VIRTUAL ROUNDTABLES: ADVANCING IMPLEMENTATION OF THE REGIONAL FRAMEWORK FOR ACTION ON FOOD SAFETY IN THE WESTERN PACIFIC

16, 18, 22, 26 and 29 March 2021
Virtual meeting
MEETING REPORT

VIRTUAL ROUNDTABLES: ADVANCING THE IMPLEMENTATION OF THE REGIONAL FRAMEWORK FOR ACTION ON FOOD SAFETY IN THE WESTERN PACIFIC

Convened by:

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

Virtual meeting
16, 18, 22, 26 and 29 March 2021

Not for sale

Printed and distributed by:

World Health Organization
Regional Office for the Western Pacific
Manila, Philippines

June 2021
NOTE

The views expressed in this report are those of the participants of the Virtual Roundtables: Advancing the Implementation of the Regional Framework for Action on Food Safety in the Western Pacific and do not necessarily reflect the policies of the conveners.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for Member States in the Region and for those who participated in the Virtual Roundtables: Advancing the Implementation of the Regional Framework for Action on Food Safety in the Western Pacific on 16, 18, 22, 26 and 29 March 2021.
CONTENTS

SUMMARY ............................................................................................................................... 1

1. INTRODUCTION .................................................................................................................. 2
   1.1 Workshop organization .................................................................................................... 2
   1.2 Objectives ....................................................................................................................... 2

2. PROCEEDINGS ................................................................................................................... 2
   2.1 Opening session .............................................................................................................. 2
   2.2 Session 1. Food safety policy and legal frameworks ....................................................... 3
      2.2.1 Specialist lecture ...................................................................................................... 3
      2.2.2 Country presentation .............................................................................................. 4
      2.2.3 Attendees’ statements ............................................................................................ 5
   2.3 Session 2. Risk-based food inspection and enforcement ............................................... 6
      2.3.1 Specialist lecture .................................................................................................... 6
      2.3.2 Country presentation ............................................................................................. 6
      2.3.3 Attendees’ statements .......................................................................................... 7
   2.4 Session 3. Food safety information underpinning evidence ........................................... 8
      2.4.1 Specialist lecture .................................................................................................... 8
      2.4.2 Country experience ............................................................................................... 9
      2.4.3 Attendees’ statements .......................................................................................... 9
   2.5 Session 4. Food safety incident and emergency response ............................................. 9
      2.5.1 Country experience .............................................................................................. 10
      2.5.2 Attendees’ statements .......................................................................................... 11
   2.6 Session 5. Food safety communications and education .............................................. 11
      2.6.1 Specialist lecture .................................................................................................... 11
      2.6.2 Country presentation ............................................................................................. 12
      2.6.3 Attendees’ statements .......................................................................................... 12
   2.7 Closing remarks ............................................................................................................ 13
   2.8 Survey results .............................................................................................................. 13
      2.8.1 Status of implementation by action area ............................................................... 14
      2.8.2 Level of compliance by Member States ............................................................... 15
      2.8.3 Identification of evaluation criteria with a lower level of compliance ................. 16

3. CONCLUSIONS AND RECOMMENDATIONS .................................................................. 17
   3.1 Conclusions ................................................................................................................... 17
   3.2 Recommendations ....................................................................................................... 17
      3.2.1 Recommendations for Member States .................................................................... 17
      3.2.2 Recommendations for WHO ................................................................................. 18

ANNEXES .............................................................................................................................. 19
   Annex 1. Programme of activities
   Annex 2. List of participants
   Annex 3. General results of the event survey: implementation status of the Regional
   Framework’s action areas

Keywords: Food safety / Regional health planning
Every year, unsafe food sickens hundreds of millions and kills hundreds of thousands of people, especially in low- and middle-income countries in Asia and Africa. Unsafe food also costs the world an estimated US$ 110 billion in lost productivity and medical expenses each year, according to the World Bank. Recognizing the challenges for food safety systems across the Western Pacific Region, the World Health Organization (WHO) Regional Committee in 2017 endorsed the Regional Framework for Action on Food Safety in the Western Pacific to be implemented from 2018 to 2025. This Regional Framework provides strategic guidance and a stepwise approach for Member States to strengthen their food safety systems.

Over the past three years, Member States have made progress in strengthening food safety systems with the Framework, which has also been used as a reference in other WHO regions and globally. The harmonization of food safety systems globally aims to protect human health and facilitate fair food trade – an important consideration given the fractured approaches of many countries where food safety is managed by many ministries.

The Virtual Roundtables: Advancing the Implementation of the Regional Framework for Action on Food Safety in the Western Pacific was held on 16, 18, 19, 22, 26 and 29 March 2021. The meeting was organized in five sessions, one for each action area of the Regional Framework, and consisted of presentations and experience sharing by international and national experts. The topics for the five sessions were: (1) Food safety policy and legal frameworks; (2) Risk-based food inspection and enforcement; (3) Food safety information underpinning evidence; (4) Food safety incident and emergency response; and (5) Food safety communications and education. The event provided an opportunity for WHO Member States in the Western Pacific Region to update each other and exchange experiences on progress made in the implementation of the Regional Framework.

During the meeting, diverse approaches and strategies were recognized, and different levels of implementation of the Regional Framework were observed. This diversity represents a challenge for the development of regional actions by the WHO Regional Office and requires a specific approach for the Pacific island countries and areas. Likewise, it was possible to recognize the need to strengthen the assessment mechanisms to evaluate the progress in the implementation of the Regional Framework.

WHO in the Western Pacific Region continues to support Member States to strengthen their national food safety systems through the implementation of the Regional Framework for Action on Food Safety in the Western Pacific.
1. INTRODUCTION

1.1 Workshop organization

Virtual Roundtables: Advancing the Implementation of the Regional Framework for Action on Food Safety in the Western Pacific was held on 16, 18, 22, 26 and 29 March 2021. The Regional Framework for Action on Food Safety in the Western Pacific, which was endorsed by the WHO Regional Committee in 2017, acknowledges the changing context of food safety and provides strategic guidance and a stepwise approach for Member States to strengthen their food safety systems. The event featured a series of presentations and plenaries distributed in five thematic daily sessions. It provided an opportunity for Member States in the Western Pacific Region to update each other on progress made in the implementation of the Regional Framework for Action on Food Safety and to learn from experts from around the world.

1.2 Objectives

The objectives of the virtual roundtables were:

1) to identify common priorities and innovative approaches to strengthen the implementation of the Regional Framework;
2) to discuss the strategic actions of each area of the Regional Framework in order to achieve a higher level of food safety, considering countries’ needs and resources; and
3) to share experiences, success factors and challenges for strengthening national food safety systems.

2. PROCEEDINGS

During the five sessions, a total of 106 participants attended the meetings, including representatives from the governments of 19 Member States in the Western Pacific Region, namely Australia, Brunei Darussalam, Cambodia, China, Cook Islands, Fiji, Japan, the Lao People’s Democratic Republic, Malaysia, Mongolia, New Zealand, Niue, the Philippines, Papua New Guinea, Samoa, Singapore, Solomon Islands, Vanuatu and Viet Nam. The WHO Secretariat included staff from WHO headquarters, WHO Regional Office for the Western Pacific, WHO Regional Office for South-East Asia and country offices. Observers who attended the meeting were from the Asia-Pacific Economic Cooperation (APEC), Fiji National University, Food and Agriculture Organization of the United Nations (FAO), National Health Commission of the People’s Republic of China and World Organisation for Animal Health (OIE). A list of participants is in Annex 2.

2.1 Opening session

Dr Simone Moraes Raszl, Technical Officer, Food Safety, WHO Regional Office for the Western Pacific, welcomed participants to the meeting. She highlighted that the general purpose of the event was to generate a space for sharing experiences, success factors and challenges for strengthening the national food safety systems of Member States in the Western Pacific Region.
Dr Takeshi Kasai, WHO Regional Director for the Western Pacific, welcomed the participants and acknowledged the representation of all the Member States of the Region. Dr Kasai highlighted the impact of foodborne diseases on public health and socioeconomic issues in the Western Pacific Region. He outlined that the implementation of the Regional Framework is crucial to reduce the occurrence of foodborne outbreaks that stress our health systems. Dr Kasai mentioned that countries may use this approach to identify priority strategic action to strengthen the uniformity of food safety systems at their respective stages of development. Dr Kasai congratulated and acknowledged the efforts made by the Western Pacific Member States for advancing implementation of the Regional Framework, especially over the last year when the coronavirus disease 2019 (COVID-19) pandemic repurposed personnel and resources to the response.

Dr Babatunde Olowokure, Director, Division of Health Security and Emergencies, WHO Regional Office for the Western Pacific, also welcomed the participants. Dr Olowokure emphasized that foodborne diseases and food contamination events highlight the need to secure public access to safe and healthy food. He mentioned that food safety is an important component of health security and emergencies in the Region and outlined that the COVID-19 pandemic has impacted many areas, including food control programmes. Unsafe food affects food security and hampers the development of nations through high costs of lost productivity and medical expenses. Given this, as he said, it is necessary to advocate for high-level authorities to understand that food safety is complex in nature and needs to be recognized as a priority for health, nutrition, food security and development.

Dr Francesco Branca, Director, Department of Nutrition and Food Safety, WHO headquarters, sent a video message. Dr Branca outlined that the Regional Framework allows for the building of trust and confidence in food safety systems, based on the key concept that food safety is everyone’s business. With the adoption of a resolution on food safety at the seventy-third session of the World Health Assembly, Member States have recognized the urgent need to improve the world’s food safety systems so that they can proactively face new challenges. The pressure of current global conditions and the complexity of food safety problems call for the holistic perspective of the One Health approach.

Dr Guilherme Antonio da Costa Junior, Chairperson of the Codex Alimentarius Commission, highlighted the role of the Commission as a multilateral organization that helps developing countries to apply its standards, strengthen their national food control systems and take advantage of international food trade opportunities.

2.2 Session 1. Food safety policy and legal frameworks

Dr Simone Moraes Raszl moderated the session on food safety policy and legal frameworks. One specialist lecture and two country presentations were conducted on this topic.

2.2.1 Specialist lecture

Dr Annamaria Bruno, Former Senior Food Standards Officer, Codex Alimentarius Secretariat, FAO, explained that foodborne diseases have a major impact on health and the global economy, including a negative impact on international food trade.
Common food safety issues in the Western Pacific, such as aflatoxins, have a great impact on people’s health. The Pacific islands present special food safety risk factors associated with high vulnerability and dependence on food imports, limited institutional frameworks, gaps in laboratory analysis capacity and other factors.

