and uniform control throughout Myanmar, various levels of Food and Drug Supervisory Committee (FDSC) at Central, State/Division, District and Township levels have been formed in 1992. For Food Safety Emergency Response Plan, the Chairman is from Health Department and members are from City Development Committee, General administration, Police Force and Livestock, Breeding, and Veterinary Health. The governmental departments responsible for implementation of food safety depending on actual problem, also use the existing laws to manage food safety incidents, such as Food and Drug Act, 1928; Public Health Law,1972 and National Food Law, 1997.

Challenges for Myanmar

- National FSER plans need to be developed
- Limited surveillance

Future plans

- Committee for setting up MACG is under consideration
- Simulation exercise on FSER plan

PHILIPPINES

Phillippines has Philippines Rapid Alert System for Food & Feeds (Phil-RASFF), which is a *web- based system tool* for rapid exchange of food and feed safety information among competent authorities involved in food safety control. Establishment of Philippines Rapid Alert System for Food & Feeds (Phil-RASFF), has been modeled from the ASEAN-RASFF and EU-RASFF, and is to institutionalize an alert and notification system for food and feed safety concerns, and improve coordination amongst food safety control agencies at national and regional levels.

Challenges for Philippines

- Improve legal framework and coordination

Future plans

- Interface with the ASEAN- & EU-RASFF and other equivalent systems of other international trading partners

VIETNAM

Food Safety Law of Vietnam dated 17/6/2010 and effective since 1/7/2011 regulates three ministries: MOH, MARD and MOIT to be directly responsible for food safety management survey/prevent/solve the problem) and food safety inspection for specific products under their purview from farm to table. Their role involved in the food safety emergency plan is to prevent the problems of food and food products from farm to trade including import and export and other foods regulated by the government. Also, to work towards solving the food contamination due to the poisoning outbreak.

Currently, the emergency plan of food safety in Vietnam is divided at two levels: The national emergency plan which responds in the issues of serious nature and having wide risks/problems on food safety and the local emergency plan: covering risks/problems of food safety in province/city level such as food contaminations in local food poisoning outbreaks.

Challenges for Vietnam

- Lack of coordination among ministries
- FSER plan has not been endorsed
- Identify and assess national emergency problem on food safety: a lots of food contamination agents and risk of food poisoning
- Estimate the influence of scale of emergency problem to human health/life as food poisoning outbreaks/food borne diseases
- Capacity of the management system on food safety: Human resource**, t**esting**,** and funds

Future plans

- Seek approval of FSER of inter-ministerial steering committee for food safety and disseminate the plan.
- Organize simulation exercise

SUMMARY OF COUNTRY STATUS

The summary of country status is listed in Table 1.

Country	Level of FSER	Establish-ment of FSER plan	Multiagency Coordination in Country	SOP/ Guidelines of FSER	Network		
					RASFF	INFOSAN	Other
BANGLADESH	Draft stage	Yes	Yes	Yes	Yes	Yes	
BRUNEI	Implementation at district & national	Yes	Yes	No SOP for product recall	No	Yes	IHR, AFSNet, IPPC, OIE
CAMBODIA	No FSER plan	No	No	No SOP of FSER	No	No	
INDONESIA	Country/ National level	Yes integrated with RASFF	Yes	Yes	Yes	Yes	NSW, IHR, AFSNet, IPPC, OIE
JAPAN	Completed plan	Yes	Yes	Yes	Yes	Yes	
LAO PDR	National level	Yes	No	No SOP of FSER	No	No	
MALAYSIA	2nd draft wait for finalization	Yes	Yes	Yes + SOP for recall	Yes	Yes	
MYANMAR	Initiating stage	Yes Developing FSER plan	No	No	No	No	
PHILIPPINES	Implementation at national and regional/ provincial levels	Yes At the planning stage	Yes	Guidelines for product recall	Yes	Yes	IHR, ASFNet, IPPC, OIE

8. WORKING GROUP SESSIONS

Each country in the region was divided in 3 groups in order to share experiences and lessons learnt in implementation of their national FSER plans. They presented and identified existing **gaps, challenges, support needed, and action** for the region with regard to the development of FSER plans in countries. The summary of the important issues from working group as follows:

1. Gaps

Structure of Agencies

- Lack of or inadequate coordination among ministries and duplications among agencies in field inspection
- Legal framework and coordination
- Lack of experts for Capacity Development
- No Government endorsement for the MACG/ FSER plan

Laboratory

- Lack of Rapid test result for screening
- Testing laboratory capacity and technical capability building e.g. risk-based inspection, laboratory analysis, risk analysis, product traceability, and effective risk communication plan

Communication

- Risk communication between agencies
- Consumer awareness
- No Surveillance for FBD, Limited surveillance

2. Challenges

Structure of Agencies

- Conflict of Interest during inspection process
- Commitment from food industries
- Linking routine inspection/food test plan for FBO along the entire food chain for domestic market and emergency response plan
- Different standards among countries
- Coordination at national and regional level
- Harmonized standard

Laboratory

- Diagnostic capacities of laboratories
- Identification of reference laboratories in the region

Communication

- Sharing info among countries
- Increasing public awareness

Others

- Human and financial resources
- Training / recall and traceability system: Trace-back and trace-forward
- Food movement and Human migration

3. Support needed

Structure of Agencies

- Supervision on FSER Plan (joint FAO/WHO/OIE)
- Technical assistance
- Legal framework and Coordination
- Run simulation to test the effectiveness of the FSER, using case studies
- Simulation exercise on FSER Plan

Laboratory

- Develop a regional network for reference food safety laboratories

Communication

- Risk communication in /own country/ Regional/ International
- Information sharing
- In country INFOSAN coordination
- National database on food borne pathogens / food consumption
- Facilitate sharing case study (e.g. food contamination, recall/trace back during emergency)

Others

- Support for training of food inspectors/ sampling/ HACCP auditing/ FBD surveillance
- Operational procedures/ guideline
- Assistance in setting up traceability systems
- Protecting consumer health
- Capacity Building (technique, Developing SOP for Management FSE, human and institutional)

4. Action plan

Structure of Agencies

- Development of national FSER Plan and procedures
- Advocacy meeting to coordinate review FSER Plans and submit to the Government for approval

- Seek approval of FSER of inter-ministerial steering committee for food safety and disseminate the plan.
- Organize simulation exercise
- Committee for setting up MACG is under consideration
- Harmonization of standards within regional and international (experts from international /some national)

Laboratory

- Situation analysis on FSER in each country
- Capacity building: risk assessment/ traceability/ food analysis

Communication

- Coordination and integration of network among ASEAN countries (A single ASEAN Food Safety Response System/ Network e.g. ARASFF, AFSNet)
- Enhance risk communication
- Capacity building (training for surveillance, test, inspectors (how to report)
- Development/enhance FBD Surveillance system
- Develop Food Safety Database

Others

- Strengthen law enforcement
- Obtain commitment from food industry through regulatory and non-regulatory actions (e.g. campaigns, meeting, inspections)
- Professional ethics training

9. CONCLUSION

1. Countries of the ASEAN region are in different stages of development/ implementation of their national FSER Plans: some have no nationally coordinated FSER Plan at all, but the different agencies involved with food safety collaborate at an ad hoc basis when emergencies occur, some have a more coordinated multi agency approach and very few have a well-developed, well documented and tested FSER Plans coordinated at national level.

2. Coordination between the different agencies involved in food safety remains challenging, in particular, in countries with decentralized administrative systems at provincial level. Well defined roles and responsibilities in routine activities and during an emergency are important. External international coordination is highly appreciated in order to set up the national multi agency approach.

3. Budget allocation and responsibility in case of an emergency still remains challenging.

4. High level commitment and support is crucial for a successful development of a national FSER plans and its implementation.

5. Risk communication and its potential negative impact during an emergency is often underestimated.

6. Technical experts on specific issues are sometimes difficult to find and the INFOSAN Network can be of support to identify expert in the region or outside of the region.

7. Linkage of FSER Plans with other existing national emergency plans is not always obvious and clear.

8. A new challenge is posed by the food products purchased on the internet. Related jurisdiction is not always clear and simple.

9. Capacity strengthening is considered important in terms of technical expertise and in terms of infrastructure development to perform the necessary analysis (laboratory, risk) when a food safety emergency occurs. In addition, it has been highlighted that trainings often focus on theoretical aspects and that they fail to address the practical aspects and hands on experience which would allow the staff to better apply the acquired theoretical knowledge in practice. In particular, risk assessment trainings were sometimes lacking to teach participants how to translate the theoretical concepts into acceptable risk management options.

10. At the international level, a number of organizations are offering their support to the region. It was underlined that a coordinated international support at ASEAN level is important so that i) the FSER Plans of different countries follow the same guidance and ii) a single regional network can collaborate with different international players INFOSAN, APEC, ARASFF, etc.

10. RECOMMENDATIONS

Country Level

i) Based on each national situational analysis additional FSER plans should be further developed and improved in the ASEAN region

ii) Risk communication and, in particular, during a crisis needs to be enhanced in order to explain the risk assessment and related management options in an understandable way

iii) More commitment from food industry through regulatory /non-regulatory actions (e.g. campaigns, consultative stakeholder meetings) should be sought iv) In general trainings should always include practical case studies

v) Every national FSER Plan should be tested in a simulation exercise and might need some revisions

vi) Based on the identified national capacity development needs following recommendations were made to:

- ✓ Develop standard operating procedures (SOP's) to manage national FSER Plans
- ✓ Develop/enhance food safety event surveillance system
- ✓ Update on latest laboratory analysis techniques
- ✓ Strengthen in-country INFOSAN coordination
- ✓ Training to food inspectors in sampling and HACCP auditing as well as detecting incidents and reporting of these
- ✓ Assist in setting up traceability systems
- ✓ Develop a national food safety database assembling monitoring and surveillance data
- ✓ Establish a national food consumption database
- ✓ Run simulation exercises on a regular basis to test the effectiveness of the FSER Plan

Regional/ International level

i) The different networks amongst countries in the region (e.g. ASEAN, ARASFF, INFOSAN, APEC) should be coordinated and integrated by a central body

ii) Roles and responsibilities of the different international players should be clearly defined

iii) It is important that international organizations collaborate in order to clearly plan and coordinate the support for the region.

iv) A central body at regional level should facilitate the compilation, analysis, dissemination of data and information sharing (e.g. chemical occurrence data, microbiological data, traceability data needed in case of recalls, case studies etc.)

v) FAO/WHO is encouraged to supervise and support the further development and implementation of National FSER Plans in the region.

ANNEX 1

WELCOME ADDRESS

by

Dr. Hiroyuki Konuma

Assistant Director-General and FAO Regional Representative for Asia and the Pacific

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Your Excellency, Dr. Surawit Khonsomboon, Deputy Minister of the Ministry of Public Health, Thailand,
Distinguished participants from the ASEAN countries, Resource persons, ladies and gentlemen:

It is my pleasure to welcome you, on behalf of the Food and Agriculture Organization of the United Nations, to the Regional Meeting on:"*Developing National Food Safety Emergency Response Plans – Sharing Experiences and Lessons Learnt*" being organized by the FAO Regional Office for Asia and the Pacific (RAP) in collaboration with the Food Safety Operation Center of the Ministry of Public Health.

Food safety emergency as you all would be aware has been defined by Codex as *a situation, whether accidental or intentional, that is identified by a competent authority as constituting a serious and as yet uncontrolled foodborne risk to public health that requires urgent action*.

We have seen many food safety emergencies in the recent past. An example of such emergencies is the *E.coli* novel strain O104:H4 bacteria which caused a serious outbreak of foodborne illness in northern Germany in May through June 2011. In this outbreak there were 4000 seriously ill patients with 50 deaths. The source of this, after detailed investigations, was identified as sprouts from imported fenugreek seeds. Other examples are the crisis of milk contaminated with melamine in 2008 due to which there were 6 deaths, 300, 000 illnesses and 115 types of contaminated food products.

Thus, countries need to be prepared to deal with all possible food safety emergency situations in order to reduce the large scale possible health, economic and social impacts. However, many countries do not have the capacity to deal even with routine food safety events, so it is extremely difficult for them to manage such emergencies.

The Food System Emergency Response (FSER) plans are aimed at enabling timely and coordinated response, minimize adverse impact on health and disruption to trade, to meet the international obligations and to reduce the socio-economic and political impact of a large scale food incident, based on "risk analysis concept". Also, such planning would enable food safety authorities to focus on prevention and preparedness, rather than only on reaction to individual events, which has less long-term sustainability.

A pilot for the development of a Food Safety Emergency Response Plan was done in Thailand during the past year based on a request received by FAO from the Food Safety Operation Centre (FSOC) of Thailand, as the central coordination agency for food safety in Thailand. As a part of the pilot, it was agreed that FSOC will coordinate a Regional Meeting where the results will be presented to ASEAN countries and other interested countries in order to learn from the process and share experiences. In addition, FAO has also recently supported Bangladesh in developing their Food Safety emergency Response Plan.

Today's meeting, the experiences of Thailand and Bangladesh will be shared in relation to the process followed for developing the plans as well as their plans so that other countries are able to learn from these experiences in developing their own FSER Plans as well as the lessons learnt in the process. In addition, other international organizations namely the OIE, WHO, FAO as well as countries namely Japan, Australia will highlight their activities as related to the area of emergency response. The Meeting will also highlight on the FAO/WHO Guide for application of risk analysis principles and procedures during food safety emergencies as well as the practical use of this tool. An Introduction of the FAO/WHO Guide on National Food Recall Systems will also be presented.

FAO Activities

I would like to take some time to dwell on FAO's activities on food safety in the region. Food safety touches on the many aspects of agricultural production technologies, food handling and processing, trade and distribution. Production of safe food requires adequate controls along the food chain from farm or sea to table. Food safety issues can arise from a range of sources including, food additives, pathogens, heavy metals, organo-chemical pollutants, residues of veterinary drugs, and pesticide residues.

The Food and Agriculture Organization of the United Nations (FAO) has been focusing on food safety at the international level as well as regional level. FAO also responds to the nee ds of individual countries with regard to capacity development.

Food safety has been recognized as a priority area for FAO in the FAO Regional Conference for the Asia & the Pacific.

At the **31st FAO Regional Conference for the Asia & the Pacific (March 20 12),** FAO was requested to assist member countries to

- enhance capacity for participation in the design of animal health and **food-safety standards**
- harmonize **food safety and quality standards** in value chain development
- strengthen legal and institutional frameworks that govern **food safety and quality** in value chain development

Regional collaboration & cooperation has also been emphasized as crucial to address existing & emerging food safety issues which further brings about the importance of this meeting.

FAO is currently supporting around 15-20 projects in various countries of Asia Pacific Region on food safety covering capacity strengthening in aspects of food legislation, food safety and quality policies, laboratories, standards and Codex related activities, Good Practices such as GAPs, FSER Plans, inspection procedures, food-borne illness surveillance, Geographical indications, public awareness and education on food safety and consumers 'health; implementing preventative risk-based approach in industry sectors, and others.

On this specific area of National Food Safety Emergency Response Plans (FSER plan), FAO provides technical assistance to member countries to formulate and implement an emergency response plan based on the FAO/WHO framework.

The main challenge faced during such emergencies is the multidisciplinary of the situations. I would like to highlight here the importance of multi -sectorial cooperation and collaboration specifically in this important sector. Food safety emergencies cuts across sectors, and multi-sectorial involvement of all relevant line ministries, academia, and the private sector is important for the effective development and implementation of FSER plans.

Ladies and gentlemen

I am not going to present the details of this regional meeting as it will be presented by my colleague later. However, I wish to stress the importance of learning from lessons from the pilot project countries and from the more experienced countries, and identifying existing gaps and capacity building needs for the development of FSER plans in countries.

In closing, I should like to take this opportunity to assure you of FAO's commitment to capacity building for food safety.

It is indeed a pleasure for FAO to be able to support and contribute to this important event. I would also like to thank our colleagues from Rome, WHO, OIE and other countries namely Japan and Australia for providing supporting to this important Meeting.

Finally, I wish you a successful Regional Meeting and look forward to the successful outcome of your deliberations in this crucial field of food safety emergency response planning.

Thank you.

ANNEX 2

Opening Address

by

H.E. Mr. Surawit Khonsomboon, Minister of Public Health

Dr. Hiroyuki Konuma, Assistant Director General,
Regional Representative of the FAO Regional Office for Asia and the Pacific
Ms.Shashi Sareen, Senior Food Safety and Nutrition Officer, FAO Representatives of the international organizations,
Distinguished resource persons and participants,

It is a great honor and pleasure for me to have this opportunity to address the opening session of the Regional Meeting on Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt.

I extend a warm welcome to those of you who have come to Thailand to participate in this important meeting and I hope that your stay here will be enjoyable and productive.

I am very grateful for the support that FAO gave the Ministry of Public Health of Thailand to organize this meeting. Food Safety Emergency Response plan is very important since Thailand is a big food producer of the world. Agricultural land is now affected by climate change and development of various diseases and this emergency needs immediate action to deal with. The key to a successful response usually falls to all agencies in the food supply chain and the governmental sectors. The multi-agency collaboration, both domestically and ASEAN regionally will be required.

The Thai Government has announced the policy which promotes "Thai Kitchen is The World Kitchen". Therefore, food safety is an important issue and the Ministry of Public Health is the responsible authority to oversee consumer health, food safety, and nutrition. The Ministry of Public Health has established Food Safety Operation Center or currently named "The Bureau of Food Safety Extension and Support" as the National INFOSAN emergency contact point in food safety co- operation system.

In addition, National Food Safety Emergency Response Plans is also formulated to provide a systematic flow of command in response of food safety emergency at both national and international levels and to strengthen food safety surveillance and investigation.

Ladies and gentlemen,

I wish the meeting will provide opportunity for various countries in formulating and implementing national food safety emergency response plans. I wish this is a great chance for all participants to learn from knowledge expert team and share their experiences. I hope that our 2-day meeting will be a fruitful one and will come up with successful outputs. I wish you a pleasant stay in our country.

At this auspicious moment, may I now declare the Regional Meeting on Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt open.

Thank you

ANNEX 3 – PROGRAMME

Regional Meeting

"Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt"

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Day 1 (June 27, 2012)	
Time	**Programme**
07.30 – 08.30	**Registration**
Opening Session	
08.30 – 09.15	• **Welcome Address** – Dr Hiroyuki Konuma, Assistant Director General/ Regional Representative, FAO RAP • **Opening Address** –H.E. Dr Surawit Khonsomboon, Deputy Minister of the Ministry of Public Health, Thailand • Group photo
09.15 – 10.00	**Tea Break**
Plenary Session	
10.00 – 10.45	**Objectives, outline and structure of the programme** and **introduction of the FAO/WHO Framework for developing national food safety emergency response plans: Practical Applications of the tool** **FAO projects on food safety in the region** • Ms Shashi Sareen, Senior Food Safety & Nutrition Officer FAO, Regional Office for Asia and the Pacific, Bangkok
10.45-11.15	**WHO projects on food safety in the region** • Ms Jenny Bishop**,** Regional Adviser for Food Safety WHO Regional Office for the Western Pacific, Philippines
11.15-12.00	**OIE approaches to responding to emergencies including zoonoses** • Dr Andrew Davis, Programme coordinator for the OIE, World Organisation for Animal Health, Sub-Regional Representation for SE Asia, Bangkok
12.00 – 13.15	**Lunch**
13.15 – 15.00	**Country experiences in developing FSER Plans:** Process of the development of National Plans; issues, challenges and positive experiences/ Presentation of the Plan □ **Thailand experience** □ **NFSER Plans: How does this framework complement other International & National Guides** • Mrs Jongkolnee Vithayarungruangsri, Director of Food Safety Operation Center, Ministry of Public Health, Thailand □ **Bangladesh experience** • Dr. Shah Mahfuzur Rahman, National Food Inspection Advisor, Food Safety Project, FAO, Bangladesh and Dr. M Mushtuq Husain, Principal Scientific Officer, IEDCR, Bangladesh • Facilitated by Ms Shashi Sareen**, Senior** Food Safety and Nutrition Officer, FAO Regional Office for Asia and the Pacific, and • Ms Darunee Edwards, President of Food Science and Technology Association of Thailand (FoSTAT)

15:00 – 15:30	**Tea Break**
15.30 – 16.15	**Implementation of national food safety emergency response Plans – examples of recent cases and lessons learnt:** 1) Response after the Yukee (raw beef) outbreaks in May 2011, and 2) Food safety control measures associated with radioactive contamination after Fukushima power plant accident. • Dr. Hajime Toyofuku, Senior Researcher, National Institute of Public Health, Ministry of Health, Labour and Welfare, Japan • Facilitated by Ms Caroline Merten, EMPRES Food Safety Officer, FAO HQ
16.30 – 16.45	**Conclusion of Day 1** • Dr. Waraluk Tangkanakul Deputy Director, Bureau of Communicable Diseases Control, Department of Disease Control, MOPH
Day 2 (June 28, 2012)	
Time	**Programme**
8.30-9.00	**INFOSAN: The International Network of Food safety Authorities Network** • Ms Caroline Merten, EMPRES Food Safety Officer FAO Head Quarter, Rome
09:00 – 10.00	**Status of FSER Plans in Countries – country presentation (roundtable):** Laos, Vietnam, Cambodia, Malaysia, Myanmar, Indonesia, Philippines. Do they have an emergency plan for food safety? Strategies of the plan? What department involved? Process to develop the plan? Plan validation? Coordination mechanisms? What other relevant plans? Facilitated by Ms Shashi Sareen, FAO RAP
10:00 – 10:30	**Tea Break**
10:30 – 12.00	**Working Group Session – Future of FSER Plans in Countries – Frame:** • Situation of each country/discussion • Challenges • Recommendation/ Capacity support needed Group: 1. Thailand, Malaysia, Bangladesh, Japan 2. Philippine, Indonesia, Singapore, Brunei 3. Cambodia, Myanmar, Laos , Vietnam 4. Thailand • Facilitated by Ms Shashi Sareen, Ms Jenny Bishop, Ms Caroline Merten
12:00 – 13:00	**Lunch**
13.00-14.00	**Presentation of problems and solutions by groups and open discussion**

14.00 – 14.30	**FAO/WHO Guide for application of risk analysis principles and procedures during food safety emergencies:** - **Framework** • Ms Jenny Bishop, WHO
14.30-15.00	**Practical use / Application of risk analysis in emergencies-examples** Dr. Paul Brent, Chief Scientist, FSANZ, Australia
15.00 – 15.30	**Tea Break**
15.30-16.00	**Introduction of the FAO/WHO Guide on National Food Recall Systems** Ms Caroline Merten, EMPRES Food Safety Officer, FAO, HQ
16.00 – 16.30	**Recommendations and Conclusions** • Ms Shashi Sareen, Senior Food Safety & Nutrition Officer, FAO, RAP • Ms Caroline Merten, EMPRES Food Safety Officer, FAO HQ **Close the meeting**

Overall Facilitator: Ms Shashi Sareen

ANNEX 4 – LIST OF PARTICIPANTS

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ANNEX 5 – PRESENTATIONS

Session 1

1) **Introduction of the FAO/WHO Framework for developing national food safety emergency response (FSER) plans: Practical Applications of the tool**

2) **Objectives, expected outputs, outline & structure of the programme**

3) **FAO projects on food safety in the region**

   By Ms Shashi Sareen,
   Senior Food Safety & Nutrition Officer
   FAO, Regional Office for Asia and the Pacific, Bangkok

4) **WHO projects on food safety in the region**

   By Ms Jenny Bishop**,**
   Regional Adviser for Food Safety
   WHO Regional Office for the Western Pacific, Philippines

5) **OIE approaches to responding to emergencies including zoonoses**

   By Dr. Andrew Davis,
   Programme coordinator for the OIE
   World Organization for Animal Health, Sub-Regional
   Representation for SEAsia, Bangkok

1) Introduction of the FAO/WHO Framework for developing national food safety emergency response (FSER) plans: Practical Applications of the tool

2) Objectives, expected outputs, outline & structure of the programme

3) FAO projects on food safety in the region

By Ms Shashi Sareen,
Senior Food Safety & Nutrition Officer
FAO, Regional Office for Asia and the Pacific, Bangkok

introduction of the FAO/WHO Framework for developing national food safety emergency response (FSER) plans: Practical Applications of the tool

at

Regional Meeting

"Developing National Food Safety Emergency Response Plans - Sharing Experiences & Lessons Learnt"

(26 – 27 June 2012, Bangkok)

Ms. Shashi Sareen
Senior Food Safety & Nutrition Officer
FAO Regional Office for the Asia & the Pacific
E-mail: shashi.sareen@fao.org

Food Safety Emergency?

Codex Alimentarius definition :

A food safety emergency is a situation whether accidental or intentional, that is identified, by a CA as constituting a serious and as yet uncontrolled foodborne risk to public health that requires urgent action.

Codex Alimentarius, document CACGL-19

Emergency, Incident and Event?

CODEX (1995, revision 2004): *an emergency*	A situation whether *accidental or intentional*, *uncontrolled*, *risk to public health* and *require urgent action*
Food Standards Agency of the UK (2009): *an incident*	Any event there are concerns about *actual or suspected threats* to the safety and quality of food, *require intervention to protect consumers*
US FDA (2005): *an emergency*	An *unforeseen* combination of *circumstances* that calls for *immediate actions*
AUS – National Food incident Response control (2007): *a food incident*	Any situation where is a *risk, potential risk or perceived risk of illness or confirmed illness* associated with the consumption of food
Public Health Emergency of International Concern (PHEIC) (under IHR, 2005)	An event which includes the following four criteria: 1) *Seriousness of public health impact* 2) *Unusual or unexpected nature of the event* 3) *Potential* for the event *to spread internationally* 4) The risk that *travel or trade restrictions* may result from the event

Emergency, Incident and Event?

Bangladesh	a situation arising from intentional or unintentional contamination of food with biological, chemical, radio-nuclear or physical hazards that is identified, by a CA as constituting an uncontrolled food borne risk to public health, economy and trade that requires urgent action
Thailand	"any event of food safety, whether accidental or intentional, caused by chemical, biological & physical hazards of food , that is serious & unable to be controlled in normal food control system, risk & impact to life, public health, trade, economic and politic, both **national and international level**, that requires urgent action & multi-agency coordination approach from involved food safety agencies"

Definition will differ along national contexts

We recognize that:

- a situation ranges from minor incident to major crisis
- a situation evolves over time
- severity varies (ie mortality, morbidity)
- international and trade implications vary

Plan ensures the coordinated response to a potential or confirmed risk to public health through food

"Food Safety Events" ?

- No standard in international approach - must make sense for each country
- Situation evolves over time
- Response is scalable to meet the changing needs of the event (resources, coord, decision making)
- Factors that effect response – numbers effected; severity of illness; volume of food effected; contaminant known/ unknown; structures in a country; etc

Nature of Emergencies

- Emergencies of any description are characterised by:
  - Unpredictability
  - Confusion
  - Lack of Information
  - Lack of Time
  - Pressure to Act
  - Loss of Control

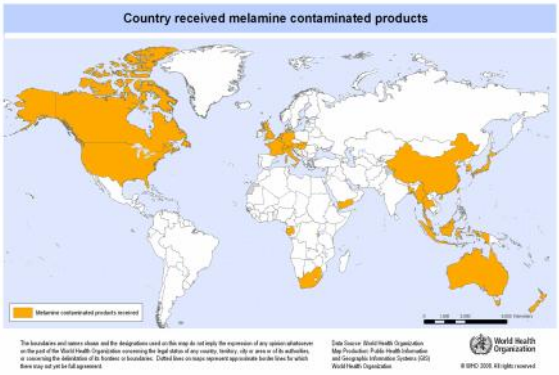
Why do we need a response plan?

