ASIAN PRODUCTIVITY ORGANIZATION

PROJECT NOTIFICATION

9 June 2015

1. Project Code 15-AG-32-GE-TRC-B

2. Title e-Learning Course on Nonchemical Pest Management in Agriculture

3. Timing and Duration
Session 1: 8–10 September 2015
Session 2: 7–9 December 2015

4. Venues
Session 1: Cambodia, Mongolia, Philippines, Thailand, and Vietnam
Session 2: Bangladesh, India, IR Iran, Pakistan, and Sri Lanka

5. Implementing Organizations APO Secretariat and the following NPOs:

Session 1
Cambodia: National Productivity Centre of Cambodia
Mongolia: Mongolian Productivity Organization
Philippines: Development Academy of the Philippines
Thailand: Thailand Productivity Institute
Vietnam: Vietnam National Productivity Institute

Session 2:
Bangladesh: National Productivity Organisation
India: National Productivity Council
IR Iran: National Iranian Productivity Organization
Pakistan: National Productivity Organization
Sri Lanka: National Productivity Secretariat

(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 Date for Nominations
Session 1: 24 August 2015
Session 2: 23 November 2015

8. Objectives

a. To acquaint participants with recent developments and the latest trends in nonchemical pest management (NCPM) strategies, approaches, techniques, and methods in agriculture; and

b. To promote environment- and socio-friendly food production to enhance sustainable food security.

9. Background

Insect, plant pathogen, and weed pests destroy more than 40% of all potential food production each year. The heaviest losses are in developing countries. Appropriate agricultural pest management control strategies can enhance food security and the safety of agricultural and food products. The two main types of pest control methods are chemical and nonchemical.

The use of synthetic chemical pesticides is the most common pest control method worldwide. Chemical pesticides are fast acting but expensive. Chemicals in pesticides can be harmful to people, animals, or the environment. Some pests can develop resistance to those chemicals, rendering chemical control ineffective. The risks associated with the use of chemical pesticides are even higher among small farmers because of low purchasing power and lack of skills to obtain and handle pesticides appropriately. To address such externalities associated with farming, there have been attempts to replace the use of synthetic chemical insecticides with NCPM.

NCPM practices are less expensive, ecologically safe, and socio-friendly. They employ various pest-control techniques that do not rely on synthetic chemical pesticides. These techniques include biological control (e.g., crop rotation, planting pest-free rootstock, predator insects, the sterile insect technique), natural chemical control (e.g., pheromones, organic pesticides), and genetic control (e.g., pest-resistant crops/varieties, genetically modified microbial pesticides, herbicide-tolerant crops). An integrated pest management (IPM) strategy is needed to promote the adoption of NCPM. IPM uses a judicious combination of pest-control practices and methods to prevent problems from occurring rather than dealing with them after they have happened.

The main impediments to scaling up the adoption of NCPM are the traditional mindset of farmers favoring the use of chemical pesticides, lack of site-specific and farmer-led approaches, lack of appropriate local institutional settings, absence of regulatory frameworks for biopesticides, and no incentives for framers to adopt such sustainable practices. Policy incentives will be needed to convince farmers to adopt sustainable farming practices such as NCPM and provide them with insurance against the risk of crop losses from alternative practices. In the long run, governments could save money by reducing future health, regulatory, and environmental clean-up costs.

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. The course will be implemented in two sessions as described above. Each participating country team will make videoconferencing presentations to share their experience in NCPM in agriculture, 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.

11. Scope and Methodology

The tentative modules to be covered are:

a) NCPM: key concepts and recent developments;
b) Nonchemical methods of pest control (e.g., biological, natural chemical, and genetic);
c) Applications of nuclear technology in insect pest control;
d) Regulatory framework for biological pesticides (e.g., plant-incorporated protectants, genetically modified microbial pesticides, herbicide-tolerant crops);
e) Institutional settings to promote the adoption of NCPM by farmers; and
f) Policy incentives to promote the adoption of sustainable food production systems (e.g., NCPM) by farmers.

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:

Date	**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	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	Agricultural extension workers, government officers, academics, representatives of NGOs and civil society organizations, and officers of pesticide companies in charge of promoting sustainable, safe agricultural production.
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.

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

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

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 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 NCPM in agriculture, and review of online sessions. The coordinator will also make all necessary arrangements with the local 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