Training Course on Agricultural Supply Chain and Logistics Optimization

Professional Development Training Course Outline

Category	Agriculture	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s competitive and globalized agribusiness environment, optimizing the agricultural supply chain and logistics has become a critical factor for sustainability, profitability, and food security. Training Course on Agricultural Supply Chain and Logistics Optimization empowers professionals with cutting-edge strategies, digital tools, and data-driven methodologies for transforming supply chain performance across the agriculture sector. Participants will gain practical knowledge on streamlining operations, reducing post-harvest losses, enhancing market access, and integrating smart logistics solutions.

By addressing key areas such as cold chain management, inventory optimization, blockchain traceability, and farmer-to-market linkages, this program fosters value chain resilience and efficiency. Through interactive modules, real-world case studies, and collaborative learning, attendees will be equipped to drive innovation and growth in agricultural logistics and supply networks.

Programme Curriculum

Training Course on Agricultural Supply Chain and Logistics Optimization

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Course Objectives

1. Understand the fundamentals of agricultural supply chain management.
2. Analyze current challenges and opportunities in agri-logistics.
3. Apply digital agriculture technologies for logistics optimization.
4. Enhance cold chain and storage efficiency for perishables.
5. Integrate blockchain for transparency and traceability.
6. Improve post-harvest handling and transportation systems.
7. Develop cost-effective and climate-smart logistics models.
8. Strengthen linkages between producers, processors, and markets.
9. Use big data and IoT for logistics performance tracking.
10. Evaluate supplier relationship and contract farming strategies.
11. Design robust inventory and warehouse management systems.
12. Optimize last-mile delivery and rural distribution networks.
13. Identify policy, finance, and infrastructure solutions in agri-logistics.

Target Audiences

1. Agribusiness Managers
2. Supply Chain Coordinators
3. Agricultural Cooperatives and Farmer Organizations
4. Government Agricultural Officers
5. Development and NGO Practitioners
6. Food Processors and Distributors
7. AgTech Solution Providers
8. Agronomists and Agricultural Consultants

Course Duration: 10 days

Course Modules

Module 1: Introduction to Agricultural Supply Chains

- Overview of agricultural value chains
- Key actors and linkages in agri-supply chains
- Characteristics of food supply logistics
- Role of infrastructure in agri-logistics
- Importance of supply chain visibility
- *Case Study: Tomato Supply Chain in Kenya*

Module 2: Supply Chain Mapping and Analysis

- Techniques for value chain mapping
- Identifying bottlenecks and inefficiencies
- Stakeholder analysis and engagement
- Geographic and seasonal influences
- Data collection tools for diagnostics
- *Case Study: Dairy Chain Mapping in Rwanda*

Module 3: Digitalization in Agri-Logistics

- IoT applications in storage and transport
- Blockchain for traceability
- Cloud-based logistics platforms
- Predictive analytics and machine learning
- Mobile solutions for farmer integration
- *Case Study: Digital Grain Tracking in India*

Module 4: Post-Harvest Management

- Causes of post-harvest losses
- Improved harvesting and packaging
- Transportation standards
- Value preservation techniques
- Food safety and compliance
- *Case Study: Mango Export Chain in Ghana*

Module 5: Cold Chain Logistics

- Temperature-sensitive produce logistics
- Refrigerated transport and storage
- Monitoring technologies (sensors, GPS)
- Building resilient cold chain networks
- Energy-efficient cold storage systems
- *Case Study: Fish Cold Chain in Bangladesh*

Module 6: Inventory and Warehouse Optimization

- ABC and Just-in-Time models
- Layout and storage design
- Warehouse management systems (WMS)
- FIFO, LIFO, and FEFO strategies
- Risk mitigation in warehousing
- *Case Study: Grain Warehousing in Nigeria*

Module 7: Transportation and Logistics Planning

- Route optimization strategies
- Modal choices: road, rail, air, sea
- Fleet management practices
- Cost-benefit analysis of transport modes
- Rural logistics constraints
- *Case Study: Farm-to-Market Logistics in Ethiopia*

Module 8: Market Access and Distribution

- Understanding market dynamics
- Aggregation centers and hubs
- Retailer and consumer trends
- Role of e-commerce in agri-trade
- Strengthening producer-market linkages
- *Case Study: Horticultural Export Chains in Morocco*

Module 9: Risk Management in Supply Chains

- Weather, pest, and price risks
- Building resilient logistics systems

- Insurance and contingency planning
- Diversification and redundancy
- Scenario planning tools
- *Case Study: Coffee Export Risk Mitigation in Colombia*

Module 10: Sustainability and Climate-Smart Logistics

- Emission reduction strategies
- Low-carbon transportation
- Resource-efficient logistics practices
- Packaging and waste management
- Sustainable procurement
- *Case Study: Green Supply Chain in South Africa*

Module 11: Financial Planning for Logistics

- Cost analysis and budgeting
- Financial models for logistics ROI
- Inventory financing
- Access to logistics infrastructure loans
- Agri-SMEs and blended finance
- *Case Study: Financing Agri Hubs in Uganda*

Module 12: Policy and Institutional Support

- Regulatory frameworks for agri-logistics
- Role of trade policies
- Institutional coordination mechanisms
- Infrastructure development strategies
- Incentives and subsidies
- *Case Study: Government-Led Logistics Reform in Vietnam*

Module 13: Gender and Inclusion in Agri-Logistics

- Women's role in agri-supply chains
- Inclusive transport and storage solutions
- Gender-responsive value chains
- Reducing entry barriers for youth and women
- Enhancing equity in distribution
- *Case Study: Women in Cocoa Logistics in Ivory Coast*

Module 14: Innovations and Agri-Tech Startups

- Emerging logistics startups in agriculture
- Technology transfer models
- Role of incubators and accelerators
- Public-private partnership models
- Scaling innovations regionally
- *Case Study: Last-Mile AgriTech in East Africa*

Module 15: Monitoring and Evaluation (M&E) of Agri-Logistics Projects

- Setting performance indicators
- Data tools for logistics tracking
- Impact assessment frameworks
- Reporting and adaptive learning

- Feedback mechanisms from value chain actors
- *Case Study: M&E of Rice Logistics in the Philippines*

Training Methodology

- Participatory lectures and expert-led presentations
- Hands-on group work and problem-solving exercises
- Practical demonstrations and video tutorials
- Real-world case studies and role-playing simulations
- Digital tools and software demonstrations
- Interactive Q&A and feedback sessions

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

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