- Planning for a food safety emergency will:
  - enable timely and coordinated response
  - minimize adverse impact on health and disruption to trade
  - meet international obligations
  - reduce the socio-economic and political impact of a large scale food incident

Recent Food Safety Emergencies

- 2008: **Melamine contamination** of infant formula leading to
  - >294000 children ill, >50000 hospitalized, 6 deaths; exported
  - Company officials charges with criminal offences, 2 executed
  - Prompted major review of food control systems

- **E.coli novel strain O104:H4 bacteria** – caused serious outbreak of foodborne illness (characterized by bloody diarrhoea, with high frequency of serious complications) - northern Germany in May to June 2011 – source possibly sprouts from imported fenugreek seeds
- 2008: **Dioxin contaminated** Irish pork, Estimated losses > USD 1 billion.
- 2009: The **Salmonellosis outbreak** linked with peanuts – USA, resulted in 9 deaths and more than 22,000 illnesses.
- 2011: **Radionuclide** contamination of food items - Japan.



Publications from FAO/WHO on FSER

FAO/WHO Guide for developing & improving national food recall systems – New!!!

Steps for Development of FSER Plan

- 3 preliminary steps
  - Step 1: Obtain high-level support (& mandate)
  - Step 2: Identify key partners (agencies with some responsibility for food safety)
  - Step 3: Establish a planning group
- 5 key elements :
  - Step 4: Essential background information
  - Step 5: Multi-Agency Coordination Group (MACG)
  - Step 6: Incident identification & management
  - Step 7: Post-incident review & evaluation
  - Step 8: Communication

The Planning Group will:

- Lead the process of developing a Plan
- Determine the scope of the plan
- Oversee preparation of the plan
- Ensure appropriate review and consultation with key partners
- Collect legal texts, integrate with other national response plans, etc
- Seek approval
- Evaluate the plan periodically & ensure that a mechanism is in place to update the plan

Key Considerations

- General
  - Tiered response
  - Build on food control systems
  - Consideration to seriousness, geographical area
  - Persons familiar – simulation exercises
- Country Specific
  - Existing systems
  - Gaps & limitations
  - Food inspection, disease surveillance mechanisms, labs
  - Resources

Points to be covered in FSER Plan

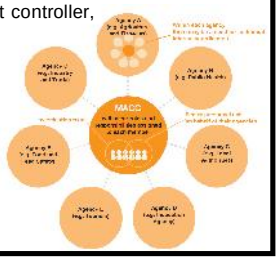
Points to be covered in FSER Plan

Essential Background Information

1. **Introduction** – purpose, objectives, reference to regulations, terminology/ definitions (**definition of Emergency)**
2. **Scope of the Plan -** Country specific considerations – food inspection & foodborne disease surveillance, testing capacities, treatments available (regional/ national)
3. **Collection and review of all relevant regulations/ legislations –** legal basis for implementation
4. **Any other national emergency plans** – list these, relationship with this protocol
5. **Roles and responsibilities** of different agencies

6. MACG (Multi Agency Coordination Group)

- General structure & composition - agencies involved; roles and responsibilities of each partner; MACG for different areas (any existing structure);
- Notifying agency, Central notification point, Food incident contact officer, Lead agency, National food incident controller, Agency food incident controller, Communications controller
- TORs of MACG
- Communication strategy for MACG members
- Operational & logistic arrangements (contact list of members, address, ph, e-mail)
- Evaluation & monitoring mech



Establishing a National MACG - Thailand

Representative Agency	Role and Responsibility
1. Food and Drug Administration	- Mandatory Food control, inspection and importing control
2. Department of Disease Control	- National IHR focal point - Food & water-borne disease, epidemiology data collection & surveillance
3. Department of Health	- Food & water sanitation, monitor & educate food handler
4. Department of Medical Sciences	- National reference laboratory, standardized accreditation
5. Food Safety Operation Center	- Nation INFOSAN emergency contact point - Functional structure to coordinate food safety policy and implementation
6. Ministry of Agriculture and Cooperatives	- Monitor and investigate primary products - Control exported food products
7. Ministry of Industry	- Industrial standardization and conformance
8. Ministry of Commerce	- Facilitation, promotion and direction for trading in domestic and international
9. Ministry of Tourism	- Distribute information to tourists/guide, food safety warning
10.Ministry of Interior and Provincial Offices	- Local authorities of food inspection - Liaise with food sector, trade and academia in communities

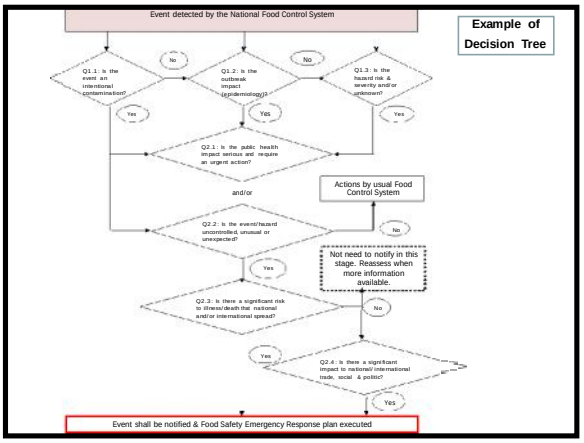
Establishing a National MACG – Bangladesh

Draft

- National Food Safety Emergency Coordination Committee (NFSECC)
- ***Structure:*** The NFSECC includes two Committees that are separate but complementary operational entities and both include representatives appointed by five core agencies involved in food safety in Bangladesh namely:
  - Ministry of Health and Family Welfare,
  - Ministry of Fisheries and Livestock,
  - Ministry of Agriculture,
  - Ministry of Food and Disaster Management, and
  - Ministry of Industry
- The two Committees are:
  - *FSE Policy Group (SPG),* top-level decision making entity of the NFSECC; includes top senior administrative level officials nominated by five core ministries/ departments.
  - *FSE Technical Group (STG)* is a separate but complementary entity of the NFSECC; includes top senior technical officials nominated by five core ministries or departments.

7. Incident identification

- Criteria for activating FSER; validation of criteria
- Identify possible information sources;
- Mechanisms for sharing information to be documented;
- Identify monitoring mechanism in multiple sectors – coordination mechanism; document
- Identify reference/ testing laboratories
- Identify documentation & evaluation mechanism (documents and records – where kept);



8. Incident Management (1)

- Relies on establishing control, direction &
- MACG is responsible for the overall management –
- Identify who takes lead in food safety/ health related investigations, the process of coordination defined
- Describe the process of flow of information to MACG and from MACG to others (daily information reports

8. Incident Management (2)

- Identify risk management options (detention, seizure, recall, closure of businesses, disposal of food products removed from food chain) & reference their procedures
- Procedure to decide when to scale down, communication process
- Reference related documents, GLs, tools, check lists, templates
- A table of involved agencies & roles & responsibilities
- Process for maintaining central records

9. Post incident review & evaluation

- Outline the process to conduct review of how incident was managed; strengths/ weaknesses
- Include reviewing process for
  - i. response activities,
  - ii. communication methodologies,
  - iii. regulatory procedures to prevent production/ distribution of implicated foods,
  - iv. capacity & reporting of lab & inspection service,
  - v. effectiveness of product withdrawal,
  - vi. identify gaps in lab testing/ regulatory procedures
- Review plan, if needed
- Sharing of corrective actions with policy makers

10. Communication

- Document strategies for communication & information exchange (partners, media, public, international orgs)
- Document processes to address emergency alerts, intra agency communication, public messaging
- List of all contact details
- Models & templates - press releases, incident notification templates, recall/withdrawal notice templates
- Identify means of information dissemination (websites, newspapers, English language, public notices, SMS
- What to communicate – the risk, what consumer should do if consumed effected product
- Decide on spokesperson (from an agency) – one single person per event is preferable

THANK YOU

Any Questions?

Regional Meeting
"Developing National Food Safety Emergency Response Plans - Sharing Experiences & Lessons Learnt"
(26 – 27 June 2012, Bangkok)
Imperial Queen's Park Hotel, Bangkok, Thailand

Objectives, expected outputs, outline & structure of the programme

Important reminder

- We need a national food safety emergency response plan in order to:
  - Enable timely and coordinated response
  - Minimize adverse impact on health and trade disruption
  - Reduce the socio-economic and political impact of a large scale food incident
  - Meet international obligations

Objectives

- To share the experiences and lessons learnt from two pilot countries (Thailand and Bangladesh) during the development phase of their national FSER plans
- To share experiences and lessons learnt from other countries in the region having already implemented their national FSER plans
- To identify existing gaps and capacity building needs in the region with regard to the development of FSER plans in countries without such a plan or strengthening their FSER Plans

Expected Outputs

- Dissemination of lessons learnt from the pilot projects and from the more experienced countries and other Regional organizations
- Status of FSER Plans in countries and identification of support needed by countries for development/ review of their Plans
- Report of the Regional Meeting

Meeting approach Day 1

Plenary Session

1. **Introduction of the FAO/WHO Framework** for developing national food safety emergency response plans: Practical Applications of the tool
2. **FAO Projects/Activities on food safety in the Region**
3. **WHO Projects/ Activities on food safety in the Region**
4. OIE approaches to responding to emergencies including zoonoses
5. **Country experiences in developing FSER Plans**:
   - Process of the development of National Plans; issues, challenges & positive experiences
   - Presentation of the Plan
     - Thailand experience
     - Bangladesh experience
6. **Implementation** of national food safety emergency response Plans – examples of recent cases and lessons learnt: Japan

Meeting approach Day 2 (1)

7. **Infosan:** The International Network of Food safety Authorities Network
8. **Status of FSER Plans in Countries –** presentation by participant countries
   - Do they have an emergency plan for food safety?
   - Strategies of the plan?
   - What department involved?
   - Process to develop the plan?
   - Plan validation?
   - Coordination mechanisms?
   - What other relevant plans?

Meeting approach Day 2…. (2)

9. Working Group Session – Future of FSER Plans in Countries

- Situation of each countries - Gaps;
- challenges;
- capacity support needed (own country; Regional; International
- Action Plan
- Presentation of problems/solutions by groups; open discussion

10. FAO/WHO Guide for application of risk analysis principles & procedures during food safety emergencies

11. Framework; Practical use/application of risk analysis in emergencies

12. Introduction of the FAO/WHO Guide on National Food Recall Systems

13. Recommendations & Conclusions

Questions?

- For more information on food safety emergencies
  - FAO EMPRES Food Safety: EMPRES-FS@fao.org
  - FAO/WHO INFOSAN: INFOSAN@fao.org and infosan@who.int

FAO Projects/ Activities on Food Safety in the Region

at

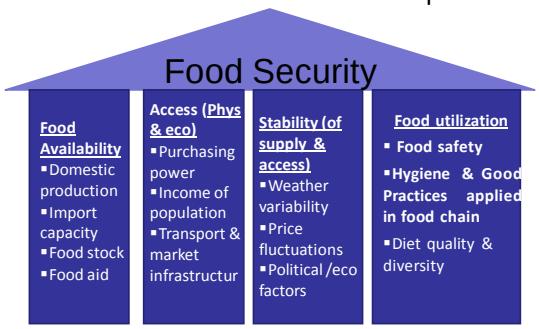
Regional Meeting
"Developing National Food Safety Emergency Response Plans - Sharing Experiences & Lessons Learnt"
(26 – 27 June 2012, Bangkok)

Ms. Shashi Sareen
Senior Food Safety & Nutrition Officer
FAO Regional Office for the Asia & the Pacific
E-mail: shashi.sareen@fao.org

FAO's mission

- "Ensuring sustainable food security for all"
- FAO - principal UN agency dealing with all aspects of food production, storage, transportation, processing & marketing & the development of agriculture & food based programmes to improve nutrition & rural & national economies.

Pillars/ Dimensions of Food Security
& determinant factors of each pillar



FAO Initiatives on Food safety

- Provide **scientific basis** to Codex through independent scientific expert Committees, meetings & consultations
- Development of **guidelines & documents**
- Communication & **information Exchange** mechanisms
- **Capacity Building** Initiatives

Guidance/ **Tools**– Some egs

- Strengthening national food control systems: GLs to **assess capacity building needs** -2006
- Risk-based food **inspection** manual (2008)
- FAO/WHO GLs for developing **FSER** plans (2010)
- Food Safety Manual for Farmers Field Schools – A training reference guide on food safety in glob al FFS programmes (2010)
- FAO/WHO guide for application of **risk analysis principles & procedures** during food safety emergencies (2011)
- Guidelines for **Risk categorization** of food and food establishments applicable to ASEAN countries (2011)
- FAO/WHO Guide for developing and improving national **food recall** systems (2012)

Information exchange Mechanisms

- FAO food safety website: http://www.fao.org/ag/agn
- Codex web site: www.codexalimentarius.net
- Food safety portal: http://www.ipfsaph.org/En/default.jsp
- Infosan: http://www.who.int/foodsafety/fs_management/infosan/en
- RAP Agriculture Food Systems website: http://www.fao.org/asiapacific/rap/afs/about/en/

FAO's Food safety Capacity Building

- Around 150 projects on food safety/quality being delivered (national, regional, global) & number of tools/GL finalized or in progress
- Broadly cover:
  - SPS/Codex capacity building, food standards
  - official food control systems for food safety that support an integrated food chain approach strengthened
    - ✓ **Institutional, policy & legal frameworks**- (Food control/ inspection, laboratory capacity)
    - ✓ **effective design/ implement progs** on food safety & QC/mgmt
  - commodity issues (e.g. meat, seafood, fresh f&v – safety, quality & value chains) –programmes to **promote adherence by food producers/ businesses** to GPs/ FSMS for food safety & Q **across food chain** & in conformity with market reqts
  - **food safety emergency management**

Regional Focus - 1

- **29th FAO Regional Conference for the Asia & the Pacific (March 2009)** recognized the need to
  - strengthen **national food-control systems**
  - improve **coordination** of FS activities from farm-to-table
  - generally raise **awareness** of importance of food safety
  - adopt a **food chain approach** (crucial for promoting food safety & protecting consumers from food-borne diseases)
  - Have national food control systems as **risk-based & preventive** in nature (use of HACCP along with GPs)
- Regional collaboration & cooperation was noted as crucial to address existing & emerging food safety issues

Regional Focus - 2

- and in the latest ie **31st FAO Regional Conference for the Asia & the Pacific (March 2012)** FAO was requested to assist member countries to
  - enhance capacity for participation in the design of animal health and **food-safety standards**
  - harmonize **food safety and quality standards** in value chain development
  - strengthen legal and institutional frameworks that govern **food safety and quality** in value chain development

Some Recent & Ongoing CD activities in Asia

Regional projects:

- ASEAN - Support to CB & Implementation of International Food Safety Standards in ASEAN Countries"*(WS, training course, case studies, guidance documents)*
- GMS – Core Agricultural Support Programme *(case studies, WS, e-learning material)*
- Promotion of rural development through development of Geographical indications at regional level in Asia

Country Projects

CD Activities of FAO on Food Safety in Asia

- **Country Projects:**
  - Capacity Building for food inspection systems in **Vietnam**
  - Strengthening **Vietnamese** SPS capacity for trade – improving safety & Q of fresh vegetables through value chain approach
  - Improving food safety in **Bangladesh**
  - Enhancing food safety lab capacity in primary production (**Thailand**)
  - Enhancing SPS Capacity of **Nepal**ese Ginger Exports through PPP
  - Policy assistance for bio-secure agro-food supply chain for enhanced market access & food security for small holding rural sector **(Nepal)**
  - Developing food law in **Laos**
  - Strengthening of Food Safety and Standards in **Bhutan**
  - Strengthening of National Codex Capacity in **Mongolia**

Workshops/ seminars

- Regional consultation on Guidelines for Development of Food Safety Policy for countries in Asia
- Regional Training Workshop on Implementing GAP in Fruit & Vegetable Sector, its Certification & Accreditation
- Pre CCASIA Training WS on "Understanding Regional Standards"
- Technical workshop on chemical risk analysis in the food chain
- FSER Plans
- ASEAN – Principles and activities for Codex Implementation (17-19 September)
- Others - retail sector (India)

WHO projects on food safety in the region

By Ms Jenny Bishop**,**
Regional Adviser for Food Safety
WHO Regional Office for the Western Pacific, Philippines

The Current Status of Food Control Systems in the Western Pacific Region?

New WPRO Strategy to Address New Developments and Challenges in Food Safety

- **International food trade and travel continues to increase.**
  - **Contaminated food which would have caused a local outbreak in the past, now quickly become regional or international health security concerns.**
  - **Therefore food safety is a critical pillar of global health security.**
- **New developments relating to assistance in addressing food safety issues:**
  - **World Health Assembly Resolution 63.3**
  - **International Health Regulations (2005) and the International Food Safety Authorities Network (INFOSAN)**
  - **Asia Pacific Strategy for Emerging Diseases (APSED) (2005) and APSED (2010)**

WHA63.3 – 2010 Urges Member States

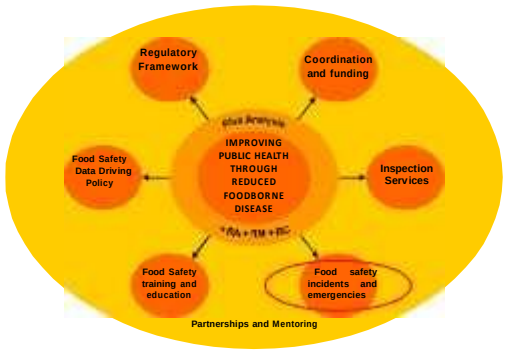
1. Further develop:
   1. Surveillance for foodborne disease and food contamination; including strengthened labs capacity;
   2. Risk assessment, risk management, including the Hazard Analysis and Critical Control Points system, and risk communication;
   3. Food safety emergency response; product tracing and recall; and
2. Participate fully in INFOSAN activities
3. Enhance the integration of food-safety in food aid, food security and nutrition
4. Continue to develop and maintain a sustainable systems approach to food safety encompassing the complete food-production chain from farm to consumption – includes education;
5. Promote dialogue and collaboration among human health, veterinary and food-related disciplines for foodborne risk reduction along the whole food-production chain;
6. Participate actively in the CAC standard-setting process and to adopt Codex standards whenever appropriate

Western Pacific Regional Food Safety Strategy 2011 - 2015

- **Vision** – A Western Pacific Region contributing to the health of all through safe and healthy food.
- **Goal** – By 2015, countries and areas in the Western Pacific will have strengthened their national food control systems and will be actively collaborating to facilitate safe and healthy food.
- **Two objectives:**

  1) Strengthen national food control systems

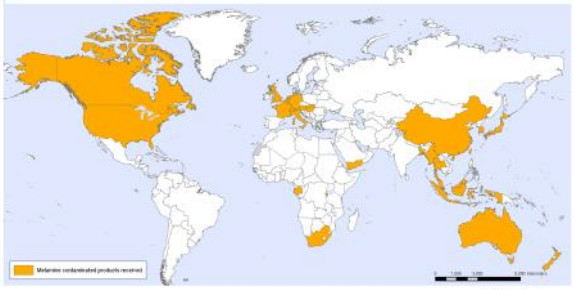
  2) Sharing information, expertise and cooperation and harmonization through partnership and mentoring



Theme 6 - Capacity to Detect, Assess and Manage Food Safety Incidents and Emergencies

International foodborne disease outbreaks: Rapid spread worldwide by movement of food

Country received melamine contaminated products



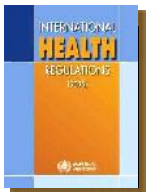
Food Safety Events in the Media

Theme 6 - Capacity to Detect, Assess and Manage Food Safety Incidents and Emergencies

- Even with the most developed national food control system, failures do occur and from time to time unsafe food is sold, leading to foodborne disease.
- To limit the public health, economic and societal impacts of food safety incidents and emergencies, national governments must be able to detect, assess and manage food safety incidents and emergencies effectively.
- These capacities are also considered core capacities, as defined by the International Health Regulations (2005).
- Food safety emergency response plans are integral part of national food control systems.

The International Health Regulations (2005)

- Old IHR (1969) only covered Yellow Fever, Cholera and Plague
- New IHR (2005) include *all public health emergencies of international concern* - including those caused by food
- IHR (2005) entered into force on 15 June 2007
- All WHO Member States are obliged to declare all public health emergencies of international concern to WHO

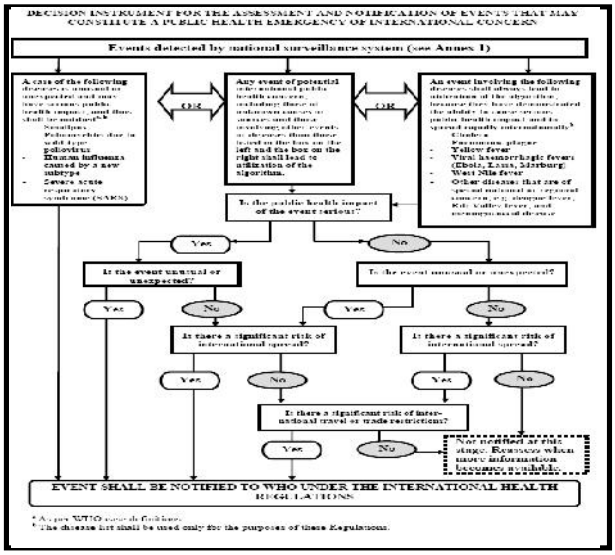


1 – Seriousness of the public health impact

2 - Unusual or unexpected nature of the event

3 - Significant risk of international spread of disease

4 - Significant risk of international trade or travel restrictions



IHR (2005) – Core capacities

Core Capability	11	Food Safety
Component	11.1	Capacity to detect and respond to food safety events that may constitute a public health emergency of national or international concern
Indicator	11.1.1	'Mechanisms are established and functioning for detecting and responding to foodborne disease and food contamination

NOTE. Before you begin, please review the general instructions for completing the questionnaire. Mark one appropriate value (Yes, No, or Not Known) for each of the questions below. A 'Not Known' value will be statistically equivalent to a 'No' value. If a question is not applicable for your country, indeed please indicate this in the comment box below.

11.1.1.1 Are national or international food safety standards available[93]?

11.1.1.2 Are there national food laws, regulations or policies in place[94] to facilitate food safety control?

11.1.1.3 Are national food laws, regulations or policies up to date and implemented?

11.1.1.4 Has a coordination mechanism been established between the food safety authorities, e.g. the INFOSAN Emergency Contact Point (if member) and the IHR NFP?

11.1.1.5 Are there functional mechanisms[95] in place for multisectoral collaborations for food safety events?

11.1.1.6 Is your country an active[96] member of the INFOSAN[97] network?

11.1.1.7 Is a list of priority food safety risks available?

11.1.1.8 Are guidelines or manuals on the surveillance, assessment and management of priority food safety events available?

11.1.1.9 Have the guidelines or manuals on the surveillance, assessment and management of priority food safety events been implemented?

11.1.1.10 Is epidemiological data related to food contamination systematically collected and analysed?

11.1.1.11 Are there risk-based food inspection services in place?

11.1.1.12 Does the country have access to laboratory capacity (through established procedures) to confirm priority food safety events of national or international concern including molecular techniques?

11.1.1.13 Is there timely[98] and systematic information exchange between food safety authorities, surveillance units and other relevant sectors regarding food safety events?

11.1.1.14 Is there a roster of food safety experts for the assessment and response to food safety events?

11.1.1.15 Have operational plan(s) for responding[99] to food safety events been tested in an actual emergency or simulation exercise and updated as needed?

11.1.1.16 Have operational plan(s) for responding to food safety events been implemented and evaluated?

11.1.1.17 Have mechanisms been established to trace, recall and dispose of contaminated products[100]?

11.1.1.18 Are there communication mechanisms and materials in place to deliver information, education and advice to stakeholders across the farm-to-fork continuum?

11.1.1.19 Have food safety control management systems (including for imported food) been implemented?

11.1.1.20 Has information from foodborne outbreaks and food contamination been used to strengthen food management systems, safety standards and regulations?

11.1.1.21 Has an analysis been published[101] of food safety events, foodborne illness trends and outbreaks which integrate data from across the food chain?

Please provide the URL link(s) to any relevant documentation: *Link/URL*_____

Please insert any comments or clarifications to the questions above and list any relevant activities that the country has conducted which are not reflected in this questionnaire (additional pages may be attached if necessary):

IHR (2005) – Core capacities

- Annex one – Core capacity requirements for:
  - Surveillance and response
  - Public health actions at Points of Entry
- WHA 63.3 adopted in 2010, urges the development and implementation of the core capacities as applicable, and those required for participation in INFOSAN, specifically for food safety events
- The IHR specify that the national core capacities must be established 'as soon as possible but no later than five years from the entry into force….'. For the majority of State Parties this is 15 June 2012.

IHR (2005) – Food Safety Related Core Capacities (examples of interest)

- Have operational plan(s) for responding to food safety events been implemented and evaluated?
- Have operational plan(s) for responding to food safety events been tested in an actual emergency or simulation exercise and updated as needed?
- Are there functional mechanisms in place for multisectoral collaborations for food safety events?
- Are guidelines or manuals on the surveillance, assessment and management of priority food safety events available?
- Have the guidelines or manuals on the surveillance, assessment and management of priority food safety events been implemented?

IHR (2005) – Food Safety Related Core Capacities (examples of interest)

- Have mechanisms been established to trace, recall and dispose of contaminated products?
- Has a coordination mechanism been established between the food safety authorities, e.g. the INFOSAN Emergency Contact Point (if member) and the IHR NFP?
- Is your country an active member of the INFOSAN network?

Theme 6 - Strategic Actions

- Develop and update food safety emergency response plans, linking to other emergency plans where appropriate. Test such plans through national and international food safety emergency simulations.
- Develop or strengthen event detection systems, risk analysis capacities and food traceability and recall systems for food incidents and emergencie

Theme 6 - Strategic Actions

Actively participate in INFOSAN, through (a) the timely communication of information relating to food safety incidents and emergencies of international interest, and (b) establishing agreements between the National IHR Focal Point and the INFOSAN Emergency Contact Point on their roles and responsibilities.

Support the WHO Western Pacific Regional Office in its work to identify likely incidents and emergencies with food safety components in the Region and develop guidelines outlining standard responses for food safety components, for modification and implementation at the national level. Identify incidents and emergencies that may occur at the national level and, utilizing the guidelines, prepare for such events.

Theme 6 - Indicators

1) Active participation in INFOSAN by all Member States of the WHO Western Pacific Region

2) Food safety emergency response plans in place and tested and updated as needed in Member States of the WHO Western Pacific Region

Report to the Regional Committee Meeting 2013/14

OIE approaches to responding to emergencies including zoonoses

By Dr. Andrew Davis,
Programme coordinator for the OIE
World Organization for Animal Health, Sub-Regional
Representation for SEAsia, Bangkok, Thailand

Dr Andrew Davis
OIE - Programme Coordinator

OIE approaches to responding to emergencies including zoonotic diseases

Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt
7 - 28 June 2012, Bangkok, Thailand

OIE approaches to responding to emergencies including zoonotic diseases

1. **Introduction to OIE**
2. **The OIE and its Key Role in Animal Disease Management including Zoonoses**
3. **The OIE and Food Safety**
4. **The OIE and Emergency Management**

The World Organisation for Animal Health

*"To improve **animal health, veterinary public health and animal welfare world-wide**."*

OIE: Background

- An intergovernmental organisation, founded in 1924
- 174 member countries
- Headquarters in Paris, France

These representations closely collaborate with Regional Commissions and are directly under the Director General's authority.