The complexity of global factors affecting food safety was noted, including technological factors, trade processes, organization of food chains (including consumer awareness, globalization, speed of communication, country reputation, interrelationship with tourism and gastronomy and others), factors related to sociodemographic changes, media and others. In the Western Pacific, some additional factors that represent specific challenges are malnutrition and a high concentration of people.

To face the complex nature of food safety problems, it is necessary to apply approaches that include interdisciplinary measures and interventions for food safety, in particular the One Health approach, with multistakeholder participation, collaboration and communication. The significant role that food legislation plays in overcoming these challenges was emphasized.

The keys to developing an adequate food law framework include the application of principles of harmonization, coordination and recognition of multiple responsibilities. Harmonization is a fundamental element for strengthening food safety systems, reducing barriers to international trade, and facilitating compliance with World Trade Organization (WTO) measures and agreements.

The Codex Alimentarius Commission plays an important role in the development of food standards that contribute to the harmonization of food legislation at the international level. The active participation of members from various countries is fundamental and allows the strengthening of the different Codex Alimentarius committees.

2.2.2 Country presentation

The first presentation was performed by Dr Joanne Chan Sheot Harn, Director of the National Centre for Food Science, Singapore Food Agency and WHO Collaborating Centre on Food Contamination Monitoring. During the last years, the work of the Singapore Food Agency has been important to achieve food safety control. However, the shared responsibility and participation of other stakeholders, such as consumers and the private sector, was essential to achieve comprehensive food safety control. Singapore is characterized by low domestic production capacity and high dependence on food imports. This condition has closely influenced the development of the National Food Safety System, orienting many of the food control strategies to imported foods and international trade.

During the past years, a functional framework has been implemented to organize the structure and mission of the competent authorities. This structure is supported by a set of normative instruments that work together to provide a comprehensive legislative framework. To ensure the adequacy of food laws to achieve their purposes, participatory and transparent decision spaces were implemented, with the presence of industry, academia and other countries. This strategy allowed the inclusion of novel foods such as cultivated meat within the national regulatory framework.

The legislative framework implemented in Singapore supports the application of various food control strategies throughout the stages of the food chain. It has been sought to improve the control of imported foods through the application of risk-based controls, preventive measures in the country
of origin, border controls, post-entry controls and strengthening of recall mechanisms and food traceability. Likewise, routine monitoring programmes and other controls applied to domestically produced foods have been adapted to strengthen the application of risk-based control approaches. These programmes maintain a comprehensive perspective based on the stages of the food chain, considering the control of establishments, processes, people and products. The entire food safety control framework is supported by a comprehensive information system that allows for decision-making based on evidence.

Mr Mohd Salim Dulatti, Senior Director of the Food Safety and Quality Division of the Ministry of Health Malaysia, described the application of different types of approaches and strategies for strengthening the national framework of Malaysian food safety legislation. He delved into the application of organization and cooperation strategies, integration of levels of government, food chain approach and normative/strategic harmonization.

The Malaysian public sector has carried out a series of measures to improve the organization and structure of competencies for food safety control. The organization of competent agencies follows a distribution approach based on the stages of the food chain and economic sectors. However, there is a central competent authority, the Food Safety and Quality Program under the Ministry of Health Malaysia, which was established to strengthen the activities of planning, implementing, monitoring and evaluating the activities of food safety and quality to protect the public against health hazards and fraud.

The Malaysian Government has made efforts to improve integration and interoperability between agencies with responsibilities for food safety. These efforts have sought to achieve vertical integration of local and regional government actions with national government strategies. Similarly, at the national level, the Government has made efforts to improve the level of collaboration between agencies (horizontal integration). This includes the creation of a high-level body, the National Food Safety and Nutrition Council, which establishes and enhances cooperation and coordination in facing new challenges in food safety and nutrition at local, regional and international levels.

During the last years, the Government has made improvements in the development of food safety legislative instruments. These improvements were made to strengthen the national capacity to face the main food safety issues of the country, which include the complexity of food chains, scientific development, compliance with international agreements, and commitment of stakeholders. The Government adopted a cyclical model, which includes design, review, implementation and evaluation activities, to develop the legal framework. It also strengthened the link between the main food safety legislative instruments and the Codex Alimentarius standards.

Finally, Mr Mohd highlighted that Malaysian authorities recognize the applicability and benefits of the WHO Regional Framework for Food Safety and acknowledge its contribution to the development of a comprehensive legislative framework.

2.2.3 Attendees’ statements

As evident from the questions posed and survey responses, participants highlighted the need for support to strengthen the application of the multisectoral approach in the development of institutional frameworks to address food safety issues. Likewise, participants indicated the need for assistance to implement adequate processes to design and implement food policies and legislation.
In addition, attendees outlined the need to strengthen the evaluation and improvement processes of the different components of the institutional framework. Finally, some of the representatives of the Member States of the Pacific Islands requested specific strategies and approaches to their food safety systems.

2.3 Session 2. Risk-based food inspection and enforcement

Dr Gyanendra Gongal, Regional Adviser on Food Safety, WHO South-East Asia Regional Office, moderated the session on risk-based food inspection and enforcement. One specialist lecture and two country presentations were conducted on this topic.

2.3.1 Specialist lecture

Dr Fernando Sampedro Parra, Professor of the Environmental Health Sciences, School of Public Health, University of Minnesota, United States of America, emphasized that the modernization of food safety systems relies on the transition from traditional food inspection systems to risk-based food inspection systems, allowing optimal use of resources to achieve effective food control.

The six-step cycle model for the implementation process of risk-based food inspection is described below:

- **Step 1: Establish the scope.** A progressive approach is recommended. Some strategies may include the application of implementation pilots in some food chains and subsequent escalation to other sectors.

- **Step 2: Collect information.** The availability of information on food establishments and on the food is the basis for a risk-based inspection. However, the absence of this information should not stop the implementation process. Some strategies can be adopted to optimize the use of information, such as the use of regional data, generally recommended models and food grouping.

- **Step 3: Categorize the risk.** Different tools can be used to categorize risks in food and food establishments, such as decision trees, matrices, multicriteria decision analysis and spreadsheets. The selection of the tool depends on the level of sophistication sought and the availability of data.

- **Step 4: Determine the inspection frequency:** A suitable method must be applied to integrate the results of the risk characterization of the food and the risk characterization of the establishment. This should facilitate the determination of the category of each case and the corresponding inspection frequency.

- **Step 5: Implement and communicate.** The application and results of the risk-based inspection allow the establishment of goals for food safety assurance and resources optimization.

- **Step 6: Revise and adjust.** It is important to recognize that risk-based inspection is a dynamic process that can be affected by the evolution of scientific knowledge and by the context of food production and consumption. In this sense, a periodic review and adjustments of the risk-based inspection must be carried out.

2.3.2 Country presentation

Dr Rin Ogiya, Director of the Office of International Food Safety, Pharmaceutical Safety and Environmental Health Bureau, Ministry of Health Labour and Welfare, Japan, described the
development of food safety control strategies carried out in Japan, including the implementation of the risk-based approach. The application of the risk-based approach in Japan was mainly developed in three components of the food safety system. These are:

- **Organization structure.** During the past 20 years, national food safety legislation has been strengthened and modified to achieve an institutional framework that allows the application of the risk-based approach. Based on this, the Japanese Government was able to organize the structure of a set of competent food safety agencies to cover all components of the food risk analysis.

- **Collaboration of central and local governments.** Coordinated work at the central and local levels is essential in the Japanese food safety system. Responsibilities have been distributed between central government agencies and local agencies in such a way that they complement and articulate each other. In addition, it has been important to recognize and work on the responsibilities of food business operators and consumers to guarantee food safety.

- **Ensuring the safety of imported food.** The risk-based approach has been implemented in the inspection and control activities of the imported food inspection system. The application of this approach allows better precision in the application of controls to imported food and guarantees compliance with the principles of transparency and fair trade established in international trade regulations.

Dr Enkhtuya Batsukh, an expert of the Mongolian National Security Council, Mongolia University of Science and Technology, described the main improvement processes carried out on the components of the Mongolian food safety system for the implementation of the risk-based approach. The primary step was the strengthening of the existing legislative framework, including risk-based approaches. This has been the basis for the design and application of control programmes based on risks. Domestic production inspection systems have been improved following a food chain and risk approach. The central Government has applied a criterion for categorizing food risk and food establishment risks, improving the effectiveness of the health authorities and optimizing the control applied to the industry.

The application of risk-based inspection activities in recent years has been a learning process for the competent authorities. They recognized the need to implement an information management system to support risk-based inspection activities. In addition, they noted the important role of food analysis laboratories in the new approach. Further improvements are being applied to these activities, and risk-based inspection is being applied to other components of the food safety system, such as imported food.

### 2.3.3 Attendees’ statements

As a result of the discussions and the survey applied, participants recognized the importance and benefits of adopting a risk-based approach in the inspection of locally produced and imported foods. The need to apply general guidelines to the characteristics of the Western Pacific Member States was highlighted. Likewise, participants recognized that the lack of data to estimate the risk levels limits the application of risk-based inspection in the Region. The attendees emphasized the need to facilitate the regional exchange of data to overcome national limitations.
2.4 Session 3. Food safety information underpinning evidence

Dr Yongning Wu, Director/Head, WHO Collaborating Centre for Food Contamination Monitoring, China National Center for Food Safety Risk Assessment, moderated the session on food safety information underpinning evidence. One specialist lecture and two country presentations were conducted on this topic.

2.4.1 Specialist lecture

Dr Britt Maestroni, Food Scientist Officer, Joint FAO/Food Safety International Atomic Energy Agency Division of Nuclear Techniques in Food and Agriculture, emphasized that food safety information for decision-making is critical to improve the quality of decisions. Furthermore, data and evidence provide the basis for risk management and decision-making. Therefore, the connection of data collected by food safety authorities and other programmes within the public health system and beyond is critical to inform appropriate risk management options.

Data systematization includes identifying available data sources; determining frequency and methods for data collection, for ensuring data quality and for data analysis; defining roles and responsibilities for data collection, for ensuring data quality and for data analysis; and establishing baseline data and specific objectives. After defining all these aspects and implementing a clear management process, the next step is the application of food safety evidence-based risk assessment. Total diet studies are essential to assess the population exposure to chemical substances present in food.

