



PROJECT IMPLEMENTATION PLAN

PIP Issue Date	17 July 2019
Project Code	19-AG-17-GE-DLN-A-05
Title	Self-learning e-Course on Modern Food Distribution Systems
Reference	Project Notification 19-AG-17-GE-DLN-A dated 27 November 2018
Timing and Duration	2 December 2019–1 December 2020 (12 months)
Implementing Organization(s)	APO Secretariat and National Productivity Organizations (NPOs)
Number of Participants	Minimum 400 participants
Self-registration	<p>Self-registration opens from 10:00 AM Japan Standard Time on 2 December 2019 on the eAPO's web portal: http://eAPO-tokyo.org</p> <p>Note: Participants can register directly from this portal on the APO website. Those who are already registered can access the course by using the assigned username and password. If you have forgotten your username and password, please refer to the help page on the home page of the portal.</p>

1. Objectives

- a. To build knowledge of the concepts, principles, characteristics, and trends in food supply and distribution systems (FDS);
- b. To understand the structures of and diversity in FDS and share various approaches to assess successful innovative models; and
- c. To promote sustainable food distribution models that reflect economic and social considerations to support APO member countries in selecting appropriate models.

2. Background

FDS are the process by which consumers are supplied with food products throughout agrifood supply chains. Generally, food is produced in agricultural and rural areas and transported to cities to meet urban consumers' dietary requirements. The rise of the middle-income class in cities and their enhanced consumption power have led to improved logistics and distribution systems, especially in developing countries where rapid urban expansion is ongoing.

The composition of distribution systems generally refers to three elements: transportation; warehousing; and retail facilities. Food is supplied to urban areas through transportation chains involving trucks and buses and then stored in warehouses for distribution. The distributed food is supplied to retail markets and facilities to reach end consumers. However, the systems are varied, complicated processes that may result in storage in multiple warehouses and transport to different distribution centers within a city.

Therefore successful FDS may take various forms based on economic and social considerations. Depending on economic factors such as level of development, urban planning, and poverty, the operational dynamics and behavior patterns of players in the supply chains require different approaches. Distribution channels are affected by social factors such as the producers and agents (gender, ethnic group, etc.). The types of agents also tend to evolve from middlemen to official management agencies based on the national development stage to enhance transparency and efficiency. Growing urban traffic congestion affects transportation methods within cities. Inadequate retail markets, limited food retail outlets, and unhealthy conditions are challenges in modernizing FDS. To establish successful FDS, integrated strategies are required in line with changes in the external factors, infrastructure, facilities, and services to match city growth and rising urban food demand. Macro-level policies on related factors such as agriculture and regional and urban development must also be considered.

This e-learning course will study the process and characteristics of FDS. The forms and types of agencies/organizations as active players in the supply systems will be also reviewed.

3. Scope and Methodology

The tentative course structure is as follows:

Module 1. Introduction to FDS

- Rationale: Linking food consumers and producers
- Evolutionary paths of FDS around the globe
- Characteristics, principles, and roles of FDS
- The basics of FDS design
- Reducing food waste: Challenges in emerging and developed economies

Module 2. Consumer and Food Industry Trends Shaping FDS

- Economic growth
- Commercialization of agriculture (e.g., fewer/bigger farms)
- Urbanization
- Demographic trends
- Relative importance and growth of modern food retailing and food service

- Business consolidation and supply chain integration
- Disruptive technology (e.g., e-commerce) and impact on traditional FDS

Module 3. Major Stakeholders and Their Roles in FDS

- Farm input suppliers and food producers
- Wholesale markets
- Manufacturers
- Wholesalers/middlemen
- Farmers' cooperatives and producers' organizations
- Retail
- Food service
- Local and national governments
- Logistics and storage providers
- Technology suppliers

Quiz 1 (for self-assessment based on questions from Modules 1–3)

Module 4. Drivers and Operations of Local and Global Supply Chains

- Local: Historic importance and their evolution, impact of seasonal food production, storage and basic processing, direct sales to consumers and the role of farmers' markets, and renaissance of consumer interest in local food, provenance, etc. (with examples)
- Global: Internationalization of consumers' diets, growth of international trade and the importance of bi-/multilateral trade agreements, and globalization of agribusiness and global food brands (with examples)

Module 5. Government and Industry Regulatory Policies and Programs Affecting FDS

- Food safety, health, and authenticity: The importance of building consumer trust in FDS
- Rising consumer interest in supply chain transparency and traceability and the global food industry's response, e.g., blockchains and DNA testing
- The importance of such programs as IFS, ISO, BRC, GLOBALGAP, MSC and fair trade, Rainforest Alliance, etc. and their impact on FDS
- Building local and global brands and the importance of gaining consumer trust

Module 6. Efficient FDS

- Consumer-driven distribution systems
- The importance of resilience
- Evolving from transactional arrangements in the FDS to longer-term partnerships in the supply chain with information shared among key parties
- Working toward an "ideal" food distribution system: Aligning the objectives of consumers, society, government, and commerce when building FDS that can deliver tasty, healthy, safe, affordable food on demanded in environmentally and socially acceptable ways while providing adequate long-term financial returns to FDS commercial participants
- Examples of best practices in FDS in emerging and developed markets

Quiz 2 (for self-assessment based on questions from Modules 4–6)

Module 7: Final Examination

Methodology

Self-learning e-modules, additional study materials for participants, intermittent quizzes for self-assessment, assignments, and a final examination to qualify for the APO e-certificate.

4. Qualifications of Candidates

The target participants are policymakers and public officers involved in planning and developing sustainable FDS; business leaders, managers, and practitioners engaged in agrifood supply chains as active players; consultants, professionals, and trainers specialized in food distribution; and those who

want to expand their knowledge of agrifood businesses and supply chains, especially for food logistics and distribution.

5. Eligibility for e-Certificate

A minimum score of 70% on the final examination is required to qualify for the APO e-certificate.

Note: Participants from nonmember countries are welcome to take the course for self-development, although APO e-certificates will not be provided.



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