Training Course on Agroforestry Systems: Integrating Trees for Sustainable Land Use and Climate Resilience

Professional Development Training Course Outline

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

Course Introduction

The imperative to create sustainable and resilient land-use systems has never been more critical. This comprehensive training course, "Agroforestry Systems: Integrating Trees for Sustainable Land Use and Climate Resilience," empowers participants to leverage the synergistic benefits of integrating trees into agricultural landscapes. We delve into the core principles of agroforestry systems, focusing on enhancing biodiversity conservation, promoting soil health management, and maximizing carbon sequestration. This program emphasizes the importance of regenerative agriculture, climate change mitigation, and sustainable livelihoods. By mastering agroforestry design, tree species selection, and integrated pest management (IPM) within agroforestry contexts, participants will contribute to building more resilient and productive ecosystems, ultimately enhancing rural development strategies.

This curriculum is designed to equip farmers, agricultural professionals, and policymakers with the knowledge and practical skills necessary to implement and manage effective agroforestry systems. We explore the critical role of water resource management, nutrient cycling, and value chain development within agroforestry frameworks. The course promotes the adoption of agroecological principles, sustainable forestry practices, and participatory rural appraisal (PRA) for community-driven agroforestry initiatives. Through practical exercises, real-world case studies, and expert insights, participants will learn to develop and implement context-specific solutions that enhance ecosystem services, improve farm productivity, and contribute to a more sustainable and equitable future

Programme Curriculum

Training Course on Agroforestry Systems: Integrating Trees for Sustainable Land Use and Climate Resilience

Introduction

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Course Objectives:

1. Understand the principles and benefits of agroforestry systems for sustainable land use.
2. Design effective agroforestry systems tailored to specific ecological and socio-economic contexts.
3. Select appropriate tree species for diverse agroforestry applications.
4. Enhance soil health management through agroforestry practices.
5. Promote biodiversity conservation within agroforestry landscapes.
6. Maximize carbon sequestration through agroforestry systems.
7. Implement integrated pest management (IPM) in agroforestry settings.
8. Improve water resource management through agroforestry practices.
9. Develop value chains for agroforestry products.
10. Apply agroecological principles to design and manage agroforestry systems.
11. Utilize participatory rural appraisal (PRA) for community-driven agroforestry initiatives.
12. Contribute to climate change mitigation through agroforestry practices.
13. Enhance sustainable livelihoods through agroforestry-based enterprises.

Target Audience:

- Smallholder Farmers and Farmer Groups
- Agricultural Extension Officers
- Forestry Professionals
- Agribusiness Professionals
- Rural Development Practitioners
- Policymakers and Government Officials
- NGO and CSO Staff involved in Land Management
- Researchers and Academics

Duration: 10 Days

Course Modules:

Module 1: Introduction to Agroforestry Systems

- Defining agroforestry and its key components.
- Exploring the ecological, economic, and social benefits of agroforestry.
- Understanding different types of agroforestry systems (alley cropping, silvopasture, homegardens).
- Analyzing global and regional trends in agroforestry adoption.
- Case studies of successful agroforestry systems.

Module 2: Agroforestry System Design

- Principles of agroforestry system design.
- Matching tree species to specific site conditions and objectives.
- Designing multi-strata agroforestry systems for optimal resource utilization.
- Integrating livestock and crops into agroforestry systems.
- Practical exercises in agroforestry system design.

Module 3: Tree Species Selection and Management

- Identifying suitable tree species for agroforestry applications.
- Understanding the ecological requirements and growth characteristics of different tree species.
- Managing tree density and spacing for optimal productivity.
- Implementing pruning and coppicing techniques.
- Practical demonstrations of tree management techniques.

Module 4: Soil Health Management in Agroforestry

- Understanding the role of trees in soil health improvement.
- Implementing soil conservation practices in agroforestry systems.
- Enhancing soil fertility through nitrogen fixation and organic matter addition.
- Managing soil erosion and water runoff.
- Practical exercises in soil health assessment and management.

Module 5: Biodiversity Conservation in Agroforestry

- Understanding the importance of biodiversity in agroforestry systems.
- Integrating native tree species to enhance biodiversity.
- Creating habitats for beneficial insects and wildlife.
- Managing agroforestry systems for pollinator conservation.
- Case studies of biodiversity-rich agroforestry systems.