The information produced by laboratories provides an important basis to support policy- and decision-making processes. Official food laboratories are responsible for analysing food samples and detecting, characterizing and quantifying data related to food safety and health assurance programmes. They provide feedback to regulators on the effectiveness of good agricultural and production practices while they identify emergent problems and follow up the results of the application of corrective actions. In order to achieve these goals, effective and advanced analytical techniques must be in place.

Dr Maestroni explained that big data technologies can be successfully applied to food safety since they enable the connection of many sectors, including agriculture, environment, nutrition, health, society and economy, and improve decision-making on food safety. WHO embraced the big data approach through the global platform for food safety data and information, that is, the Food Safety Collaborative Platform.

The international food trade, the rapid flow of information across borders and the internationalization of the food chain require food safety authorities to work together to reduce food safety risks and to respond to food safety incidents and emergencies. The benefits of active participation in networks rely on data and information sharing, sharing of methodologies, interlaboratory studies, harmonized food controls, and coordinated response to food safety emergencies and incidents.

Regarding the specific context of Pacific island countries and areas, such as food import controls, food testing capacity, food-related noncommunicable disease risk factors and food safety issues associated with climate change, it was mentioned that regional cooperation would enable access to
food safety reference laboratories with the necessary capacity and would also share data with the Codex Alimentarius Commission and global databases related to food safety and nutrition.

2.4.2 Country experience

Dr Shuang Zhou, Professor, China National Center for Food Safety Risk Assessment, presented the country’s experience with data collection and how it contributed to decision-making. With the results from data collection, China collaborated with Codex to establish maximum levels for contaminants and to publish China’s total diet study, thereby contributing to better evidence-based regulation. As part of the process of generating and using evidence, China has carried out a risk assessment with the available data and has undertaken regulatory review processes, such as the revision of the standard that regulates the levels of mycotoxins and the implementation of surveillance programmes with a wide scope throughout the national territory.

Ms Patricia Soqoilo, Chief Health Inspector, Ministry of Health and Medical Services, Solomon Islands, presented the country’s experience with the challenges imposed by the geography of Pacific islands in the development of food control measures. A national laboratory is being prepared for accreditation, and there are agreements with universities to perform analysis of food contaminants. However, operational and logistical difficulties in carrying out monitoring activities were mentioned. She suggested developing technical documents for information underpinning evidence, more detailed guidelines for the implementation of the Regional Framework, and support to strengthen a network of food safety authorities from the Pacific island countries and areas.

2.4.3 Attendees’ statements

As a result of the questions addressed and the results of the survey applied, participants recognized that laboratory diagnostic capacities applied to food safety are fundamental for data generation. In this sense, Member States emphasized the need for technical assistance to evaluate, strengthen and accredit laboratory capacities. Participants also recognized the need to strengthen data collection for the generation of evidence and to adopt strategies to use it for decision-making.

2.5 Session 4. Food safety incident and emergency response

Dr Edwin Lok-Kin Tsui, Director/Head, Centre for Food Safety, Food and Environmental Hygiene Department, WHO Collaborating Centre for Risk Analysis of Chemicals in Food, Hong Kong SAR (China), moderated the session on food safety incident and emergency response. One specialist lecture and one country presentation were conducted on this topic.

Dr Samuel Godefroy, Full Professor of Food Risk Analysis and Regulatory Policies at the Department of Food Science, Faculty of Agriculture and Food Sciences, University Laval, Québec, Canada, mentioned that competent authorities need to be prepared to address food safety incidents and emergencies in a systematic and consistent manner. The Codex Alimentarius Commission defined food safety emergency as a situation, whether accidental or intentional, identified by a competent authority as constituting a serious yet uncontrolled foodborne risk to public health that requires urgent attention. Food incidents can evolve into emergencies depending on the level of control of the situation, the degree of distribution of the food, the type of population exposed and the dimensions of the responses required for their control.
One of the most important capacities for governments is the timely ability to identify situations, apply rapid measures and determine the escalation of the situation to an emergency. There are general operational structures that describe the key phases of a process when responding to a food incident: identification, investigation and response. The identification capacity includes the ability to collect and analyse information, detect signals within collective strategies and construction of international collaboration networks for data exchange, such as the International Food Safety Authorities Network (INFOSAN), the Rapid Alert System for Food and Feed and the ASEAN Rapid Alert System for Food and Feed.

It is essential for countries to have a framework to face food safety emergencies and incidents. It allows countries to respond more effectively to all types of incidents by providing support using a coordinated structure. The framework should be based on several key elements, including a single point of coordination, a clear definition of roles and responsibilities, actions, a strong and organized communication framework, and built on the protocols of each agency and organization.

The ability to mobilize resources, including financial resources, operational capacities and scientific capacities, is crucial when facing a food safety emergency. The development of a framework for emergency response is not static; it is a cyclical process of continuous improvement and learning. The evaluation of the response to an emergency should be a participative process in which government agencies and the industry analyse the response and the opportunities for improvement. This process and its results must be documented. The emergency response framework requires support from the control systems for proper operation. Due to that, it is necessary to strengthen incident management, surveillance and research capacities.

2.5.1 Country experience

Ms Jenny Bishop, Team Manager, Food Compliance Service Group, Ministry for Primary Industries, New Zealand, commented on the six strategic actions that are being undertaken to strengthen emergency response systems in accordance with the Regional Framework. These actions improve coordination between ministries and agencies responsible for food safety response and allow for an integrated response that broadens the range of response to different emergency scenarios.

- **Strategic action 1**: In partnership with departments responsible for the management of emerging diseases and public health emergency preparedness and response, develop procedures for investigation and response to food safety incidents and emergencies with clearly defined roles and responsibilities.

- **Strategic action 2**: Enhance participation in INFOSAN and coordination between the designated INFOSAN Emergency Contact Point and the National IHR Focal Point during public health events of international concern.

- **Strategic action 3**: Ensure food safety authorities have the necessary legal power to enforce and conduct food recalls and other emergency-related risk management measures.

- **Strategic action 4**: Establish or strengthen documented national food recall and traceability systems and work with food businesses to develop their food recall and traceability plans.
- **Strategic action 5**: Support INFOSAN initiatives such as regional training, one-on-one training and the buddy system under development.

- **Strategic action 6**: In partnership with departments responsible for the management of emerging diseases and public health emergency preparedness and response, review, test and monitor the system for food safety incident and emergency investigation and response.

### 2.5.2 Attendees’ statements

As evident from the questions posed and survey responses, participants recognized the need for technical assistance to implement or strengthen the Food Safety Emergency Response Plan and to establish an efficient recall system, including support for the application of regular simulation exercises to review the performance of these systems. Likewise, the attendees indicated that it is necessary to receive training in the use of INFOSAN services to better face food incidents and emergencies. Progress made by countries such as New Zealand and Australia in incident and emergency response systems was recognized.

### 2.6 Session 5. Food safety communications and education

Dr Juliawati Untoro, Technical Lead, Nutrition, Division of Healthy Environments and Populations, WHO Health Emergencies Programme, WHO Regional Office for the Western Pacific, moderated the session on food safety communications and education. Two specialist lectures and one country presentation were conducted on this topic.

### 2.6.1 Specialist lecture

The first lecture was presented by Dr David Massey, Special Adviser, Codex Alimentarius Secretariat, FAO. Even though communications is usually undervalued, it is one of the most important elements of an organization. Through communications, it is possible to create a connection between organizations and individuals in their environment.

Communications strategies can be based on education, entertainment, inspiration, promotion, awareness, among others. There are many ways to communicate a message that connects people. Understanding and valuing the social and cultural aspects of the target audience is essential.

Important communication features are critical in developing integrated strategies to ensure food safety. Dr Massey congratulated the WHO Regional Office for the Western Pacific for including communications as one of the five action areas in the Regional Framework. He recommended that all countries in the Region take seriously the approach of this action area to strengthen their food safety systems.

The second lecture was delivered by Dr Armando Hoet, Director of the Veterinary Public Health Program, The Ohio State University, United States of America. He delved into education strategies applied to food safety and health issues.

Various communications and education strategies can be applied to food safety, but the conditions of the context and the audience will determine the correct one. It is necessary to make a specific diagnosis based on the characteristics of the target public and in which part of the food chain these people are located.
The most important considerations for the designing of educational strategies for food safety officers were presented. The first consideration is the ratio between theory-based and practice-based educational activities. The educational strategy model considers different proportions of practice-based and theory-based activities to design specific education strategies for each type of professional level of food safety officers. It is important to consider the professional level of food safety officers (for example, student, early career, mid-career, senior, decision-maker), recognizing their different learning characteristics. The second consideration is the specific application of pedagogic or andragogic educational techniques. Andragogic educational techniques seek to teach theoretical and practical content to adult learners, while pedagogical techniques aim to teach children. Early professional stages of food safety officers require the application of pedagogical techniques; senior or mid-career food safety officers require the application of andragogical techniques and behavioural training.

2.6.2 Country presentation

Mr Timothy Moises C Mendoza, Food Drug Regulations Officer III of the Food and Drug Administration of Philippines, described the main strategies applied to build capacities on food safety in the Philippines. He based his descriptions on the different types of audiences within the food safety system.

The competent authority of the Philippines has implemented various educational strategies for capacity-building among food safety officers. These strategies have been adapted to the new conditions imposed by the COVID-19 pandemic, including more intensified use of information technologies for the execution of training.

Regarding food business operators, the national legislation applied to food safety sets requirements for adequate levels of knowledge about food safety and training for food handlers. The competent authority of the Philippines deploys different communications strategies aimed at consumers to generate awareness in the population about food safety issues and basic hygiene practices. Strategies include posting messages on social media, improving the official website focused on consumers and executing communications campaigns on specific topics.

Finally, Mr Mendoza noted that the Philippine health authority has faced certain challenges while developing communications and education strategies, including: gaps in the institutional framework that supports communications and education activities; limitations in the coordination capacities among agencies; lack of standardized procedures and guidelines for execution; greater use of digital information; and attending to the great cultural diversity for the design of communication messages.

2.6.3 Attendees’ statements

Based on the questions posed and information collected through the survey, participants recognized the need for technical support on the development of legislative and operational instruments such as policies, plans and guidelines for the development of food safety communications strategies. Likewise, participants indicated that it is necessary to implement adequate food safety education strategies that address the new challenges in the food sector and provide a sufficient number of food safety professionals to maintain the functioning of food safety systems.
2.7 Closing remarks

Dr Simone Raszl described the workshop as a great learning experience and a good opportunity to exchange knowledge among the representatives of the Member States of the WHO Western Pacific Region. She referred to the opening remarks of Dr Takeshi Kasai, who highlighted that these roundtables would allow participants to understand where they are now on the implementation of the *Regional Framework for Action on Food Safety in the Western Pacific Region* and where we should be in the next few years.