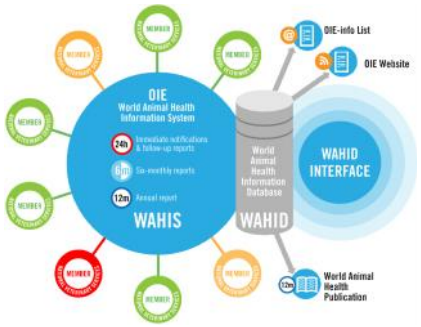
OIE: The 5th Strategic Plan (2011-2015)

Improve animal health and welfare worldwide

The OIE and its Key Role in Animal Disease Management including Zoonoses

- Disease reporting/transparency
- International Standards
- PVS Pathway

International Communication of Animal Disease and Zoonosis Information



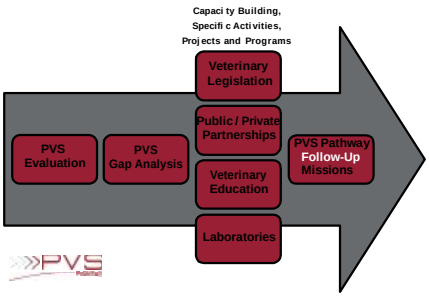
International Communication of Animal Disease and Zoonosis Information

ARAHIS

International Communication of Animal Disease and Zoonosis Information

International Standards

Capacity Building for National Veterinary Services



The OIE and Food Safety

- International Standards
- Collaborations and One Health
- Antimicrobials

Collaborations and One Health

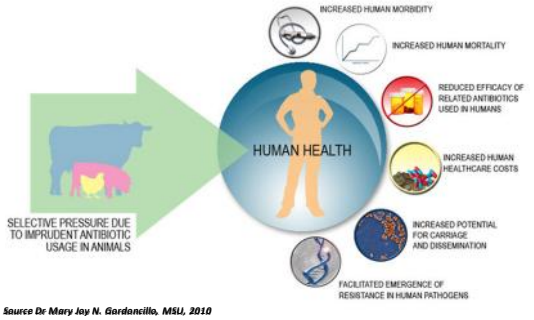
CODEX ALIMENTARIUS

OIE

WHO

one world • one health

Antimicrobial Resistance



Source Dr Mary Jay N. Gardoncillo, MSU, 2010

OIE

The OIE and Emergency Management

A. Role in Early Warning
B. Role in Emergency response
C. Networks of Expertise
D. Support for Members to develop Emergency Plans
   - PSVS
   - AUSVETPLAN example

GLEWS – Global Early Warning System for Major Animal Diseases including Zoonoses

FAO OIE World Health Organization

Crisis Management Centre – Animal Health Function

Deploys **missions** and develops **tools** to support veterinary services responding to **disease emergencies**

Real example: pandemic H1N1

WHO

offlu

April 09: novel H1N1 virus with genes of avian, swine, and human origin causing infections in humans in North America with sustained human to human transmission

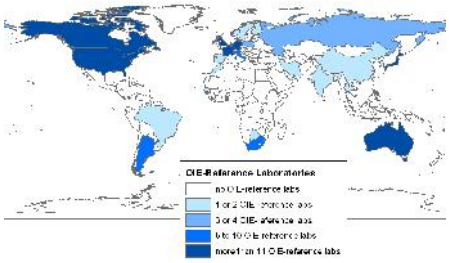
May '09: WHO warned of imminent publication of paper suggesting the virus has a laboratory origin

Within 24 hours key experts from WHO and OFFLU networks are mobilised to provide expert opinion in joint WHO-OFFLU telecon

Conclusion: the hypothesis is flawed and the paper does not present scientific evidence to suggest the virus has a laboratory origin

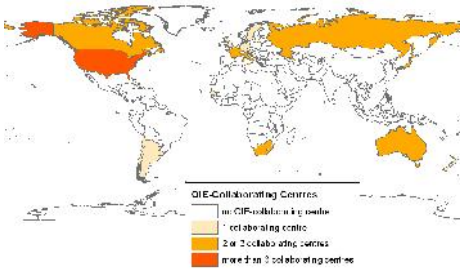
Ensuring the Scientific Excellence of Information and Advice

World Distribution of the OIE- Reference Laboratories



Ensuring the Scientific Excellence of Information and Advice

World Distribution of the OIE- Collaborating Centres



Prevention, Control And Eradication of Animal Diseases, including Zoonoses

Vaccine Banks

- EU funded Regional Cooperation Programme on Highly Pathogenic Emerging and Re-emerging animal diseases (HPED) in Asia
  - avian influenza
  - foot and mouth disease
  - rabies
  - possibly other pathogenic emerging and re-emerging transboundary diseases.

Support for VS to develop Emergency Response Plans

Regional Workshop on Emergency Preparedness and Contingency Planning (eg Chiang Mai Sep 2008 – PSVS)

Sharing of Emergency Response Plans

AnimalHealth AUSTRALIA

Canadian Food Inspection Agency

MAF

RVI OIE UPV

Ministry of Food, Agriculture and Fisheries
Danish Food Industry Agency

Examples of Country level Emergency Response Plans

AUSVETPLAN

Summary document				
Disease Strategies	Operational Procedures Manual	Enterprise Manuals	Management Manuals	Guidance Documents
• Individual strategies for diseases • Bee Diseases and Pests • Response Policy Briefs (for diseases not covered by individual manuals)	• Decontamination• Destruction of Animals • Disposal Procedures • Public Relations • Valuation and Compensation • Livestock Management and Welfare • Wild Animal Response Strategy	• Artificial Breeding Centres • Dairy processing • Feedlots • Meat Processing • Pig Industry • Poultry Industry • Saleyards and Transport • Zoos	• Control Centres Management Manuals(Parts 1&2) • Laboratory Preparedness	• Guidance Document for the use of Avian Influenza (AI) Vaccine in the Event of an AI Outbreak in Australia • Guidance Document for Premises Classifications • Guidance Document for the Management of Pandemic (H1N1) 2009 in Pig Enterprises

Session 2

1) **Country experiences in developing FSER Plans:** Process of the development of National Plans; issues, challenges and positive experiences/ Presentation of the Plan
   - **Thailand experience**
   - **NFSER Plans: How does this framework complement other International & National Guides**

   By Ms Jongkolnee Vithayarungruangsri,
   Director of Food Safety Operation Center,
   Ministry of Public Health, Thailand

2) **Bangladesh experience**

   By Dr. Shah Mahfuzur Rahman, National Advisor, Food Safety Project Bangladesh
   and Dr Mushtaque, IEDCR, Bangladesh

3) **Implementation of national food safety emergency response Plans – examples of recent cases and lessons learnt**
   - Response after the Yukee (raw beef) outbreaks in May 2011, and Food safety control measures associated with radioactive contamination after Fukushima power plant accident

   By Dr. Hajime Toyofuku,
   Senior Researcher, National Institute of Public Health,
   Ministry of Health, Labour and Welfare, Japan

Country experiences in developing FSER Plans and NFSER Plans: How does this framework complement other International & National Guides

By Mrs. Jongkolnee Vithayarungruangsri, Director of Food Safety Operation Center, Ministry of Public Health, Thailand

COUNTRY EXPERIENCES IN DEVELOPING FSER PLANS

Mrs. Jongkolnee Vithayarungruangsri
Director, Bureau of Food Safety Extension and Support,
Permanent Secretary, Ministry of Public Health, Thailand
(Food Safety Operation Center)

Content

1. **Background and introduction**
2. **Process of the development of National Plans;** *issues, challenges and positive experiences*
3. **Presentation of the Thai Food Safety Emergency Response (FSER) plan**
4. **How does this framework complement other International & National Guides**

1

BACKGROUND AND INTRODUCTION

Background in Development of the Thai FSER plan

FAO / WHO have jointly developed "Framework for Developing National Food Safety Emergency Response plans", Rome 2010

↓

the 1st INFOSAN global meeting held on December 16, 2010, Member states requested for the FAO/WHO to provide technical assistance in the development of the national food safety emergency response plans

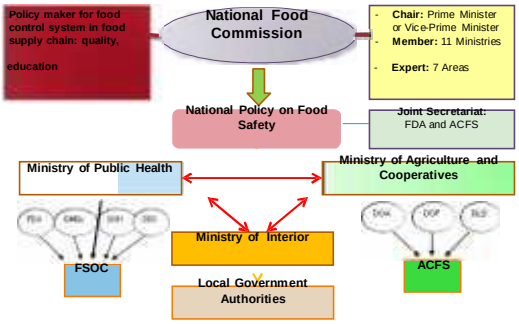
↓

the **Food Safety Operation Center (FSOC)** has requested a support from the FAO Regional Office for Asia and the Pacific (FAO RAP) to develop Thailand FSER plan to use in emergency/crisis of food safety events

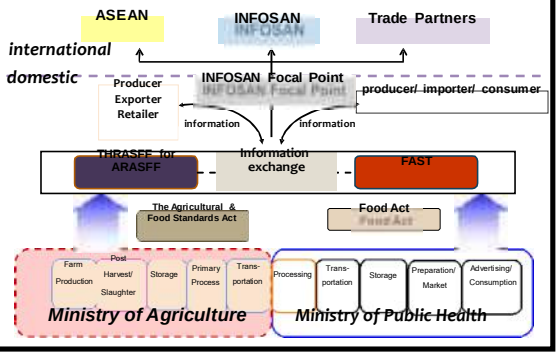
↓

"Developing of the National Food Safety Emergency Response plan" (LOA/RAP/2011/34)

Command Action on Food Safety Management System in Thailand



Existing Food Alert System and Information Exchange



2

PROCESS OF THE DEVELOPMENT OF NATIONAL PLANS;

ISSUES, CHALLENGES AND POSITIVE EXPERIENCES

Factors Driving Changes in Food Safety System

Issues to Development of FSER plan (1)

- We have seen many food safety emergencies in the recent past, such as:

- *Clostridium botulinum* outbreak associated with traditional canned bamboo shoots in 2006 **(Nan Province, Thailand)**

- Crisis of milk contaminated with melamine in 2008 **(China)**

- *E. coli* novel strain O104:H4 which caused a serious outbreak of foodborne illness in May through June 2011 **(Germany)**

- Radionuclide contamination of food items from earthquake crisis in 2011 **(Japan)**

Issues to Development of FSER plan (2)

- Diet style changed in Thai people in cities.
- Fragmented response plans in each organization

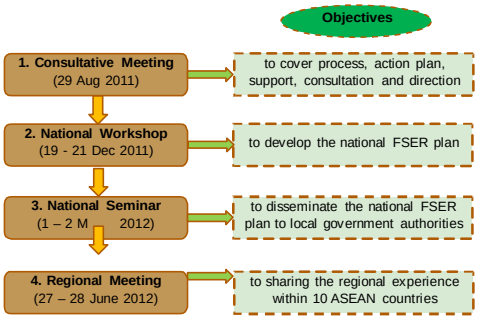
FAO/WHO guideline for developing of FSER plan with "**Risk Analysis Concept**"

"FSER plan is needed to be enforced preparedness, recognize and rapidly response to food safety in emergency/crisis events"

Challenges

- Consideration the clear meaning of *"Food Safety Emergency"* that covered and separately from "normal" situation
- Risk assessment during an emergency situation, the interaction between risk assessors and risk managers can be achieved through frequent & regular meeting
- Capacity building on Food Safety Rapid Response Team (FRRT) should be developed, it's necessary to get along with SRRT and PHER team of DDC, RRT of Department of Health (DOH)
- Multiagency collaboration among all food safety agencies, both in domestically and internationally, to ensure an effective response

FSER Project Design



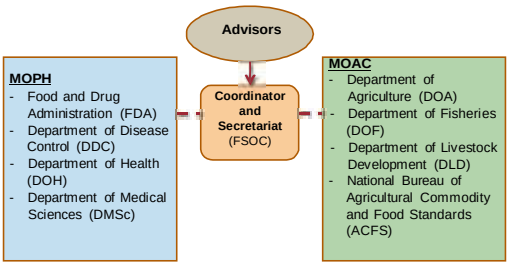
1. Consultative Meeting

Summary of the meeting:

- Early working group in MOPH : FDA, post-marketing control, DDC, DOH, DMSc, and FSOC
- To obtain high-level support and approve for establishment of **"a working group"** to draft the FSER plan
- Thai FSER plan should be drafted consistent with the existing Public Health Emergency Response plan (PHER)
- FSOC will coordinating in development of the FSER plan with other agencies involved (Identify key-partners)

Establishment of the FSER Working Group

- The working group responsible for preparation of Thai FSER plan, consist of:



2. National FSER Workshop

Workshop Participants (FSER planning group)

- **Government sector**
  - Ministry of Public Health (FDA, DOH, DDC, DMSc and EMIT)
  - Ministry of Agriculture and Cooperatives (DOA, DLD, DOF, and ACFS)
  - Ministry of Interior
  - Ministry of Commerce
  - Ministry of Foreign Affairs
  - Bangkok Metropolitan Administration
  - Provincial Public Health Office
  - Provincial Livestock Office
  - Office of Disease Prevention and Control
- **Private sector**
  - Thailand Tourism Council
  - Thai Chamber
- **Organization & Academia**
  - FAO Rome and RAP
  - WHO Thailand Representative
  - FoSTAT
  - Chulalongkorn University
- **Observer**
  - Ministry of Food And Disaster Management, Bangladesh

Case Studies

#1: *C. botulinum* outbreak associated with bamboo shoots

In order to determine the **"Food Safety Emergency"** for Thailand, three case studies have been used in various of food safety situations

#2: Food-borne outbreak in seafood products

#3: Intentional formalin contamination associated with illegal chicken meat

3. National FSER Seminar

1.Dir –BQSF, Natl. Food Lab 2.North-Eastern Provincial Health 3. Central Part Provincial Health 4. DDC-Food & Water Borne Diseases Control 5. DPS-MOPH 6.Dir-Bureau of Food, FDA 7.Dir-FSOC 8. Northern Provincial Health

National FSER Seminar Participants

- **Ministry of Public Health**
  - Food and Drug Administration
  - Department of Disease control
  - Department of Medical Sciences
  - Department of Health
  - Emergency Medical Institute of Thailand
- **Ministry of Agriculture and Cooperatives**
  - Department of Agriculture, MOAC
  - Department of Livestock Development, MOAC
  - Department of Fisheries, MOAC
  - Rice Department
- **Ministry of Industry**
- **Ministry of Commerce**
- **Food Safety Operation Center**
- **Provincial Public Health Office** (58 Provinces)
- **The Office of Disease Prevention and Control** (3 Offices)

Important activities in the FSER seminar

- Seminar on important issues, needs of response plan, and some experiences on food safety incident
- Special topic on Food laws, by an Expert in the National Food Commission
- Discussion and questions in the 2 nd draft of Thai FSER plan

Positive Experiences

- Response plan in emergencies is interesting among food safety agencies involved
- Strength of some local government authorities in food safety incident management and good practice (Na Luang village) could be an example for "Lesson-learned" from *Foodborne Botulism Associated With Home-Canned Bamboo Shoots – at Ban Na Luang in Nan province, 1998.*

3

PRESENTATION OF THE THAI FSER PLAN: *IMPORTANT DETAILS*

Outline of the Thai FSER plan

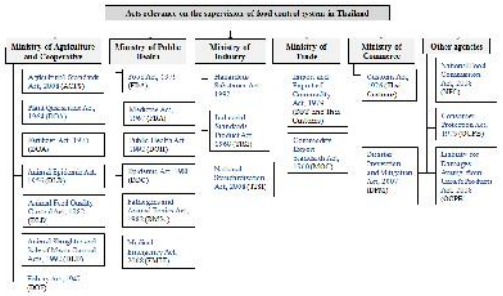
- There are **seven** chapters in the Thai FSER plan, in the following:
  1. **Introduction** – *essential background, relevance laws and existing food safety systems.*
  2. **Definition and Scope** – *meaning, criteria and how to determine the "food safety emergency"?.*
  3. **MACG and Procedure during Emergency Situation** –*MACG, support units, and their roles and responsibilities.*
  4. **Incident Identification** – *information sources, verification and evaluation of data, samples used for laboratory testing, and how to do when we executed the plan?.*
  5. **Incident Management** – *notification in emergency, management options and when to scale down and closure the event?.*
  6. **Post-incident Review and Evaluation** – *what things we need to do after the event?.*
  7. **Communications** – *how to process in communication?.*

(36 pages)

Chapter 1

Page 12

Acts relevance on the supervision of food control system in Thailand



All of relevance laws on food safety are collected

Chapter 2

Definition of "Food Safety Emergency"

(page 15)

- In terms of Thailand, **Food Safety Emergency** is :

"any incident of food safety, whether accidental or intentional, caused by chemical, biological and physical

normal food control system and would caused risks and impacts to lives, public health, trade, societies, economy and politics, at both national and international levels, that require an urgent and integrated action among concerned agencies"

Chapter 2

Decision Tree Considered "Food Safety Emergency"

(Page 17)

- When a food safety event detected by the National Food Control System, the event should be decided by using "Decision tree for the assessment and notification of events that may constitute a Food Safety Emergency Response". In the decision tree, we will answer in 2 questions, that:

Q1 → "Consider for hazards and impact"
- **Q1.1** Intentional contamination
- **Q1.2** Significant hazards
- **Q1.3** Impact in epidemiology

Q2 → "Consider for risk to Public Health/International spread (according to IHR, 2005: PHIEC)"
- **Q2.1** Require urgent actions to PH
- **Q2.2** Unusual/unexpected
- **Q2.2** International spread
- **Q2.2** Risk to trade, social and politic

Chapter 2

Decision tree for the assessment the FSER plan

Start: Food Safety Emergency is **detected**

Q1: Consider for **cause** of the Emergency

Q2: Consider for **impact** of the Emergency

If not, can be used the normal food control system

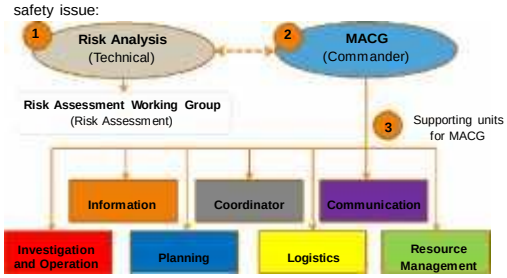
Result: **Notify** and **execute** the Thai FSER plan

Chapter 3

(Page 25)

Operating System in Emergency

- Implementation to respond in emergencies should be based on the existing Incident Command System (ICS) and support units for food safety issue:



Chapter 3

(Page 22)

Roles and Responsibilities

Unit	Main Role and Responsibility
1) Food Safety Risk Analysis Committee • Food Safety Risk Assessment Working Group	Technical committee on Risk Analysis, provide management options to MACG • Provide information risk assessment of the emergency event
2) MACG	Commander during the emergency events
3) Supporting units	Support in the implementation of necessary measures provided by MACG
3.1 Food Safety Emergency Information Center	Collect, organize, analyze and interpret data and information
3.2 Food Safety Emergency Coordinating Center	Secretariat and coordination among agencies
3.3 Investigation and Operation Unit	Investigate and identify the event
3.4 Planning Unit	Provide measures
3.5 Resource Management Unit	Provide resource and management
3.6 Logistics Unit	Support in logistics
3.7 Emergency Communication Unit	Risk communication

Chapter 3

(Page 21)

National and Provincial MACG

A: **National MACG** | B: **Provincial MACG**

Have to reporting and coordinating to the national level

Chapter 4 (Page 26)

Details of Incident Identification

1. Identify information sources, from existing systems:
   - Government agencies
   - Food safety information network
   - Press and consumer compliant
2. Verification and evaluation of the information
3. Laboratory testing and risk assessment
   - Food samples
   - Specimens
   - Clinical criteria (if necessary)
4. Execute for the FSER plan
5. Information and Documentary Management

Chapter 5 (Page 30-31)

Incident Management

Objectives: (1) Control and monitoring of the implemented measures, (2) Coordination and resources management for effective response, and (3) Follow-up and measure adjustment via command system.

1) Preparation/before the event occurrence → "**to *prevent* an occurrence** of food hazard before accessing to national food supply chain and raise ***preparedness*** in emergency"

2) During the event → "**to *prevent an illness* and *remove the defected product distribution***", considered in three cases
1. Intentional contamination/Bio-terrorism
2. Food product contaminants significant hazards
3. Epidemic of food and water-borne diseases

3) After the event → "**to *conduct* an *evaluation* and a *review*** of the previously incident management "

Chapter 6 (Page 34)

Review and Evaluation after the Event

Main objective: to improve measures of the FSER plan and also preparedness for resources and development systems or of structure that can be implemented by the measures more efficiently.

1. **Processes of post-incident review and evaluation**
   - Summarize the whole incident
   - Review and evaluation to corrective actions in the future
   - Report to NFC
2. **Lesson-learned preparation**
   - Analysis for strength and weakness of the process to fix any gap
   - Prepare for lesson-learned and/or best practice
3. **Simulation exercise**
   - "on the table practice" at least once a year
   - "full simulation practice" once in every two years, according to the IHR

Chapter 7 (Page 35)

Communication Approach

Key success: easy to understand and at a timely manner and must cover to all groups of stakeholders

1) Involved food safety agencies
- Information and fact-sheet
- Establish communication channels
- Arrange meeting using teleconference and/or video conference
- Provide an update situation on a 24 hour basis

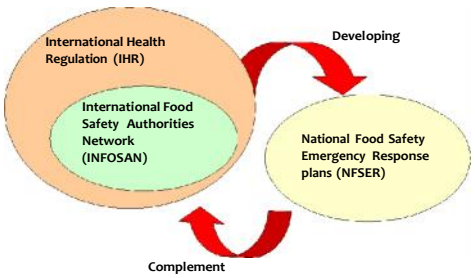
2) Stakeholders
- Prepare information and communicate to public by using an easy to understanding language that does not cause panic
- Establish a call center and hot-line number
- Provide as many communication channels for public to easily access

3) International Organizations
- Communicate via existing channels such as IHR and INFOSAN, according to the requirements

4

HOW DOES THIS FRAMEWORK COMPLEMENT OTHER INTERNATIONAL & NATIONAL GUIDES

Why do we need FSER plan?



Requirements of International Health Regulation (IHR, 2005)

IHR assessment for surveillance and response on "Food Safety"

- Need to develop risk management capacity with regard to food control throughout the food chain continuum
- Capacity to detect and respond to food safety events
- Implementation of IHR core capacities monitoring framework > Self assessment by answering 21 questionnaires
- **There are …….IHR Core capacities related to food safety**

Measure of compliance

- A Food Safety Control system primarily designed to prevent emergencies is in place
- A government department is responsible for ensuring that a national PH plan for dealing with food safety events is developed and implemented
- There are documented networks with updated emergency contact points and contact information
- The plan is integrated into the existing PH infrastructure and links with general national emergency response systems
- The plan includes communication/links with international networks where appropriate e.g. INFOSAN
- The link is written in a SOP

IHR focal point vs INFOSAN

has established links with relevant authorities links with:

- Animal Health
- Food Safety (INFOSAN)
- Water authorities
- Chemical safety
- Radiological hazards

IHR focal point and the INFOSAN emergency contact point work closely and inform each other of events

International Food Safety Authorities Network

- INFOSAN is a global network, which is joint initiative between WHO and FAO includes of 177 member states.
- Each has a designated INFOSAN in 2 ways: Emergency Contact Point and Focal Points
- INFOSAN works under an IHR (2005) requirement. Recognizing that food safety is often a shared responsibility, countries are also asked to identify focal points in other relevant agencies to receive INFOSAN communications.

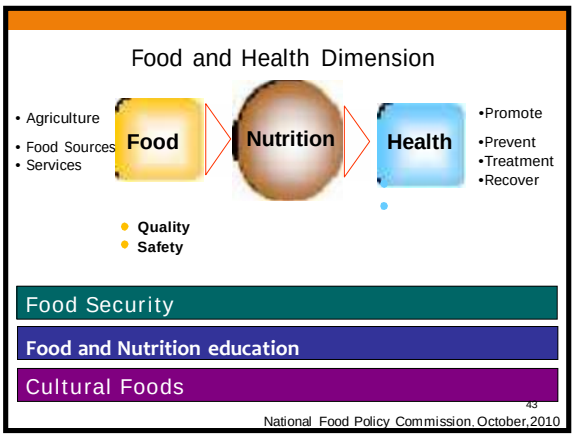
The network aims to:

- ***Promote the rapid exchange of information during food safety related events***
- ***Help countries strengthen their capacity to manage food safety risks***

Roles of responsibility of INFOSAN Thailand

- Emergency Contact Point:
  The Bureau of Food Safety Extension & Support (Food Safety Operation Center) responses an alert message from WHO Secretariat and communicate to Emergency Contact Point in each countries.
- Focal Point members from 9 agencies
  Food Safety Operation Center/ Food and Drug Administration (FAST)/ Department of Agriculture/ National Bureau of Agricultural Commodity and Food Standards/ Department of Livestock Development/ Department of Medical Sciences/ Department of Health/ Department of Disease Control (IHR)/ Department of Fisheries

INFOSAN function in Thailand



What should be accomplished in the future?

- Ensure effective and coordinated communication between province and local authorities, and the public by having MOU or SOP among IHR and INFOSAN.
- Facilitate food rapid response team (FRRT) co-investigation and network for a food-related incident.
- Have specify duties, roles, and responsibilities for risk assessment on a food – related incident across border.

THANK YOU

KHOB KHUN KA

Bangladesh experience

By Dr. Shah Mahfuzur Rahman, National Advisor, Food Safety Project Bangladesh and Dr. Mushtaque, IEDCR, Bangladesh

Regional Meeting : Developing National Food Safety Emergency Response Plans- Sharing Experiences and Lessons Learnt
Bangkok, 27-28 June 2012

Food Safety Emergency Response Plan, Bangladesh, 2012

M Mushtuq Hosain
Principal Scientific Officer and Head, Dept of Medical Social Science
Institute of Epidemiology, Disease Control & Research (IEDCR)
Ministry of Health and Family Welfare, Bangladesh

Shah Mahfuzur Rahman
National Food Inspection Advisor
Food Safety Project
Food and Agriculture Organization of United Nations, Bangladesh

Outline of the presentation

- Background
- Process of development of the draft Plan
- Purpose and Scope of FSER Plan
- National Food Safety Emergency Coordination Committee (NFSECC) and its activities
- Incident identification and assessment
- Food safety emergency management
- Post emergency review and evaluation
- Communication
- Lessons learned
- Way forward
- Conclusion

Background

- Food safety and quality is an important challenge for public health in Bangladesh
- In Bangladesh, Food safety is a shared responsibility of around 15 Ministries and their 20 agencies
- Among the agencies, there are gaps and overlaps in their roles and responsibilities, and sometime do not cover the whole food chain
- The main focus of food control is primarily on end-product and reaction to emergencies rather than effective up-stream prevention

Background

- In recent years, there were a number of food safety emergencies/outbreaks occurred in Bangladesh like Anthrax (2010), Nipah outbreak (2010,2011), Hepatitis-E & A (2010) Pesticide poisoning (2009) , Puffer fish poisoning etc.
- There are number of laws and regulations govern the food safety and quality activities in Bangladesh including the Bangladesh Pure Food (Amendment) Act 2005
- The laws and regulations are fragmented, mostly not updated, and do not cover the whole food chain

Background

- At present, there are no single Ministry or Agency is responsible for, or taking the lead to response the food safety emergency.
- Any food safety related emergency is initially responded by the concerned Ministry and its agency e.g. for Anthrax-the Livestock department; Pesticide poisoning-the Agriculture department etc.. As the emergency eventually affect human health, so the concerned agencies work together on an ad hoc basis, usually lead by the Ministry of Health and Family Welfare through Institute of Epidemiology Disease Control and Research (IEDCR)-the specialized, mandated Institute. Support also receives from ICDDR,B.
- IEDCR responds through its Rapid Response Team-at the National, District and Upazilla (bub-district) levels

Background

- In Bangladesh, there are no **Plan** related to food safety emergency existed to guide the concerned ministries/agencies. They usually response case by case, as and when required
- But the country has some National Emergency Plans like National Avian and Pandemic Influenza Preparedness and Response Plan (2011-2016); National Plan for Disaster Management (2011-2016)
- Considering the situation, Bangladesh has drafted its National Food Safety Emergency Response Plan (NFSERP) in March 2012 with the support of FAO Food Safety Project, a EU funded project, with key partnership of the Ministry of Health and Family Welfare. The project to be ended on 30 June 2012. The incompleted and new tasks to be implemented by a new project funded by the Netherlands Government from 1 July 2012

NFSERP, Bangladesh: Process of Development of the Draft Plan

Committee Formation

- The National Food Safety Advisory Council under the Bangladesh Pure Food (Amendment) Act 2005, constituted a number of Technical Sub-Committees (TSCs) including TSC on Food Safety Emergency Response (TSC-FSER)
- TSC-FSER has been constituted in late December 2011, comprising members from the ministries of Health, Fisheries and Livestock, Agriculture, Local Govt. Industries, Science & Technology etc. headed by the Ministry of Food and Disaster Management

NFSERP, Bangladesh: Process of Development of Draft Plan contd.

