

## Concept Note

### Regional Training on Protected Agriculture Technology in Asian Countries

China, 22-29 January 2018

#### Background

Protected agriculture is the modification of the natural environment to achieve optimum plant growth. It is an increasingly important agricultural practice due to its useful application to both the aerial and root environments to increase crop yields, extend growing seasons, and allow plant growth during periods of the year not commonly used to grow open field crops.

Although the practice of protected agriculture has enabled many countries to expand their food production capacity, the technologies to support this agricultural system in some of the Asian-Pacific countries are still lagging behind. In particular, the capacities for disaster prevention and mitigation with the practice of protected agriculture is relatively low in some of the countries. Accordingly, *the Regional Training on Protected Agriculture Technology in Asian Countries* is proposed to be organized on 22-29 Jan. 2018 in China.

The Training is a follow up action of the Regional Workshop for Research and Academic Institutions in April 2017, co-organized by Nanjing Research Institute for Agricultural Mechanization (NRIAM) and the Centre for Sustainable Agricultural Mechanization (CSAM) of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

The Training will contribute towards strengthening capacities in the region for promoting sustainable agricultural development and mechanization, and contributing to the achievement of the Sustainable Development Goals, particularly SDG 2 (end hunger, achieve food security and improved nutrition, and promote sustainable agriculture), and SDG 12 (ensure sustainable consumption and production patterns).

#### Objectives

The Regional Training aims to:

- 1) introduce application of protected agricultural technologies;

- 2) share new developments, innovations and know-how in relation to protected agriculture in participating countries;
- 3) enhance the knowledge and capacity of participants on protected agriculture; and
- 4) contribute towards improving the quality and safety of agricultural products, and protecting the agro-ecosystem.

### **Training Content**

- 1) Overview of application of, and innovations in, protected agricultural technologies;
- 2) Overview of the development and application of intelligent control system for plants including for pest and disease control;
- 3) Introduction to applying fill light recommendations on protected crops
- 4) Overview of role of protected agriculture in disaster prevention and mitigation;
- 5) Introduction to design and equipment for greenhouses; and

### **Organization and Participation**

*The Regional Training on Protected Agriculture Technology in Asian Countries* will be organized on 22-29 Jan. 2018 in China. The training will be conducted in the form of seminars and presentations. It will also include visits to a plant protection equipment lab, test center, breeding base and greenhouse industry park in cities near Nanjing.

*The Regional Training on Protected Agriculture Technology in Asian Countries* is co-organized by NRIAM and CSAM.

Targeted participants include representatives of governments, and research and academic institutions, which work in the area of protected agriculture. It is expected that around 13 participants from 13 countries in Asia will attend the event. The participants are also expected to prepare and share pertinent information on protected agriculture, including general conditions, recent developments and related regulations, in their respective countries.

### **Tentative Programme**

Jan 22	All day	Arrival and check-in
Jan 23	Morning	Opening Ceremony& Keynote Report
	Afternoon	Lecture & Visit to the protected agricultural field site
Jan 24	Morning	Lecture & Visit plant protection equipment lab& test center
	Afternoon	Travel to Shanghai
Jan 25	All day	Lecture & Visit breeding base in Shanghai

Jan 26	Morning	Lecture on design and equipment for greenhouses
	Afternoon	Travel to Xinghua
Jan 27	Morning	Lecture & Visit greenhouses industry park
	Afternoon	Travel to Nanjing
Jan 38	All day	Summary and discussions
Jan 29	All day	Departure from Nanjing