Dr Raszl reflected on the key messages and lessons shared during the five days of the event. From days 1 and 2, lectures and presentations highlighted the need for Member States to adopt a multisectoral approach for legal frameworks in response to the complexity of food safety aspects, to transition from traditional food inspection systems to risk-based systems and to optimize the use of resources. In addition, Dr Raszl emphasized the importance of having access to a sufficient quantity of high-quality data to make precise decisions. She highlighted that the COVID-19 pandemic had promoted the strengthening of diagnostic laboratory services in the Member States, which could be used to further food safety control. On day 4, the importance of applying simulation exercises to evaluate national programmes on food safety incidents and emergency response and the need for having common protocols and good coordination among different authorities were mentioned. And finally, the crucial role of communications and education in food safety systems was emphasized, recognizing the transversal nature of communications and education throughout all elements of the system.

The five areas of action of the Regional Framework should not be regarded as isolated elements. On the contrary, they are all connected, and they all support each other, forming the foundations of the food safety systems of our Region.

2.8 Survey results

During the event, a short survey was carried out to estimate the state of implementation of the different areas of action of the Regional Framework by Member States. The questions were designed according to specific elements of each action area.

Table 1 shows an overview of the main descriptive information of the scope of the survey applied at the event.

Each action area had a different number of Member States responding to the survey. Not all Member States responded to the survey on each day. And each action area had a different number of evaluation criteria. Both the differences in the number of Member States evaluated and the number of evaluation criteria generated a variation in the total number of responses. It is necessary to mention that 10 Member States completed all five surveys, so it was possible to make a comprehensive analysis in these cases. A more detailed description of this information is shown in Annex 3.
Table 1. Overview of the main descriptive information of the scope of the survey applied at the event

<table>
<thead>
<tr>
<th>Action area</th>
<th># Responses</th>
<th># Evaluation criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Food safety policy and legal frameworks</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>2. Risk-based food inspection and enforcement</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>3. Food safety information underpinning evidence</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>4. Food safety incident and emergency response</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>5. Food safety communications and education</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

Based on this information, a basic qualitative analysis has been carried out. This document presents three results of analysis focused on understanding the status of implementation by action area; the level of compliance by Member States; and the identification of evaluation criteria with a lower level of compliance. In all cases, a general analysis approach has been maintained that does not identify individual results by Member State.

2.8.1 Status of implementation by action area

The total number of evaluations (all Member States) obtained by each action area was analysed based on the proportion of implementation status: Implemented, Implementing/Partially and Not implemented. Fig. 1 shows a graphic representation of the proportion of the implementation status of each action area, as well as the results reported for the 10 Member States that completed the five questionnaires.

Fig. 1. General results of the event survey: implementation status of the Regional Framework’s action areas for all Member States evaluated

In general terms, these results show that Member States in the Western Pacific Region are at different stages of implementation of the five action areas. In all cases, no action area shows an implementation value close to 100%. Action areas 2 and 1 present the highest proportions of implementations, with 45% and 40%, respectively. On the other hand, action areas 3 and 4 show the lowest implementation values in the Region, with 23% and 25%, respectively. These last two
action areas are related to the use of information and evidence to make decisions on food safety issues and to build the capacity of the Member States to deal with food incidents and emergencies. These results will be considered to plan priority strategies to support Member States in implementing the Regional Framework.

2.8.2 Level of compliance by Member States

As a second objective of the analysis, it was sought to determine the level of implementation of the Regional Framework for each Member State surveyed. To achieve a more precise estimation, it was decided to perform a qualitative analysis based on numerical values. For this, a nominal scale of measurement was applied. This approach is based on assigning the same numerical value to each type or class in a dataset. In the case of the applied survey, numerical values were assigned to the three types of implementation status: 2 for Implemented, 1 for Implementing/Partially and 0 for Not implemented. Under this configuration, it was possible to have a differentiated weighting of values by type of implementation status.

Table 2 shows the level of implementation of each action area of the Regional Framework by Member State. The results are shown without specifying the name of the Member State. Likewise, in order to perform a categorization based on the level of implementation, three types of levels were established: (1) advanced level, with a total result greater than 70% implementation; (2) medium level, with a total result lower than 70% but higher than 40%; and (3) low level, with a result less than 40%.

Table 2. General results of the event survey: level of implementation of action areas of the Regional Framework for Action on Food Safety in the Western Pacific

<table>
<thead>
<tr>
<th>Action area</th>
<th># Member States</th>
<th># Evaluation criteria</th>
<th>Level of compliance</th>
<th># Member States by level of implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advanced (70–100%)</td>
</tr>
<tr>
<td>1. Food safety policy and legal frameworks</td>
<td>17</td>
<td>7</td>
<td>65%</td>
<td>7 (41%)</td>
</tr>
<tr>
<td>2. Risk-based food inspection and enforcement</td>
<td>15</td>
<td>8</td>
<td>69%</td>
<td>7 (47%)</td>
</tr>
<tr>
<td>3. Food safety information underpinning evidence</td>
<td>12</td>
<td>11</td>
<td>55%</td>
<td>2 (17%)</td>
</tr>
<tr>
<td>4. Food safety incident and emergency response</td>
<td>12</td>
<td>18</td>
<td>51%</td>
<td>3 (25%)</td>
</tr>
<tr>
<td>5. Food safety communications and education</td>
<td>11</td>
<td>8</td>
<td>49%</td>
<td>1 (9%)</td>
</tr>
<tr>
<td>TOTAL*</td>
<td>10</td>
<td>49</td>
<td>56%</td>
<td>2 (20%)</td>
</tr>
</tbody>
</table>

* Complete evaluation of five areas of action

These results show that of the 10 Member States that carried out all five surveys, only two (20%) of them showed an advanced level of implementation. Of the remaining eight Member States, 60% achieved a medium level of implementation, and 20% showed a low level.

On the other hand, from a specific perspective of each action area, the results showed high variability between the results of the implementation levels. It was observed that the Member States
that demonstrated a general advanced level of implementation maintained the same advanced-level results in each of the five action areas. However, for the rest of the Member States, it was observed that they could have a different level of implementation in each action area. These results will be considered for the design and application of regional food safety strategies, seeking to better correspond to this variability. More tailored strategies will be needed for each Member State.

2.8.3 Analysis of evaluation criteria with a lower level of compliance

In addition to the previous analyses, this section analyses the evaluation criteria that had lower levels of compliance. With this information, it will be possible to apply a more precise prioritization approach. Based on the information shown in Annex 3, evaluation criteria with an implementation level value below 50% have been selected.

Table 3 lists the evaluation criteria for each action area of the Regional Framework that showed a low level of compliance among Member States of the Western Pacific Region. These results indicate that the majority of evaluation criteria with low values are concentrated in action areas 4 and 5, with six and four criteria, respectively. In the case of action areas 1 and 2, no results were reported below 50% implementation. Knowing this information allows us to design actions to face specific problems of the food safety systems of the Region.

Table 3. General results of the event survey: Evaluation criteria with a low level of compliance by action area (compliance level >50%)

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Level of compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Food safety information underpinning evidence (n=11)</td>
<td></td>
</tr>
<tr>
<td>- Ad hoc studies supplementing surveillance and response data</td>
<td>46%</td>
</tr>
<tr>
<td>4. Food safety incident and emergency response (n=18)</td>
<td></td>
</tr>
<tr>
<td>- The planning process includes arrangements for the maintenance and periodic review of the plan and for ensuring that the information contained within it is up to date</td>
<td>38%</td>
</tr>
<tr>
<td>- There is a formally established multidisciplinary planning group with the participation of representatives from all key government agencies to determine the scope of the food safety emergency response plan, to oversee the preparation of the plan, to ensure appropriate review and consultation.</td>
<td>46%</td>
</tr>
<tr>
<td>- Once a plan has been written, exercises are performed to ensure that the persons involved are familiar with the plan and that it can be implemented rapidly and effectively.</td>
<td>33%</td>
</tr>
<tr>
<td>- Once the plan has been developed, it is adequately communicated to all relevant national agencies, and key stakeholders are informed.</td>
<td>46%</td>
</tr>
<tr>
<td>- There is sufficient laboratory capacity (public or private) to cope with the number and type of samples required to respond to food incidents and emergency situations.</td>
<td>38%</td>
</tr>
<tr>
<td>- The food safety emergency response plan has a documented strategy for communications and information exchange with partners; stakeholders, including health-care providers, media and the general public; and international organizations.</td>
<td>38%</td>
</tr>
<tr>
<td>5. Food safety communications and education (n=8)</td>
<td></td>
</tr>
<tr>
<td>- Food safety communications plan</td>
<td>36%</td>
</tr>
<tr>
<td>- National food safety education strategy</td>
<td>36%</td>
</tr>
<tr>
<td>- Spokesperson and guiding principles for coordination of food safety risk communications</td>
<td>45%</td>
</tr>
<tr>
<td>- System for monitoring media and other informal reports and public perceptions</td>
<td>41%</td>
</tr>
</tbody>
</table>
3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

The meeting facilitated the exchange of experiences on the implementation of the different components of each of the five action areas of the Regional Framework. Likewise, the participants were able to learn from experts on each action area. This exchange of information and knowledge will contribute to the strengthening of the implementation of Regional Framework.

Discussions on each action area of the Regional Framework revealed a great diversity of approaches and strategies applied by the Member States, as well as different levels of implementation of the Framework. This diversity represents a challenge for the development of regional actions by the WHO Regional Office for the Western Pacific. It requires a specific approach for the Pacific island countries and areas.

The survey results and the records of the discussion sessions revealed low levels of implementation of some action areas of the Regional Framework among Member States in the Western Pacific Region. In particular, the action areas related to food safety incident and emergency response and food safety communications and education showed the lowest levels of implementation. These results will be used to prioritize and tailor actions. However, the diversity of characteristics of each Member State must be considered in order to achieve adequate precision and greater impact.

Based on this first experience of conducting surveys during roundtables, it was noted that the implementation of the stages of the Framework does not depend on the achievement of all components from previous stages. Thus, the categorization of Member States according to the stage of implementation is a complex task. In relation to this, there is a need to strengthen the assessment mechanisms to evaluate the progress in the implementation of the Regional Framework.

