PROJECT NOTIFICATION ADDENDUM

22 November 2018

1. Project Code   18-AG-28-GE-DLN-A

2. Title   e-Learning Course on Global Food Safety Trends: Application of Advanced Technologies

3. Addendum No.   3

4. Reference   APO Project Notification 18-AG-28-GE-DLN-A dated 20 August 2018, Project Notification Addendum-1 dated 29 August 2018, and Project Notification Addendum-2 dated 21 September 2018.

5. Details   Nepal has withdrawn from this project. Accordingly Item No.4 and Item No.5 will change as follows:

a) Item No.4 "Venues":

    Session 1:   Bangladesh, Fiji, Mongolia, and Vietnam
    Session 2:   India, IR Iran, Pakistan, and the Philippines

b) Item No.5 "Implementing Organizations":

    Session 1   Bangladesh: National Productivity Organisation
    Fiji: National Training & Productivity Centre, Fiji National University
    Mongolia: Mongolian Productivity Organization
    Vietnam: Vietnam National Productivity Institute

    Session 2   India: National Productivity Council
    IR Iran: National Iranian Productivity Organization
    Pakistan: National Productivity Organization
    Philippines: Development Academy of the Philippines

Unless otherwise modified by the APO in writing, the other provisions of the Project Notification dated 20 August 2018, Project Notification Addendum-1 dated 29 August 2018, and Project Notification Addendum-2 dated 21 September 2018 pertaining to this e-Learning Course will remain valid.

Dr. Santhi Kanoktanaporn
Secretary-General

PROJECT NOTIFICATION ADDENDUM

21 September 2018

1. Project Code   18-AG-28-GE-DLN-A

2. Title   e-Learning Course on Global Food Safety Trends: Application of Advanced Technologies

3. Addendum No.   2

4. Reference   APO Project Notification 18-AG-28-GE-DLN-A dated 20 August 2018 and Project Notification Addendum 1 dated 29 August 2018

5. Details   The implementing organization for Vietnam is updated. Item No. 5 is therefore changed as follows:

a.   Item No. 5 "Implementing Organizations":

Session 1   Bangladesh: National Productivity Organisation
Fiji: National Training & Productivity Centre, Fiji National University
Mongolia: Mongolian Productivity Organization
Vietnam: Directorate for Standards, Metrology and Quality

Session 2   India: National Productivity Council
IR Iran: National Iranian Productivity Organization
Nepal: National Productivity and Economic Development Centre
Pakistan: National Productivity Organization
Philippines: Development Academy of the Philippines

Unless otherwise modified by the APO in writing, the other provisions of the Project Notification dated 20 August 2018 and Project Notification Addendum 1 dated 29 August 2018 pertaining to this e-learning course will remain valid.

Dr. Santhi Kanoktanaporn
Secretary-General

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PROJECT NOTIFICATION ADDENDUM

29 August 2018

1. Project Code 18-AG-28-GE-DLN-A

2. Title e-Learning Course on Global Food Safety Trends: Application of Advanced Technologies

3. Addendum No. 1

4. Reference APO Project Notification 18-AG-28-GE-DLN-A dated 20 August 2018

5. Details Cambodia is unable to participate in this project due to unavoidable circumstances. Accordingly Item No.4 and Item No.5 will change as follows:

a) Item No.4 "Venues":

Session 1: Bangladesh, Fiji, Mongolia, and Vietnam
Session 2: India, IR Iran, Nepal, Pakistan, and the Philippines

b) Item No.5 "Implementing Organizations":

Session 1 Bangladesh: National Productivity Organisation
Fiji: National Training & Productivity Centre, Fiji National University
Mongolia: Mongolian Productivity Organization
Vietnam: Vietnam National Productivity Institute

Session 2 India: National Productivity Council
IR Iran: National Iranian Productivity Organization
Nepal: National Productivity and Economic Development Centre
Pakistan: National Productivity Organization
Philippines: Development Academy of the Philippines

Unless otherwise modified by the APO in writing, the other provisions of the Project Notification dated 20 August 2018 pertaining to this e-Learning Course will remain valid.

