



PROJECT NOTIFICATION

Ref. No.: 20-AG-17-GE-DLN-A-AP02-PP2000010-002

Date of Issue	31 August 2021
Project Code	20-AG-17-GE-DLN-A-AP02
Title	Self-learning e-Course on Digital Technologies for Smallholder Farmers
Launch Date	1 November 2021
Hosting Country(ies)	APO Secretariat
Modality	Digital Learning
Implementing Organization(s)	APO Secretariat
Participating Country(ies)	Open
Overseas Participants	Not Applicable
Local Participants	Not Applicable
Qualifications of Participants	Open
Nominations of Participants	Not Applicable
Closing Date for Nominations	Not Applicable

1. Objectives

- a. Understand the key roles and applications of digital technologies for smallholder farmers (SHFs).
- b. Introduce digital solutions from the planning to postharvest phases in agricultural production.
- c. Learn about innovative postharvest solutions including marketing, logistics, and sales linkages.

2. Background

According to the Food and Agriculture Organization of the United Nations (FAO), agriculture faces enormous challenges to feed more than nine billion people by 2050, which will require 70% more food production, with shrinking land and water resources for agriculture, aging farming communities, and shortages of productive farm labor. SHFs can play a key role to address this challenge in the Asia-Pacific region since 87% of the total 500 million small farmers worldwide are in Asia (FAO, 2015).

To achieve this, SHFs must adopt digital technologies. These technologies enable SHFs to produce more food by increasing resource efficiency, optimizing productivity, and boosting revenues/profits. ICT is at the core of the technologies, which assists farmers in making better decisions based on data. However, the majority of SHFs are not prepared to utilize advanced technology applications due to a lack of finance, infrastructure, or ICT literacy. In the Asia-Pacific region, SHFs, who comprise the majority of farmers, remain largely excluded from mainstream food and agribusiness value chains. For example, there are over 70 million small farmers in Southeast Asia, but only 25,000 are engaged in e-commerce (IFAD, 2019).

To support APO member countries in adopting digital technologies in agriculture, the APO developed the Agriculture Transformation Framework in 2019. It encourages private investment in affordable, low-cost technologies and services targeting small farmers with new business models such as fee-based services, service provision in exchange for data from users, and service provision through aggregators like farmers' organizations, cooperatives, etc.

This e-learning course is to continue the initiative on promoting the applications of digital technologies in agriculture, particularly to enable and encourage SHFs to apply digital solutions from the planning to postharvest stages.

3. Modality of Implementation

- a. The course is offered through the APO e-learning platform: <http://eAPO-tokyo.org>
- b. Participants should register on this portal and create their own accounts.
- c. Certificates of completion will be provided for those who satisfactorily complete all the modules of the course, including quizzes and a final examination.

4. Scope and Methodology

The course will comprise five modules:

Module 1:

The concept of digitization and the digitalization framework

Module 2:

Agri-input digitalization solutions to access and use high-quality inputs

Module 3:

Monitoring and decision making through data-based technologies at the production stage

Module 4:

Innovative harvest and postharvest solutions through digital market linkages

Module 5:
Advancing digital technologies for SHFs in Asia

Final examination

Methodology

Module study, additional study material for participants, quizzes for self-assessment, and a final examination.

5. Requirements

- a. Have necessary devices and software comprising a computer/smartphone, updated browser, microphone, and speaker or headphones.
- b. Access to internet connections.
- c. Completion of all the modules, quizzes, and final examination.
- d. The APO e-certificate will be given to participants who score a minimum of 70% on the final examination.

6. Financial Arrangements

The APO will meet the assignment costs for resource persons to develop the course modules including quizzes and a final examination.

7. Actions by Member Countries

- a. Promote the courses nationwide.
- b. Provide the link to the APO e-learning platform on the NPO's website and social network services.

8. Actions by the APO Secretariat

- a. Identify and assign the resource person(s) to develop the course.
- b. Announce course commencement on the APO website and social network services.



Dr. AKP Mochtan
Secretary-General