3.2 Recommendations

3.2.1 Recommendations for Member States

In order to continue implementing the Regional Framework for Action on Food Safety in the Western Pacific, Member States are encouraged to consider the following:

1. Continue strengthening food safety legal and regulatory frameworks with formal national food safety policies and establishment of roles and responsibilities among national authorities related to food safety and aligned with the Codex Alimentarius and other international recommendations and requirements.

2. Modernize the food inspection system, implementing risk-based food safety inspection and enforcement with a risk-based inspection plan, registry system for food business and access to reference food analysis laboratories considering the priority food hazards.

3. Strengthen national capacity for food monitoring and foodborne surveillance by participating in networks and advancing the accreditation of official laboratories.
Implement procedures for investigation and response to food safety incidents and emergencies and establish a recall system. Continue to strengthen the food safety core capacities as defined under IHR (2005).

Establish a platform for food safety awareness programmes, a national food safety education strategy and a food safety communications plan.

Document, evaluate and share experiences in applying the Regional Framework as a strategy to strengthen their food safety systems.

Increase their participation in regional and subregional activities for coordination, cooperation and harmonization in food safety. Use INFOSAN, IHR (2005), the Codex Alimentarius Commission and other participation mechanisms to strengthen the linkages among food safety authorities in the Western Pacific Region.

3.2.2 Recommendations for WHO

WHO is requested to consider the following:

(1) Provide support to Member States to execute evaluation and improvement processes of the legislative framework and of the organization of involved government agencies, including a multisectoral approach in the development of legal frameworks.

(2) Develop and publish guidelines for the implementation of risk-based inspection activities applied to the context of Member States, and provide technical support for the transition from traditional food inspection to risk-based food safety inspection.

(3) Provide technical support for the evaluation and strengthening of laboratory capacity, for facilitating access to referral laboratories and for accreditation of national food analysis laboratories.

(4) Provide technical support for Member States to assess and improve national food safety incident and emergency response plans and strengthen their participation in INFOSAN.

(5) Provide support for Member States to develop, assess and improve national risk communication plans, including training for national leaders in food safety risk communication.

(6) Strengthen the assessment mechanisms to evaluate the progress in the implementation of the Regional Framework.
## Annex 1. Programme of activities

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
<th>Speaker (Moderator)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1: Tuesday, 16 March 2021</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>09:00 – 09:40</strong></td>
<td>Opening Session</td>
<td></td>
</tr>
<tr>
<td>1. Welcome and opening remarks</td>
<td>Dr Takeshi Kasai, Regional Director, WHO/WPRO (TBC)</td>
<td></td>
</tr>
<tr>
<td>2. Self-introductions</td>
<td>Dr Babatunde Olowokure, Regional Emergency Director and Health Security and Emergencies Director, WHO/WPRO</td>
<td></td>
</tr>
<tr>
<td>3. Overview of objectives and agenda</td>
<td>Dr Francesco Branca, Director, Department of Nutrition and Food Safety, WHO/HQ</td>
<td></td>
</tr>
<tr>
<td>4. Administrative announcements</td>
<td>Dr Guilherme Antonio da Costa Junior, Chairperson, CODEX Alimentarius Commission</td>
<td></td>
</tr>
<tr>
<td>5. Group photo (virtual)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>09:40 – 10:10</strong></td>
<td>Food safety policy and legal frameworks</td>
<td>Moderator: Dr Simone Moraes Raszl, Technical Officer, Food Safety, WHO/WPRO</td>
</tr>
<tr>
<td>10:10 – 10:20</td>
<td>Mobility break</td>
<td>Dr Annamaria Bruno, Independent Consultant, Former Senior Food Standards Officer, Codex Alimentarius Secretariat</td>
</tr>
<tr>
<td><strong>10:20 – 11:00</strong></td>
<td>Country presentations: Strengthening food safety policy and legal frameworks</td>
<td>Ms Joanne Chan Sheot Harn, Director, WHO Collaborating Centre, National Centre for Food Science, Singapore</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Question and answer</td>
<td>Mr Mohd Salim Dulatti, Ministry of Health, Malaysia</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Closing remarks</td>
<td></td>
</tr>
</tbody>
</table>
### Day 2: Thursday, 18 March 2021

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Moderators/Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30 – 09:40</td>
<td>Welcome and overview of day 1</td>
<td></td>
</tr>
<tr>
<td>09:40 – 10:10</td>
<td>Risk-based food inspection and enforcement</td>
<td>Moderator: Dr Gyanendra Gongal, Regional Adviser, Food Safety, WHO/SEARO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr Fernando Sampedro Parra, Environmental Health Sciences, School of Public Health, University of Minnesota</td>
</tr>
<tr>
<td>10:10 – 10:20</td>
<td>Mobility break</td>
<td></td>
</tr>
<tr>
<td>10:20 – 11:00</td>
<td>Country presentations:</td>
<td>Dr Rin Ogiya, Director, Office of International Food Safety Pharmaceutical Safety and Environmental Health Bureau, Ministry of Health Labour and Welfare, Japan</td>
</tr>
<tr>
<td></td>
<td>Keep food safer in Japan, risk-based food inspection and enforcement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changing the approach for food safety risk-based</td>
<td>Mrs Enkhtuya Batsukh, Mongolia University of Science and Technology</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Question and answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Closing remarks</td>
<td></td>
</tr>
</tbody>
</table>

### Day 3: Monday, 22 March 2021

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Moderators/Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30 – 09:40</td>
<td>Welcome and overview of day 2</td>
<td></td>
</tr>
<tr>
<td>09:40 – 10:30</td>
<td>Food safety information underpinning evidence</td>
<td>Moderator: Dr Yongning Wu, Director/Head, WHO Collaborating Centre for Food Contamination Monitoring, China National Center for Food Safety Risk Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr Britt Maestroni, Food Scientist Officer, Joint FAO/Food Safety International Atomic Energy Agency Division of Nuclear Techniques in Food and Agriculture</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speaker/Location</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10:30 – 10:40</td>
<td>Mobility break</td>
<td></td>
</tr>
<tr>
<td>10:40 – 11:00</td>
<td>Country presentation: The science behind food safety decision making</td>
<td>Dr Shuang Zhou, Director, China National Center for Food Safety Risk Assessment, WHO Collaborating Centre for Food Contamination Monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms Patricia Soqoilo, Ministry of Health and Medical Services, Solomon Islands</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Question and answer Closing remarks</td>
<td></td>
</tr>
</tbody>
</table>

**Day 4: Friday, 26 March 2021**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30 – 09:40</td>
<td>Welcome and overview of day 3</td>
<td></td>
</tr>
<tr>
<td>09:40 – 10:30</td>
<td>Food safety incident and emergency response</td>
<td>Moderator: Dr Edwin Lok-Kin Tsui, Director/Head, WHO Collaborating Centre, Centre for Food Safety, Food and Environmental Hygiene Department, Hong Kong SAR (China)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr Samuel Godefroy, Full Professor, University of Laval, Director-General, Food Directorate Health Products and Food Branch, Canada Food Inspection Agency</td>
</tr>
<tr>
<td>10:30 – 10:40</td>
<td>Mobility break</td>
<td></td>
</tr>
<tr>
<td>10:40 – 11:00</td>
<td>Country presentation: Regional and national coordination on food safety</td>
<td>Ms Jenny Bishop, MPI Team Manager, Food Compliance Service Group, Ministry for Primary Industries, Ministry of Health New Zealand</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Question and answer Closing remarks</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
<td>Speakers</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>09:30 – 09:40</td>
<td>Welcome and overview of day 4</td>
<td></td>
</tr>
<tr>
<td>09:40 – 10:30</td>
<td><strong>Food safety communications and education</strong></td>
<td>Moderator: Dr Juliawati Untoro, Technical Lead, Nutrition, WHO/WPRO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr David Massey, Special Advisor Codex Alimentarius Secretariat, Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr Armando Hoet, Director, Veterinary Public Health Program, The Ohio State University, United States of America</td>
</tr>
<tr>
<td>10:30 – 10:40</td>
<td><strong>Mobility break</strong></td>
<td></td>
</tr>
<tr>
<td>10:40 – 11:00</td>
<td><strong>Country presentation: Building capacity on food safety</strong></td>
<td>Mr Timothy Moises C. Mendoza, Food Drug Regulations Officer III, Food and Drug Administration</td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td>Question and answer Closing remarks of the session</td>
<td>Dr Juliawati Untoro, Technical Lead, WHO/WPRO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr Simone Moraes Raszl, Technical Officer, Food Safety, WHO/WPRO</td>
</tr>
</tbody>
</table>

Day 5: Monday, 29 March 2021
Annex 2. List of participants

1. PARTICIPANTS

Mr Stephen Crossly, Head, International and Dietary Exposure Assessment, Scientific Risk Assessment Branch, Food Standard Australia, 15 Lancaster Place, Majura Park, Australia. Tel. No.: +612 6271 2278, Email: Steve.Crossley@foodstandards.gov.au

Ms Angela Davies, Manager, Food Safety and Response, Food Safety and Corporate, Food Standard Australia, P.O. Box 5423, Kingston, ACT 2604, Australia. Tel. No.: +610 429 864 1. Email: angela.davies@foodstandards.gov.au

Mr Siti Syafiqah Fatin Haji Abd Kadir, Agriculture Officer, Department of Agriculture Dan Agrifood, Ministry of Primary Resources and Tourism, No 18A SPG 599 Kg Salar JLM Muara, BU 1429 Negara, Brunei Darussalam. Tel. No.: +6737 395994, Email: fatinhjabdkadir@gmail.com

Ms Wai See Wong, Director of Pharmaceutical Services/Interim CEO of Brunei Darussalam Food Authority, Ministry of Health, Ong Sum Ping Condominium, Bandar Seri Begawan, Brunei Darussalam. Tel No.: +673 890 7070. Email: Waisee.wong@moh.gov.bn

Dr Noraskhin Hj Mohd Fadillah, Senior Medical Officer, Department of Environmental Health Services, Ministry of Health, Commonwealth Drive, BB 3910, Bandar Seri Begawan, Brunei Darussalam. Tel No.: +673 2380316. Email: noraskhin.fadillah@moh.gov.bn

Dr Sandap Vong, Secretary of State, Ministry of Economy and Finance, Chair of the Secretariat of Cambodia Food Reserve System, Street 92, Sangkat Wat Phnom, Khan Daun Penh, Phnom Penh, Cambodia. Tel No.: +855 129 52047. Email: sd.vongs5@gmail.com

Mr Chen Seng Heang, Deputy Director General, Institute of Standards of Cambodia, Ministry of Industry, Science, Technology & Innovation, #45 Phrea Norodom Blvd, Phnom Penh, Cambodia. Tel No.: +855 1224 6789. Email: chensengheang@yahoo.com