Process

- Review existing legislations, plans and programmes related to food safety, and emergency response in Bangladesh
- Review FAO/WHO Guidelines, FSER Plans of different countries
- Review documents, records, literatures on food safety related emergency /outbreaks in Bangladesh and elsewhere in the world
- Meetings, discussions and consultations with different stakeholders
- Formation of working groups on different areas like Health Agriculture, Livestock, Fisheries and Processed foods.

NFSERP, Bangladesh: Process of Development of Draft Plan contd.

- The Working Groups are headed by the concerned high level technical experts in the respective areas
- Experience gathered by the Member-Secretary of the Committee from the National FSER Planning Workshop, Bangkok, 19-21 December 2011
- Organized a national level Workshop on Food Safety Emergency Response Planning , Dhaka 20-22 March 2012, with the support of FAO Food Safety Project. The workshop was participated by key stakeholders including consumers' group, civil society etc.

NFSERP, Bangladesh: Process of Development of Draft Plan contd.

- In addition to working sessions , plenary discussions etc.- a number of case studies on food safety emergencies/ outbreaks were presented. The Workshop was facilitated by National and International Experts.
- A zero draft of National Food Safety Emergency Response Plan, Bangladesh was developed through this workshop
- Currently, a small working group comprising members from IEDCR, Livestock services, Food Planning and Monitoring Unit and Food Safety Project is reviewing the zero draft
- A final draft to be developed during July-September 2012 through further consultations and feedback from the stakeholder

Purpose of the Plan

- To clearly describe the process for identifying and assessing food safety emergencies using an effective co-ordination mechanism
- To guide and coordinate efforts of various authorities during food safety emergencies
- To conduct post-emergency response review and evaluation; recommend and implement corrective actions, and share these with policy makers
- To enhance the safety of foods produced in Bangladesh resulting improved public health and facilitate trades

Scope of FSER Plan

The plan applies to any biological, chemical, radionuclear and physical hazards that could arise along the food chain and cause potential or real threat to food safety, public health and domestic or international trade of foods of different origin

National Food Safety Emergency Coordination Committee (NFSECC)

Roles and Responsibilities of the Committee

NFSECC is in charge of assessing food safety events that could result in potential food safety emergencies (FSE), and provides guidance for declaring alerts and managing FSE

Structure of the committee- *Representative from 5 core ministries*

- Ministry of Health and Family Welfare (MoHFW)
- Ministry of Fisheries and Livestock
- Ministry of Agriculture
- Ministry of Food and Disaster Management
- Ministry of Industry

NFSECC: Two Committees

NFSECC includes two Committees

- **FSE Policy Group (PG) :** *from 5 core ministries*
  - top-level decision making entity
  - includes top senior administrative level officials
- **FSE Technical Group (TG) :** *from 5 core ministries*
  - separate but complementary entity
  - includes top senior technical officials

NFSEC Chair is from MoHFW, also chairs both the PG and TG

Technical Group

Two Co-Chairs of TG are nominated by Ministries of Health and Livestock/Fisheries, respectively.

- call TG meetings,
- perform food safety event assessments
- provide technical guidance to PG

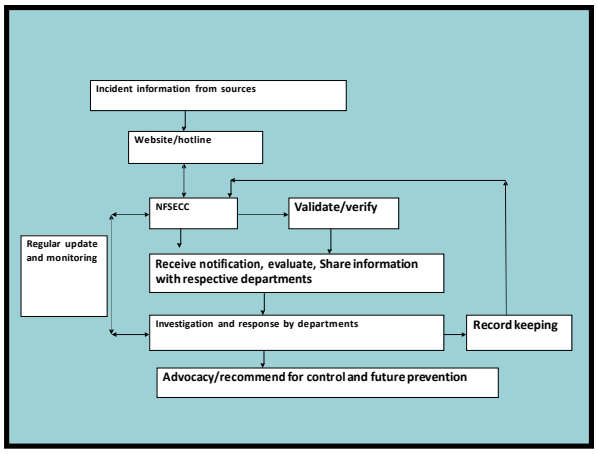
- *TG co-chairs are also members of PG, maintain communication between two entities*
- *The spoke-person is a member of the PG*

Procedure

- PG, chaired by Director General of Health Services meets immediately upon being notified by TG on food safety event that could become a potential FSE
- Based on the assessment and recommendations of TG, PG makes decision on declaration FSE and appoints jurisdiction and department to manage the events or emergencies
- TG to have operational linkage with IEDCR
- Upon receiving a notification of an event, IEDCR representatives will immediately notify both Co-chairs of TG

Procedure….

- Co-chairs will call TG meeting within 12-24 hours, conduct initial risk assessment and provide key recommendations to PG
- TG may seek advice from various technical experts from their expert roster, if needed
- PG will assess the situation and appoint respective jurisdiction and departments according to food safety legislative framework of Bangladesh



Incident identification and assessment

- A notification of events that could result in FSE could come from various sources
- An interactive website, including FSE Hotline, will be created and maintained by IEDCR
- IEDCR will immediately inform both Co-chairs of TG on potential events that could result in FSE
- The Co-chairs would organise teleconference or in person meetings of STG and inform SPG on initial assessment, when alert phase is likely anticipated.

Food safety emergency management

Alert Phase	**Food Safety event is identified and communicated**
Action Phase	**TG convenes meeting, assesses and recommends to PG . PG takes decision**
Scale down Phase	**Response no longer required but team remain alert. Post event/emergency reviewed and evaluated**

Food Safety Emergency Management contd.

In case of an emergency:

- outbreak investigation & rapid response,
- event based surveillance,
- control distribution of contaminated food,
- withdrawal and recall measures,
- closure of businesses,
- disposal of food products removed from food chain; etc,

as appropriate and as per their Regulations will be taken by the responsible agency

Post Emergency Review and Evaluation

- Review will be completed within three months upon declaration of scale down phase.
- Evaluation will cover review response, effectiveness of communication, regulatory procedures, capacity and reporting of lab and inspection services, effectiveness of product withdrawal, need of surveillance etc
- Key lessons learnt throughout the process will be documented by TG and posted on the IEDCR website : www.iedcr.org

Communication

Communication strategy:

Should be designed to reduce risk of transmission of food-borne disease

Levels of Communication:

Within NFSERCC and outside like other public and private sectors, international bodies etc.

What to communicate:

The risk and what the consumer should do if affected product is consumed

Process of Communication:

Develop communication toolbox, Single spoke person to be designated for each FSE

Lessons learned

- Ministry of Health and Family Welfare should be the lead stakeholder considering its strength
- Institutionalization of the resource mobilization at the time of emergency is an important issue
- Dedicated panel of experts is an important issue
- Development or availability of protocols for managing rare events also is an issue

The way forward

- The draft **PLAN** to be finalized through further consultations and feedback from the stakeholders, and to be submitted to the Government by September 2012, with the support of the new FAO Food Safety Project
- Strengthening National Capacity on the Food Safety Emergency Response is an important activity under the one of the seven outputs i.e. "Enhanced foodborne illness surveillance" of the ***Improving Food Safety in Bangladesh" Project,*** to be started from the July 2012 , with the key partnership of MoHFW, supported by the Netherlands Govt.

Conclusion

With the support and cooperation from the all stakeholders and partners, proposed FSER Plan of Bangladesh would be implemented , aimed at improving public health and facilitating food trades

Thank you

Implementation of national food safety emergency response Plans – examples of recent cases and lessons learnt

By Dr. Hajime Toyofuku,
Senior Researcher, National Institute of Public Health,
Ministry of Health, Labor and Welfare, Japan

Implementation of national food safety emergency response plans- examples of recent cases and lessons learnt:

Developing National Food Safety Emergency Response Plans - Sharing Experiences and Lessons Learnt"

FAO in collaboration with Food Safety Operation Center, Ministry of Public Health, Thailand
27-28 June 2012
Imperial Queen's Park Hotel, Sukhumvit 22, Bangkok, Thailand
Hajime TOYOFUKU National
Institute of Public Health,
Ministry of Health, Labour and Welfare, Japan

Table of Contents

1. Responses after Yukee (raw beef) outbreak Enterohemorrhagic *E. coli* (EHEC) O111 and O157 food poisoning
2. Food safety control measures associated with radioactive contamination after FUKUSHIMA power plant accident after the earthquake

Locations of the restaurants and cases

Number of patients: 181, Number of HUS cases: 34, fatalities: 5

Places where cases were lived Restaurants located, but no cases reported

Toyama prefecture, 1.09 million population

Detection 1 — 26th April (Tue)

- A potential VTEC infection, a hospital asked Takaoka Health Center to perform VT test
- 6 years old boy, onset on 24th, vomiting and bloody diarrhea

Detection 2 — 27th April (Wed)

- Toyama Prefecture identified an Outbreak,
  - Common eating Place; Ebisu Tonami restaurant
  - Agents: VTEC O157 was isolated from a case
  - Cases: 3 groups A group ate on 23rd (2 /5), B group ate on 22nd (2/4), C group ate on 23rd (1/3). total 5 cases, 3 hospitalizations
  - Enforcement:
    - the restaurant was ordered to stop business for 3 days
    - All the restaurants in the F chain voluntary stop serving Yukee (raw beef)
- Fukui Pref. identified a boy case infected with VTEC O111
  - on 28th, he dies
- Asked Tokyo pref. to investigate a meat processing est. where the raw material beef was processed.

Detection 3

28th Apr (Thur)

- The Ministry of Health, Labour and Welfare (MHLW) searched for other cases associated with F chain restaurants outside of Toyama and Fukui pref.
- The MHLW asked Toyama and Fukui Public Health Institute to perform PFGE pattern analysis.
- Toyama pref. opened 4 consumer consulting counters.
- 2 hospitalization cases who had eaten at Ebisu Takaoka Station South Restaurant were reported.

National holiday

Detection 4

29th April (Fri)

- A Case ate at Tonami Res died (<10 Yrs boy)
- All 20 restaurants in the Chain F voluntarily stopped business.
- Cases finding was carried out from other restaurants in the chain F.
- Toyama pref. began inspections for all raw beef serving restaurants.
- VTECO157 &O111 were isolated from cases.

1st of May (Sun)

Detection 5

2nd of May(Mon)

- A HUS case who ate at Toyama Yamazato restaurant was reported.(1st May)
- Another HUS case who ate at Yokohama Kamishirane restaurant was reported (2nd May).
- O111PFGE patterns isolated from cases in Fukui and Toyama were indistinguishable.
- A FETP team in the National Institute of Infectious Diseases (NIID) was sent to Toyama Pref. to help the outbreak investigation.

Detection 6

- A potential case who ate at Fujisawa Shonandai branch

4th May (Wed)

- A case who ate at Tonami restaurant died (female. 40s)

5th May (Thu)

- A case who ate at Tonami restaurant died (female. 70s) inspections (in which potentially serving raw beef)

6th May (Fri)

banned

Detection 7

- PFGE patterns of VTEC isolated from un-opened beef and VTEC isolated from a case who ate at Tonami restaurant were indistinguishable.

Responses for preventing EHEC outbreaks

VTEC 0 157 outbreaks associated with raw beef

Asked consumers to avoid raw liver

The Minister asked the Food Sanitation Commission of the Pharmaceutical Affairs June 1997

Pose questions on establishment of standards for raw beef

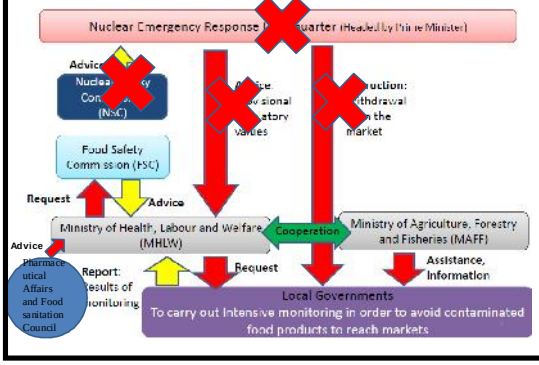
Guidelines for meat for raw consumption
The FSC replied to the Health Minister in Sep 1998

A voluntary based guideline was published in 1998

consequence

- The Governor of the Toyama prefcture requested the Health, Labour and Welfare Minister to develop a regulatory standard and Microbiological criteria for raw beef.
- Health Minister promised to develop a regulatory requirement by 1st of October.

Administrative System for Food Safety in the Situation of non-Nuclear Emergency



Risk assessment and management for raw beef

- 24 June 2011: The MHLW asked scientific opinions to the Pharmaceutical Affairs and Food Sanitation Council
- July 8 2011: The MHLW asked the Food Safety Commission to perform risk assessment in order to develop Microbiological Criteria and processing criteria .
- July 26 2011: The MHLW notified to WTO Committee on Sanitary and Phytosanitary Measures of the introduction of MC and processing standards for meat intended to be eaten raw for raw beef **(G/SPS/N/JPN/280)**
- 25 August 2011: The Food Safety Commission sent back the result of the risk assessment to the MHLW. Risk Based, ALOP FSO, PO based MC
- 1 of October; MC and standards for meat intended to be eaten raw were published and enforced.

Safety of raw beef which meet this standard

- The MHLW indicated that this Microbiological Criteria and Processing Standard does not guarantee 100% of the safety of raw beef consumption. Basically raw beef consumption shall be avoided.
- High risk population including children, elderly people shall not eat any raw, undercooked meat and internal organs (e.g. liver).

16

Heat Treatment of Beef to Be Eaten Raw

To business operators treating beef to be eaten raw

From October 1, 2011, standards and criteria, and labeling standards based on the Food Sanitation Act are to be enforced regarding beef (except innards) to be eaten raw.

Be careful that foods to be eaten raw cannot be processed or prepared, or served or sold at shops, etc. unless the foods conform to these standards.

Violators of the standards, criteria, or labeling standards will be subject to administrative punishment or penalty based on the Food Sanitation Act.

<Standards and criteria set by MHLW>

Standards and criteria for processing and preparation (Outline)

(1) **Enterobacteriaceae must be negative.**
(2) Processing and preparation shall be conducted in a hygienic place provided with equipment dedicated to raw meat.
(3) Processing and preparation shall be conducted by a person with knowledge about the risks of enterohemorrhagic Escherichia coli, etc.
(4) A piece of meat shall be sterilized by heat treatment immediately after cut from the carcass.

<**Labeling** standards set by Consumer Affairs Agency (CAA)>

Labeling standards for serving and selling foods, not canned or packaged, at shops such as restaurants

The following two notices shall be displayed in easily visible locations, such as in store fronts or menus.
(1) Generally, eating raw meat brings the risk of food poisoning.
(2) Children, elderly people, and people vulnerable to food poisoning should refrain from eating raw meat.

Labeling standards for selling canned or packaged foods

In addition to the above, the following three notices shall be written in easily visible locations on containers and packaging.
(3) This food is to be eaten raw.
(4) The prefecture (country of origin in case of imported meat) and name of the slaughterhouse (and information that it is a slaughterhouse) where the slaughtering or dressing of the carcass was carried out
(5) The prefecture (country of origin in case of imported meat) and name of the processing facility (and information that it is a processing facility) where the processing was carried out in a method conforming to processing standards for meat to be eaten raw

* For details, visit the CAA website at http://www.caa.go.jp/foods/index10.html#e01-1.

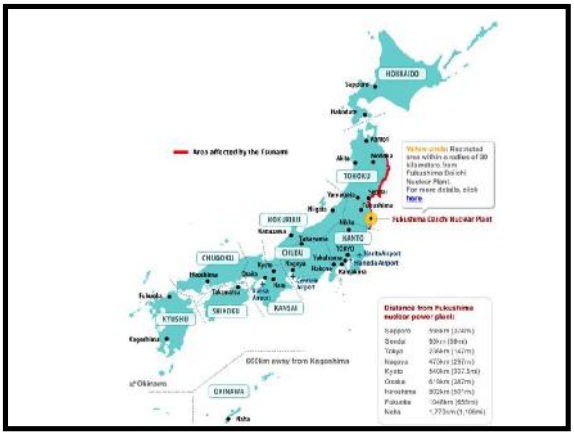
Refrain from serving raw meat, even if it meets standards and criteria, to people such as children and elderly people with little resistance.

Consumer Affairs Agency, Ministry of Health, Labour and Welfare

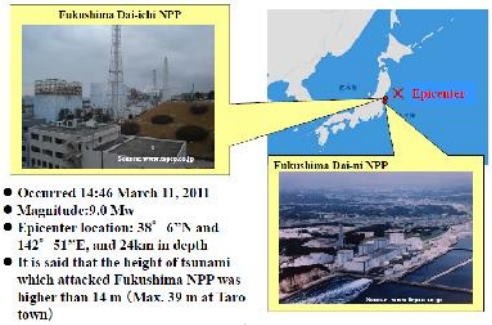
Raw beef liver

- June 2011: During the discussion in the MHLW and the FSC, more elevated level of risk associated with raw liver consumption was identified
- 6th July 2011: MHLW requested Food Business Operators not serving beef liver for raw consumption
- June – December 2011: The MHLW performed research to identify contamination pathway and potential interventions, as a result, an internal contamination was suggested
- April 2012: The MHLW asked the FSC to perform risk assessment if heat treatment (63C , 30min) would be required
- 14 April 2012: FSC replied to MHLW
  - If heat treatment is introduced and implemented, the risk reduction is so obvious, no need to perform any risk assessment.
- From July 1st 2012 : Beef liver shall be heat treated before consumption. raw beef liver consumption will be disappeared.

Part II. Food safety control measures associated with radioactive contamination after FUKUSHIMA power plant accident after the earthquake



Nuclear Power Stations Nuclear Reactors near Epicenter of



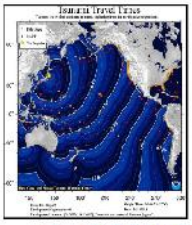
- Occurred 14:46 March 11, 2011
- Magnitude:9.0 Mw
- Epicenter location: 38° 6"N and 142° 51"E, and 24km in depth
- It is said that the height of tsunami which attacked Fukushima NPP was higher than 14 m (Max. 39 m at Taro town)

National Institute of Radiological Sciences, Dr. Makoto Arai

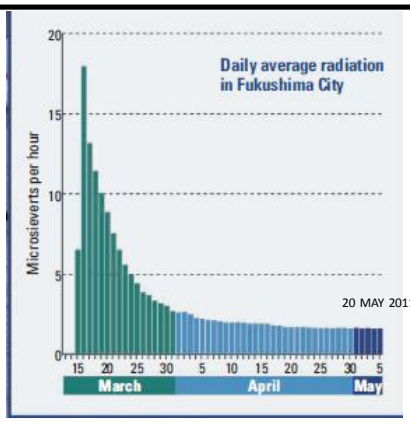
Damage Caused by Earthquake and Tsunami

Casualties : over 24,524
- Dead : 15, 037
- Missing : 9,487

Evacuees : 116,591

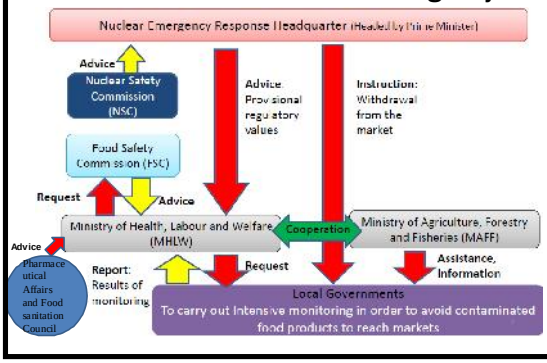


National Institute of Radiological Sciences, Dr. Makoto Arai



20 MAY 2011 VOL 332 SCIENCE

Administrative System for Food Safety in the Situation of Nuclear Emergency



Measures taken against foods containing radioactive materials based on the Food Sanitation Law

- 11 March 2011. The Earthquake occurred at 14:46
- 12 Mach Discharge of radioactive substances into environment from the Fukushima nuclear power plant
- 17 March :The provisional regulation values are set for radioactive materials in foods with reference to the index levels designated by the Nuclear Safety Commission , notified to prefectures.
  - The MHLW adopted *Indices for Food and Beverage Intake Restriction posted by the Nuclear* Safety Commission of Japan
  - foods exceeding the said values according to Article 6, Item 2 of the Food Sanitation Law
- 18 March : test started, 128, 811 survey cases, out of which 1,193 cases exceeded the provisional regulation values (as of March 22 2012)
- 19 March: MHLW announced that food exceeding the regulatory value was found
- 20 March: The FSC was consulted upon for scientific evaluation of the effects of radioactive materials in foods on health.
- 23 March. Restriction of distribution of Spinach, Komatsuna, cabbage, broccoli, cauliflower harvested in Fukushima pref., and raw milk and parsley harvested from Ibaragi prefecture.
- 23March: 200 Bq/kg radioactivity level as was detected at the Kanamachi Purification Plant, Tokyo, consequently restriction of drinking water intake for infant and young children was enforced.
- 29 March: Emergency Report on Radioactive Nuclides in Foods was published by the Food Safety Commission. FSC could not identify any evidence the ICRP recommendation of an effective dose of 10mSv/y for any single foodstuff as an intervention level was inadequate. Radioactive cesium effective dose of 5 mSv/year has a certain safety margin.

25

Measures taken 2

- **4 April :** The Food Sanitation Commission of the Pharmaceutical Affairs (F San C of PA)and Food Sanitation Council announced its remarks that, under the present situation, the provisional regulation values set based on the Food Sanitation Law should be maintained in the light of the "Emergency Reports" issued by the Food Safety Commission
- April 4: In the light of the Nuclear Emergency Response Headquarters' concepts on the establishment and cancellation of the instructions to restrict distribution and/or consumption of foods concerned, an announcement was made on Prefectural Governments' inspection plans, decided in consultation with the relevant ministries, together with the handling of the provisional regulation values of radioactive materials within foods.

Measures taken 3

- April 5: Because a significant level of radioactive iodine was detected in fishery products, the provisional regulation values of radioactive iodine in the fishery products were set up upon the Nuclear Safety Commission's advice.
- April 6: The Food Safety Committee was asked for evaluation of the health effects on foods related to radioactive iodine in fishery products.
- April 8: The Task Force on the Countermeasures against Radioactive Materials, the Food Safety Commission, the Pharmaceutical Affairs and Food Sanitation Council, was set up and compiled provisional remarks on the handling of provisional regulation values related to radioactive iodine in fishery products.
- April 28: Relevant prefectures were notified of the MHLW's report on the status of formulation and implementation of survey plans on radioactive materials within foods and tap water, compiled based on the relevant prefectures' reports.

Concept of setting regulation values for food (March 2011)

○March 17 2011 provisional regulation values for radioactive materials based on the Food Sanitation Law are established in line with the following.

①Set the annual maximum permissible radiation dose (mSv) originating in food, and assign the dose to each food category.

②Based on certain premises e g continuing to consume contaminated premises, e.g., food, calculate the regulation values (Bq/kg) considering the intake volume, etc., of each food category in order not to exceed the set doses.

※For example, the strictest of the limitation values obtained based on generation are applied to all ages by taking the intake volume and sensitivity of adults, toddlers, and infants into consideration.

○After setting the regulation values, inspections are conducted by prefectures, etc., based on the relevant regulation values. If food items exceeding the regulation values are found, measures are taken to prevent the distribution of these food items based on the Food Hygiene Law.

※The Nuclear Emergency Response Headquarters will determine measures, e.g., restrictions on shipment, based on the Act on Special Measures Concerning Nuclear Emergency Preparedness.

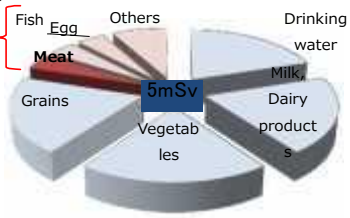
as an emergency intervention, NSC has prepared index value to restriction food consumption/distribution is introduced,

緊急時における防護対策の一つとしての飲食物制限措置を導入する際の目安とする値

The setting method of provisional regulation values for radioactive cesium

Maximum permissible dose (5mSv/year) was allocated equally to five food categories →Assign 1mSv/y to each food category

Food Categories Meat/ Egg/Fish



Even a part of food may be contaminated with radioactive cesium, it would not exceed the intervention dose level.

