PROJECT NOTIFICATION

Reference No.: 564

Date of Issue	4 March 2025
Project Code	25-IP-19-GE-DLN-A
Title	APO e-Course on Data-driven Agrifood Businesses
Timing	31 July 2025
Hosting Country(ies)	APO Secretariat
Venue City(ies)	Not Applicable
Modality	Digital Learning
Implementing Organization(s)	APO Secretariat
Participating Country(ies)	Open
Overseas Participants	Not Applicable
Local Participants	Not Applicable
Closing Date	Not Applicable
Remarks	Timing is the launch date of the e-course.

Objectives	Understand the basics of big data applications in the agrifood business and farm production; learn about the technical and organizational applications, challenges, and opportunities of data-driven tools in agrifood business; and acquire knowledge on precision data applications in agriculture, supply chain optimization, and market intelligence in the agrifood business.
Rationale	The agrifood sector is increasingly integrating data-driven technologies to enhance efficiency, sustainability, and resilience. Businesses that adopt data analytics can optimize farm-to-fork operations, improve supply chain integration, and anticipate real-time market trends. Understanding these technologies is essential for staying competitive and innovative in modern agrifood systems.
Background	Big data analytics, AI, and digital technologies can transform production and value and food supply chains. Precision agriculture uses real-time data from sensors, drones, satellites, and IoT devices to optimize irrigation, fertilization, and pest control, leading to higher yields and lower impact on biodiversity. The global agritech market was approximately USD24.42 billion in 2024 and projected to reach USD48.98 billion by 2030, growing at a CAGR of 12.30%. Polaris Market Research projects that agriculture analytics alone will expand from USD6.63 billion in 2024 to USD25.50 billion by 2034. These trends highlight the role of big data in optimizing supply chain logistics, reducing food waste, and enhancing market forecasting. By integrating these innovations, data-driven agrifood businesses can ensure value chain productivity, traceability from farm to fork, and sustainability with real-time monitoring. This e-course introduces the transformative potential of data analytics in the agrifood sector.
Topics	Data-driven tools in agribusiness; Big data and precision agriculture in smart farming; Market insights, risk management, and production forecasting: Use of big data at farm-to-fork level; Blockchains, traceability, and supply chain optimization: Application of data analytics; and Case studies/success stories of data-driven applications in agrifood and agribusiness.
Outcome	Participants gain a comprehensive understanding of big data applications and data-driven decision-making in agribusiness, enabling them to enhance productivity, optimize resources, and implement data-driven strategies for sustainable, competitive agrifood systems.
Qualifications	Open to all participants in APO members and nonmembers.

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

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Secretary-General