Dr Dim Theng, Deputy Director General, Consumer protection Competition and Fraud Repression, Ministry of Commerce, New Building Srt18, Phum Kdey Takoy, Sangkat Vielsbov, Khan Chbar Ampoeu, Phnom Penh, Cambodia. Tel No.: +855 12526660. Email: dimtheng@gmail.com

Mr Aing Hoksrun, Chief, Food Safety Bureau, Ministry of Health, #80 Samdech Pen Nuth Boulevard, Sangkat Boeung Kak II, Khan Toul Kork, Phnom Penh, Cambodia. Tel No.: +855 85 538066. Email: hoksrunaing@gmail.com

Dr Chuo Mony Roth, Chief of Laboratory, Department of Agro-Industry, Ministry of Agriculture, Forestry and Fisheries, #242 Preah Norodom Blvd (41), Phnom Penh, Cambodia. Tel No.: +855 7867 3225. Email: chuonmony@yahoo.com

Dr Chen Xu, Inspector General, Department of Food Distribution and Catering Safety, Regulation of State Administration for Market Regulation, National Health Commission of the People’s Republic of China, Beijing, People’s Republic of China. Tel No.: +8601 8833 1156. Fax: +86010 8833 0458. Email: wangyuhan@samr.gov.cn / lyc620@163.com
Dr Li Tairan, Second Counsel, Department of Food Safety Standards, Risk Surveillance and Assessment, National Health Commission of the People’s Republic of China, No.1, Nan’u Xizhimenwai, Xicheng District, Beijing, People’s Republic of China. Tel No.: +86-10-68792832. Email: litr2008@139.com

Dr Jiao Yang, Director, Research Center for International Standards, Technical Regulation of Inspection and Quarantine, National Health Commission of the People’s Republic of China, Beijing, People’s Republic of China. Tel No.: +8601 5795 4635. Email: 1712828254@qq.com

Dr Chen Song, Director/Researcher, Policy and Information Division Institute of Quality Standard and Testing Technology, for Agro-Products Chinese Academy of Agriculture Science #12 Zhong Guan Cun, South Street, Beijing, People’s Republic of China. Tel No.: +861 331 8747. Fax: +86010 8210 6552. Email: caas-chensong@163.com

Mrs Zhang Caiwen, Official, Ministry of Industry and Information Technology of the People’s Republic of China, #13 West Chang’an Street, Xicheng District, Beijing, People’s Republic of China. Tel No.: + 86-10-6820 5639. Email: zhangcaiwcn@china-cicc.org

Dr Tereapii Uka, Director of Public Health, Ministry of Health, P. O Box 109, Avarua. Rarotonga, Cook Islands. Tel No.: +682 29110, Email: tereapii.uka@cookislands.gov.ck

Ms Mirella Mairi, Manager – Health Promotion, Public Health, Ministry of Health, P.O. Box 32, Avarua, Rarotonga, Cook Islands. Tel No.: +682 70402. Email: Mirella.mairi@cookislands.gov.ck

Ms Nuhisifa Williams, Manager, Policy and Planning, Funding and Planning Directorate Ministry of Health, Tapapa, Avarua, Rarotonga, Cook Islands. Tel No.: +682 71152. Email: nuhisifa.williams@cookislands.gov.ck

Mr Tangata Vaeau, Manager, Health Protection Unit, Public Health, Ministry of Health. Avarua, Rarotonga, Cook Islands. Tel No.: +682 54008. Email: tangata.vaeau@cookislands.gov.ck

Mr Ngatamaine Rongo, Health Protection officer – Food Safety, Public Health, Ministry of Health, Avarua, Rarotonga, Cook Islands. Tel No.: +682 77930. Email: ngatamaine.rongo@cookislands.gov.ck

Mr Vimal Vikash Deo, Chief Health Inspector, Environmental Health Unit, Ministry of Health & Medical Services, 88 Amy Street, Toorak, Suva, Fiji. Tel No.: +679 9907385. Email: vimal.deo@health.gov.fj

Ms Taina Ralivala Waqaliva, Head of Food Unit, Competent Authority, Environmental Health Unit. Ministry of Health, P.O. Box 16088, Suva, Fiji. Tel No.: +679 9904144. Email: taina.waqaliva@health.gov.fj

Ms Alvina Karan, Senior Nutritionist, National Food and Nutrition Centre, Level 2, Namosi House, Toorak, Suva, Fiji. Tel No.: +679 3313055. Email: alvina13deo@yahoo.com.au
Ms Ateca Vucago Kama, Manager Food and Nutrition Security, National Food and Nutrition Centre Level 2, Namosi House, Toorak, Suva, Fiji. Tel No.: +679 8912855. Email: ateca.kama@yahoo.com

Dr Viengxay Vansilalom, Deputy Director General, Food and Drug Department, Ministry of Health, Simouang Road, Vientiane, Lao People’s Democratic Republic. Tel No.: +856 21 264324. Fax No.: +603 88850769. Email: nilundone.lun@gmail.com

Ms Phoxay Sisomvang, Deputy Head of Food Control Division, Food and Drug Department, Ministry of Health, Simouang Road, Vientiane, Lao People’s Democratic Republic. Tel No.: +856 21 264324. Fax No.: +603 88850769. Email: sphoxay@yahoo.com

Ms Vilanya Kanyady, Technical Officer, Food and Drug Department, Ministry of Health, Simouang Road, Vientiane, Lao People’s Democratic Republic. Tel No.: +856 21 264324. Fax No.: +603 88850769. Email: vilanyafdd88@gmail.com

Dr Nilandone Senvanpan, Technical Officer, Department of Communicable Disease Control, Ministry of Health, Vientiane, Lao People’s Democratic Republic. Tel No.: +856 21 264324. Fax No.: +603 88850769. Email: nilandone.lun@gmail.com

Mr Mohd Salim Dulatti, Senior Director, Food Safety and Quality Division, Ministry of Health, 4th Floor, Menara Prisma, No. 26, Jln Persiaran Peroana, 62675 Putrajaya, Malaysia. Tel No.: +603 88850762. Fax No.: +603 88850769. Email: mdsalim@moh.gov.my

Mr Ahmad Nadzri Sulaiman, Director for Policy, Strategic Planning and CODEX Standard, Ministry of Health, Food Safety and Quality Division, Level 4, Prisma Tower, Precinct 3, 62675 Putrajaya, Malaysia. Tel No.: +603 88850787. Fax No.: +603 88850790. Email: ahmadnadzri@moh.gov.my

Ms Zailina Abdul Majid, Deputy Director, Food Safety & Quality Division, Ministry of Health, Putrajaya, Malaysia. Tel No.: +603 88850797. Fax No.: +603 88850790. Email: zailina.am@moh.gov.my

Ms Noraini Ab Wahab, Deputy Director, Food Safety and Quality Division, Ministry of Health, Putrajaya, Malaysia. Tel No.: +603 88850797. Fax No.: +603 88850790. Email: norawahab@moh.gov.my

Dr Gerelmaa Lkhaasuren, State Senior Inspector, Food Inspection Department, General Agency for Specialized Investigation, Government Building 12, Builder’s Square 13, Ulaanbaatar 15170, Mongolia. Tel No.: +976 51 264342. Fax No.: +976 51 264342. Email: gerelmaa.ssia@yahoo.com
Dr Byambatogtokh Baasaikhuu, Head, Division of Control and Prevention of National Communicable Diseases Prevention and Control, Ministry of Health, Government Building VIII. Olympic Street 2, Sukhbaatar District 14210, Ulaanbaatar, Mongolia. Tel No.: +263325 99098508. Fax No.: +263325. Email: byambatogtokh@moh.gov.mn / Begy_b@yahoo.com

Mrs Enkhtuya Batsukh, Expert, Mongolian National Security Council, Biotechnology & Nutrition Division, School of Industrial Technology, Mongolian University of Science and Technology. Sukhbaatar District, VIII Khoroo, Ulaanbaatar 14191, Mongolia. Tel No.: +976 11 324590. Email: enkhtuyab@must.edu.mn

Dr Tungalag Chultemdorj, Expert, Mongolian National Security Council, Department of Microbiology and Infectious Diseases, Mongolia Unity of Life Science, Zaisan, Han-uuul District Ulaanbaatar, Mongolia. Tel No.: +976 99100501. Email: tungalag.chultemdorj@yahoo.com

Mr Batbaatar Bayarmagnai, Officer, Food Production Policy Implementation and Coordination Department, Ministry of Food, Agriculture and Light Industry, Government Building 9A, Peace Avenue 16A, Bayanzurkh District 1 Khoroo, Ulaanbaatar 13381, Mongolia. Tel No.: +976 512 61962. Fax No.: +976 99017633. Email: batbaatar@mofa.gov.mn / bbatala@yahoo.com

Dr Anne-Marie Perchec-Merien, Specialist Adviser Microbiology, Food Science & Risk Assessment, New Zealand Food Safety for Primary Industries, 25 The Terrace, P.O. Box 2526, Wellington 6140, New Zealand. Tel No.: +644 8940405. Email: anne-marie.perchecmerien@mpi.govt.nz

Mr Raj Rajasekar, Senior Programme Manager, Ministry for Primary Industries, New Zealand. Tel No.: +644 8940405. Email: Raj.Rajasekar@mpi.govt.nz

Ms Ashleigh Vialesana Pihigia, Public Health Officer, Niue Health Department, Ministry of Social Services, Kaimiti, Alofi South, Niue. Tel No.: +683 4377. Email: Ashleigh.Pihigia@mail.gov.nu

Mr Aaron Gwamatae, Assistant Manager, Environmental Health, Department of Health Waigani, Papua New Guinea. Tel No.: +301 3701. Email: gwamataeaaron@gmail.com

Mr James Teio, Acting Program Officer – Food Safety, Environmental Health Department of Health, Waigani, Papua New Guinea. Tel No.: +301 3705. Email: teiojames@gmail.com

Ms Pilar Marilyn Paguyanan, Director IV, Food and Drug Administration, Annex Bldg. Food and Drug Administration Philippines, Civid Drive, Filinvest City, Alabang, Muntinlupa City, Philippines. Tel No.: +63 857 1900 local 8105. Email: pmppagayunan@fda.gov.ph