Calculate the limit (Bq/Kg) considering intake volumes and sensitivity by ages

Food Categories	Adult	Toddler	Infant	Regulatory values
Drinking water	201	421	228	200
Milk, Dairy products	1660	843	270	200
Vegetables	554	1686	1540	500
Grains	1110	3830	2940	500
Meat, Eggs, Fish and other food	664	4010	3234	500

Units : $^{134}Cs + ^{137}Cs$ (Bq/kg)

- Effective dose=F×（effective dose translation rate(mSv/Bq))×(radiation quantity in food (Bq/kg))×(daily consumption weight)×[1-exp{－(physical decay constant)×(consumption period (365 days)}]/(physical decay constant)
- F: annual average concentration/peak concentration≒0.5

Daily food consumption

- Age, sex, regional, and seasonal differences were recognized
- However, too much breakdown is not practical, so only the age group was taken into account

categories	adults* (kg)	Young children**(kg)	infants**(kg)
Drinking water	1.65	1.0	0.71
Milk・daily	0.2	0.5	0.6
Veg	0.6	0.25	0.105
Grains	0.3	0.11	0.055
Meat・eggs・fish/others	0.5	0.105	0.05

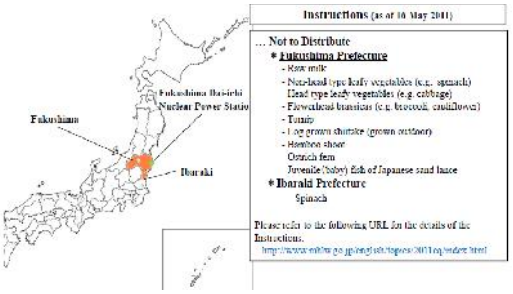
*厚生省「国民栄養の現状」

**茨城県沿岸漁業世帯の食品摂取実態調査からの推計値（放射線医学総合研究所）

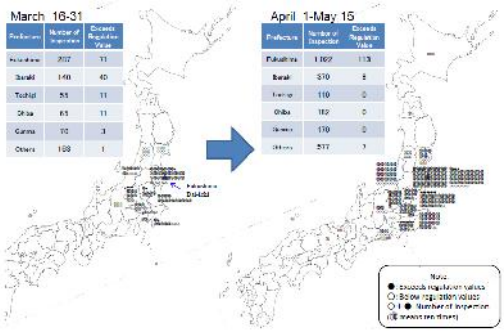
Japan set provisional regulation values of radioactive materials in food in accordance with the Food Sanitation Law and notified local government

	Provisional regulation values of radioactive materials in food in accordance with the Food Sanitation Act (Bq/kg)	
Radioactive iodine (^{131}I)	Drinking water Milk, dairy products[4]	300
	Vegetables（Except root vegetables and tubers), Fish	2,000
Radioactive cesium(sum of ^{134}Cs and ^{137}Cs)	Drinking water Milk, dairy products	200
	Vegetables, Grains, Meat, eggs, fish, etc.	500
Uranium	Infant foods, Drinking water, Milk, dairy products	20
	Vegetables, Grains, Meat, eggs, fish, etc.	100
Alpha emitting nuclides of plutonium and transuranic elements（Total radioactivity of $^{238,239,240}Pu$, $^{239,240}Pu$, ^{239}Pu, ^{242}Pu, ^{241}Am, ^{242}Cm, ^{243}Cm, ^{244}Cm)	Infant foods, Drinking water , Milk, dairy products	1
	Vegetables, Grains, Meat, eggs, fish, etc.	10

Japan inspects radioactivity in food every day, and restricts distribution of food that fails to meet provisional regulation values taking into consideration the spread of contamination.



Radionuclide Levels in Fresh Products



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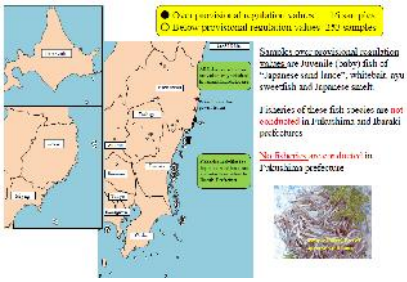
Safety of Marine Products



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Released Radioactive materials (PBq)

Radioactive materials	Chernobyl accident*	TEPCO Fukushima **
Xenon 133	6500	11000
Iodine 131	～1760	160
Tellurium 132	～1150	0.76
Iodine 133	910	0.68
Neptunium 239	400	0.076
Ba140	240	3.2
Tellurium 129m	240	3.3
ruthebuym103	＜168	0.0000075
Sr89	～115	2
Cs137	～85	15

*IAEA. "Environmental consequences of the Chernobyl accident and their remediation: twenty years of experience"

**原子力安全・保安院「東京電力株式会社福島第一原子力発電所の事故に係る1号機、2号機及び3号機の炉心の状態に関する評価について」

Temporal sequence (June-Oct)

- June 27.2011 The concepts of inspection planning and establishing and cancelling items and areas to which restriction of distribution and/or consumption of foods concerned applies" were revised. Beef
- August 4, 2011 "The concepts of inspection planning and establishing and cancelling items and areas to which restriction of distribution and/or consumption of foods concerned applies" were revised.
- October 27, 2011: The Food Safety Commission submitted an evaluation report of the health effects on foods to the Minister for Health, Labour and Welfare.
- October 28, 2011: The Minister for Health, Labour and Welfare consulted the Pharmaceutical Affairs and Food Sanitation Council regarding the establishment of new standards and criteria

Temporal sequence (Nov2011-April2012)

- Nov. 24.2011. The discussion on new standard limits by section meeting of Pharmaceutical Affairs and Food Sanitation Council
- Dec. 22, 2011. Proposal standard limits are created by section meeting of Pharmaceutical Affairs and Food Sanitation Council
- Dec. 27, 2011. Consultation & Report to/by **Radiation Council** (MEXT) (Consultation :, Under deliberations)
- Jan. 6, - Feb. 4、 2012. Public comments
- Jan.17 - Feb. 10, 2012 WTO/TBT notification
- Jan. 16 – Feb. 28, 2012 Risk communication.

- February 24, 2012. The Pharmaceutical Affairs and Food Sanitation Council reported in response to the Minister's consultation by approving the proposed standard limits
- March 15, 2012. Promulgation of standard limits
- April 1, 2012. Enforcement of standard limits

■ Establishment of New Standard limits for Radionuclides in Food

1. **Concept of Review**

○ Based on current scientific knowledge, commodities that meet current provisional regulation values are considered to be safe, and in fact food safety is basically secured.
However, to achieve further food safety and consumer confidence, Japan ieduced the maximum permissible dose from 5mSv/year to 1mSv/year.

○ Establish the four categories of "Drinking water", "Infant foods" and "Milk" , which are deemed to need special consideration, and "General foods" for other foods.

2. New standard limits

(Date of enforcement : April 1, 2012. Transitional measure applies to some commodities.)

○**Provisional regulation values for radioactive cesium**[1]

Category	Limit
Drinking water	200
Milk, dairy	200
Vegetables	500
Grains	
Meat, eggs, fish, etc.	

○**New standard limits for radioactive cesium** [2]

Category	Limit
Drinking water	10
Milk	50
General Foods	100
Infant Foods	50

(Unit:Bq/Kg)

NOTE: 1 These values take into account the contribution of radioactive strontium
2 These limits take into account the contribution of radioactive strontium, plutonium etc.

3

■ The range of food categories

Food category	The reason to establish new standard limits	The range of foods
Drinking water	1 Water is essential for human life and there is no substitution for water, and its consumption is large. 2 WHO's guidance level for radioactive cesium in drinking water is 10Bq/kg. 3 Strict management is possible for the radionuclides in tap water.	○Drinking water, water used for cooking and tea drinks, which is substitute for water
Infant Foods	○The Food Safety Commission pointed out that "the susceptibility to radiation may be higher in childhood than in adulthood."	○Foods approved to be labeled as "fit for infants" based on Article 26 Paragraph 1 of the Health Promotion Law ○Foods and drinks sold as intended for infants
Milk	1 Children consume a lot. 2 Food Safety Commission pointed out that "a susceptibility to radiation may be higher in childhood than in adulthood."	○"Milk" and "milk drinks" refers to products specified in Article 2 Paragraph 1 and 40 of the Ministerial Ordinance concerning Compositional Standards Etc. for Milk and Milk Products.
General Foods	For the following reasons, foods other than given above are categorized as "General Foods" 1 It is possible to make the influence of individual differences in eating habits (deviation of the foods to be consumed) minimal. 2 Regulation intelligible for people 3 Consistency with international views, such as these of Codex Alimentarius Commission	○Foods other than given above

4

■ The concept of radionuclides to be regulated (1)

● **Radionuclides**

Targets to be regulated are all radionuclides which were placed on the trial calculation list of the Nuclear and Industrial Safety Agency as substances emitted by the Fukushima nuclear power plant accident, and whose half-life is over 1 year.

Note: Standard limits are not established for radioactive Iodine, which has a short half-life and has been no longer detected, and the for Uranium, whose level is the almost the same in the nuclear power plant site as in the nature environment.

Regulated Radionuclides	Physical Half-life
Cs-134	2.1 years
Cs-137	30 years
Sr-90	29 years
Pu	14 years or more
Ru-106	374 days

5

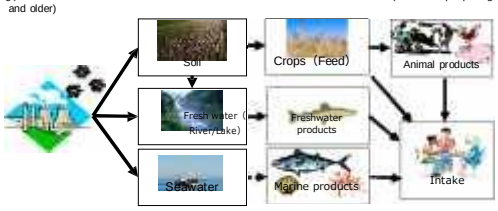
■ The concept of radionuclides to be regulated (2)

●The concept for establishment of new standard limits

The new standard limits for radioactive cesium are established for effective dose of radionuclides (including Sr-90, Ru-106, Pu) not to exceed 1mSV/year.
Because radionulides other than Cs-134 and Cs-137 require a longer time for measurement, following procedure is taken to establish new standard limits.

■Analyze the migration ratio of each radionuclide according to migration pathway, derive the contribution of radioactive cesium according to product and age categories , and establish standard limits for radioactive cesium so that the sum of effective dose not exceed 1mSv/year.

e.g.)The contribution of radionuclides other than radioactive cesium is about 12% (in case of people aged 19 and older)



6

■ The Concept of standard limit for "General Foods"

Calculate limit values, taking into consideration the intake and conversion coefficient according to age category.

Operational intervention level 1 mSv/year

Subtract the effective dose for "Drinking water"

Determine the effective dose to assign to "General foods"

Age category	Intake	Limit value (Bq/kg)
under 1	Average	460
1-6	Male	310
	Female	320
7-12	Male	190
	Female	210
13-18	Male	120
	Female	150
19 and older	Male	130
	Female	160
pregnant	Female	160
Minimum		**120**

Standard limit 100 Bq/kg

<Effective dose for "Drinking water"=Standard limit for "Drinking water" (Bq/kg)
×Intake of drinking water according to age category × Dose Coefficient according to age category>

- In line with WHO's guidance level for radioactive cesium in drinking water, the standard limit for "Drinking water" is established as 10Bq/kg, and the effective dose as about 0.1mSv/year.
- The effective dose to assign to "General foods" is determined as about 0.9 mSv/year by subtracting the effective dose for "Drinking water"(about 0.1mSv/year) from the operational intervention level(1mSv/year)
- Limit values are calculated by dividing this effective dose by the intake and conversion coefficient according to age category. (On the assumption that 50% of the marketed foods are contaminated.)

7

■ The range of "Infant Foods"

Category	The range of foods
●Foods approved to be labeled as "fit for infants" based on Article 26 Paragraph 1 of the Health Promotion Law	■ Infant formula
●Foods and drinks sold as intended for infants →Foods which can be recognized by consumers as products intended for infants from the appearance and labeling of outer package, etc.	■ Formulated milk powder for young children (Including follow up milk etc.) ■ Foods for young children (snacks etc.) ■ Drinks for young children The limit for " Drinking water" applies to te nks ■ Baby foods (Weaning foods etc ■ Others jelly-type sugarcoat, dietary supplement for infants etc.

■ Transitional measures

- Food safety is ensured for commodities that meet current provisional regulation values for radionuclides. Transitional measures are set for some commodities (rice, beef, soybean) which needs a certain period of preparation to prevent any confusion in distribution at the time of shift to new standard limits.
- The Government of Japan gives thorough explanation to consumers and producers about food safety and reasons why these foods are targets of the measures.

April ,2012 Oct, 2012 Jan. March,

Raw materials: Provisional regulation values → New standard limits

Foods manufactured or processed:
- ●Foods manufactured, processed or imported by Mar. 31, 2012: Provisional regulation values (until best-before date)
- ●Foods manufactured, processed or imported after Apr. 1, 2012: New standard limits

<Transitional measure applies to following commodities>

Rice・Beef: Provisional regulation values (until September 30, 2012) → New standard limits

Products manufactured or processed from rice or beef and their import:
- ●Foods manufactured, processed or imported by Sep. 30, 2012: Provisional regulation values (until best-before date)
- ●Foods manufactured, processed or imported after Oct. 1, 2012: New standard limits

Soy Beans: Provisional regulation values (until December 31, 2012) → New standard limits

Products manufactured or processed from soy beans and their import:
- ●Foods manufactured, processed or imported by Dec. 31, 2012: Provisional regulation values (until best-before date)
- ●Foods manufactured, processed or imported after Jan. 1, 2013: New standard limits

12

■ Restriction of shipment (by DG of the Nuclear Emergency Response Headquarters)

Prefecture	Items
Fukushima	(individual area) Raw milk, spinach, Kakina, Cabbage, Broccoli, Cauliflower, Turnip, Log-grown Shiitake mushroom (both grown outdoor and in greenhouse), Log-grown pholiota nameko, Wild mushroom, Bamboo shoot, Ostrich fern, Ume, Yuzu, Chestnut, Kiwi fruit, Rice (produced in 2011). Japanese sandlance (juvenile). Land-locked salmon (excluding farmed fish), Ayu sweetfish (excluding farmed fish), Japanese dace Boar meat, bear meat, beef(※)
Ibaragi	(individual area), Log-grown Shiitake mushroom (Grown outdoor or in greenhouse)、tea (whole area)Boar meat(※)
Tochigi	(individual area) Tea, Log-grown brick cap (outdoor)、Log-grown Shiitake mushroom (both grown outdoor and in greenhouse), Log-grown pholiota nameko, Bamboo shoot, Ostrich fern (whole area)beef(※), boar meat(※), deer meat
Chiba	(individual area) Log-grown Shiitake mushroom, Tea
Kanagawa	(individual area) Tea,
Gunma	(individual area) Tea,
Miyagi	(individual area) Log-grown Shiitake mushroom, (whole area) beef(※)
Iwate	(whole area) beef(※)

47

■ Inspection of radioactive materials in food (1)

I. Inspection plan

Developed by Nuclear Emergency Response Headquarter

Prefecture	Fukushima, Miyagi, Ibaragi, Tochigi, Gunma, Chiba, Aomori, Iwate, Akita, Yamagata, Saitama, Tokyo, Kanagawa, Niigata, Yamanashi, Niigata, Yamanashi, Nagano, and Shizuoka
Target food items	Exceeding provisional regulatory limits, large consummation volume, immediately after lifting from shipment restrictions list, major harvesting items in the area, major distributed item in markets
Target harvesting area	Each prefecture is divided into a few parts, in each part, tests are performed in some cities, towns, based on the results of environmental monitoring etc..
Test frequency	Once a week Those item with limited Harvesting period, 3 days after the distribution started., otherwise periodic testing should be performed. Based on the detection results, test plan may be enhanced.

Each Pref. was guided to develop inspection plan and to implement, tests.

48

■ Inspection of radioactive materials in food (2)

Ⅱ.test methods

① radionuclide analysis by germanium semiconductor detector
② Screening of radioactive cesium by NaI scintillation spectrometer etc. ← **July 2011, This method was introduced to speed up testing and improve efficiency of the test**

<flow>

cutting → weight → measurement → analysis

Beef

Raw tea

■ Inspection of radioactive materials in food (3)

Ⅲ. Shipment restriction

- Based on the Act on Special Measures Concerning Nuclear Emergency Preparedness
- Guidelines for setting shipment restriction and lifting the restriction were articulated
- When regional spread of high level of radioactive materials is recognized, "shipment restrict" should be enforced.
- Extremely high level is detected, restriction of consumption should be enforced.

Test based on the food sanitation law → The lot is considered as the violation of the Food Sanitation Law → Shipment restriction based on the Act on Special Measures Concerning Nuclear Emergency Preparedness → Consumption restriction based on the Act on Special Measures Concerning Nuclear Emergency Preparedness

■ Inspection of radioactive materials in food (4)

■ Lifting shipment and/or consumption restriction。

Radioactive iodine: Weekly inspections are conducted in multiple municipalities in each area. (Inspections are mandatory for municipalities previously found to have radiation levels exceeding the regulation limit. As for other municipalities, inspections are in principle conducted in different municipalities for each inspection. Restrictions are lifted if radiation levels are below the provisional regulation values for three consecutive weeks

Radioactive cesium: At least three locations are inspected in each municipality in the relevant area. (Inspections are mandatory for municipalities previously found to have radiation levels exceeding the provisional regulation values.) Restrictions are lifted if radiation levels are below the regulation limits in all inspections for the past month.

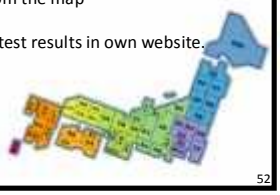
51

■ Inspection of radioactive materials in food (6)

Ⅳ. Publish test results

Tests results performed by each prefectures;

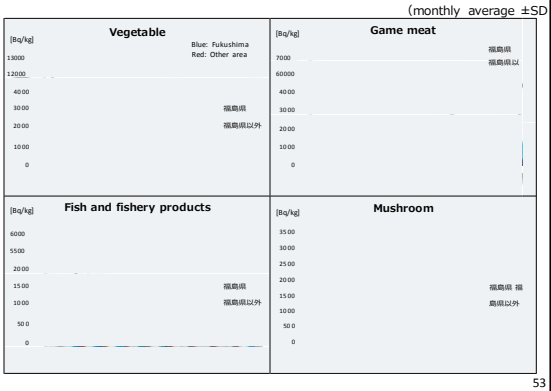
- MHLW compiles results of testing everyday, and publishes in the MHLW website.
- Test results can be searched from the map
- Each prefecture also publishes test results in own website.



52

■ Trend analysis of monitoring results (radioactive cesium)(1)

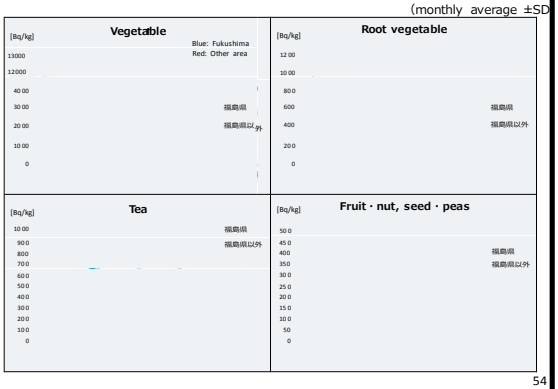
(monthly average ±SD



53

■ Trend analysis of monitoring results (radioactive cesium)(2)

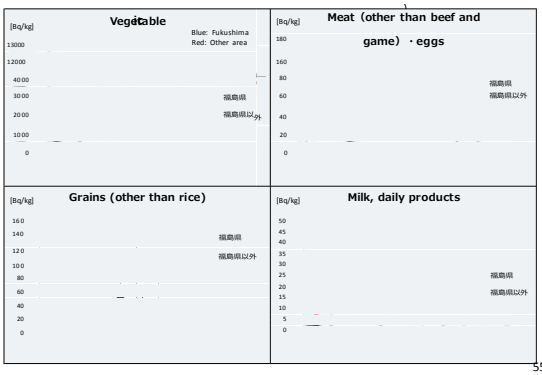
(monthly average ±SD



54

■ Trend analysis of monitoring results (radioactive cesium (3)

(monthly average ±SD)



55

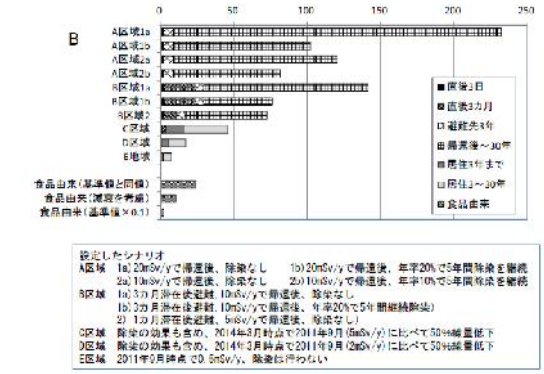
■Inspection plan for radioactive cesium in food

	>50Bq/kg municipalities	Municipalities in growing area	Other municipalities	>50Bq/kg municipalities	Municipalities in growing area	Other municipalities
100Bq/kg ～	>3 samples	>3 samples	>1 samples	>3 samples	>1 samples	>1 samples
50～100Bq/kg	>3 samples	>1 samples		>3 samples (1)	>1 samples (1)	
Milk	Per week per Cool station			Once in one ～two weeks		
Beef	Once per 3 months per farm			Once per 3 months per farm (Iwate pref)		
Inland fish	Once a week			Set based on the pervious detection		

(1) applied to prefectures where radioactive cesium levels of 50Bq/kg or higher is detected

	Fukushima, Miyagi, Ibaragi,	Iwate, Chiba
Marine fish	Once a week	Set based on the pervious detection

56



Science Council of Japan, 2012

Lesson learned

- Need rapid response
- Timely involvement of risk assessment
- The same structure could be utilized in both normal and emergency situation, only speed in each step could be faster, or some steps maybe skipped or performed in parallel (to do so, some training may be needed)
- Preparedness in the routine situation
- Multi ministries/agencies collaborations, interaction, co-ordinations are key.
- Risk communication in emergency situations, what is the real risk
- Mass media responses
- Heavily rely on testing
- Once testing starts, very difficult to stop it

Thank you for your attention

By the way, how do you generate your electricity?

Have you save electricity?

Session 3

1) **INFOSAN: The International Network of Food safety Authorities Network**
   By Ms Caroline Merten, EMPRES Food Safety Officer
   FAO Head Quarter, Rome

2) **Status of FSER Plans in Countries –** country presentation (roundtable): Laos, Vietnam, Cambodia, Malaysia, Indonesia, Philippines.

   Do they have an emergency plan for food safety?
   - Strategies of the plan?
   - What department involved?
   - Process to develop the plan?
   - Plan validation?
   - Coordination mechanisms?
   - What other relevant plans?

   Facilitated by Ms Shashi Sareen, FAO RAP

3) **Working Group Session** – Future of FSER Plans in Countries –
   Frame:
   - Situation of each country/discussion
   - Challenges
   - Recommendation/ Capacity support needed

   Group:
   1. Thailand, Malaysia, Bangladesh, Japan
   2. Philippine, Indonesia, Singapore, Brunei
   3. Cambodia, Myanmar, Laos , Vietnam

INFOSAN: The International Network of Food safety Authorities Network

By Ms Caroline Merten, EMPRES Food Safety Officer FAO Head Quarter, Rome

INFOSAN

The International Food Safety Authorities Network

Food Safety Officer, FAO HQ Bangkok, Thailand

Food and Agriculture Organization of the United Nations

World Health Organization

Background

- Rapid globalization of food production and trade
- Rapid exchange of food safety information is required
- Information sharing improves management of food safety issues
- Important to have a mechanism in place to facilitate collaboration between countries

To provide such a mechanism, INFOSAN was launched in 2004 and has been growing ever since

What is INFOSAN and its Purpose?

- A voluntary network of food safety authorities from around the world managed jointly by WHO and FAO
- To prevent international spread of contaminated food and foodborne disease and strengthen food safety systems globally, by:
  - promoting the rapid exchange of information during food safety events
  - sharing information on important food safety issues of global interest
  - promoting partnership and collaboration between countries
  - helping countries strengthen their capacity to manage food safety risks

Food and Agriculture Organization of the United Nations

Milestones in Developing INFOSAN

2000 – 2004

May 2000 – World Health Assembly of **WHO adopts a resolution calling for improved communication** among WHO and Member States on matters of food safety.

May 2002 – Member States express **serious concerns** at the WHA regarding health emergencies posed by natural, **accidental and intentional contamination of food**; WHO is requested to provide tools and support to Member States to increase their capacity to respond to such emergencies.

March 2004 – WHO and its Regional Offices take the **first steps in establishing INFOSAN**; WHO Representatives request the official designation of one or more INFOSAN Focal Points and one INFOSAN Emergency Contact Point.

January 2002 – FAO/WHO **First Global Forum** for Food Safety Regulators calls for strengthened international communication regarding food safety.

July 2004 – The Codex Alimentarius Commission adopted a text entitled '***Principles and Guidelines for the Exchange of Information in Food Control Emergency Situations***'.

October 2004 – The Department of Food Safety and Zoonoses (FOS) of WHO, in cooperation with the FAO, **officially inaugurate INFOSAN** as a collaborative program, at the FAO/WHO Second Global Forum for Food Safety Regulators.

Milestones in Developing INFOSAN

2005 – 2011

November 2007 – Official launch of the INFOSAN **Secure Website**

May 2010 – WHA Resolution 63.3 calls for the further development of INFOSAN by encouraging the participation of all Member States through timely sharing of data, information and knowledge and urging the Director General of WHO to further develop INFOSAN to facilitate communications and sharing of best practices, to strengthen INFOSAN's emergency function and to ensure sustainable support.

December 2010 – First Global Meeting of Network members in Abu Dhabi, UAE

April 2006 – Inaugural meeting of the INFOSAN Advisory Group

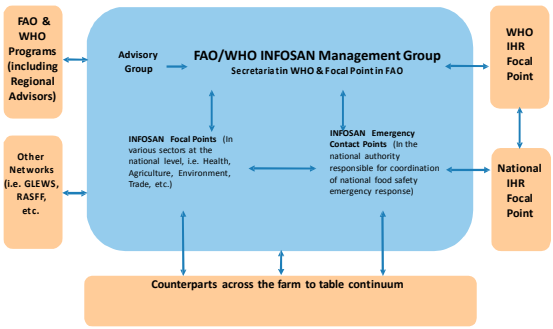
June 2007 – International Health Regulations (2005) implemented with a broad scope which includes food events

November 2007 – The '***Beijing declaration*** *on Food Safety*' is adopted, urging all countries to **actively participate in INFOSAN** by sharing information on emerging food safety issues and experiences about best practices

June 2010 – INFOSAN becomes a **joint FAO/WHO** program

2011 – New INFOSAN Community Website under develop and scheduled to launch before the end of the year

INFOSAN Structure and Links to Key Partners



Current Membership

177 Member Countries

Emergency Contact Point Roles and Responsibilities

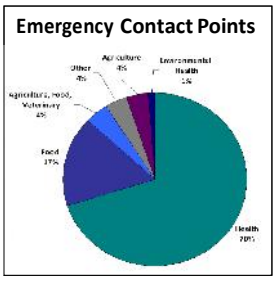
- Reports urgent food safety events of potential international significance to the INFOSAN Secretariat
- Assists the INFOSAN Secretariat in the verification and assessment of events by providing all necessary information
- Requests international assistance through the INFOSAN Secretariat to respond to a food safety incident or emergency, as necessary
- Takes action on INFOSAN Alerts and disseminates information accordingly
- Carries out functions outlined for Focal Points within their Agency

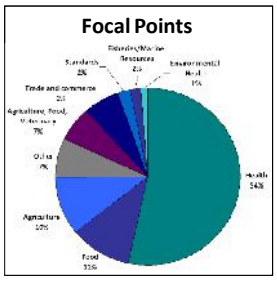
Focal Point Roles and Responsibilities

- Disseminates INFOSAN notes, FAO/WHO guidelines, and other important food safety information from INFOSAN within their agency, as appropriate
- Provides comments to INFOSAN on information products disseminated to the Network
- Engages in sharing information with the INFOSAN Secretariat and other members on food safety issues
- Collaborates with INFOSAN Emergency Contact point on emergency events involving their respective agency

NFOSAN coordination at national level

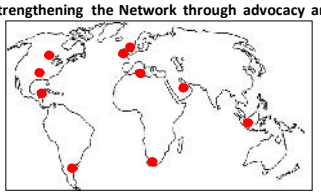
Affiliations of Emergency Contact Points and Focal Points





INFOSAN Advisory Group

- Advise the Secretariat on effective ways to interact with Member States
- Review current operations and recommend ways to improve the functions of the Network
- Provide input on the INFOSAN strategic plan and work plan
- Engage in strengthening the Network through advocacy and fund raising



INFOSAN Collaborative Partnerships

- Global Early Warning System for Major Animal Diseases, including Zoonoses (GLEWS)
- World Organisation for Animal Health (OIE)
- Global Foodborne Infections Network (GFN)
- European Union - Rapid Alert System for Food and Feed (RASFF)
- EMPRES Food Safety
- WHO's Global Outbreak Alert and Response Network
- PulseNet International

Communication within the Network

- The new INFOSAN Secure Website is intended to facilitate online collaboration
- Members are part of an electronic mailing list and receive alerts and other information from the Secretariat
- Members can contact the Secretariat for general inquiries or for emergency matters
- Members have access to a list of all INFOSAN members and can be in contact directly

INFOSAN Community Website

- The INFOSAN Community Website has been developed to be more user-friendly and intuitive for INFOSAN Members
- It will improve each member's ability to exchange information during both routine activities and significant food safety events and emergencies
- The new website has been developed with the goal of strengthening the sense of community among INFOSAN members

Routine Activities

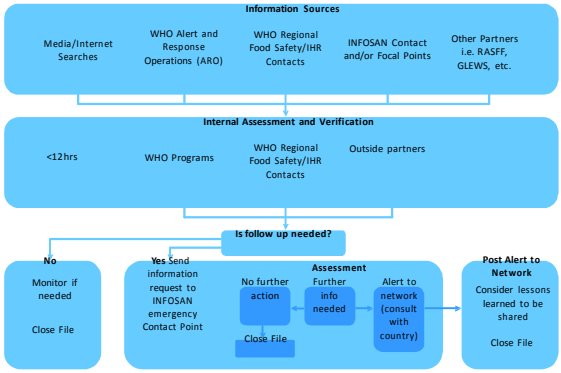
- INFOSAN Information Notes to provide key information about emergent or topical food safety issues
- Food safety guidelines, questionnaires, surveys, newsletters and factsheets
- INFOSAN members aid routine in-country sharing
- INFOSAN Members are engaged by the Secretariat for gathering information on emerging issues

Emergency Activities

- INFOSAN identifies, verifies and shares information on food safety-related events :
  - ✓ contaminated foods in international commerce
  - ✓ foodborne illness outbreaks, not limited to one country
- INFOSAN Secretariat provides technical assistance to national governments in managing food safety and food production-related events or emergencies

Food Safety Events in the Media

Event Detection and Action



First Global Meeting – Dec 2010

- Closed, technical meeting in Abu Dhabi, UAE; 150 participants from 65 different countries

First Global Meeting – Dec 2010

Meeting outcomes:

- An improved sense of community among members
- Practical recommendations to enhance communication and collaboration
- Identification of opportunities to strengthen core capacity at country and regional level which promote participation in INFOSAN

Available online

The Way Forward

- Continue fostering a true community of practice
- Enhance member engagement in the Network
  - ✓ Revise Members' Guide
  - ✓ Develop regionally based strategies for enhancing participation in INFOSAN
- Improve national coordination
  - ✓ Identify capacity building and training needs and link with partners to meet them
- Encourage member engagement on the new INFOSAN Community Website
- Develop further interaction with other global networks and initiatives
  - ✓ Formalize agreements
- Develop a resource mobilization plan to ensure sustainability

Questions?

