Innovative farm management practices to enhance agricultural productivity

Farm managers are pursuing various strategies and methods to make farms more productive and maximize profits on a sustainable basis. Constant adjustments are needed to stay abreast of changes in technologies, production methods, price variability, resource availability, and customer demand. The majority of farms in the Asia-Pacific region are small and generally characterized by low productivity, which could be attributed to less than ideal management. Most farmers and farm managers lack knowledge of modern management techniques due to limited opportunities and inadequate training in strategic planning, business plan preparation, business assessment, viability and sustainability analysis, and management of resources.

In response to these challenges, the APO organized the multicountry observational study mission on Innovative Farm Management Practices to Enhance Agricultural Productivity in Tokyo, 18–22 November 2013, under a special grant from the Government of Japan. The main objective of the mission was to enhance participants' knowledge and understanding of various innovative farm management practices available. Seventeen participants from 12 member countries, along with five resource persons, attended.

The resource persons representing the Ministry of Agriculture, Forestry and Fisheries, University of Kyoto, University of Chiba, Tokyo University of Agriculture and Technology, and National Agriculture and Food Research Organization gave wide-ranging presentations on advanced farming models and technologies to enhance agricultural productivity. Participants also explored the advantages of precision agricultural management using information technology to obtain data for making decisions on production activities.

Demonstration of a GPS-controlled tractor at the National Agriculture and Food Research Organization.

After intensive lectures and discussions on innovations in farming, participants made observational site visits to relevant facilities. Several participants commented that the plant factory within Chiba University was a source of ideas for adoption, as it showcased resource-saving, environment-friendly, stable, safer food production technology. Many participants were impressed by the biomass recycling center of Wagoen, an agricultural cooperative corporation, as a useful facility to add value to waste products and address global climate change. Other sites for the field visits include AEON Farm, Tsukuba factory of Kubota Agriculture Machinery Company, and a variety of research institutes under the National Agriculture and Food Research Organization, where participants observed Global GAP-certified farms, GPS-controlled tractors, and advanced irrigation management systems in the field. In the group discussions, participants debated how to apply the relevant knowledge and best practices learned from this mission and confirmed their commitment to disseminating them in their countries.