Dr. Santhi Kanoktanaporn
Secretary-General

Asian Productivity Organization

PROJECT NOTIFICATION

20 August 2018

1. Project Code	18-AG-28-GE-DLN-A
2. Title	e-Learning Course on Global Food Safety Trends: Application of Advanced Technologies

3. Timing and Duration

Session 1: 29 October–1 November 2018 (four days)
Session 2: 17–20 December 2018 (four days)

4. Venues

Session 1: Bangladesh, Fiji, Mongolia, and Vietnam
Session 2: Cambodia, India, IR Iran, Nepal, Pakistan, and the Philippines

5. Implementing Organizations

APO Secretariat and the following NPOs:

Session 1
Bangladesh: National Productivity Organisation
Fiji: National Training & Productivity Centre, Fiji National University
Mongolia: Mongolian Productivity Organization
Vietnam: Vietnam National Productivity Institute

Session 2
Cambodia: National Productivity Centre of Cambodia
India: National Productivity Council
IR Iran: National Iranian Productivity Organization
Nepal: National Productivity and Economic Development Centre
Pakistan: National Productivity Organization
Philippines: Development Academy of the Philippines

(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

At least 20 qualified participants from each participating country

7. Closing Dates for Nominations

Session 1: 25 September 2018
Session 2: 30 October 2018

8. Objectives

a. To enhance participants' understanding of global trends in food safety management (FSM);

b. To provide updated knowledge of advanced technologies for efficient, effective FSM; and

c. To discuss key success factors in implementing and receiving certification in modern food safety standards.

9. Background

Food safety is a matter of global concern. Increasing reports of outbreaks of foodborne illnesses worldwide in recent years have heightened consumers' food safety awareness and caused public distrust of increasingly complex cross-border food value chains. FSM therefore has become a crucial part of any modern food business. It protects businesses' competitive market share, customers, and the community. In addition, regulatory bodies are increasingly demanding that organizations demonstrate a commitment to food safety, the prevention of foodborne illnesses, and the promotion of safe food.

To meet these requirements, more organizations are putting in place sound FSM systems and choosing to have their systems certified to demonstrate their commitment to food safety. Applications of advanced technologies can help the food industry reduce risks associated with increasingly complex modern food supply chains. For example, modern microbial intervention technologies, whether thermal, nonthermal, or chemical in nature, can inactivate or inhibit the growth of microbe populations significantly and may be used as a "kill step" to enhance or ensure the safety of food. Advanced technologies, like blockchains, the Internet of Things (IoT), and next-generation sequencing (NGS), will help the food industry strengthen food safety programs, deter food fraud, and decrease the necessity for tracebacks and recalls.

Blockchains enable organizations to record and secure arbitrary, disparate types of data. Digital traceability systems can lessen recall expenses, make distribution systems cheaper, and increase the sales of high-value products. Digitized packaging and labeling give consumers the ability to scan food purchases and link to web pages with detailed information from farm to the final stages of packaging and labeling. NGS, also known as high-throughput sequencing, has greatly reduced the time and cost of DNA and RNA sequencing. NGS-based food tests and software analytics make it possible to identify pathogens at the strain level even in mixed-ingredient and packaged food. Inefficient, labor-intensive processes for monitoring food quality and safety are being replaced with digitized automated systems.

10. Modality of Implementation

This course is offered using the APO's own videoconferencing platform. Appropriate videoconferencing centers in participating countries will be used for this purpose. Professional experts will conduct the training course in two sessions as described above. Each participating country team will make videoconferencing presentations to share their experience in FSM systems in food supply chains, 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.

11. Scope and Methodology

The tentative modules to be covered are:

a. Global trends in FSM;
b. New microbial intervention technologies for FSM;
c. Advanced technologies (blockchains, IoT, and NGS) for strengthening FSM systems; and
d. Challenges in and opportunities for the adoption of advanced FSM technologies.

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, and written examination.

The tentative program of the training course is given below:

Day	Activity
Day 1	Opening session through videoconferencing Presentation of resource papers through videoconferencing Group exercise/individual assignments offline
Day 2	Presentation of resource papers through videoconferencing Group exercise/individual assignments offline
Day 3	Field/company visit(s)
Day 4	Presentation of group exercise output by participating countries through videoconferencing Summing-up and closing sessions through videoconferencing Written examination offline

12. Qualifications of Candidates

The participants are expected to possess the following qualifications:

Present Position	Officers and inspectors of national organizations responsible for food safety and quality standards, managers and officers of food industry SMEs, and consultants of NPOs responsible for FSM systems.
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	Those meeting the above qualifications are generally between 25 and 45 years of age.
Attendance	Participants are required to attend the entire program.

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 videoconferencing centers in participating countries, resource persons' countries, and Japan.

c. Honoraria for local coordinators designated by NPOs and transportation costs for field visits, if necessary.

To be borne by participating countries

a. Any 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 and 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 food safety systems in food supply chains, and review of online sessions. The coordinator will also make all necessary arrangements with the local videoconferencing centers prior to the commencement of the e-learning course to ensure that the facility is ready for the sessions.

Dr. Santhi Kanoktanaporn
Secretary-General