Training Course on Agroforestry Systems Design and Management

Professional Development Training Course Outline

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

Course Introduction

Agroforestry is emerging as a transformative land-use system that integrates trees and shrubs into farming landscapes to achieve productive, ecological, and socio-economic benefits. Training Course on Agroforestry Systems Design and Management is meticulously designed to equip practitioners, agricultural professionals, policymakers, and development agents with in-depth knowledge and practical skills for planning, implementing, and managing agroforestry systems. This course addresses urgent global challenges such as climate change, food insecurity, soil degradation, and biodiversity loss while promoting sustainable agriculture and livelihoods.

By combining ecological principles with modern agroecological practices, this training offers participants the opportunity to harness nature-based solutions for land restoration, income diversification, and carbon sequestration. Featuring field-tested case studies, expert-led modules, and innovative methodologies, this course aligns with current global sustainability goals and regenerative agricultural practices, making it a valuable resource for development-focused organizations and climate-resilient farming initiatives.

Programme Curriculum

Training Course on Agroforestry Systems Design and Management

Introduction

Agroforestry is emerging as a transformative land-use system that integrates trees and shrubs into farming landscapes to achieve productive, ecological, and socio-economic benefits. Training Course on Agroforestry Systems Design and Management is meticulously designed to equip practitioners, agricultural professionals, policymakers, and development agents with in-depth knowledge and practical skills for planning, implementing, and managing agroforestry systems. This course addresses urgent global challenges such as climate change, food insecurity, soil degradation, and biodiversity loss while promoting sustainable agriculture and livelihoods.

By combining ecological principles with modern agroecological practices, this training offers participants the opportunity to harness nature-based solutions for land restoration, income diversification, and carbon sequestration. Featuring field-tested case studies, expert-led modules, and innovative methodologies, this course aligns with current global sustainability goals and regenerative agricultural practices, making it a valuable resource for development-focused organizations and climate-resilient farming initiatives.

Course Objectives

1. Understand the principles of agroforestry and integrated land use systems.
2. Analyze ecosystem services provided by agroforestry practices.
3. Design climate-smart agroecological landscapes for sustainability.
4. Integrate carbon farming and sequestration strategies into farm designs.
5. Promote climate-resilient agriculture through diverse agroforestry models.
6. Master soil health restoration techniques using tree-based systems.
7. Evaluate economic benefits and livelihood opportunities of agroforestry.
8. Utilize GIS and mapping tools in agroforestry planning.
9. Assess and mitigate pest and disease management in tree-crop systems.
10. Foster community-based agroforestry planning and participatory design.
11. Enhance knowledge on policy frameworks and incentive mechanisms.
12. Develop business models for agroforestry product value chains.
13. Conduct impact assessment and monitoring of agroforestry systems.

Target Audiences

1. Agricultural Extension Officers
2. Environmental and Forestry Officers
3. Climate Change and Natural Resource Professionals
4. Policy Makers and Rural Planners
5. Development NGO Practitioners
6. University Students and Researchers
7. Agroecology and Permaculture Trainers
8. Smallholder Farmers and Farmer Cooperatives

Course Duration: 10 days

Training Modules

Module 1: Introduction to Agroforestry

- Historical background and evolution
- Definition and scope of agroforestry
- Benefits and functions of agroforestry systems
- Global trends and adoption
- Classification of agroforestry practices
- **Case Study: Indigenous agroforestry in Kenya’s Central Highlands**

Module 2: Agroecological Principles

- Ecosystem-based farming
- Ecological niches and species complementarity
- Nutrient cycling and biodiversity
- Energy and water use efficiency
- Sustainability indicators
- **Case Study: Cocoa-based agroforestry in Ghana**

Module 3: Climate-Smart Agroforestry

- Climate adaptation and mitigation strategies
- Role of trees in temperature and water regulation
- Integrating agroforestry into National Adaptation Plans (NAPs)
- Drought-tolerant tree species
- Early warning systems and resilience planning
- **Case Study: Silvopastoral systems in Brazil**

Module 4: Tree Species Selection and Propagation

- Criteria for species selection
- Tree-crop compatibility
- Propagation techniques: seeds, grafting, cuttings
- Nursery management
- Agroforestry tree databanks
- **Case Study: Fruit tree propagation in Malawi's school feeding program**

Module 5: Soil Health and Fertility Management

- Soil erosion control using trees
- Organic matter management
- Nitrogen-fixing species and mycorrhizae
- Soil pH and nutrient balancing
- Composting and mulching techniques
- **Case Study: Alley cropping and soil fertility in Nigeria**

Module 6: Water Management in Agroforestry

- Water harvesting and storage
- Agroforestry and watershed conservation
- Irrigation strategies for tree systems
- Buffer zones and riparian protection
- Role of trees in preventing runoff
- **Case Study: Agroforestry-based watershed restoration in India**

Module 7: Agroforestry Systems Design and Layout

- System planning and layout principles
- Spatial and temporal arrangement
- Multi-strata and zonal design
- Mapping tools and software
- Design for different agroecological zones
- **Case Study: Participatory design of homegardens in Sri Lanka**

Module 8: Tree-Crop-Livestock Interactions

- Compatibility and competition
- Nutrient flows and biomass recycling
- Livestock management in silvopasture
- Feeding systems and fodder trees
- Livelihood enhancement
- **Case Study: Mixed farming in Uganda's cattle corridor**

Module 9: Economic Analysis of Agroforestry

- Cost-benefit analysis

- Short- and long-term returns
- Accessing green finance and credits
- Non-timber forest products (NTFPs)
- Agroforestry enterprises
- **Case Study: Market-driven agroforestry in Ethiopia**

Module 10: Agroforestry and Biodiversity Conservation

- Trees as habitat for pollinators and wildlife
- Conservation corridors and hedgerows
- Agroforestry and landscape connectivity
- Restoration of degraded lands
- Tree planting for species protection
- **Case Study: Biodiversity corridors in Indonesia's cocoa sector**

Module 11: Policy and Legal Frameworks

- National agroforestry policies
- Land tenure and tree ownership
- Institutional roles and coordination
- Incentives and subsidies for agroforestry
- Policy integration with climate agendas
- **Case Study: Kenya's National Agroforestry Strategy**

Module 12: Gender and Social Inclusion

- Role of women in agroforestry
- Indigenous knowledge systems
- Youth engagement in tree-based systems
- Equitable benefit-sharing
- Inclusive decision-making processes
- **Case Study: Women-led agroforestry cooperatives in Nepal**

Module 13: Value Chains and Marketing

- Agroforestry product development
- Post-harvest management
- Accessing markets and certifications
- E-commerce and agroforestry branding
- Market information systems
- **Case Study: Shea nut value chain development in West Africa**

Module 14: Monitoring and Evaluation (M&E)

- Indicators for agroforestry success
- Tools for tracking progress
- Participatory monitoring approaches
- Data collection and analysis
- Feedback and adaptive management
- **Case Study: Impact tracking in agroforestry projects in Rwanda**

Module 15: Scaling Up and Knowledge Sharing

- Farmer-to-farmer extension
- Agroforestry networks and platforms
- Digital technologies for dissemination

- Integration into education curricula
- Partnerships and institutional support
- **Case Study: Scaling agroforestry through ICT in Tanzania**

Training Methodology

- Participatory lectures and expert presentations
- Field demonstrations and site visits
- Group discussions and brainstorming sessions
- Case study analysis and reflection
- Interactive hands-on exercises and design projects
- Use of digital tools (GIS, mapping, simulation models)

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

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

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com