

# Training Course on Post-Harvest Loss Reduction Strategies for Perishable Crops

Professional Development Training Course Outline

|          |             |               |                         |
|----------|-------------|---------------|-------------------------|
| Category | Agriculture | Duration      | 5 Days                  |
| Base Fee | \$1,500 USD | Delivery Mode | Online / On-site Hybrid |

## Course Introduction

Post-harvest losses of perishable crops such as fruits, vegetables, and leafy greens remain a major challenge in global agricultural systems, contributing to food insecurity, income loss for farmers, and market inefficiencies. Training Course on Post-Harvest Loss Reduction Strategies for Perishable Crops is designed to equip agricultural professionals, farmers, and agribusiness stakeholders with innovative and sustainable post-harvest management strategies. By leveraging modern technologies and evidence-based techniques, this course addresses critical gaps in the value chain, ensuring better quality produce, extended shelf life, and reduced economic losses.

Participants will explore effective post-harvest handling practices, cold chain solutions, value addition techniques, and digital monitoring tools that can significantly minimize spoilage. This course emphasizes climate-smart agriculture, supply chain optimization, and local context adaptability. Through interactive modules, real-world case studies, and practical exercises, learners will gain comprehensive insights into reducing post-harvest losses while promoting food safety, income sustainability, and environmental responsibility.

## Programme Curriculum

### Training Course on Post-Harvest Loss Reduction Strategies for Perishable Crops

#### Introduction

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### **Course Objectives**

1. Understand the causes and impact of post-harvest losses in perishable crops.
2. Learn innovative cold chain management solutions.
3. Identify climate-smart practices for crop preservation.
4. Apply packaging technologies for freshness retention.
5. Integrate smart farming tools for quality monitoring.
6. Improve logistics for efficient farm-to-market supply.
7. Promote food safety through hygienic handling.
8. Explore value addition for extended marketability.
9. Implement data-driven post-harvest decision-making.
10. Adopt biodegradable storage and transport materials.
11. Analyze consumer trends for perishable crop marketing.
12. Utilize mobile platforms for traceability and logistics.
13. Develop community-based aggregation and storage models.

### **Target Audiences**

1. Smallholder farmers
2. Agribusiness entrepreneurs
3. Agricultural extension officers
4. Post-harvest handling specialists
5. Supply chain managers
6. Food safety inspectors
7. Development agency staff
8. Agriculture policy makers

**Course Duration:** 5 days

### **Course Modules**

#### **Module 1: Understanding Post-Harvest Losses in Perishable Crops**

- Causes of post-harvest losses
- Economic and environmental implications
- Common challenges in perishable crop handling
- Loss quantification and assessment tools
- Community awareness strategies
- *Case Study: Tomato Loss Assessment in Eastern Africa*

#### **Module 2: Cold Chain and Temperature Control Solutions**

- Principles of cold chain management

- Types of refrigeration and storage units
- Low-cost cooling innovations
- Solar-powered cold storage systems
- Transportation temperature control
- *Case Study: Cold Chain Success in Avocado Export from Kenya*

### **Module 3: Smart Packaging Technologies**

- Role of packaging in loss reduction
- Biodegradable and active packaging materials
- Modified atmosphere packaging (MAP)
- Packaging design for transport resilience
- Cost-benefit analysis of smart packaging
- *Case Study: Shelf Life Extension with MAP for Leafy Greens*

### **Module 4: Supply Chain Optimization and Logistics**

- Mapping the value chain for perishable crops
- Aggregation centers and local markets
- Real-time transportation tracking systems
- Route optimization tools
- Blockchain in agricultural logistics
- *Case Study: Digital Aggregation Platforms in India*

### **Module 5: Digital Monitoring and Smart Farming Tools**

- IoT and sensor-based technologies
- Remote quality monitoring
- Mobile-based inventory systems
- Data analytics in post-harvest decision-making
- Integration with weather forecasting tools
- *Case Study: Smart Post-Harvest Management for Strawberries*

### **Module 6: Food Safety and Hygiene Practices**

- Post-harvest hygiene protocols
- Pest and contamination control
- Training farm workers in sanitation
- HACCP and GAP certifications
- Traceability systems
- *Case Study: Improved Food Safety in Mango Supply Chain*

### **Module 7: Value Addition and Agro-Processing**

- Preservation through drying, freezing, and canning
- Branding and labeling for niche markets
- Nutrient retention in processing
- Investment in small-scale agro-processing units
- Regulatory frameworks for value-added products
- *Case Study: Banana Chips Processing Cooperative in Uganda*

### **Module 8: Community-Based Models and Policy Integration**

- Building rural storage cooperatives
- Integrating gender-responsive strategies
- Local government and policy support
- Financial and microcredit access for technologies
- Impact measurement and sustainability
- *Case Study: Village Aggregation Centers in Rwanda*

### Training Methodology

- Interactive lectures and multimedia presentations
- Group discussions and experience sharing
- Field visits and demonstration activities
- Simulation exercises and problem-solving workshops
- Action planning and course evaluation

### Register as a group from 3 participants for a Discount

Send us an email: [info@fineskilltrainingcenter.org](mailto: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

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- 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   |
|-------------|-------------|----------|---------|
| 21 Sep 2026 | 25 Sep 2026 | Online   | \$1,000 |
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$1,500 |

| Start Date  | End Date    | Location | Price |
|-------------|-------------|----------|-------|
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$0   |
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$0   |
| 21 Sep 2026 | 25 Sep 2026 | Physical | \$0   |
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Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: [info@fineskilltrainingcenter.com](mailto:info@fineskilltrainingcenter.com) | Website: [www.fineskilltrainingcenter.com](http://www.fineskilltrainingcenter.com)