Dr Theodora Cecile Magturo, Medical Specialist IV, Infectious Disease Office, Department of Health, Tayuman, Sta Cruz, Manila, Philippines. Tel No.: +63(0)920 9243561 Email: cecilemagturo917@gmail.com
Mr Timothy Moises C. Mendoza, Food Drug Regulation Officer III, Food and Drug Administration. Annex Bldg. Food and Drug Administration Philippines, Civid Drive, Filinvest City, Alabang, Muntinlupa City, Philippines. Tel No.: +632 857 1900 local 8105. Email: tmcmendoza@fda.gov.ph

Mr Edward Brown, Principal Environmental Health Officer, Health Protection Enforcement Division, Ministry of Health, Motootua, Samoa. Tel No.: +685 66726 Email: edwardb@health.gov.ws

Ms Angela Stanley, Senior Health Officer, Food Safety Unit, Health Protection Enforcement Division, Ministry of Health, Motootua, Samoa. Tel No.: +685 66726. Email: angela.stanley@health.gov.ws

Ms Analosa Manuele-Magele, Senior Nutritionist, Health Protection & Promotion Division, Ministry of Health, Motootua, Samoa. Tel No.: +685 7746742. Email: analosam@health.gov.ws

Ms Perenise Iupeli, Environmental Health Officer, Food Safety Unit, Ministry of Health Motootua, Samoa. Tel No.: +685 66726. Email: perenise.iupeli@health.gov.ws

Ms Christina Ulberg, Principal Nutritionist, Health Protection Enforcement Division, Ministry of Health, Motootua, Samoa. Tel No.: +685 66727. Email: christinau@health.gov.ws

Dr Yuan Sheng Wu, Director, Food Safety Monitoring & Forensics Department, Singapore Food Agency, 52 Jurong Gateway Road, Singapore 608550, Singapore. Tel No.: +65 6795 2825. Email: wu_yuan_sheng@sfa.gov.sg

Ms Jannie Wan, Deputy Director, Licence Management Department, Singapore Food Agency 52 Jurong Gateway Road, Singapore 608550, Singapore. Tel No.: +65 6805 2735 Email: jannie_wan@sfa.gov.sg

Ms Kate Yee Theng Chng, Team Lead, CEO Office, Singapore Food Agency, 52 Jurong Gateway Road, Singapore 608550, Singapore. Email: chng_yhee_theng@sfa.gov.sg

Ms Charlene Quek, Assistant Director, Singapore Food Agency (SFA), 52 Jurong Gateway Road Singapore 608550, Singapore. Tel No.: +65 98258903. Email: charlene_quek@sfa.gov.sg

Ms Jenny Loi, Assistant Director, Food Regulatory Management Division, Singapore Food Agency 52 Jurong Gateway Road, Singapore 608550, Singapore. Tel No.: +65 68052908 Email: jenny_loi@sfa.gov.sg

Ms Patricia Paeru Soqilo, Chief Health Inspector, Food Safety Unit, Ministry of Health & Medical Services, Honiara, Solomon Islands. Tel No.: +677 28166. Email: Psoqilo@moh.gov.sb

Mr Jahret Limarii, Health Inspector, EHD, Food Safety, Ministry of Health & Medical Services Honiara, Solomon Islands. Tel No.: +723 1572. Email: jlimarii@moh.gov.sb
Mr Mark Lazal Arimalanga, Codex Contact Point, Food Safety, Food Safety Environmental Health, Ministry of Health & Medical Services, Honiara, Solomon Islands. Tel No: +677 25349
Email: marimalanga@moh.gov.sb

Hon. Isaia Taape, Minister for Health, Social Welfare and Gender Affairs, Ministry of Health Government of Tuvalu, Funafuti, Tuvalu. Tel No.: +688 20416.
Email: fititaape2013@gmail.com

Ms Nellie Muru Wouloseje, Manager, Environmental Health Unit, Public Health Department Ministry of Health, Port Vila, Tuvalu. Tel No.: +6678 22512. Email: nham@vanuatu.gov.vu

Ms Marie Vovarea Bani, Compliance Officer, Environmental Health Unit, Public Health Department, Ministry of Health, Port Vila, Tuvalu. Tel No.: +6678 22512.
Email: bmarie@vanuatu.gov.vu

Ms Nerida Hinge, Public Health Department, Ministry of Health, Port Vila, Tuvalu, Tel No. : +678 562 5556. Email: hnevida@vanuatu.gov.vu

Dr Nguyen Hung Long, Deputy Director, Vietnam Food Administration, Ministry of Health Hanoi, Viet Nam. Tel No.: +84 243846 4489. Email: Nguyenhunglong1002@gmail.com

Dr Le Hoang, Head of Division, Food Poisoning Surveillance and Communication Division Vietnam Food Administration, Ministry of Health, Hanoi, Viet Nam. Tel No.: +084 903225559
Email: lhuong2002@yahoo.com

Dr Nguyen Man Ha Anh, Vice Head, Division of Legislation Inspection, Vietnam Food Administration, Ministry of Health, Hanoi, Viet Nam. Tel No.: +84 989 082 285.
Email: manhaanh@gmail.com

Mrs Vu Thi Phuong, Senior Officer, International Cooperation Department, Ministry of Agriculture and Rural Development, No 2, Ngoc Ha Street, Hanoi, Viet Nam.
Tel No.: +84 0904240783. Email: vuphuonghtqt@gmail.com

Mr Thuan Nguyen Van, Head, Division of Agro Quality Assurance, Ministry of Agriculture and Rural Development (MARD), Ba Dinh, Hanoi, Viet Nam. Tel No.: +84 913038319
Email: thuannafi@yahoo.com

2. TEMPORARY ADVISER

Ms Jenny Bishop, MPI Team Manager, Food Compliance Service Group, Ministry of Primary Industries, P.O. Box 2526, Wellington 6140, New Zealand, Tel. No.: +64 4894 0100,
Fax No.: +64 4894 0720. Email: jenny.bishop@mpi.govt.nz

Dr Annamaria Bruno, Former Senior Food Standards Officer, Codex Secretariat and Food and Agriculture Organization of the United Nations. Email: annamaria.bruno56@gmail.com
Dr Samuel Godefroy, Full Professor, University of Laval, Director General, Food Directorate, Health Products and Food Branch, Canada Food Inspection Agency, 59 Camelot Drive, Ottawa, Ontario, Canada. Tel. No.: +418 6562131. Email: Samuel.godefroy@fsaa.ulaval.ca

Dr Joanne Chan Sheot Harn, Centre Director, National Centre for Food Science, Singapore Food Agency 10 Perahu Road, Singapore 718837, Singapore. Tel No.: +65 6795 2828. Email: CHAN_Sheot_Harn@sfa.gov.sg

Dr Armando Hoet, AAVMC One Health Scholar, Director, Veterinary Public Health Program Professor, Department of Veterinary Preventive Medicine, College of Veterinary Medicine The Ohio State University, A188 Sisson Hall, 1920 Coffey Road, Columbus, Ohio 43210, United States of America. Tel No.: +614 292 0684. Fax No.: +614 292 4142. Email: hoet.l@osu.edu

Dr Guilherme Antonio da Costa Junior, Agriculture Attache, Ministry of Agriculture, Livestock and Food Supply of Brazil, Mission of Brazil to the European Union, Chairperson, Codex Alimentarius Commission, Brussels, Belgium. Tel No.: +32 (0)2 645-0107. Fax No.: +32 (0)2 648-8040. Email: guilherme.costa@agricultura.gov.br / gguilherme@hotmail.com

Dr Edwin Lok-kin Tsui, Director/Head, WHO Collaborating Centre for Risk Analysis of Chemicals in Food, Centre for Food Safety, Food and Environmental Hygiene Department. 45/F Queensway Government Offices, 66 Queensway, Hong Kong SAR (China). Tel No.: +852 2867 5500. Fax No.: +852 2536 9731. Email: edwintsui@fehd.gov.hk

Dr Britt Maestroni, Scientific Officer, Food and Environmental Protection Laboratory Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications, International Atomic Energy Agency, Vienna International Centre, 1400 Vienna, Austria. Tel No.: +43 1 2600 28398. Fax No.: +43 1 2600-28222. Email: B.M.Maestroni@iaea.org

Mr David Masse, Communications Specialist, Food and Agriculture Organization. Codex Alimentarius Secretariat, Email: David.Massey@fao.org

Dr Rin Ogiya, Director, Office of International Food Safety, Pharmaceutical Safety and Environmental Health Bureau, Ministry of Health, Labour and Welfare. Tokyo, Japan. Tel No.: +813 3595 2326. Email: ogyia-rin.yn5@mhlw.go.jp

Dr Fernando Sampedro Parra, Researcher, School of Public Health, University of Minnesota. 1555 Selby Avenue, Apt 322, St Paul, Minnesota 55104, United States of America. Tel No.: +612 310 8472. Email: fsampedr@umn.edu

Dr Yongning Wu, Director/Head, WHO Collaborating Centre for Food Contamination Monitoring, China National Center for Food Safety Risk Assessment, Building 2, No 37 Guangqu Road, Chaoyang District 100022, People’s Republic of China. Tel No.: +8610 521 65589. Fax No.: +8610 521 65519. Email: wuyongning@cfsa.net.cn
Dr Zhou Shuang, Co-Director, WHO Collaborating Centre for Food Contamination Monitoring. China National Center for Food Safety Risk Assessment, Building 2, No 37 Guanggu Road, Chaoyang District 100022, People’s Republic of China. Tel No.: +8610 521 65589. Fax No.: +8610 521 65519. Email: zhoush@cfsa.net.cn

3. OBSERVERS

Ms Nurulaina binti Nadzeri, Program Director, Policy Partnership on Science, Technology and Innovation, Asia-Pacific Economic Cooperation, 35 Heng Mui Keng Terrace, Singapore 119616, Singapore. Tel. No.: + (65) 6891 9600. Fax No.: +(65) 6891 9690. Email: nn@apec.org

Mr Sridhar Dharmapuri, Senior Food Safety and Nutrition Officer, Regional Office for Asia and the Pacific, Food and Agriculture Organization of the United Nations, Maliwan Mansion, Phra Atit Road, Bangkok 10200, Thailand. Email: sridhar.dharmapuri@fao.org

Dr Mahu Urabe, Regional Veterinary Officer, Regional Representation for Asia and the Pacific Food Science Building 5F, The University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo 113-8657, Japan. Tel. No. + 813 5805 1931. Fax No.: + 813 5805 1934. Email: m.urabe@oie.int

Ms Nathan M Belete, Practice Manager, Food and Agriculture Global Practice, East Asia and Pacific Region. Email: nbelete@worldbank.org