Module 6: Carbon Sequestration and Climate Change Mitigation

- Understanding the role of trees in carbon sequestration.
- Designing agroforestry systems for maximum carbon storage.
- Assessing the carbon footprint of agroforestry systems.
- Utilizing agroforestry for climate change adaptation.
- Practical applications of carbon sequestration measurement.

Module 7: Integrated Pest Management (IPM) in Agroforestry

- Principles of IPM and its application in agroforestry.
- Identifying and managing common pests and diseases in agroforestry systems.
- Utilizing biological control and other eco-friendly pest management methods.
- Implementing safe and effective pesticide application techniques.
- Practical exercises in pest identification and management.

Module 8: Water Resource Management in Agroforestry

- Understanding the role of trees in water conservation.
- Implementing water harvesting and irrigation techniques in agroforestry systems.
- Managing water runoff and erosion control.
- Selecting tree species for water-stressed environments.
- Practical demonstrations of water management techniques.

Module 9: Value Chains for Agroforestry Products

- Identifying market opportunities for agroforestry products.
- Developing value-added products from agroforestry resources.
- Implementing sustainable harvesting and processing techniques.
- Establishing fair trade and certification systems.
- Case studies of successful agroforestry value chains.

Module 10: Agroecological Principles in Agroforestry

- Understanding the principles of agroecology and their application in agroforestry.
- Designing agroforestry systems for nutrient cycling and energy flow.
- Implementing polyculture and intercropping in agroforestry systems.
- Promoting ecological resilience and stability.
- Practical exercises in agroecological design.

Module 11: Participatory Rural Appraisal (PRA) for Agroforestry

- Principles of PRA and its application in community-driven agroforestry initiatives.
- Conducting participatory needs assessments and resource mapping.
- Facilitating community workshops and planning sessions.
- Developing collaborative agroforestry management plans.
- Practical exercises in PRA techniques.

Module 12: Agroforestry for Climate Change Adaptation

- Assessing the vulnerability of agroforestry systems to climate change.
- Designing agroforestry systems for climate resilience.
- Selecting tree species for drought and heat tolerance.
- Implementing climate-smart agroforestry practices.
- Case studies of climate-resilient agroforestry systems.

Module 13: Agroforestry for Sustainable Livelihoods

- Identifying income-generating opportunities from agroforestry products.
- Developing agroforestry-based enterprises for rural communities.
- Utilizing agroforestry for food security and nutritional diversity.
- Promoting gender equity and social inclusion in agroforestry initiatives.
- Practical exercises in business plan development.

Module 14: Agroforestry Policy and Planning

- Analyzing relevant agroforestry policies and regulations.
- Developing agroforestry management plans at the regional and national level.
- Promoting agroforestry through extension services and incentives.
- Integrating agroforestry into land use planning and development strategies.
- Case studies of successful agroforestry policy interventions.

Module 15: Project Development and Implementation for Agroforestry

- Developing project proposals for agroforestry initiatives.
- Implementing project management and monitoring and evaluation.
- Scaling up successful agroforestry practices.
- Developing action plans for implementing agroforestry systems.
- Practical exercises in project development.

Training Methodology:

- Interactive Workshops: Facilitated discussions, group exercises, and problem-solving activities.
- Practical Demonstrations: Hands-on experience with tree planting, pruning, and soil management techniques.
- Field Visits: Exposure to working agroforestry systems and community projects.
- Role-Playing and Simulations: Practice decision-making in realistic scenarios.
- Expert Presentations: Insights from leading researchers and practitioners.
- Group Projects: Collaborative development of agroforestry management plans.
- Action Planning: Development of personalized action plans for implementing learned practices.
- Digital Tools and Resources: Utilization of online platforms and mobile applications.
- Participatory mapping: Engaging communities in spatial representation of resources.
- Post-Training Support: Access to online forums, mentorship, and continued learning resources.

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

1. The participant must be conversant with English.
2. Upon completion of training the participant will be issued with an Authorized Training Certificate
3. Course duration is flexible and the contents can be modified to fit any number of days.
4. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
5. 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
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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