PROJECT NOTIFICATION

Reference No.: 763

Date of Issue	22 December 2025
Project Code	25-CP-51-GE-TRC-A
Title	Training Course on AI in Agriculture
Timing	23 March 2026–27 March 2026
Hosting Country(ies)	APO Secretariat
Venue City(ies)	Sendai
Modality	Face-to-face
Implementing Organization(s)	Not Applicable
Participating Country(ies)	All Member Countries
Overseas Participants	20
Local Participants	Not Applicable
Closing Date	30 January 2026
Remarks	Not Applicable

Objectives	Provide comprehensive insights into AI applications, benefits, challenges, and future potential in farming; and offer practical, step-by-step guidance on how to leverage AI in the agriculture sector to enhance productivity and sustainability.
Rationale	AI in agriculture is revolutionizing farming practices by leveraging machine learning to enhance efficiency, sustainability, and productivity. AI-powered systems analyze data from sensors, drones, and satellites to optimize crop growth, resource management, and pest control. This leads to increased yields, reduced waste, and improved overall farm management.
Background	The APO emphasizes smart transformation through Industry 4.0 technologies, including AI, to boost productivity in agriculture. It focuses on capacity building, policy advisory, and promoting best practices, aligned with leveraging technology in all member economies. With the global population expected to exceed 9 billion by 2050, with more than 50% in Asia, agricultural productivity must rise significantly.

AI enables higher yields and efficient resource use through precise monitoring, reducing waste and environmental impact. Predictive models and AI-driven weather forecasting help farmers adapt to climate change, optimize planting, and mitigate risks. In Japan, Sendai serves as the regional hub of the Tohoku agricultural belt, a major food-producing region, enabling participants to observe AI solutions in a real production environment. The rapid restoration of agricultural production after the 2011 earthquake showcased how technology supports agriculture after major disruptions. |
Topics	Introduction to AI in agriculture and its transformative benefits; AI technologies and diverse applications in farming; Advanced AI concepts, practical implementation, and case studies; and Challenges, responsible AI, future prospects, and the way forward.
Outcome	Capabilities of trainers are enhanced with new AI knowledge, enabling them to train and educate farmers on how to leverage AI in the agriculture sector. Increased usage of AI will contribute to productivity enhancement and profitability for farmers.
Qualifications	Agriculture-focused trainers, consultants, extension officers, and agri-tech professionals with sufficient digital literacy to understand and transfer knowledge on AI-based farming applications.

Please refer to the implementation procedures circulated with this document for further details.

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