ขอขอบคุณ

INFOSAN at FAO: INFOSA

http://www.who.int/foodsafety/fs_management/infosan/en/

The International Food Safety Authorities Network (INFOSAN)

Progress Report 2004 - 2010

Food and Agriculture Organization of the United Nations

Status of FSER Plans in Countries – country presentation: Laos, Vietnam, Cambodia, Malaysia, Indonesia, Philippines.

Regional Meeting "Developing National Food Safety Emergencies Response Plans - Sharing Experiences and Lessons Learnt"
27-28 June 2012
Bangkok, Thailand

Food Safety Emergency Response Plan in Cambodia

Presented by,

Heng Chhunhy, Deputy Director, DPPSPS, MAFF

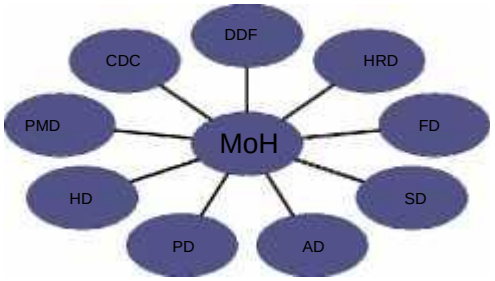
Aing Hoksrun, Chief of Food Safety Bureau, DDF, Ministry of Health

Map of Cambodia

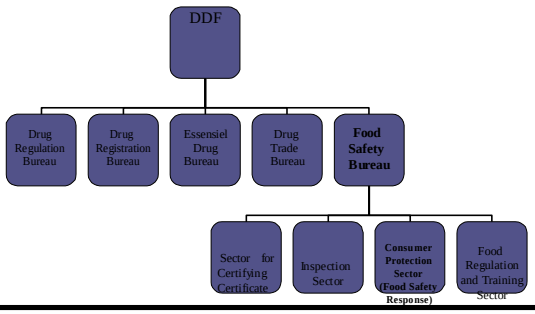
Year 2011:

- ***Cambodian Population 14,111,133***
- ***Land:181,035km²***
- ***Capital : Phnom Penh***
- ***Provinces : 24***

Structure of Ministry of Health



Department of Drugs and Food



Networks

- *Not yet set up the National Committee (Multi agencies)*
- *24 Provincial Health departments*

  - *Local Authorities*

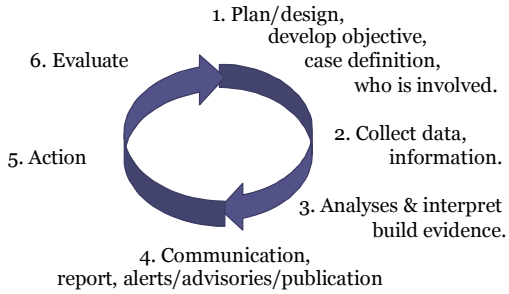
What Has Food Safety Bureau done? (1/2)

- *Publish the Leaflets, Posters, Bulletins related to Food Safety and deliver to Public Sectors, Private Sectors, Restaurant Association, ...*
- *Strengthen the capacity building in food safety to Provincial Health Level.*
- *Provide the Training on Food Hygiene to Food Handlers and Producers working in Food Catering, Food Factories.*

What Has Food Safety Bureau done? (2/2)

- *Collect the data, information and result of samples testing to identify the hazard caused the foodborne disease outbreak*
- *Cooperate with the relevant departments, other agencies to take action (recall the contaminated products from the market places, or destroy,...)*
- *Share information with other countries.*

Surveillance Circle



Involved Departments and agencies

- *Ministry of Health (Department of Drugs & Food)*
- *Ministry of Agriculture, Forestry and Fisheries*
- *Ministry of Commerce (CAMCOTROL)*
- *Ministry of Industry, Mines & Energy*
- *Ministry of Tourism*
- *All Provincial Health Departments*
- *Local Authorities*
- *Private sectors*

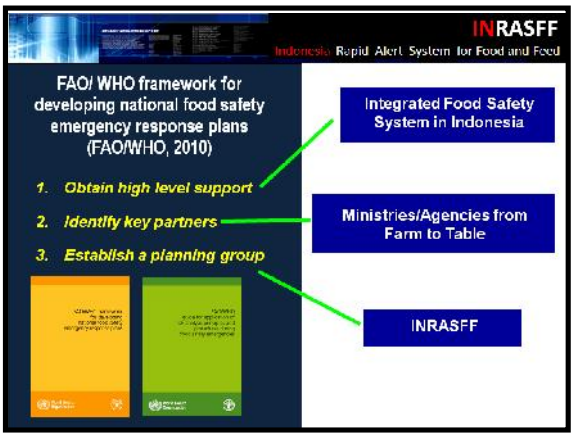
Challenges

- *Not yet set up the National Committee for FSER*
- *Lacking the capability of food laboratory*
- *Lacking of the coordination from relevant agencies*
- *Not have sufficient documents in food traceability (No food registration)*
- *Lacking of the human and financial resources*
- *Not develop yet food law and regulations*
- *Not yet conduct the risk assessment in food*
- *Lacking of the food control system*

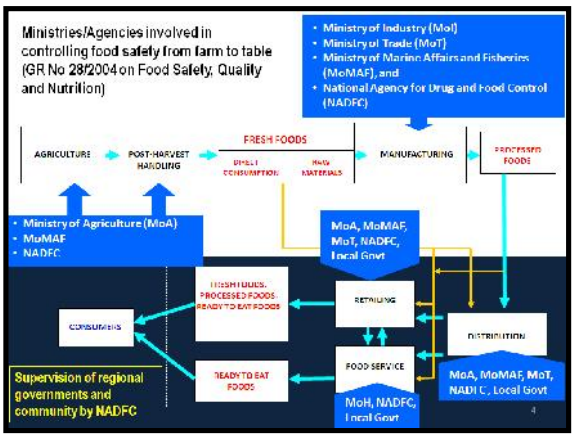
Next action

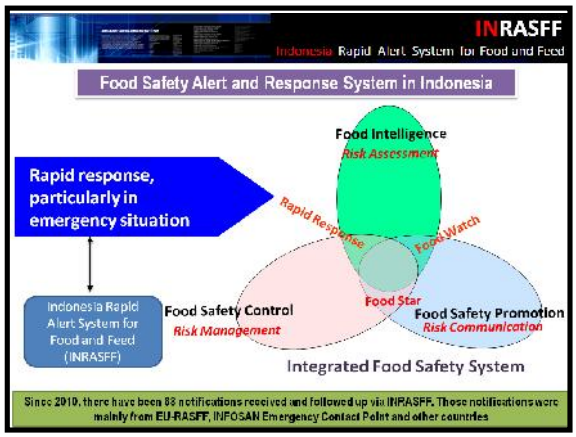
- Continue provide training to food handlers and producers
- Publish the food safety promotional materials
- Develop food safety emergency response regulations
- Put the risk assessment program in food in curriculum of the university
- Conduct risk assessment in food
- Establish the committee on food safety emergency responses.

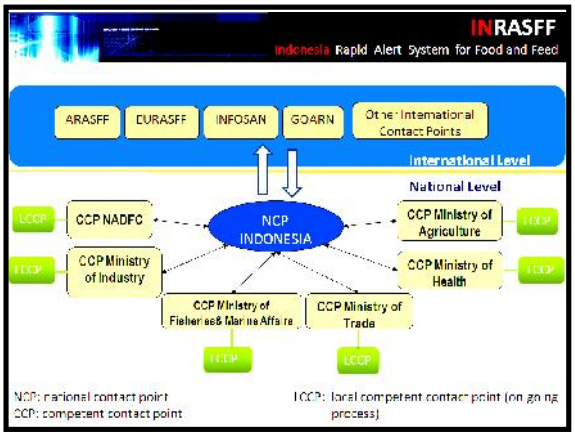
INRASFF
Indonesia Rapid Alert System for Food and Feed
STATUS OF FOOD SAFETY EMERGENCY RESPONSE PLAN IN INDONESIA
Presented by:
Halim Nababan
Director of Food Safety Surveillance and Extension
National Agency of Drug and Food Control Republic of Indonesia
Regional Meeting Developing National Food Safety Emergency Response (FSER) Plans - Sharing Experiences and Lessons Learnt
Thailand, 27-28 June 2012


INRASFF
Indonesia Rapid Alert System for Food and Feed
FAO/ WHO framework for developing national food safety emergency response plans (FAO/WHO, 2010)
1. Obtain high level support
2. Identify key partners
3. Establish a planning group
Integrated Food Safety System in Indonesia
Ministries/Agencies from Farm to Table
INRASFF

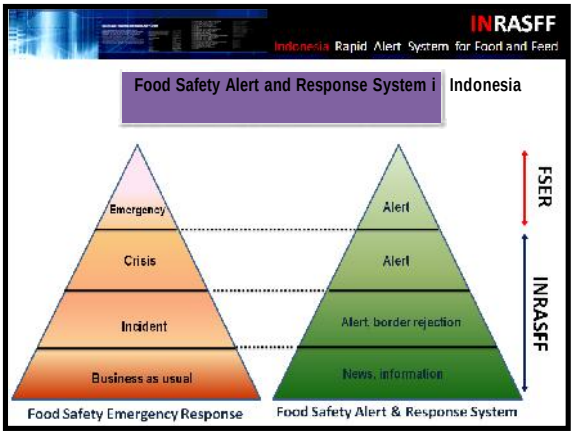
INRASFF
Indonesia Rapid Alert System for Food and Feed
Integrated Food Safety System (IFSS) in Indonesia
• The IFSS officially launched in 2004 provides a logical framework to strengthen the national food safety program
• The system involves various government institutions and universities dealing with food safety as well as association of food industries and consumers
• Formalized by the Decree of Coordinating Minister for People's Welfare No 28 / 2011 on the Team of Coordination of National Food Safety Network
• The team consists of three networks based on risk analysis: Food Intelligence Network, Food Control Network, Food Safety Promotion Network
Together we
can improve
Food Safety in Indonesia

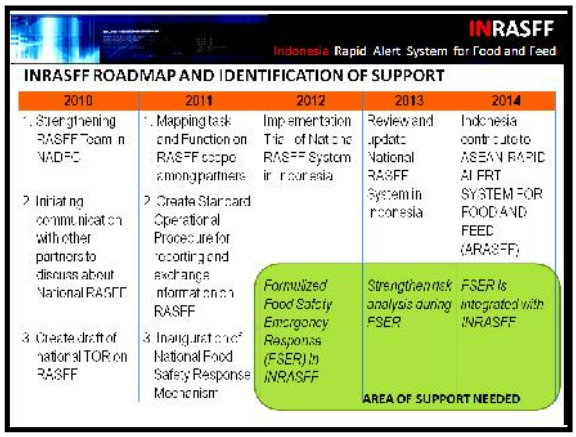

Ministries/Agencies involved in controlling food safety from farm to table (GR No 28/2004 on Food Safety, Quality and Nutrition)
• Ministry of Industry (MoI)
• Ministry of Trade (MoT)
• Ministry of Marine Affairs and Fisheries (MoMAF), and
• National Agency for Drug and Food Control (NADFC)
AGRICULTURE
POST-HARVEST HANDLING
FRESH FOODS
DIRECT CONSUMPTION
RAW MATERIALS
MANUFACTURING
PROCESSED FOODS
• Ministry of Agriculture (MoA)
• MoMAF
• NADFC
MoA, MoMAF, MoT, NADFC, Local Govt
FRESH FOODS, PROCESSED FOODS, READY TO EAT FOODS
RETAILING
CONSUMERS
DISTRIBUTION
FOOD SERVICE
READY TO EAT FOODS
Supervision of regional governments and community by NADFC
MoA, MoMAF, MoT, NADFC, Local Govt
MoH, NADFC, Local Govt

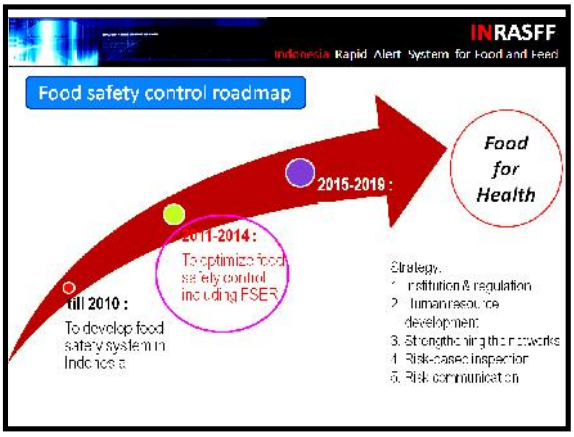

INRASFF
Indonesia Rapid Alert System for Food and Feed
Food Safety Alert and Response System in Indonesia
Rapid response, particularly in emergency situation
Indonesia Rapid Alert System for Food and Feed (INRASFF)
Food Intelligence
Risk Assessment
Rapid Response
Food Watch
Food Star
Food Safety Control
Risk Management
Food Safety Promotion
Risk Communication
Integrated Food Safety System
Since 2010, there have been 88 notifications received and followed up via INRASFF. Those notifications were mainly from EU-RASFF, INFOSAN Emergency Contact Point and other countries

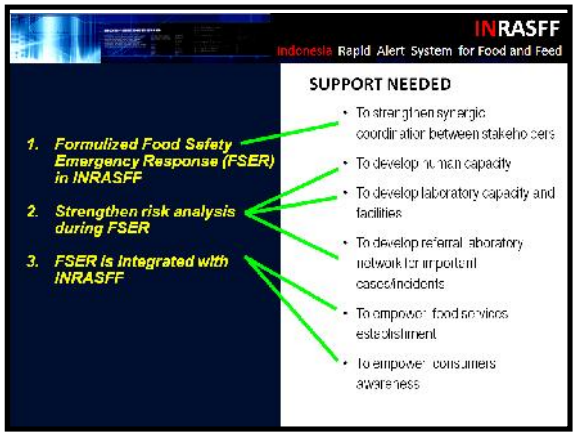

INRASFF
Indonesia Rapid Alert System for Food and Feed
ARASFF
EURASFF
INFOSAN
GOARN
Other International Contact Points
International Level
National Level
LCCP
CCP NADFC
NCP INDONESIA
CCP Ministry of Agriculture
CCP Ministry of Industry
CCP Ministry of Health
CCP Ministry of Fisheries & Marine Affairs
CCP Ministry of Trade
NCP: national contact point
CCP: competent contact point
LCCP: local competent contact point (on going process)

INRASFF
Indonesia Rapid Alert System for Food and Feed
KEWASPADAAN DAN PENANGGULANGAN KEAMANAN PANGAN
POM-03.SOP.25
BADAN POM RI
Standard Operating Procedures
2011
The Standard Operating Procedure of INRASFF
NCP (also as INFOSAN Emergency Contact Point)
NADFC, Director of Food Safety Surveillance & Extension
CCP
Ministry/ agency
CCP
NADFC
Director of Food Inspection & Certification
MoA
Director of Quality and Standardization
Ministry of Health
Director of Environmental Health
Director of Nutrition*
Head of Health Crisis Response Center*
MoHMA
Director of Quality Certification
MoT
Director of Consumer Protection
MoI
Director of Food and Fisheries
* Additional focal points in food safety emergency response


INRASFF
Indonesia Rapid Alert System for Food and Feed
Food Safety Alert and Response System in Indonesia
Emergency
Crisis
Incident
Business as usual
Alert
Alert
Alert border rejection
News, information
FSER
INRASFF
Food Safety Emergency Response
Food Safety Alert & Response System


INRASFF
Indonesia Rapid Alert System for Food and Feed
INRASFF ROADMAP AND IDENTIFICATION OF SUPPORT
2010
2011
2012
2013
2014
1. Strengthening RASFF Team in NADFC
2. Initiating communication with other partners to discuss about National RASFF
3. Create draft of national TOR on RASFF
1. Mapping task and Function on RASFF scope among partners
2. Create Standard Operational Procedure for reporting and exchange information on RASFF
3. Inaugurating National Food Safety Response Mechanism
Implementation Title of National RASFF System in Indonesia
Review and update National RASFF System in Indonesia
Indonesia contribute to ASEAN RAPID ALERT SYSTEM FOR FOOD AND FEED (ARASFF)
Formulized Food Safety Emergency Response (FSER) in INRASFF
Strengthen risk analysis during FSER
FSER is integrated with INRASFF
AREA OF SUPPORT NEEDED


INRASFF
Indonesia Rapid Alert System for Food and Feed
Food safety control roadmap
Food for Health
2015-2019 :
2011-2014 :
To optimize food safety control including FSER
Till 2010 :
To develop food safety system in Indonesia
Strategy:
1. Institution & regulation
2. Human resource development
3. Strengthening the networks
4. Risk-based inspection
5. Risk communication


INRASFF
Indonesia Rapid Alert System for Food and Feed
1. Formulized Food Safety Emergency Response (FSER) in INRASFF
2. Strengthen risk analysis during FSER
3. FSER is integrated with INRASFF
SUPPORT NEEDED
To strengthen synergic coordination between stakeholders
To develop human capacity
To develop laboratory capacity and facilities
To develop referral laboratory network for important cases/incidents
To empower food services establishment
To empower consumers awareness

Food Emergency Response Plan in Lao PDR

Lao Delegation

27-28/06/2012

Food Safety Control

Food Safety control have been developed by getting commitment of all key ministries to address food safety along the length of the food chain.

The goals are addressing to

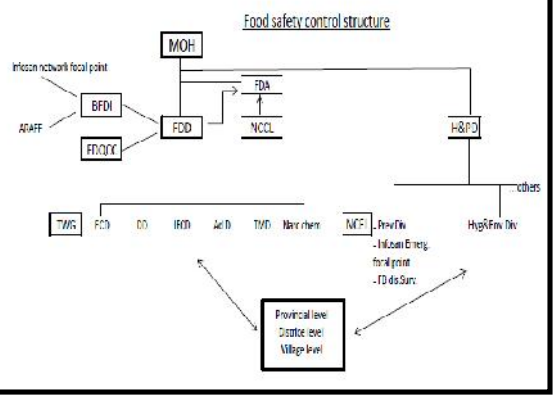
- reduce morbidity and mortality due to food borne illness and
- to promote safe food production and international and domestic trade in safe food

Food Safety Overview

- The prevention of food borne illnesses and other adverse consequences of unsafe food is a major component of the government's approach to achieve economic growth and sustainability of its social progress.
- Laos adopted a National Food Safety Policy to guide the management of food safety throughout the food chain, including a "coordinated national response to potential food borne emergencies, including tracing food products and their recall in case of problems."

Food Safety Overview

- The National Food Safety Action Plan is in line with the Food Law No. 04/NA (dated 15 May 2004) and serves as a practical guide to implement the essential elements and strategies outlined in the National Food Safety Policy (028/PM; 03 February 2009)
- Ensures the "safety and quality of food throughout the food chain and require the cooperation of various ministries including private sectors.



Food Safety Emergency Response Plan

- National food safety emergency response plans was developed since 2008
- with the basic principles and elements outlined in the FAO/WHO Draft Guidelines.
- Ministry of Health (MoH) led for the development and drafting of a plan.
- the Food and Drug Advisory Committee (FDAC) is responsible for the plan at the Ministerial level
  - the FDAC acts as the central coordinating unit for all sectors with regard to food safety management.
  - The Vice Minister of MoH is a chairman of the Committee
  - and the Food and Drug Department is the permanent secretariat of this committee.

Strategies of the plan

- Lao food safety authorities use a risk and science based approach to organize and analyze available data and determine the level of response to a food safety incident or emergency.
- In the absence of a formal risk assessment, a 3-tier strategy will be used.
  - Routine incidents - Existing national food safety control functions
  - Larger or more serious incidents – routine and existing FS control functions are still able to cope
  - Incident which is "not yet controlled" – move to emergency

Department involved in the plan

- Two different team member are involved:
  - o Emergency Task Force Members : 9 pers
  - o Emergency Management Team : 27 pers
  - (list of potential members with contact information)
- General Contact List

  (list of "official" contacts for National and International organizations - with specific and current contact information)

Emergency Task Force Members

- Vice Minister for Ministry of Health – Chair
- Director General or Dir or Deputy Dir of different departments, bureau and center – member as below:
  - Food and Drug Department, MoH
  - Hygiene and Prevention Department, MoH
  - Curative Medicine Department, MoH
  - The Bureau of Food and Drug Inspection, MOH
  - National Center for Laboratory and Epidemiology, MoH
  - Food and Drug Quality Control Center, MoH
  - Livestock and Fishery Department, MAF
  - Animal Health Center, MAF
  - Agriculture Department, MAF

Emergency Management Team

(list of potential members with contact information)

- **BFDI:** Deputy Dir of BFDI; Head of food inspectors , Infosan netwok, ARASFF focal point
- **FDD:** Head of FC Div, IEC Div,
- **H&PD:** Head of Prev Div, Hyg & Env Div, Infosan emergency focal point
- **CIEH:** Media officer
- **NCLE:** Epi Div, Micro. Div, IHR focal point
- **MAFF:** Livestock & Fishery Dept, Agri Dept
- **MOIC :** Industry Dept, Domestic trade Dept, Import-export Dept
- **VTC:** VT Health Dept: FD subdiv.; VT Ind & Com Dept: Trade , Industry Dept, VT custom Dept
- **FDQCC:** Deputy Dir of FDQCC, Microbiology Unit, Chemical unit
- **Min. of Interior:** Economic Police Dept, Economic Div

The Team will be selected depending on the type of emergency situation, e.g., contaminated food (chemical or biological) or reports of foodborne illnesses.

General Contact List

(list of "official" contacts for National and International organizations - with specific and current contact information)

- MOH: FDD, H&PD, Cur.Dept, Planning Dept, Finance Dept, Cabinet Dept, CIEH
- MAF: Agri.Dept, Livest.& Fish.Dept, Ani. Health Center
- MOIC: Policy Trade Dept, Domest. Dept, Import Export Dept, Industry Dept.
- FDQCC: Dir & Deputy Dir
- Nat. Lab & Epidem. Center: Dir & Deputy Dir
- VTC Health Department: Dir & Deputy Dir
- Nat. Disaster Management Office: Dir & Deputy Dir
- Economic Police Department: Dir & Deputy Dir

General Contact List (cont)

(list of "official" contacts for National and International organizations - with specific and current contact information)

- International Contact Lists :
  - WHO: Food safety coordinators, Infosan secretariat, IHR secretariat
  - FAO: Food security coordinators, Avian Influenza Program (Consultants and National coordinators)
  - Pasteur Institute of Laos: Experts and consultants
  - Merieux Foundation : Experts and Nat. coordinators

Process to develop the plan

Round table meeting for senior policy maker from all related ministries involved in food safety and senior technical management from agencies/departments to:

- Identify existing FSER mechanisms;
- Identify and agree the legal basis for declaring a food safety emergency;
- Agree what constitutes a FSE in this context;
- Identify persons who can declare a FSE
- Identify the specific persons who will be responsible for managing a FSE (Emerg. Team)

Process to develop the plan(cont)

- Agree the procedure for informing the person activating the plan and assembling the Emerg. Team
- Discuss and agree the reporting arrangements btw the Emerg. Team and higher officials/Minister.
- Identify and agree the reporting arrangements btw the emerg. Team and regional, district and local levels of response
- Identify all contacts necessary for inclusion the plan

Food Safety Information Exchange

- Food safety information has been exchanged inside country between different departments of Ministry of Health and other concerned Ministries. There are a rapid response teams from central to district level to manage the outbreak control. (Weekly report by email, fax, phone..)

- Regarding to the food safety control particularly imported food, an intranet system is used to connect between province and central by using internet website at: http://moh.gov.la/fdd/

Plan validation

- Lao PDR developed a food safety emergency response plan during 2008 and was not officially issued and mandated by the MOH
- Plan was used during incidents such
  - Melamine-contaminated milk episode (2008).
    - A recall procedure was conducted during the response by informing all provinces about the names and the barcode of milk and collecting and destroying all contaminated items.
    - A general recall plan however is not yet available and needs to be developed.

– Food poisoning (Silk worm) – 2011

- 143 cases , no death (Xekong province- 9 villages,2 districts)
- From the outbreak investagation report,

– the chemicals lime and chlorine were suspected to be one of the possible sources of contamination of the pupae because of the symptoms were similar .

– Water used in the production process – pesticide

– Suspected samples were sent to lab for testing on pesticide - no high concentration

- Could not define the cause of food poisoning (silkworm)
- Conducted a surveillance in the community and advised to send to district hospital in serious cases.
- To forbid the eating of pupae (silkworm) in this period

– Food poisoning (mushroom) – 2011

- 13 cases , 4 death (Huaphanh province- Ban Longloa)
- Affected group 1-10 years old, female more than male
- Collect samples for testing – result found that there are highly toxic and absolutely not suitable for human consumption.
- Conducted a surveillance in the community and advised to send to district hospital in serious cases.
- Educate the community and illness family to forbid the eating of wild mushroom (using the official notice in the affected province and spot radio, spot TV..)

