



PROJECT NOTIFICATION

Ref. No.: 22-CP-46-GE-OSM-A-PN2200028-002

Date of Issue	23 March 2022
Project Code	22-CP-46-GE-OSM-A
Title	Multicountry Observational Study Mission on Innovative Smart Farming Models for Agriculture 4.0
Timing and Duration	29–30 June 2022 (two days)
Hosting Country(ies)	Turkey
Modality	Digital Multicountry
Implementing Organization(s)	Ministry of Industry and Technology of Turkey and APO Secretariat
Participating Country(ies)	All Member Countries
Overseas Participants	57
Local Participants	12
Qualifications of Participants	Government officials, policymakers, leaders of farmers' cooperatives and organizations, academics, representatives of agricultural SMEs, and consultants involved in developing and adopting smart farming
Nomination of Participants	All nominations must be submitted through National Productivity Organizations of member countries
Closing Date for Nominations	15 June 2022

1. Objectives

- a. Understand policies and R&D activities for Agriculture 4.0 in Turkey.
- b. Examine good practices by virtually visiting smart farming sites.
- c. Discuss enablers for advancing smart farming in the Asia-Pacific region.

2. Background

Agriculture 4.0, also known as smart farming, is a management concept to efficiently increase the quantity and quality of agricultural output by using advanced technologies including machines and IT devices such as sensors, drones, robots, GPS, AI, and the Internet of Things. These technologies enable farmers to monitor fields precisely, make timely decisions and take actions based on data, and optimize workloads for achieving higher yields and quality at lower cost and with less labor. Agriculture 4.0 is also a key tool to advance environmental sustainability, accelerate climate-resilient agriculture, and promote inclusivity in the sector.

The APO Agricultural Transformation Framework (2019) highlighted the following considerations for enabling smart farming: 1) creating public goods related to smart agricultural technologies that benefit the majority of actors, especially smallholders; 2) supporting public- and private-sector institutions in conducting R&D; 3) encouraging private investment in affordable, low-cost technologies and services; 4) encouraging information and data sharing, with adequate safeguards and protection of intellectual property rights; 5) experimenting with and launching pilot programs before scaling up; 6) prioritizing smart agriculture as part of national development strategies; and 7) formulating regulations and policies to support initiatives and encourage early adopters as well as cross-country collaboration and cooperation for sharing knowledge, experience, best practices, and appropriate technology.

Turkey exported around USD1 billion of agricultural products in 2020 and is one of the leading countries among APO members in adopting agricultural machinery and promoting mechanization. Agriculture 4.0 has progressed along with advanced mechanization in the country, exemplifying good practices of smart agricultural farming. One of the sites to be visited is Vodafone Smart Farm, which aims to increase productivity and encourage young people's involvement in farming by applying the latest technologies and advanced ICT. Participants will virtually observe this case and learn about the roles of the public and private sectors in promoting and adopting Agriculture 4.0. This observational study mission will also discuss how to apply the learning and experience of Turkey for adoption in other APO members.

3. Scope, Methodology, and Certificate of Attendance

The duration of each day's sessions will be around three hours comprising presentations by experts, virtual site visits, group discussions, and other relevant learning methods. The indicative topics of the presentations are:

Day 1:

- Introduction to Agriculture 4.0 technologies
- Virtual site visit 1: Government policies on Agriculture 4.0 in Turkey
- Virtual site visit 2: Smart dairy farm

Day 2:

- Virtual site visit 3: R&D activities on Agriculture 4.0 in Turkey
- Virtual site visit 4: Smart village
- Group discussion

The detailed program and list of speakers will be provided two weeks prior to the sessions with announcement of the names of the selected participants.

The participants are required to attend all sessions. This full participation is a prerequisite for receiving the APO certificate of attendance.

4. Financial Arrangements

The APO will meet the assignment costs for overseas resource persons, honorarium for up to two local resource persons, and video production costs for a virtual site visit(s) of up to USD2,000.00, either broadcast live or recorded as applicable.

5. Implementation Procedures

Please refer to the implementation procedures for APO digital multicountry projects circulated with this document.

A handwritten signature in dark ink, appearing to read 'Mochtan', with a long, sweeping flourish extending upwards and to the right.

Dr. AKP Mochtan
Secretary-General