# Agri-Food Supply Chain Management

**Module duration:** 30 Hrs. (5 sessions)

**Introduction**

Food is immensely important for human life. The food sector has rapidly changed during past decade. Agri-food supply chains are becoming complex. The globalization of economy has facilitated the migration of peoples for work. This has led to the demand for food products from across the globe and service providers are keen to oblige. The style of retailers, the technology advancements in tracking, operations management and packaging have made it possible to import a food item from any part of the world of the right quality specifications. Businesses across the world are trying to improve their market share and profitability. This is not easy and requires developing appropriate capability to serve as per international customer requirements. One possible enabler will be the use of Geospatial technology. Geospatial technology is rapidly developing and transmitting the expertise useful for the agri-food supply chain. The term geospatial technology (GST) refers to global positioning systems (GPS), remote sensing (RS), and geographical information systems (GIS), all emerging technologies that assist the user in the collection, analysis, and interpretation of spatial of data. The challenges includes a) To satisfy the consumers as per their requirements, b) To ensure efficient and effective operations. This course may help the participants to understand agri-food supply chain challenges and the strategies to cope with it.

**Target Audience –** Frontline Executives and Mid-Level Managers

**Relevant Industry:** Agriculture and Food processing industry, aligned industries

**Prerequisites-** Basic knowledge of Supply Chain Management

**Course Objectives**
- To provide an understanding and cross-functional perspective of agri-food supply chain [Level-2]
- How to apply the best practices in agri-food supply chain management. [Level-3].

**Pedagogy:** Lectures, case studies, and discussion in the class.

## References Books

- Food supply chain management: Economic, Social and Environmental Perspectives by Madeleine Pullman and Zhaohui Wu; Routledge, Taylor & Francis Group (Recent edition/Latest edition)
- Designing and Managing the Supply Chain (Latest Edition), David Simchi-Levi, Philip Kaminsky, Simchi-Levi, McGraw Hill. (Recent edition/Latest edition)
- Integral Logistics Management: Operations and Supply Chain Management within and Across Companies, Paul Schönsleben, CRC Press, Taylor & Francis Group. (Recent edition/Latest edition)

## Additional References

- Supply Chain Design and Management: Strategic and Tactical Perspectives, Academic Press, San Diego, Manish Govil and Jean-Marie Prop. (Recent edition/Latest edition)
- Principles of Supply Chain Management: A Balanced Approach. 4th ed. Wisner, J. D., Tan, K.-C., & Leong, G. L.  Nelson, Cengage. (Recent edition/Latest edition)

## Session Details [Each unit 3 hrs.]

| Unit No. | Title | Topics | Case study |
|---|---|---|---|
| 01 | Introduction to agri-food supply chain management, agri-food silos, storage of agri-food, interdepartmental linkage, public procurement and distribution system, Railway Vs Airways, issues in interface complexities of vegetable supply chain, cold supply chain management | Concept of agricultural food supply chain Operations Management in agri-food supply chain | * |
| 02 | Resource Utilization | Essentials of farm business management and sustainability Efficient, effective, and sustainable use of resources | Vasant Farm Fresh: Reducing Food Wastage (W18711) by Debjit Roy and Shailesh Kulkarni (HBR case) |
| 03 | Human resource management in agri-food supply chain management | Leadership and People Management | * |
| 04 | Logistics and Transportation, Network Design | Applications of logistics in agri-food supply chain | * |
| 05 | Digital supply chain management in the era of circular and sustainable economy | Enabling technologies for sustainable agri-food supply chain Circular economy in agri-food supply chain | Tetra Pak: Creating a Recycling Chain in China ( W17704-PDF-ENG) by Yu Gong; Fu Jia; Steve Brown (HBR case) |

*Note- Relevant videos and case studies may be included*

**Learning Outcomes**

- The participants will be able to understand the fundamentals and cross-functional perspectives of agri-food supply chain.
- The participants will understand and be able to apply the best practices in agri-food supply chain management for performance improvement.