Coordination mechanism

- Emergency Task Force Members
  - will be advised immediately and will meet within 24 hours
- Emergency Management Team
  - The team will be selected depending on the type of emergency situation, eg contaminated food or reports of foodborne illnesses.

Other National emergency response plan

- National Strategy Plan on the Control H1N1
- National Disaster Management
  - Strategy plan on disaster risk management

Food Borne Disease Surveillance

- Food and water borne diseases are a public health problem in Laos and are currently included in the surveillance system of the country including acute watery diarrhea, acute muco-bloody diarrhea, Food poisoning, Typhoid fever, Acute viral hepatitis. (weekly report)
- Lao health authorities have access to the Food and Drug Quality Control Centre laboratory facilities which can analyze food for some of the more common bacterial pathogens but often identification is limited.

Food Borne Disease Surveillance

- More recently, 1999 to October 2009 combined reports on food poisoning, Typhoid, hepatitis, and dysentery, recorded 76,001 cases with 1,090 deaths (1.43%) or approximately 7600 cases each year.
- For acute watery diarrhea that reported under the current computer-based surveillance system (LaoEWARN) were in the number of 2,921, 7,241 and 11,317 cases for the years 2007, 2008 and 2009 (January-October only) respectively with 15 deaths in 2009.
- The report of food borne illness in 2010 showed an increasing of cases number of food poisoning, Typhoid, hepatitis, and dysentery that were in the number of 20,224 cases with 25 deaths (0.10%). For acute watery diarrhea, there was 16,318 cases with 19 deaths.
- In 2011, the national center for laboratory and epidemiology reported on five food borne diseases such hepatitis (625 cases; death 1), acute watery diarrhea (24491cases; death 7), acute muco bloody diarrhea (4414cases; death 1), food poisoning(890cases; death6), typhoid fever (3346cases; death 2)
  - **The data shows the number of cases continually increasing due to improvements in surveillance but this is still considered an under representation of the true situation**

Surveillance for domestic products

- In 2003, The study on Borax contaminants in food in five districts of Vientiane Municipality showed that Ngno, meat ball and wet noodle were contaminated by borax in 15.2%, 11.8% and 10.2% respectively .
- In 2008, The study on Formalin contaminants in sea food in three market of three districts of Vientiane Municipality and in two imported agencies. The result showed that formalin were found 100% in sea food in three market and 100% in the imported agencies
- In the early of 2012, the monitoring of 8 markets of VTC reported that formalin were found in sea food and offal and also showed that sodium hydroxide were used in high concentration .

Lesson Learnt

- The monitoring and response could be better defined and strengthened in Lao PDR. (properly implemented)
- The actual coordination for ER shall be broadened to include other concerned Ministries.
- The existing networks for rapid response to outbreaks by DHP and NCLE could be used to gather information from the village level.
- The information shall be disseminated such as case definitions to the local level through dispensaries and hospitals.
- Although inspectors collected samples, there are too few inspectors at the Provincial level or lower to provide an effective local investigation of markets, etc.
- The budget implications of managing a FSE was not considered and mentioned in the plan ;

Constraints for emergency response

- Limited numbers of qualified staff (all levels) to well understand on food safety issues and identify an emergency/incidence issue such as melamine contamination, radionuclide contamination...
- Limited operational costs/resources
- Limited supplies and Equipment
- Limited capability of laboratory facilities for necessary chemical and microbiological contaminants and also for confirmation of some viral and bacterial infectious diseases
- Limited funds for trainings inspectors

Next plan

- Raising the importance of the FSER to the existing committee (Task force & Emergency team) with the information/lessons learnt.
- Revising & strengthening the existing FSER plan
- Conducting a simulation exercise of FSERP
- Reporting the progress to the authority concern (FDAC) / Ministry of Health
- Enhance INFOSAN contact points by strengthening capacity for food safety information exchange and emergency response
- Support development of a web-based system in order to provide the scientific basis for health related decisions
- Strengthen cooperation and collaboration of technical assistance to develop regulations and SOPs

STATUS OF FOOD SAFETY EMERGENCY RESPONSE PLANS IN MALAYSIA

Bangkok, Thailand
27th – 28th June 2012

BADRUZZAMAN BIN ABDUL RAHIM
FOOD SAFETY AND QUALITY DIVISION
MINISTRY OF HEALTH MALAYSIA

Outline

- Malaysia's Food Safety Emergency Response Plan
- Information exchange
  - International
  - ASEAN

MALAYSIA'S FOOD SAFETY EMERGENCY RESPONSE PLAN

Objective

To provide **prompt and effective response** to food safety emergency to **minimize the health, social and economic impact** by being **constantly** and **adequately prepared** in managing the food safety emergency

Scope

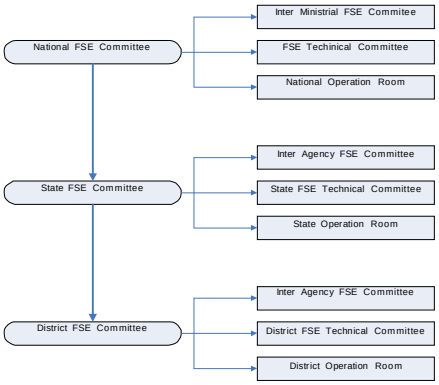
Describes the guiding principles and operating procedures to help coordinate the response of the potential food emergency that may have multi-jurisdictional implications

Is intended to be followed during the response to potential food safety emergency including those resulting from the natural, unintentional and intentional contamination of foods by biological, chemical, physical and radioactive substances.

Scope

- Describes activities beginning with the determination of a potential for food safety emergency and ending with either the containment of the risk that trigerred the food safety emergency and post emergency review process
- Collaborate and coordinate with industries and other relevant government agencies and describe the line of action in the prevention and management of FSE

Chain of Command



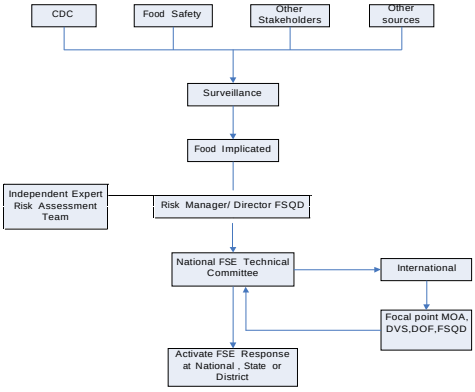
Criteria for Activation Of FSER

- Unusual occurrence of notifiable infectious diseases related with food in more than one state
- Unusual occurrences of other infectious diseases related with food in more than one state
- Unusual occurrences / clusters of diseases / deaths related to food in more than one state
- Request for assistance from State / District Health Office

Criteria for Activation of FSER

- The nature of the outbreak requires the involvement at national level (e.g. in highly contagious and fatal infectious diseases, transboundary spread, bioterrorist attack)
- An international alert
- Systems breakdown and natural disasters that may affect health e.g. disruption of water supplies, civil disturbances etc

Initiation of FSER



Risk Communication Strategies

- To seek the cooperation of related government agencies and non-government organizations (NGOs) during food safety emergency
- To provide accurate, timely, comprehensible information through the use of appropriate technology and channels of communication during food safety emergency
- To obtain feedback during food safety emergency so as to improve the flow of relevant information to the respective target group
- To foster relationship with media
- To ensure develop foster effective partnership with the media so that messages are accurate and appropriate
- To coordinate flow of information to internal and external stakeholders in the prevention and control of FSE. This include relevant government agencies, NGO's as well as the food industries.

Post Mortem of FSER

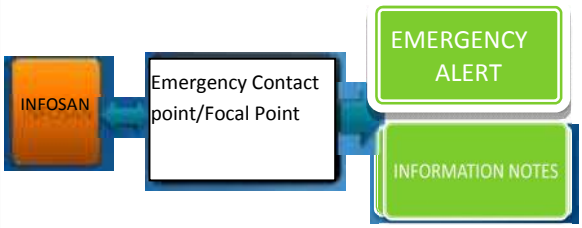
- How fast were we able to control the crisis?
- Was that desirable time to control the crisis?
- What were our constraints? (3M)
- How much are the losses including sosio economic losses?
- What could we have done better?
- What went wrong? Why?
- Was the process implemented as planned? If not, why and how did it differ?
- What need to be done to improve?
- How will procedures be changed or embedded to ensure they are followed?
- How prepared were the industries
- How effective was the defense plan
- Was our risk communication effective?
  - ✓Timeliness?
  - ✓Message understood?
  - ✓Coverage and content sufficient?
  - ✓Did it change public perception?
  - ✓Information seeking behaviour?

INFORMATION EXCHANGE & EMERGENCY RESPONSE

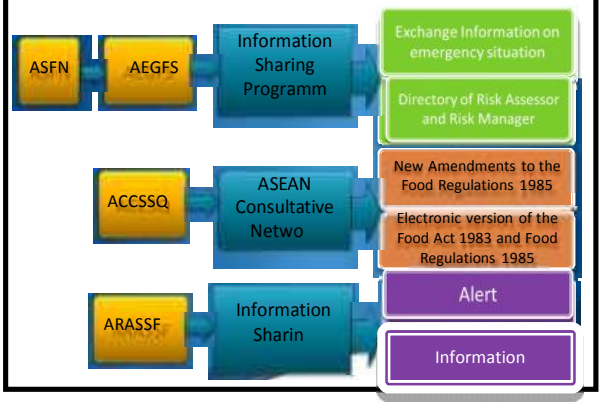
INTERNATIONAL

- Malaysia is a member OSAN since 2005
- Senior Director of Food Safety and Quality Division has been appointed Focal Point and Emergency Contact Point for INFOSAN in Malaysia.
- Set up a national committee in partnership with other key stakeholder comprising all stakeholders

INTERNATIONAL



ASEAN



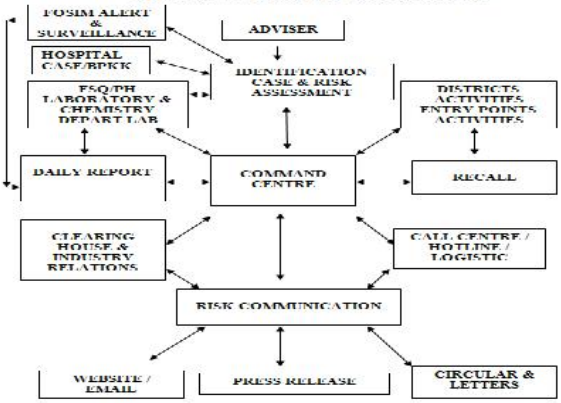
Malaysia's Experience in responding to NFOSAN Emergency Alert

Alert:
Salmonella contamination of peanut butter from United States in March 2007

Alert:
Levels of Vitamin K in milk and yogurt of particular brand poses significant health risk to those taking Warfarin

Alert:
More than 50 000 infants have been hospitalized and six deaths have been confirmed in melamine - tainted infant formula milk powder produced by Sanlu Group.

MELAMINE OPERATION ROOM



ARASFF INFORMATION EXCHANGE FROM ASEAN MEMBER COUNTRY

DATE	NOTIFIED BY	REASON FOR NOTIFYING	FOOD/FEED	CONTROL TYPE	NOTIFICATION TYPE
25/2/2009	Malaysia	prohibited vet drug chloramphenicol (0.26 ppb) in black tiger prawns from Vietnam	food	border control - consignment release	Alert
30/3/2009	Thailand	Melamine (81.49 mg/kg) in squid liver power from Korea	feed	border control - consignment	Information
30/3/2009	Philippines	aflatoksin (300 ppb) in nut products (roast nut)	food	border control - consignment	Alert
3/6/20	Malaysia	aflatoksin (129.7 ppb) in groundnut kernals from	food	border control -	Information
11/9/2009	Malaysia	Salmonella spp (presence/25g) in lychee mix fruit juice from Thailand	food	border control - consignment rejected	Alert
3/10/2009	Malaysia	Ethion (2.04 mk/kg) in dried chillies from India	food	border control - consignment	Information
19/1/2010	Malaysia	Aminotadalafil detected in Mentalk Candy from Thailand	food	border control - consignment rejected	Information
3/2/2010	Malaysia	Aminotadalafil detected in Candy from Thailand	food	border control - consignment	Information
17/8/2010	Malaysia	prohibited vet drug nitrofuran detected in Frozen Soft Shell Crab from Myanmar	food	border control - consignment release	Information
22/9/2010	Malaysia	Sulfur dioxide (130 mg/kg) in fresh longan fruit from Thailand	food	border control - consignment	Information

Thank You

Developing Food Safety Emergency Response Plan

Dr. Myint Myint
Deputy Director
Food and Drug Administration
Myanmar

Food Safety Emergency Response Plan

Ministry of Health, Agriculture, Livestock Disaster management Committee

- was already formed since after cyclone Nargis in 2008
- Chair person – Ministry of Health
- Members – Myanmar Red Cross Association, Health related associations, General Administration Department, Ministry of social welfare, relief and resettlement

Existing laws relating to food safety

- Food and Drug Act -1928
- Public Health Law -1972
- The National Drug Law -1992
- The National Food Law -1997
- Pesticide law - 1990

Myanmar Food and Drug Board of Authority (MFDBA)

- Formed in 1997 accordance with the National Drug Law.
- Chaired by Minister of Health
- Members comprise from related departments/Professionals from relevant fields of specialties.

- To ensure efficient and uniform control throughout Myanmar, various levels of Food and Drug Supervisory Committee (FDSC)
  - Central
  - State/Division
  - District and Township levels

  has been formed in 1992.
- - Chairman is from Health Department and members are from City Development Committee, General administration, Police Force and Livestock , Breeding, and Veterinary Health .

Governmental departments responsible for implementation of food safety

No	Toxic Substances	Responsible Department	National Legislative
1	Food Additives	Food and Drug Administration Ministry of Health	National Food Law
	Microbiological contaminants	Food and Drug Administration, National Health Laboratory, Ministry of Health	Public Health Law
3	Veterinary Drug Residue	Veterinary Assay Laboratory, Ministry of Animal Husbandry and Fishery	Animal Quarantine Law

No	Toxic Substances	Responsible Department	National Legislative
4	Mycotoxin	Plant Protection Division, Ministry of Agriculture & Irrigation Post Harvest Application Department Center, Ministry of Commence	National Food Law
5	Heavy metal	- Food and Drug Administration - Plant Protection Division, - Post Harvest Application Department Center,	National Food Law
6	Pesticide Residue	Plant Protection Division, Ministry of Agriculture & Irrigation Post Harvest Application Department Center, Ministry of Commence	Pesticide Law and National Food Law

Control of Food emergencies

Dioxin 1999

- order by Ministry of Health
- banned the Imported poultry, meat and dairy products.

Melamine 2008

- detection of melamine in imported milk and milk products
- destroyed the imported milk powder contaminated with melamine from China.
- continue detection of melamine in imported milk product

Misuse of dye in Food in Myanmar

Market Survey

- Mobile Food Van to various Markets
- Township FDSC collected the samples and sent to FDA.
- Non permitted food colour or industrial dyes were detected in food
- Adulterated, misuse, less knowledge on use of non permitted colour/dyes
- The use of textile dyes (which are cheap and readily available) in food are carcinogenic and are dangerous to health.

Common Non permitted dye detected in traditional foods –

- Auramine O (Yellow colour) in Pickled tea leaves,
- Rhodamine B (Red colour) in Fish paste, Preserved fruits, sauce, bamboo shoot, chilli powder
- Orange II (orange colour) in Black tea, sauce etc....

10

Action taken

- If unpermitted colour positive, Recall and destroy
- Announcement of food - not fit for human consumption through Media

Development of test kits for unpermitted colour in some food

Rapid Test Kits for -

- Auramine O in Pickled Tea leaves
- Rhodamine B for fish & shrimp paste

Food Poisoning Outbreak

- Source-Investigation
- -Food and Water sample
- -Utensil swabs
- -Hand swabs, Nasal swab from Food Handlers
- Vomitus, stool
- Take action-treatment

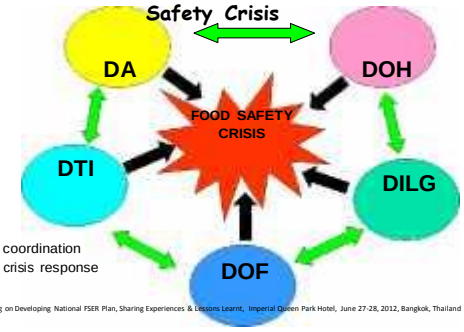
PHILIPPINE
Food Safety Emergency Response & Strategies

AMOR G. DIAZ
Fisheries Regulatory and Quarantine Division
Bureau of Fisheries & Aquatic Resources

and

CATHERINE P. CRUZ
Policy Planning & Advocacy Division
Food and Drug Administration

Overview of Philippine Food Safety Control & Emergency (Alert) Response During Food Safety Crisis



LEGEND:

= coordination
= crisis response

AGENCIES INVOLVED DURING FOOD SAFETY CRISIS & EMERGENCY SITUATIONS (1/2)

A. DEPARTMENT OF AGRICULTURE (DA):

- Bureau of Fisheries & Aquatic Resources (BFAR) - Fish & Fishery Products
- Bureau of Animal Industry (BAI) – Livestock Products
- Bureau of Plant Industry (BPI) – Plant Products
- National Meat Inspection Service (NMIS) – Slaughtered & Processed Products
- Other DA-attached Agencies

AGENCIES INVOLVED DURING FOOD SAFETY CRISIS & EMERGENCY SITUATIONS (2/2)

B.DEPARTMENT OF HEALTH (DOH):

- Food & Drug Administration (FDA) – Processed (except Meat) & Food Supplement Products

C. DEPARTMENT OF TRADE (DTI):

- Bureau of Export & Trade Promotions (BETP) – Trade-related issues

D. DEPARTMENT OF FINANCE (DOF):

- Bureau of Customs (BOC) – Trade control at port entries/exits

E. Department of the Interior & Local Government (DILG):

- Local Government Units (LGU's)

CURRENT INITIATIVE (1/2):

- Establishment of **Philippine Rapid Alert System for Food & Feeds (Phil-RASFF),** modeled from Asean-RASFF & EU-RASFF
- Phil-RASFF is a ***web-based system tool*** for rapid exchange of food & feed safety information among competent authorities involved in food safety control
- ***FUNCTIONAL OBJECTIVE***: to institutionalize an alert & notification system for food & feed safety concerns, and improve coordination amongst food safety control agencies at national & regional levels.
- ***PRODUCT COVERAGE***: imported, exported and domestic products

CURRENT INITIATIVE (1/2):

- ***LINKAGE:*** to interface with the Asean- & EU-RASFF and other equivalent systems of other international trading partners
- **Implementing Regulatory Agencies:**

  DA : BFAR, BPI, BAI & NMIS

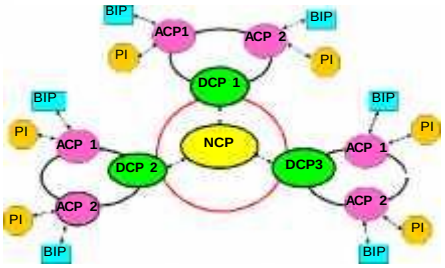
  DOH : FDA

  DTI : BETP, BTRCP

  DOST : PCIEERD, ITDI, FNRI

  Other Support Agencies : Laboratories, BAFPS, etc.

PHIL-RASFF OPERATIONAL CONCEPT



LEGEND: NCP – National Contact Point
DCP – Department Contact Point
ACP – Agency Contact Point
BIP – Border Inspection Post
PI – Plant Inspector

FDA Food Safety Emergency Response Plan
Product Recall System

- Case Report
- Convene FDA Recall Committee
- Recommend Product Recall to FDA Director
- Issuance of Product Recall Order
- Inform Secretary of Health and Concerned Parties
- Information Dissemination Class I, II and III Recall
- Discussion on Recall Operation Plan
- Monitoring/ Audit of Recall Operation
- Termination of recall operation upon completion

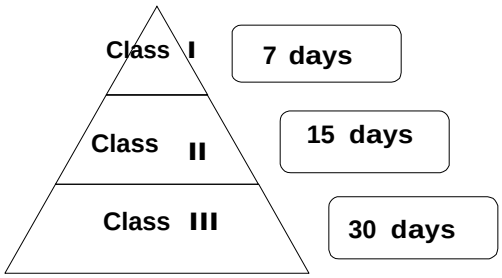
PRODUCT RECALL
Philippine Experience

Public Health Alert:

To be issued by FDA within 24-hours after issuance of Order for Product Recall.

Class I Recall	• Notice and warnings shall be issued by tri-media to the general public, health professionals, health institutions, industry associations, distribution outlets for such products and other concerned parties.
Class II Recall	• Notices and warnings shall be issued to : 1) groups and institutions that are identified as those who generally use or are exposed to the product, and 2) those who could help remove such violative products from the market or prevent such products from being used.
Class III Recall	• Notice and warnings shall be issued to the concerned parties and distribution outlets.

Completion of Recall Operation



THANK YOU!

Prevent emergency problems on food safety in vietnam: situation and challenge

Presentation: PhD. Lam Quoc Hung
Chief of Preventive Division of Food Poisoning
Vietnam Food Administration - MoH

Contents

I. Background

II. Situation in Vietnam

- Emergency plan for problem on food safety
- Contents of the plan
- Some results of the emergency plan

III. Challenges

I. BACKGROUND

Food Safety Law dated on 17/6/2010 & effected since 1/7/2011

1. **Definition of the food safety problem:** the situations are happening by Food poisoning outbreaks/FBDs or by Food contamination having direct bad influences to human health/life.
2. **To regulate:**

Chapter VII: Food testing, Risk Analysis on food safety; Prevent and Solve food safety problems

Section 3: Prevent and Solve food safety problems

Article 52: Prevent food safety problems

Article 53: Solve food safety problems

II. STUATION IN VIETNAM

1. Emergency plan on Food Safety in Vietnam: *two kinds*

(1) The national emergency plan:

Serious and wide risks/problems on food safety:

- Food contaminations distributing widely in region or nation or international;
- Wide food poisoning outbreaks;
- Serious pathogen agents…

(2) The local emergency plan:

Risks/problems on food safety in province/city level:

- Food contaminations;
- Local food poisoning outbreaks…

2. Contents of the emergency plan on food safety (1)

(1) Framework of the emergency plan:

a) Purpose and indexes of the emergency plan:

Depend on situation (kinds and treatment demands of the problems) and capacity of management system on FS.

b) Objects of the emergency plan: food supply chains (Kinds of food; Domestic/import food)/human groups

c) Places of the plan: local/nation/region

d) Time of the plan: estimation interval for complete plan

e) Contents of method: Prevent or Solve the problem

f) Organization and Performance: Departments/functional units are involved; assign the duties

g) Expenses of the plan activities: estimate expenses of activities and resource of funds

2. Contents of the emergency plan on FS (2)

(2) Prevent the problem on food safety: Article 52

a) To confirm and evaluate the problem on food safety: what problem; yes/no; scale of effectiveness by surveillance methods.

b) Applying the control methods in the whole food supply chain: domestic or import food (Materials/products/process of manufacture and business and consumption); base on risk assessment.

c) IEC about knowledge and practice on food safety: Manufactures, Businessmen, consumer.

d) To inspect in the whole food supply chain: Early detection and absolute solution of lead reasons

e) To communicate and alert communities: levels and results

2. Contents of the emergency plan on FS (3)

(3) Solve the problem on food safety: Article 53

a) To detect and give emergency aid to patients and prevent to high risk human groups in the situation: patients; high risk human groups; specific methods; functional units.

b) To survey the food poisoning outbreak or the problem:

To confirm: reason (agent); contamination food; to trace food resources ability and risk assessment

c) To stop the food manufacture/distribution/consumption:

Domestic/import food (Materials/products/process of manufacture and business and consumption); base on risk assessment results.

d) IEC about knowledge and practice on prevention of food poisoning: Manufactures, Businessmen, consumer.

e) Applying the preventive methods for communities

2. Contents of the emergency plan on FS (4)

(4) What department are involved in the plan

Food Safety Law dated on 17/6/2010 & effected since 1/7/2011 regulates: 03 Ministries: MOH; MARD & MOIT: direct responsibilities for FS state management (survey/prevent/solve the problem) & FS inspection within specific products under its purview from farm to table:

MOH:

- To prevent the problems: Food additives, substances assisting food processing, bottled water, mineral water, functional food from farm to trade including import and export & other foods regulated by Gov.
- To organize and perform solutions: food poisoning

MARD:

- To prevent the problems: cereals, meat and other meat products, seafood and seafood products, vegetables, roots, fruits and their products, eggs and their products, fresh milk honey and honey products, GM products, salt and other agri-products as regulated by Gov;
- To perform solutions: control the food contamination of the poisoning outbreak

MOIT:

- To prevent the problems: alcohol, beer, drinks, processed milk, vegetable oil, products used for processing powder & starch & other foods as regulated by Gov.
- To perform solutions: control the food of the poisoning outbreak

2. Contents of the emergency plan on FS (5)

(5) Some results of the national emergency plan on food safety:

a) Radioactive risk in food from Fukusima (Japan): Vegetable, fruit, animal meat, food products (March 2011)

b) Lead risk in imported paper cups and imported dry bamboo soot (April 2011)

c) DEHP risk in cloudy additives and drinking products (Imported and domestic products) (April 2011)

d) E.coli risk in imported vegetable and fruit from France, Germany (North of Euro) (April 2011).

e) Lead contamination in imported dry fruit (April 2012)

f) B-agonist contamination in pork meat (April 2012)

III. CHALLENGE IN VIETNAM

(1) To identify and assess national emergency problem on FS:

a lots of food contamination agents and risk of food poisoning

(2) To estimate the influences scale of emergency problem to human health/life as food poisoning outbreaks/FBDs

(3) Capacity of the capacity of management system on FS:

- Human resource
- Testing;
- Resource of funds

Thanks for your attention!

Working Group Session – Future of FSER Plans in Countries

WG1:

Bangladesh, Malaysia, Japan, Thailand

Countries	FSER Status	Organization	SOP	Contact Point	Communication	Gap
Thai	Completed, voluntary to test the plan	Ministry of Public Health Agriculture Finance Livesctock Commerce Industry ACFS	OBI Communicable	MoPH MoSC MoA	-Province and Central -Industry and consumer -Inter national Network system	- Lab support Coordination among Ministries -Duplication among agencies -Field inspection VS Rapid Alert
Malaysia	2nd draft wait for finalization	MoH (L) MoA MITI MNRE MC	>20, recall, OBI, food sap	MoH	FOSIM web media, integrated FS agencies , public and indusrty Secure parts	Rapid test kits for screening

Countries	FSER Status	Organization	SOP	Contact Point	Communication	Gap
Japan	End, implemented	MHLW MAFF FSC, Cons	OBI	MHLW	NESFD	Strength-ening Epidemi-ology
Bangla-desh	Draft stage, wait for Final	MoH MoFL MoFD MMoI	Particular event MNG	MoH	Horizontal and vertical Industry, public, media	Res Mo include experts Capacity to Develop.