4. SECRETARIAT

Dr Babatunde Olowokure, Coordinator, Emerging Disease Surveillance and Response, Division of Health Security and Emergencies, World Health Organization, Regional Office for the Western Pacific, P.O. Box 2932, 1000 Manila, Philippines. Tel. No.: (632) 528 8001. Fax No.: (632) 521 1036. E-mail: olowokureb@who.int

Dr Simone Moraes Raszl, Technical Officer, Food Safety, Division of Health Security and Emergencies, World Health Organization, Regional Office for the Western Pacific, P.O. Box 2932, 1000 Manila, Philippines. Tel. No.: +632 528 9914. Fax No.: +632 521 1036, E-mail: raszlsim@who.int

Dr Juliawati Untoro, Technical Lead, Nutrition, Division of Healthy Environments and Populations, WHO Health Emergencies Programme, World Health Organization, Regional Office for the Western Pacific, P.O. Box 2932, 1000 Manila, Philippines. Tel. No.: +632 528 9093. Fax No.: +632 521 1036. E-mail: untoroj@who.int

Ms Frida Sparaciari, Consultant, Division of Health Security and Emergencies, World Health Organization, Regional Office for the Western Pacific, P.O. Box 2932, 1000 Manila, Philippines. Tel. No.: +632 528 8001. Fax No.: +632 521 1036. E-mail: sparacifri@who.int

Dr Kab Vannya, Technical Officer, World Health Organization, No. 61-64, Preah Norodom Blvd. (corner Street 306), Sangkat Boeung Keng Kang 1, Khan Chamkamorn Phnom Penh, Cambodia. Tel No.: +855 23 216610. Fax No.:+855 23 216211
E-mail: kabv@who.int

Dr Chin Kei Lee, Medical Officer, Office of the WHO Representative in China
World Health Organization, 401, Dongwai Diplomatic Office Building 23, Dongzhimenwai
Dajie, Chaoyang District, 100600 Beijing, China. Tel. No.: +8610 6532 2189.
Fax No.: +8610 6532 2359. E-mail: LeeC@who.int

Dr Reiko Tsuyuoka, WHO Health Emergencies (WHE) Lead, Office of the WHO
Representative in the Lao People’s Democratic Republic, World Health Organization,
125 Saphanthong Road, Unit 5, Ban Saphanthongtai, Sisattanak District, Vientiane,
Lao People’s Democratic Republic. Tel. No.: +856 20 5999 81809. Fax No.: +856 2135 3905,
E-mail: tsuyuokar@who.int

Ms Nola Eluh Ndrewei, Technical Officer, World Health Organization, 4th Floor, AOPI
Centre, Waigani Drive, Port Moresby, Papua New Guinea. Tel No.+675 325 7827.
Fax No.:+675 325 0568. E-mail: ndrewein@who.int

Engineer Bonifacio Magtibay, Technical Officer, Office of the WHO Representative in the
Philippines, Ground Floor, Building 3, Department of Health, San Lazaro Compound,
Rizal Avenue, Sta. Cruz, Manila, Philippines. Tel. No.: +63 2 8528 9764.
Fax No.: +63 2 85310 6550. E-mail: magtibaybo@who.int

Dr Ariuntuya Ochirpurev, Technical Officer, Office of the WHO Representative in Mongolia,
Ministry of Health, Government Building No. 8 Ulaanbaatar, Mongolia,
Tel. No.: +976 11 327870. Fax No.: +976 11 324683. E-mail: ochirpureva@who.int

Ms Angela Merianos, Team Coordinator, Office of the WHO Representative in South Pacific,
Level 4 Provident Plaza One Downtown, Boulevard 33 Ellery Street, Suva, Fiji.
Tel. No.: +679 323 4100. Fax No.: +679 323 4166. E-mail: merianosa@who.int

Dr Satoko Otsu, Technical Leader, Office of the WHO Representative in Viet Nam,
World Health Organization, 304 Kim Ma Street, Hanoi, Viet Nam.
Tel. No.: +84 4 38500318. Fax No.: +84 4 37 265 519. E-mail: otsus@who.int

Dr Francesco Branca, Director, Nutrition and Food Safety, World Health Organization
Avenue Appia 20, 1211 Geneva, Switzerland. Tel No.:+41 22 791 1025
E-mail: brancaf@who.int

Dr Gyanendra Gongal, Regional Adviser (Food Safety), Healthier Populations &
Noncommunicable Diseases, Regional Office for South-East Asia,
World Health Organization, Indraprastha Estate, Mahatma Gandhi Road
110002 New Delhi, India. Tel No.:+911123370804. Fax No.:+91123370197.
E-mail: gongalg@who.int
### Annex 3. General results of the event survey: implementation status of the Regional Framework’s action areas

<table>
<thead>
<tr>
<th>Action area</th>
<th># Member States</th>
<th>Evaluation criteria</th>
<th># Member States by status of evaluation criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Implemented</td>
</tr>
<tr>
<td>1. Food safety policy and legal frameworks</td>
<td>17 7</td>
<td>- Clearly defined, risk-based and coherent food safety laws and regulations</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Legal measures for food production, handling, storage, processing, marketing and distribution in line with Codex Alimentarius and international requirements</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mechanism for coordination of activities and functions across all agencies with responsibilities for food safety control</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mechanism to monitor and evaluate performance of the food safety system</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Multisectoral national food safety plan</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Procedures for conducting regulatory impact assessments incorporated into legislation</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Roles and responsibilities of stakeholders in the food safety system are defined</td>
<td>5</td>
</tr>
<tr>
<td>Total action area 1</td>
<td></td>
<td></td>
<td>48 (40%)</td>
</tr>
<tr>
<td>2. Risk-based food inspection and enforcement</td>
<td>15 8</td>
<td>- Basic food inspection tools and equipment</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Designated qualified food inspectors</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Food business registry covering all food businesses</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Register of food businesses in the formal sector</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Access to reference food laboratories with capacity to test food composition and priority food safety hazards</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Documented system for consistent and impartial implementation of risk-based inspection and enforcement activities throughout the food chain</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Procedures for food-premises hygiene grading</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Risk-based food inspection plan</td>
<td>6</td>
</tr>
<tr>
<td>Total action area 2</td>
<td></td>
<td></td>
<td>54 (45%)</td>
</tr>
<tr>
<td>3. Food safety information underpinning evidence</td>
<td>12 11</td>
<td>- Ad hoc studies supplementing surveillance and response data</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Availability of laboratory-based surveillance of foodborne diseases</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Coordinated national surveillance system (indicator- and event-based food monitoring system and ad hoc studies)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Estimates of the national burden of foodborne diseases</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Existing indicator- and event-based surveillance systems</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Food consumption and food composition monitoring programmes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Generic system for risk assessment and response to emerging diseases and public health emergencies include food safety-related incidents and emergencies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mechanism for collection, evaluation and use of foodborne disease surveillance data to inform policy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Programme for monitoring food safety hazards of public health concern</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Research and development to improve the availability of evidence-based food safety information</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total diet studies or equivalent</td>
<td>2</td>
</tr>
<tr>
<td>Total action area 3</td>
<td></td>
<td></td>
<td>31 (23%)</td>
</tr>
<tr>
<td>Action area</td>
<td>Total</td>
<td>53 (25%)</td>
<td>116 (54%)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| 4. Food safety incident and emergency response | 12 18 | - Food safety authorities have the necessary legal power to enforce and conduct food recalls and other emergency-related risk management measures 6 6 0  
- There is an adequate level of cooperation and collaboration between the corresponding government agencies and other key stakeholders (multisectoral) in order to develop and implement an effective food safety emergency plan successfully 3 7 2  
- There is a formally established multidisciplinary planning group with the participation of representatives from all key government agencies to determine the scope of the food safety emergency response plan, to oversee the preparation of the plan, to ensure appropriate review and consultation. 2 7 3  
- There is a food safety emergency response plan formally implemented and published, which is duly communicated to interested parties. 3 7 2  
- There are procedures for investigation and response to food safety incidents and emergencies with clearly defined roles and responsibilities. 4 8 0  
- The procedures for investigation and response to food safety incidents and emergencies have an adequate and transparent documentation system 4 5 3  
- There are formal criteria to distinguish between routine, easy to manage incidents and larger emergencies 3 6 3  
- The planning process include arrangements for the maintenance and periodic review of the plan and for ensuring that the information contained within it is up to date 1 7 4  
- Adequate mechanisms are in place to achieve timely communication and for the collection, dissemination, and exchange of detailed information about the situation. 1 6 5  
- Once the plan has been developed, it is adequately communicated to all relevant national agencies and key stakeholders have been informed about the plan 3 8 2  
- Previous experiences of food-related incidents are reviewed and a profile of the system that already exists to address food safety emergencies, identify gaps and limitations, and consider how these should be addressed is developed 4 6 2  
- There is adequate participation of regional and international partners, including participation in INFOSAN and adequate coordination between the designated INFOSAN emergency contact point and the IHR national focal point during public health events of international interest 5 5 2  
- Adequate mechanisms are in place to identify, validate and report food safety incidents through the analysis of a wide variety of information sources 2 9 1  
- Adequate resources are available to execute procedures for investigation and response to food safety incidents and emergencies 3 6 3  
- There is a sufficient laboratory capacity (public or private) to cope with the number and type of samples required in order to respond to food incidents and emergency situations 1 7 4  
- The food safety emergency response plan has a document strategy for communication and information exchange with 1) partners, 2) stakeholders, including healthcare providers, media and the general public, and 3) international organizations 2 5 5  
- There is a documented food recall and traceability systems and coordinated work is carried out with food businesses to develop and strengthen food recall and traceability plans 4 6 2  |
| 5. Food safety communications and education | 11 8 | - Food safety awareness programme for consumers 4 6 1  
- Food safety communications plan 2 4 5  
- Mechanism to review and evaluate the effectiveness of food safety communications programmes 7 4 0  |
- National food safety education strategy  
  1  6  4
- Platform for food safety awareness programmes  
  5  5  1
- Programme for basic food safety training for food handlers  
  5  6  0
- Spokesperson and guiding principles for coordination of food safety risk communication  
  2  6  3
- System for monitoring media and other informal reports and public perceptions  
  1  7  3

<table>
<thead>
<tr>
<th>Total Action area 5</th>
<th>27 (31%)</th>
<th>44 (50%)</th>
<th>17 (19%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL TOTAL</td>
<td>213 (32%)</td>
<td>360 (53%)</td>
<td>102 (15%)</td>
</tr>
</tbody>
</table>