

Modernizing agriculture, strengthening its productivity



The conference brought together 32 participants from 16 APO member economies as well as 13 experts from around the world.

With the relationship of humans and agriculture stretching back millennia, utilizing state-of-the-art tools to modernize farming and agrifood production can sometimes be daunting. Efforts to enhance productivity, however, involve constant processes of innovation, modernization, and improvement, and the agriculture sector is no exception. Advanced technologies must be used for the further development of agriculture.

To promote modern agricultural practices, the conference on State-of-the-Art Technologies to Drive Agricultural Productivity in the Next Quarter of the Century was organized by the APO in Tokyo, 28–30 June, to deliberate on the latest scientific advances and technologies in agriculture to enhance the productivity, sustainability, and competitiveness of small- and medium-sized farms.

As the agriculture sector becomes increasingly integrated into agrifood chains and global markets, players face new challenges in ensuring product safety and quality, improving environmental performance, conservation and rehabilitation of land and water resources, and adaptation to climate change. The conference was designed to disseminate accurate information and demonstrate the advantages of modern technologies in the context of persistent widespread food insecurity, environmental degradation, climate change, aging farmers, and a shrinking labor force.

The program consisted of diverse thematic sessions, covering mega-trends in agriculture and the food industry; precision agricultural technologies; aquaculture 4.0 and seafood traceability; mechanization, field robots, and emerging technologies for productive farming in fragile environments; safe agricultural food commodity production and marketing;

and applications of cutting-edge technologies. Thirty-two participants from 16 APO member economies examined new trends and opportunities in the sector, as well as state-of-the-art technologies utilized worldwide for increasing productivity, sustainability, and competitiveness, guided by experts from Belgium, the ROC, Japan, Malaysia, USA, and the International Atomic Energy Agency. Each session included an open forum for lively Q&A and discussion sessions. On day 3, the participants toured the Kashiwa-no-ha Smart City at Chiba University to observe its pioneering plant factory. They also formulated a set of recommendations for APO member economies on harnessing agricultural technologies over the next quarter-century.

“The conference was a great success,” commented Dr. Muhammad Saeed, Director of the APO Secretariat Agriculture Department and overall conference coordinator. “Participants were interactive with a keen interest in learning. They came up with a set of meaningful recommendations for promoting the adoption of modern technologies and best practices to develop productive, safe, sustainable, competitive agriculture in face of daunting challenges Asian agriculture is facing. The Agriculture Department will share these recommendations with NPOs and hopes to organize follow-up national courses in selected member countries to achieve greater multiplier effects of this conference.” Continuing and expanding the growth of the agricultural sector in the Asia-Pacific in the next decade depends on a balance between yesterday’s, today’s, and tomorrow’s wisdom. The conference pointed out several avenues for maximizing the benefits of modern methods for the development of farms and agrifood businesses in the region. 🌾