Challenges

- Human and financial resources
- Limited Capacity (see next slide for details)
- Increasing public awareness
- Commitment from food industry
- Linking routine inspection/food test plan for FBO along the entire food chain for domestic market and emergency response plan
- Conflict of Interest during inspection process
- Different standards among countries
- Sharing info among countries
- Training / recall and traceability system
  - Trace-back and trace-foward

Capacity support needed (Nat, Reg, Int'l)

- Capacity Building (latest lab technique, Developing SOP for Mng FSE, human and institutional)
- Inspector's capacity to detect incidents and report to relevant the agency
- Focus on protecting consumer health
- Run simulation to test the effectiveness of the FSEP, using case studies
- Facilitate sharing case study (e.g. food contamination, recall/traceback during emergency, RC)
- Risk communication

Action Plan

- harmonization of standards within regional and international (experts from int'l /some national)
- Capacity building (training for surveillance, test, inspectors (how to report)
- Development/enhance FBD Surveillance system
- Dev FS Database
- Enhance risk communication
- Obtain commitment from food industry through regulatory and non-regulatory actions (e.g. campaigns. Meeting, inspections)
- Coordination of action plan
- Professional ethics training
- Strengthen Law enforcement

Future of FSER Plans in Countries

Group 2

Brunei, Indonesia, Philippines, Thailand

Situation of FSER in each country

Country	Level of FSER	FSER plan	Multi Agency Coordination	SOP/ Guide-lines	NCP			Communication scheme
					RASFF	INFOSAN	others	
Indonesia	Country/ national	Yes , integrated with RASFF	Yes	Yes	Yes	Yes	NSW,IHR, AFSNet, IPPC, OIE	Yes
Thailand	Country/ national	Yes	Yes	Yes	Yes	Yes	NSW,IHR, AFSNet, IPPC, OIE	Yes
Brunei	Departmental, Implementation at district &national	None	No national coordination body but collaboration in place	SOP for Product recall	None	Yes	NSW,IHR, AFSNet, IPPC, OIE	Yes, under general public health emergency platform
Philippines	Departmental, Implementation at national/ regional/ provincial levels	At the planning stage	Yes	Guideline for Product recall	Yes	Yes	NSW,IHR, AFSNet, IPPC, OIE	Yes

Assessment of Gaps and Challenges

Gaps	Challenges	Support needed	Action plan
1.Legal framework and coordination 2. Testing laboratory capacity, capability and network 3.Technical capability building e.g. risk-based inspection, laboratory analysis, risk analysis, product traceability, effective risk communication plan 4.Consumer awareness 5.Individual departmental plan 6.Risk communication between agencies	1.Food is a global product 2.Food and human migration 3.Coordination at national and regional level 4.Harmonized standard	1.own country: -Legal framework and coordination - Operational procedures/ guidelines 2.Regional: -Information sharing 3. International -Technical assistance Supervision on FSER plan (joint FAO/WHO/OIE)	1.Situation analysis on FSER in each country 2. Capacity building -risk assessment -traceability -food analysis 3.Development of national FSER plan and procedures 4. Coordination and integration of network among ASEN countries (A single ASEAN Food Safety Response System/Network e.g. ARASFF, AFSNet)

Group 3: Cambodia, Laos, Myanmar, Vietnam

Gaps

- No GoV endorsement for the MACG/ FSER plan (Laos)
- Lack of coordination among ministries (VTN)
- FSER plan has not been endorsed (VTN)
- National FSER plans need to be developed (Cambodia & Myanmar)

Challenges

- Coordination mechanism/platform in between national and local level (Laos)
- Diagnostic capacities of laboratories (Cambodia & Laos)
- Identification of reference laboratories in the region
- Capacities of inspection services
- No Surveillance for FBD (Cambodia & Laos), Limited surveillance (Myanmar)
- HR
- No traceability system, lack of expertise to do risk assessment, no database

Support needed

- In country INFOSAN coordination
- Practical training on risk assessment
- Pilot project on risk assessment
- Set up national database on food borne pathogens / food consumption
- Simulation exercise on FSER plan
- Assistance in setting up traceability systems
- Support for training of food inspectors/ sampling/ HACCP auditing/ FBD surveillance
- Develop the regional network for reference food safety laboratories

Action Plans

- Committee for setting up MACG is under consideration (Myanmar & Cambodia)
- Advocacy meeting to coordinate, review FSER Plans and submit to the GoV for approval (Laos)
- Seek approval of FSER of inter-ministerial steering committee for food safety and disseminate the plan. Organize simulation exercise (Vietnam)

FSER Future plan in Thailand

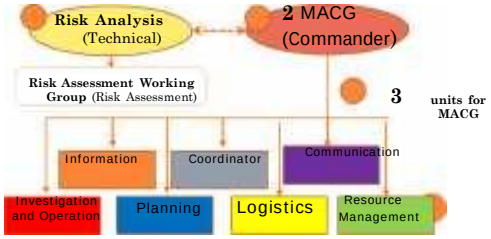
Presentation : Dr.Denpong wongwichit

Now	Gaps	Future
Organization	Body single command	MACG
Laboratory	Networking Information Sharing about analysis working team and harmonize international standard (CODEX)	
Risk assessment	Training assessor Critera Responsible person	
Inspection	SRRT, FRRT Provincial Health office, DDC region office	

Future

Operating System in Emergency

- Implementation to respond in emergencies should be based on the existing Incident Command System (ICS) and support units for food safety issue:



Thank you

Session 4

1) **FAO/WHO Guide for application of risk analysis principles and procedures during food safety emergencies:**
   By Ms Jenny Bishop,
   WHO

2) **Practical use / Application of risk analysis in emergencies-examples**
   By Dr. Paul Brent,
   Chief Scientist, FSANZ, Australia

3) **Introduction of the FAO/WHO Guide on National Food Recall Systems**
   By Ms Caroline Merten,
   EMPRES Food Safety Officer, FAO, HQ

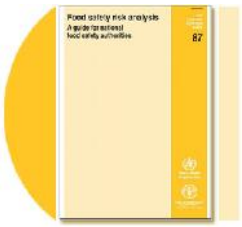
FAO/WHO Guide for application of risk analysis principles and procedures during food safety emergencies:

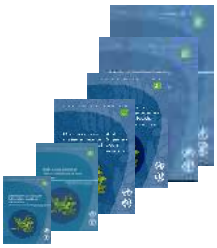
By Ms Jenny Bishop,WHO

Risk Analysis

Risk Analysis provides the **information** and **evidence** needed for **effective and transparent decision-making**, contributing to **better food safety outcomes** and **improvements in public health**.

Risk Analysis Resources





New FAO/WHO Guidelines

- FAO/WHO guide for application of risk analysis principles and procedures during food safety emergencies
- Utilising existing RA approaches
- More dynamic and intense
- To be read in conjunction with
  - FAO/WHO FSER guidelines
  - FAO/WHO Food safety risk analysis: a guide for national food safety authorities

Example 1

The Food Safety Authority of Ireland said tests carried out by the national radiological institute had confirmed trace levels of iodine-131, a radioactive isotope, in three individual samples.

The amounts were only a tiny fraction of the level of iodine presence permitted under European law, however, with the authority's chief executive Professor Alan Reilly indicating that even the legal limit was set on a precautionary basis.

"Consumers should have absolutely no concerns in relation to this finding. A person would have to drink some 96,000 litres of milk with Iodine-131 at current levels to exceed the annual safe limit set to protect consumers," he said.

Example 2

Exposure over 32.9ml per day will exceed TDI (1 cup is 250ml) (adult)

Example 3

Clean
Cook thoroughly
Chill
Avoid Cross-contamination

New FAO/WHO Guidelines

- Preliminary risk management activities
- Risk assessment during emergencies
- Risk management during emergencies
- Risk communication during emergencies

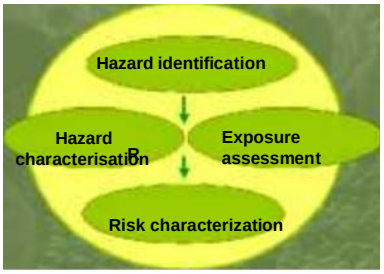
Preliminary risk management activities

- Preparedness for food safety emergencies
  - Tools/templates
- Initial steps after identifying a food safety event
  - Consideration of: 1) magnitude, 2) need to inform higher officials, 3) activation of FSER
- Activation of emergency response
  - MACG – risk management and risk communication
    - Consideration of who will do the risk assessment
  - Documentation through out the process
- Formulating targeted questions for risk assessors
  - Assessment and management interaction - ↑rapid, ↑frequent and earlier

Formulating targeted questions for risk assessors

- To ensure targeted questions for risk assessors:
  - Engage relevant partners, to gather additional information to support risk assessment
  - Collect and focus information for risk assessment components
  - Collect field data for novel/unknown hazards
  - Standardized terminologies
  - Templates provided:
    - Risk assessment request form
    - Risk assessment

Risk assessment during emergencies



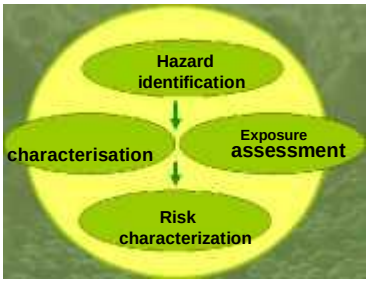
Hazard Identification

Hazard – biological, chemical or physical agents which may cause adverse health effects – in a food or group of foods

The identification of known or potential health effects associated with a hazard

- What is the hazard?
- Case information?
- Product information?
- What is the strength of association between the hazard and food?

Risk Assessment



Hazard Characterisation

Evaluation of the adverse health effects

"Everything is **poisonous**, **nothing** is **poisonous**, it is **all** a **matter** of **dose**." (Claude Bernard)

Dose – Response

Relationship between the magnitude of exposure (dose) to a hazard and the severity and/or frequency of associated adverse health effects (response).

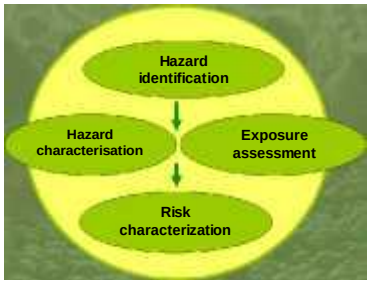
JEMRA (microbiological hazards in food)

JECFA (food additives, veterinary drug residues, contaminants in food)

Ad hoc expert consultations

JMPR (pesticide residues in food)

Risk Assessment



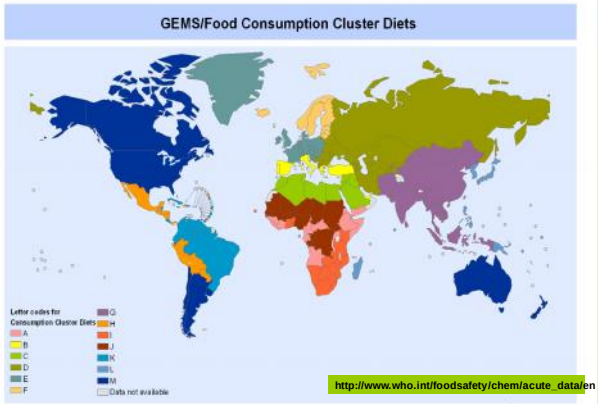
Exposure Assessment

Degree of intake likely to occur?

- Consumption data
- Imported food data
- Food business data (Distribution, Sales)

Nature of the product?

Who and how many people are likely to get sick?

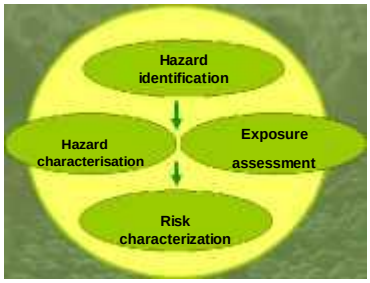


Exposure Assessment

Consider growth and survivability characteristics

Consider food processes associated with the implicated food and the effects on the hazard

Risk Assessment



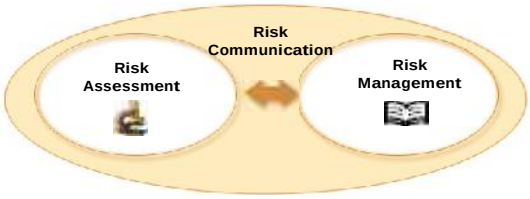
Risk Characterizations

Based on all of the information that has been gathered, determine if there is a reasonable belief that food contains a hazard at levels that can cause serious, adverse health effects.

Risk Assessment

- Importance of addressing limitations and uncertainties in risk assessment
  - What can be done to reduce the uncertainties
  - Identifying what cannot be done in a short period of time
- Revision of assessment as data/knowledge become available
  - Risk assessment to be revisited in a forum such as the MACG to allow the contribution of new data and to determine the need to revise the assessment.
  - Effective interaction between risk managers and risk assessors is important and needs to be agreed upon in the FSER plan.

Risk Analysis



Risk Management

Risk management is the **process of weighing risk mitigation options to manage the issue**, considering:

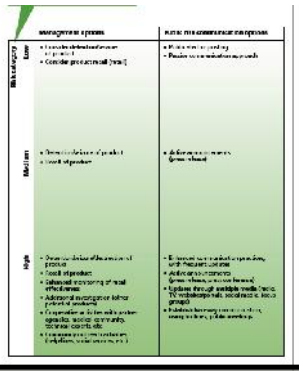
- Proportionality to the level of risk
- Effectiveness
- Levels of uncertainly/ data gaps
- Impact on the population
- Capacity issues
- Expectations
- Legal considerations
- Industry considerations
- International considerations

Risk management options

- **Immediate(e.g.)**
  - **No action**
  - **No action/ assess further**
  - **Stop production/distribution**
  - **Withdrawal**
  - **Recall**
  - **Detain/seizure**
  - **Stopping importation**
  - **Reprocessing**
  - **Consumer advice**
- **Longer term(e.g.)**
  - **Legislation**
  - **Education**

  Enforcement

Risk management matrix

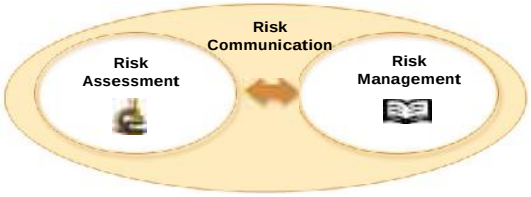


- Rapid decision making
- Improved consistency

Risk management

- Implementation of risk management options
  - Implementation is likely to involve multiple agencies and services
  - May need to be coordinated by MACG
  - Industry consultation and monitoring is important
- Monitoring and evaluation of outcomes/results

Risk Analysis

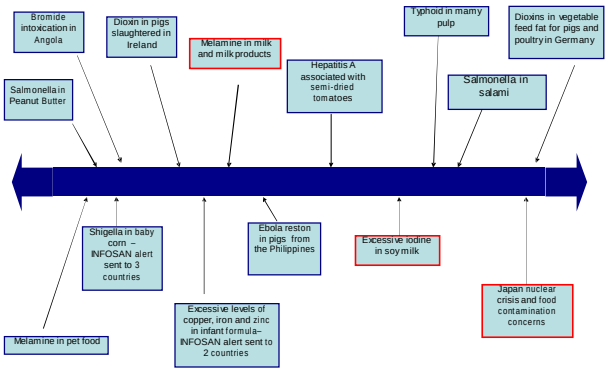


Risk Communication

Risk communication consists in the interactive exchange of information and opinions throughout the risk analysis process.:

- Rationale for the selection of control measures
- Communication with industry through out the risk analysis process
- Risk communication to the general public
- Communication with relevant international/regional bodies

Examples of INFOSAN Emergency Actions



Take home messages

- Read the green book
  - Review RA undertaken in emergencies
- Prepare – for example
  - Templates/ tools
  - Experts
  - Links to other countries
  - Communication strategy
- Consider RA in FSER development
  - Separation of risk assessment and risk management
  - Risk management and risk communication in MACG
- Share your experience

Thank you – any questions?

bishopj@wpro.who.int

Practical use / Application of risk analysis in emergencies-examples

By Dr. Paul Brent,
Chief Scientist, FSANZ, Australia

The Australian System

Australian Political System

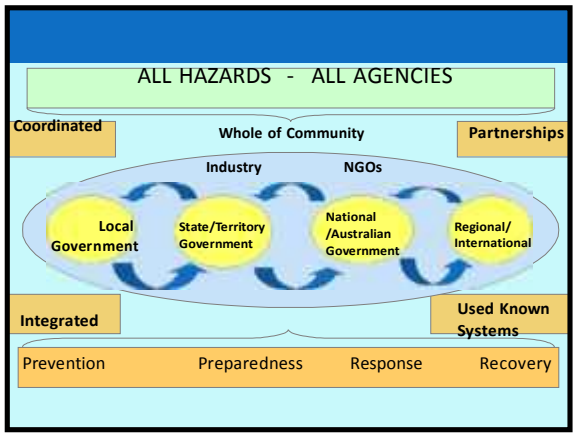
Federal system

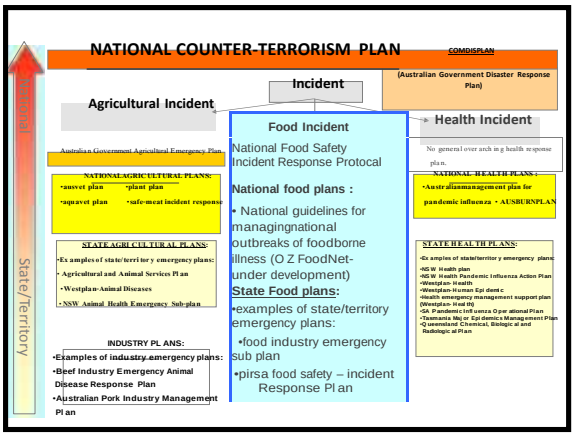
Comprises National Government

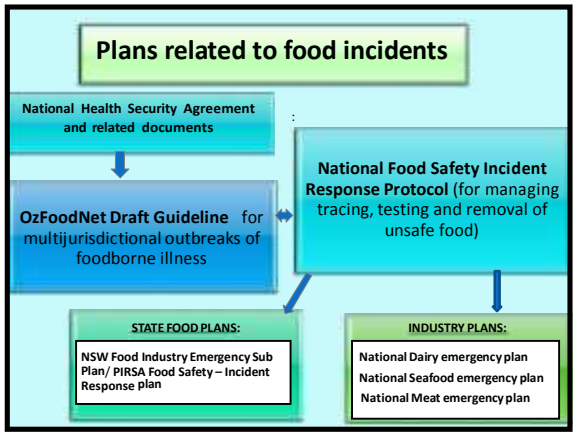
6 States

2 Territories

many local Authorities







National food incidents -the last 3 years

- 2008: cyanogenic glycosides, vegetable crackers
- 2008: metal contamination, meat and frozen products
- 2008: Contaminated dairy products from China
- 2008: Contaminated pork from Ireland
- 2009: Hep A linked to consumption of semi-dried tomatoes
- 2010: Iodine (Bonsoy and seaweed) linked to thyroid dysfunction
- 2010: *Listeria* in melons
- 2010: Sibutramine in weight loss products
- 2011: Peanut in soy flour
- 2011: Latin Seed

Lesson learned

- Each incident reveals different problems/weaknesses in our system
- Incidents usually involve imported food or ingredients – but international processes lacking
- Lab capacity a rate limiting step for us
- Legislation impedes effective responses
- Dealing with and communicating scientific uncertainty difficult

Lessons learned

- Industry preparedness varies – especially for ingredient tracing
- Linkages between government and industry systems not well established
- High level documents necessary but not sufficient – SoPs needed in our system
- 'Debrief' process valuable for continual improvement and as a form of training – but needs mechanisms and willpower to implement change

Lessons learned

- Emerging issues difficult to spot, assess and prepare for
- New issues difficult to respond to – eg viruses, parasites, radiation. Our arrangements are reactive and we have not developed a good proactive system. Is this a problem?
- Because we have a fragmented system, we operate a consensus based system not a command and control system.

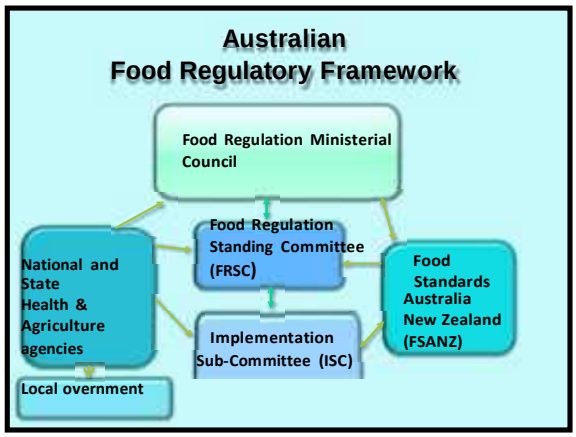
What will be Australia's next areas of focus

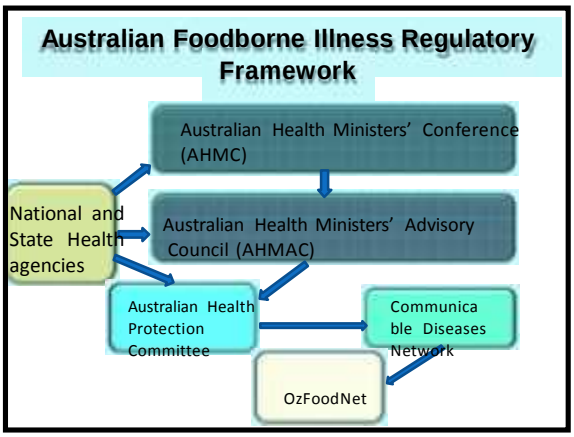
- Establishing international relationships and processes (trans-national incidents)
- Refining and documenting links between the different government incident management systems (institutional fragmentation)
- Working with domestic industry to improve the linkages between their emergency systems and government systems (public and private sector divide)

Thank You

Alert	• Incident notified to central notification point • Information circulated to all food incident contact officers
Action	• FSANZ convenes teleconferences to consider level of action required • Action phase process followed
Stand down	• Nationally coordinated action no longer required – return to business as usual • Debrief and review of Protocol

**


Australian
Food Regulatory Framework
Food Regulation Ministerial Council
Food Regulation Standing Committee (FRSC)
National and State Health & Agriculture agencies
Food Standards Australia New Zealand (FSANZ)
Implementation Sub-Committee (ISC)
Local overnment


Australian Foodborne Illness Regulatory Framework
Australian Health Ministers' Conference (AHMC)
National and State Health agencies
Australian Health Ministers' Advisory Council (AHMAC)
Australian Health Protection Committee
Communica ble Diseases Network
OzFoodNet

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Introduction of the FAO/WHO Guide on National Food Recall Systems

By Ms Caroline Merten,
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FAO/WHO guide for developing and improving national food recall systems

Dr. Caroline Merten Food Safety Officer, FAO HQ
Bangkok, 26-27 June 2012

Food and Agriculture Organization of the United Nations

World Health Organization

Background

- Food recall is a fundamental tool to respond to food safety incidents and emergencies
- Some countries still lack effective recall systems
- Globalization of food safety emergencies pose new challenges to conduct recalls, trace- back and trace-forward activities

Purpose and target audience

- To support countries in establishing and implementing an effective **national food recall system** to respond to food safety emergencies and events.
- The document draws on demonstrated **best practices** and outlines the elements for an effective national food recall system
- **National food safety authorities** with responsibility for food recall

Content

- Introduction
- Terminology and typology relevant to food recall and traceability
- Preliminary steps for developing and/or improving national food recall systems
- Elements and tools of national food recall systems
- Operating a national food recall system
- Elements of food recall management
- Conclusions

Terminology

- **Food recall:** The action to remove food from the market at any stage of the food chain
- **Food recall plan**: The procedures that a food business operator may have in place to retrieve food from the food chain if a problem arises
- **National food recall system:** The system/framework that national governments put in place for effective food recalls

Preliminary steps for developing national food recall systems

- Step 1: Understanding the importance of shared responsibilities
- Step 2: Review of the current national food recall system
- Step 3: Consideration of general issues
- Step 4: Consideration of country-specific issues

Elements of national food recall systems (1)

1. The legal framework
2. The powers of the competent authority
3. Clearly defined roles and responsibilities
   - Competent authority
   - Food business operators
   - INFOSAN
4. Effective communication and notification

Elements of national food recall systems (2)

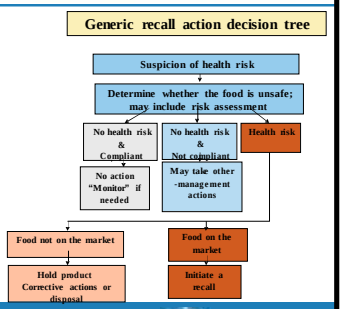
5. Accurate record-keeping
6. Guidance materials and training
7. Review:
   - National food recall system
   - Recall plan

Tools for effective food recall

- Traceability
- Data collection/ exchange system

Operating a national food recall system

- Initiation of recall:
  - Food business operator
  - Competent authority



Elements of food recall management

1. Competent authority and multi-agency approach
2. Interaction between the competent authority and the recalling food business operator
3. International dimension
4. Communication to the public
5. Documentation of recall events and related activities

Example of a food recall workflow

- Initial communication with relevant partners (government and industry)
- Initiation and implementation of food recall across the food chain
- Monitoring and documentation of the recall
- Verification of retrieval, correction or disposal of affected food items
- Providing consumer advice (industry and government actions)
- Monitoring actions to prevent product failure and recall
- General evaluation of the recall

Examples

- Example scenarios:
  - a contaminated food
  - a pathogen in one ingredient
  - an international source
  - an outbreak of food-borne illness

- Useful tools:
  - recall activity flows
  - Checklists, questions and forms
    - ✓ trade notification form
    - ✓ newspaper advertisement
    - ✓ recall report
    - ✓ Phone call/personal visit template/worksheet
    - ✓ Public warning template

Questions?

ขอขอบคุณค่ะ

About BFSES

The Bureau of Food Safety Extension and Support under Permanent Secretary, Ministry of Public Health, Thailand (the former namely Food Safety Operation Center) has been established for management of food safety and consumer health on March 24, 2012.

The objectives of BFSES are for:

- Strengthen food safety surveillance and investigation,
- Providing a systematic flow of command in food safety from national level forward to local level.
- Collecting information from involving agencies.
- Coordinating the obtained information from any food safety situations.
- Be the National INFOSAN emergency contact point in food safety co-operation system at both national and international levels
- Responding in food safety affecting in the global according to International Health Regulation (IHR), 2005

Currently more than 600 agencies and 20 Food Laws and Legislations in Thailand, BFSES has main strategies on food safety area and work as the intermediate agencies in collaboration with involving agencies at both national and local levels in order to prevent the distribution of food safety risks and outbreaks into the supply chain and consumers. BFSES, therefore, aims to reduce a confusing from communication by standardized both existing and additional experiences and knowledge from international organization to be able to react and respond to emergency events effectively.

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website: www.foodsafetythailand.net

About FAO

The Food and Agriculture Organization of the United Nations (FAO) strives for a world free of hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner. The global goals of FAO are:

- reduction of the absolute number of people suffering from hunger, progressively ensuring a world in which all people at all times have sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life;
- elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods; and
- sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources, for the benefit of present and future generations.

The FAO Asia-Pacific regional office (RAP) located in Bangkok covers 44 member countries in the region. RAP is responsible for the identification of regional priorities in the region in support of food security, agriculture and rural development and the planning, implementation, monitoring and reporting of FAO's response to the regional priorities of member countries in the context FAO's strategic objectives.

In the area of food safety, FAO's main strategic objective is to improve quality and safety at all stages of the food chain by providing support at the country and regional levels for:

- the facilitation of regional activities on food standardization, including strengthening country capacities to understand the importance and use of Codex standards and texts;
- strengthening institutional, policy and legal frameworks of countries in the food chain approach to food safety and quality management, with strengthened regional coordination and networking;
- the effective design and implementation of programmes for food safety and quality management and control with emphasis on risk management as per international norms; and
- establishment of effective programmes to raise awareness of food producers and processors about food safety and quality issues and build capacities to implement good practices in the producer to consumer chain in order to meet the requirements of local, national, regional and international markets.

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