Training Course on Developing Farm-Level Climate Action Plans

Professional Development Training Course Outline

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

Course Introduction

Climate change presents a serious threat to global food security, and the agricultural sector is both a contributor to and victim of its impacts. In response, the need for sustainable agriculture, climate-resilient farming, and climate-smart practices has become more urgent than ever. Training Course on Developing Farm-Level Climate Action Plans is designed to equip farmers, agribusiness professionals, and policymakers with the practical skills and strategic knowledge to design, implement, and monitor climate actions tailored to the farm level. Leveraging evidence-based climate adaptation strategies, the course integrates international best practices and local knowledge to enhance resilience, productivity, and environmental stewardship.

The course offers actionable insights into carbon footprint reduction, sustainable land management, climate-smart irrigation, and renewable energy applications in farming. Trainees will engage with interactive modules, real-life case studies, and hands-on tools to build capacity for climate mitigation, resource optimization, and data-driven farm management. With a focus on net-zero transitions, the training will empower participants to become leaders in climate action planning within their communities and sectors.

Programme Curriculum

Training Course on Developing Farm-Level Climate Action Plans

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Course Objectives

1. Understand climate change impacts on farm productivity and rural livelihoods
2. Identify and analyze farm-level greenhouse gas (GHG) emission sources
3. Design tailored farm-level climate action strategies
4. Implement climate-smart agriculture practices for mitigation and adaptation
5. Use digital tools for carbon accounting and emissions tracking
6. Promote regenerative agriculture and sustainable soil health
7. Integrate renewable energy solutions into farm operations
8. Enhance water resource management through climate-responsive irrigation
9. Apply risk assessment techniques for climate-related agricultural threats
10. Mobilize community-based climate action and farmer cooperatives
11. Evaluate policy frameworks supporting climate-resilient agriculture
12. Develop monitoring, reporting, and verification (MRV) systems for farm plans
13. Scale up successful interventions using data and case evidence

Target Audience

1. Smallholder farmers
2. Agronomists and agricultural extension officers
3. Climate change adaptation specialists
4. Rural development professionals
5. Environmental consultants
6. Agribusiness entrepreneurs
7. Agriculture and environmental policy makers
8. NGOs and CBOs focused on agriculture and climate

Training Modules

Module 1: Introduction to Climate Change and Agriculture

- Basics of climate change science and terminology
- Impacts of climate change on agriculture
- Vulnerabilities at the farm level
- Climate projections and risk zones
- Role of farmers in climate mitigation
- **Case Study**: Climate impacts on maize yields in Sub-Saharan Africa

Module 2: Principles of Climate-Smart Agriculture (CSA)

- Overview of CSA pillars (productivity, resilience, mitigation)
- CSA and SDGs alignment
- Entry points for action planning
- Gender and youth inclusion in CSA
- Institutional and policy support for CSA
- **Case Study**: CSA adoption in drought-prone regions of Kenya

Module 3: Farm-Level Carbon Footprint Assessment

- What is a carbon footprint?
- Measuring GHG emissions on farms
- Tools and calculators for carbon audits
- Scope 1, 2, 3 emissions explained
- Using data to inform decisions
- **Case Study**: Emissions audit in rice farming systems

Module 4: Sustainable Soil Management

- Soil as a carbon sink
- Composting and organic amendments
- No-till and cover cropping
- Integrated nutrient management
- Reducing emissions from synthetic fertilizers
- **Case Study**: Soil health initiatives in organic banana farms

Module 5: Climate-Smart Water Management

- Water use efficiency strategies
- Drip and sprinkler systems
- Rainwater harvesting
- Irrigation scheduling and automation
- Water-energy nexus in farming
- **Case Study**: Smart irrigation systems in India’s drylands

Module 6: Crop Diversification and Agroecology

- Crop rotation benefits
- Agroforestry integration
- Indigenous and climate-resilient crops
- Pollinator-friendly practices
- Ecosystem services and biodiversity
- **Case Study**: Resilient cropping in Latin American highlands

Module 7: Livestock and GHG Emissions

- Methane emissions in livestock systems
- Feed quality and herd management
- Manure treatment and biogas
- Livestock breed selection
- Integrating animals into circular systems
- **Case Study**: Low-emission dairy farming in New Zealand

Module 8: Renewable Energy for Farms

- Solar and wind energy for irrigation
- Biogas from farm waste
- Energy-efficient equipment
- Cost-benefit of renewable installations
- Maintenance and operations
- **Case Study**: Solar-powered greenhouses in Morocco

Module 9: Farm Risk Assessment and Climate Resilience

- Climate risk profiling

- Tools for vulnerability assessment
- Early warning systems
- Decision-support systems
- Risk-sharing and crop insurance
- **Case Study**: Risk analysis tools in Southeast Asian farms

Module 10: Developing a Farm Climate Action Plan

- Step-by-step plan creation
- Vision, goals, and timelines
- Costing and resource needs
- Stakeholder mapping
- Action plan templates and guidance
- **Case Study**: Plan implementation in South African vineyards

Module 11: Data Collection and Monitoring Tools

- Field-level data management
- Mobile apps and sensors
- GPS, GIS, and remote sensing
- Climate data portals
- Farmer-led data collection
- **Case Study**: Mobile monitoring tools in Uganda's bean farming

Module 12: Community Engagement and Knowledge Sharing

- Role of farmer groups and cooperatives
- Participatory rural appraisal (PRA)
- Farmer field schools
- Local knowledge integration
- Communication strategies for climate literacy
- **Case Study**: Farmer cooperatives in Nepal leading CSA transitions

Module 13: Integrating Gender and Social Inclusion

- Gendered climate impacts
- Women-led climate actions
- Youth empowerment
- Inclusive planning processes
- Removing systemic access barriers
- **Case Study**: Female farmer-led adaptation in Ethiopia

Module 14: Policy and Finance for Climate Agriculture

- Enabling policy environments
- Climate finance mechanisms
- Green bonds and carbon credits
- Subsidy reforms for sustainability
- Navigating grant proposals
- **Case Study**: Climate financing in East African cooperatives

Module 15: Scaling, Replication, and Innovation

- Identifying scalable practices
- Farmer innovation and feedback loops
- Public-private partnerships

- Piloting and prototyping methods
- Innovation hubs and incubators
- **Case Study**: Scaling up CSA through digital extension in West Africa

Training Methodology

- Participatory workshops and discussions
- Case study analysis and group work
- Hands-on practice with digital tools
- Simulation exercises and role plays
- Field visits and peer learning exchanges
- Expert lectures and mentoring 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

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

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