1 April 2014

1. Project Code 14-AG-10-GE-TRC-B

2. Title e-Learning Course on Risk Management of Foodborne Pathogens

3. Timing and Duration
   - Session 1: 19–22 May 2014
   - Session 2: 24–27 June 2014

4. Venues
   - Session 1: Bangladesh, India, IR Iran, Nepal, and Pakistan
   - Session 2: Cambodia, Fiji, Indonesia, Mongolia, Philippines, and Vietnam

5. Implementing Organizations
   - APO Secretariat and the following NPOs:
     - Session 1
       - Bangladesh: National Productivity Organisation
       - India: National Productivity Council
       - IR Iran: National Iranian Productivity Organization
       - Nepal: National Productivity and Economic Development Centre
       - Pakistan: National Productivity Organization
     - Session 2:
       - Cambodia: National Productivity Centre of Cambodia
       - Fiji: National Training and Productivity Centre, Fiji National University
       - Indonesia: Directorate Productivity and Entrepreneurship, Directorate General of Training and Productivity
       - Mongolia: Mongolian Productivity Organization
       - Philippines: Development Academy of the Philippines
       - Vietnam: Vietnam Productivity Centre

(Note: To maximize project benefits, the local venue [city and/or videoconferencing center] may change depending on the level of interest, participant type, and suitability of the venue as advised by the NPO.)

6. Number of Participants More than 20 qualified participants from each participating country

7. Closing Date for Nominations
   - Session 1: 6 May 2014
   - Session 2: 10 June 2014
8. Objectives

a. To acquaint participants with the knowledge of food safety risks and vulnerabilities in food supply chains, especially due to foodborne pathogens, and approaches to contain them; and

b. To enhance participants’ understanding of the concepts and application of food safety risk management in food supply chains.

9. Background

Food safety assurance to protect public health and promote socioeconomic development remains a significant challenge in both developed and developing countries. Many countries have achieved notable progress in strengthening national food safety systems but others are still struggling to tailor their traditional food control systems to meet current food safety challenges. A high incidence of foodborne illness remains, and new hazards continue to enter the food supply.

Foodborne risks to human health can arise from biological, chemical, or physical hazards. Foodborne pathogens, i.e., microorganisms found in food such as bacteria, are the main causes of foodborne illness. The food chain has many stages where food is susceptible to contamination by pathogens. Application of the risk analysis approach to assess food safety risks can significantly contribute to reducing foodborne illnesses and strengthening food safety systems.

Risk analysis is internationally recognized as a critical decision support tool used by national and international agencies, animal health services, and the food industry. It consists of three interactive processes: risk assessment, risk management, and risk communication. Risk analysis enables national food safety authorities to make evidence-based food safety decisions. It provides particular value in addressing complex, persistent, evolving hazards in different parts of the food supply chain. An increasing use of risk analysis to support national food safety, public and animal health policies, as well as international trade agreements has led to growing demand for good risk analysis practices.

The application of risk analysis is, however, hampered by inadequate food safety capacities, insufficient financial investments, weak foodborne disease surveillance, outdated food regulations and weak law enforcement, inability of small- and medium-sized producers to ensure the supply of safe food, fragmented food control systems, and lack of policy coherence among different sectors. Inadequate capacity for risk analysis is another important issue. This course is meant to enhance the capacity of numerous key stakeholders in food safety risk management.

10. Modality of Implementation

This course is offered through videoconferencing using the World Bank’s Global Development Learning Network (GDLN) platform. GDLN centers in participating countries will be used for this purpose. In countries where World Bank facilities are not available, other service providers will be tapped. Professional experts will conduct the training course. The course will be implemented in two sessions as described above. Each participating country team will make videoconferencing presentations to share their experience in risk management.
of foodborne pathogens which will be moderated by a local coordinator. On the last day, a written examination will be conducted to test the participants’ learning from the course. Performance in the examination will be one of the criteria for selection of the participants for the subsequent follow-up training course.

**Follow-up face-to-face course**

The APO will organize a multicountry face-to-face program on food safety and quality in 2015. One or two of the best-performing participants in this e-learning course from each country may be selected to attend through the concerned NPO.

11. **Scope and Methodology**

The tentative modules to be covered are:

- a. Foodborne illnesses and their socioeconomic impact;
- b. Emerging foodborne pathogens and characteristics of major ones;
- c. Food safety risks and vulnerabilities in food supply chains;
- d. Risk analysis framework for food safety;
- e. Microbial risk management: principles and components;
- f. Microbial risk assessment: principles and components;
- g. Microbial risk assessment: structure and types;
- h. Microbial risk assessment/management: some examples;
- i. Using the results of microbial risk assessment; and
- j. Best practices of prevention/control of foodborne pathogens in food supply chains.

This distance-learning course will consist of a combination of videoconferencing and offline sessions such as online lectures, online discussions, online presentations of country case studies, offline group exercises, field/company visits, and written examination.

The tentative program of the workshop is given below:

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>Opening session through videoconferencing</td>
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<td></td>
<td>Presentation of resource papers through videoconferencing</td>
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<td></td>
<td>Group exercise/individual assignment offline</td>
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<tr>
<td>Day 2</td>
<td>Presentation of resource papers through videoconferencing</td>
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<td></td>
<td>Group exercise/individual assignment offline</td>
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<tr>
<td>Day 3</td>
<td>Field/company visit(s) to food factory/company</td>
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<td>Day 4</td>
<td>Presentation of group exercise output by participating countries through</td>
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<td></td>
<td>videoconferencing</td>
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<td></td>
<td>Summing up and closing sessions through videoconferencing</td>
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<td></td>
<td>Written examination offline</td>
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12. Qualifications of Candidates

The candidates are expected to possess the following qualifications:

Present Position  Food scientists; food microbiologists; academics; food safety managers; leaders of food safety teams of food companies and their associations; food preservation and processing specialists; officials of public health and government agencies; or wholesalers, retailers, and logistic operators of food and agricultural products, among others, who are in charge of food safety management.

Experience  At least two years of experience in the position described above.

Education  University degree or equivalent qualification from a recognized university/institution.

Language  All proceedings of the project are conducted in English. Proficiency in spoken and written English is essential.

Age  Preferably between 25 and 45 years.

APO Certificate  Participants are required to attend the entire program to receive the APO certificate of attendance.

13. Financial Arrangements

To be borne by the APO

a. All assignment costs for resource speakers to prepare presentation materials and deliver presentations.

b. Rental and other charges of the GDLN/videoconferencing centers in participating countries, resource persons' countries, and Japan.

c. Honorarium for a local coordinator in each participating country.

d. Transportation costs for field visits.

To be borne by participating countries

a. Any other local implementing costs not covered by the APO.

14. Actions by Participating Member Countries

a. The NPO of each participating country is requested to nominate more than 20 participants and submit a list in the format to be provided by the Secretariat later. Please adhere to the nomination deadlines specified under section 7 of this document and ensure that candidates nominated meet the qualifications prescribed under section 12.
b. Each NPO will identify an appropriate local coordinator. The coordinator will moderate all technical sessions including field visits, group exercises/individual assignments in consultation with the NPO and chief resource person identified by the APO. The group exercises will include experience sharing, views of participants on management of risks of foodborne diseases, especially those caused by pathogens, and review online sessions. The coordinator will also make all necessary arrangements with the local GDLN/videoconferencing centers prior to the commencement of the training course to ensure that the facility is ready for the training sessions.

Mari Amano
Secretary-General