Training Course on Agricultural Biodiversity Conservation and Ecosystem Services

Professional Development Training Course Outline

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

Course Introduction

Agricultural biodiversity is the backbone of resilient food systems, ensuring ecological balance, climate adaptability, and sustainable agricultural productivity. Training Course on Agricultural Biodiversity Conservation and Ecosystem Services is designed to empower farmers, extension agents, policymakers, and stakeholders with practical tools and knowledge to safeguard biodiversity while enhancing ecosystem services. Through the lens of sustainability, the course explores species diversification, agroecology, pollinator preservation, soil health, and integrated farm management practices to mitigate environmental degradation.

In an era of accelerating climate change, biodiversity loss, and unsustainable land use, conserving agrobiodiversity and supporting natural ecosystem services has become a global priority. This program delivers actionable strategies, indigenous knowledge integration, and policy frameworks for biodiversity conservation, aiming to restore ecological equilibrium, increase farm resilience, and ensure long-term food security. Trainees will gain skills in biodiversity mapping, ecosystem valuation, sustainable land management, and community-based conservation.

Programme Curriculum

Training Course on Agricultural Biodiversity Conservation and Ecosystem Services

Introduction

Agricultural biodiversity is the backbone of resilient food systems, ensuring ecological balance, climate adaptability, and sustainable agricultural productivity. Training Course on Agricultural Biodiversity Conservation and Ecosystem Services is designed to empower farmers, extension agents, policymakers, and stakeholders with practical tools and knowledge to safeguard biodiversity while enhancing ecosystem services. Through the lens of sustainability, the course explores species diversification, agroecology, pollinator preservation, soil health, and integrated farm management practices to mitigate environmental degradation.

In an era of accelerating climate change, biodiversity loss, and unsustainable land use, conserving agrobiodiversity and supporting natural ecosystem services has become a global priority. This program delivers actionable strategies, indigenous knowledge integration, and policy frameworks for biodiversity conservation, aiming to restore ecological equilibrium, increase farm resilience, and ensure long-term food security. Trainees will gain skills in biodiversity mapping, ecosystem valuation, sustainable land management, and community-based conservation.

Course Objectives

Participants will be able to:

1. Understand the role of agricultural biodiversity in food security and ecosystem stability.
2. Identify key ecosystem services supporting sustainable agriculture.
3. Apply biodiversity conservation techniques in different agro-ecological zones.
4. Integrate agroecological practices to enhance soil fertility and resilience.
5. Analyze the impacts of monoculture and climate change on biodiversity loss.
6. Promote the conservation of indigenous seeds and livestock breeds.
7. Develop community-based biodiversity management plans.
8. Utilize GIS and remote sensing for biodiversity monitoring.
9. Evaluate the economic value of ecosystem services in rural livelihoods.
10. Advocate for policies and legal frameworks supporting conservation.
11. Strengthen pollinator habitats and beneficial insect populations.
12. Incorporate traditional knowledge and farmer innovations into modern systems.
13. Design biodiversity-friendly farming systems for climate adaptation.

Target Audiences

1. Farmers and farmer cooperatives
2. Agricultural extension officers
3. Environmental and biodiversity researchers
4. Policymakers and government officials
5. NGOs and conservation organizations
6. Students and academics in agriculture and ecology
7. Agribusiness professionals
8. Rural development officers

Course Duration: 5 days

Course Modules

Module 1: Introduction to Agricultural Biodiversity

- Concepts of agricultural biodiversity and its global importance
- Types and levels of agrobiodiversity
- Drivers of biodiversity loss
- Benefits of biodiversity in agriculture
- Conservation vs. utilization: finding the balance
- **Case Study:** Biodiversity hotspots in East African farming systems

Module 2: Understanding Ecosystem Services

- Classification: provisioning, regulating, supporting, cultural
- Natural capital and ecosystem service frameworks
- Linkages between ecosystem services and agrobiodiversity
- Valuation methods and tools
- Threats to ecosystem services in agriculture

- **Case Study:** Payment for Ecosystem Services in Latin America

Module 3: Biodiversity-Smart Farming Practices

- Crop diversification and intercropping
- Integrated pest and nutrient management
- Organic and regenerative agriculture
- Use of local and traditional seed varieties
- Habitat management on farms
- **Case Study:** Push-pull technology in maize farming

Module 4: Soil Biodiversity and Health

- Importance of soil organisms in agroecosystems
- Soil conservation techniques
- Impact of chemical inputs on soil biodiversity
- Enhancing soil fertility through composting and cover crops
- Soil biodiversity indicators and testing
- **Case Study:** Composting adoption among smallholders in India

Module 5: Pollinators and Beneficial Insects

- Role of pollinators in food production
- Habitat requirements and threats
- Conservation strategies for pollinators
- Integrating flowering plants into crop systems
- Policy support for pollinator-friendly farming
- **Case Study:** Pollinator gardens in California almond farms

Module 6: Indigenous Knowledge and Genetic Resources

- Role of indigenous practices in conservation
- On-farm conservation of genetic resources
- Seed banks and seed sovereignty
- Community-based breeding programs
- Policy frameworks supporting traditional knowledge
- **Case Study:** Indigenous millet conservation in West Africa

Module 7: Monitoring and Valuation Tools

- Biodiversity indicators and metrics
- Participatory biodiversity monitoring
- GIS and remote sensing tools
- Economic valuation of ecosystem services
- Monitoring protocols for farmers
- **Case Study:** Biodiversity mapping in Amazonian agroforestry

Module 8: Policy, Planning, and Advocacy

- Global and national biodiversity frameworks (CBD, FAO)
- National Biodiversity Strategies and Action Plans (NBSAPs)
- Legal instruments for biodiversity protection
- Advocacy strategies for community involvement
- Linking policy to farm-level practices
- **Case Study:** Farmer-led biodiversity policy lobbying in Kenya

Training Methodology

- Participatory and experiential learning
- Field-based demonstration and farm visits
- Hands-on group exercises and role plays
- Case study analysis and discussions
- Interactive lectures with expert facilitators
- Toolkit development and action planning

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	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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

Register Online Now

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