Training Course on Sustainable Aquaculture

Professional Development Training Course Outline

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

Course Introduction

Sustainable Aquaculture is rapidly transforming the future of global food systems by promoting environmentally responsible, economically viable, and socially inclusive fish farming practices. As the world seeks alternatives to overfished wild stocks, aquaculture presents a critical solution to meeting the rising demand for high-quality seafood. This comprehensive training course is tailored to equip stakeholders with practical tools, strategic insights, and cutting-edge innovations to enhance sustainable fish farming operations, preserve aquatic biodiversity, and contribute to climate-smart food security.

With a sharp focus on eco-efficiency, circular economy principles, and best management practices, this course integrates sustainability standards with real-world applications. From integrated multi-trophic aquaculture (IMTA) to recirculating aquaculture systems (RAS), participants will gain actionable skills to reduce environmental footprints, improve water quality, adopt green technologies, and scale up production through digital transformation and sustainable business models.

Programme Curriculum

Training Course on Sustainable Aquaculture

Introduction

Sustainable Aquaculture is rapidly transforming the future of global food systems by promoting environmentally responsible, economically viable, and socially inclusive fish farming practices. As the world seeks alternatives to overfished wild stocks, aquaculture presents a critical solution to meeting the rising demand for high-quality seafood. This comprehensive training course is tailored to equip stakeholders with practical tools, strategic insights, and cutting-edge innovations to enhance sustainable fish farming operations, preserve aquatic biodiversity, and contribute to climate-smart food security.

With a sharp focus on eco-efficiency, circular economy principles, and best management practices, this course integrates sustainability standards with real-world applications. From integrated multi-trophic aquaculture (IMTA) to recirculating aquaculture systems (RAS), participants will gain actionable skills to reduce environmental footprints, improve water quality, adopt green technologies, and scale up production through digital transformation and sustainable business models.

Course Duration

5 days

Training Objectives

1. Understand the principles of **sustainable aquaculture** and **blue economy development**.
2. Apply **climate-resilient aquaculture** strategies to mitigate environmental risks.
3. Design **low-impact fish farming systems** using green infrastructure.
4. Implement **biosecurity and disease control** protocols in aquaculture.
5. Explore **aquaponics and integrated farming systems** for resource efficiency.
6. Learn about **sustainable feed formulation** and eco-friendly inputs.
7. Utilize **smart aquaculture technologies** (IoT, AI, data analytics) for optimization.
8. Analyze **value chains** and market access for aquaculture products.
9. Manage **water quality** and nutrient recycling in closed systems.
10. Promote **gender inclusion and community-based aquaculture**.
11. Integrate **policy frameworks and regulatory compliance** in aquaculture planning.
12. Develop **business models and financing** strategies for sustainable growth.
13. Assess the **environmental and social impact** of aquaculture operations.

Organizational Benefits

- Build in-house expertise in **eco-innovative aquaculture** practices
- Reduce operational costs through **efficient resource management**
- Improve compliance with **international sustainability standards**
- Enhance brand reputation via **environmentally responsible practices**
- Expand market opportunities through **certification and traceability**

Target Participants

1. Aquaculture entrepreneurs and fish farm owners
2. Fisheries and marine officers
3. Environmental scientists and sustainability consultants
4. Policy makers in fisheries and food security
5. NGOs in marine conservation and community development
6. Agricultural and aquaculture extension officers
7. Students and researchers in aquaculture and marine studies
8. Investors and agri-finance professionals in aquaculture startups

Course Outline

Module 1: Introduction to Sustainable Aquaculture

- Overview of global aquaculture trends
- Environmental, economic, and social pillars
- Blue economy and sustainability linkages

- Climate change and aquaculture resilience
- Aquaculture and the SDGs

Module 2: System Design and Technologies

- Cage, pond, RAS, and IMTA systems
- Smart aquaculture technologies (IoT, sensors)
- Automation and digital monitoring
- Infrastructure for sustainability
- Energy efficiency in aquaculture

Module 3: Sustainable Feed and Nutrition

- Sustainable feed sources and alternatives
- Reducing fishmeal dependency
- Formulation techniques for balanced diets
- Impacts of feed on water quality
- Local production of feed

Module 4: Environmental and Waste Management

- Water quality monitoring
- Solid waste and sludge management
- Eutrophication control
- Circular aquaculture systems
- Eco-labels and green certifications

Module 5: Health Management and Biosecurity

- Common diseases and diagnosis
- Vaccination and treatment methods
- On-farm biosecurity practices
- Early warning systems
- Fish welfare and stress reduction

Module 6: Business Development and Marketing

- Aquaculture business models
- Cost-benefit analysis and risk assessment
- Accessing finance and insurance
- Value addition and product innovation
- Branding and market linkages

Module 7: Policy, Governance, and Compliance

- National aquaculture strategies
- Licensing and regulatory frameworks
- Environmental impact assessments
- Sustainable aquaculture policies
- Stakeholder engagement and advocacy

Module 8: Community Engagement and Gender Inclusion

- Community-based aquaculture

- Role of women and youth
- Inclusive aquaculture development
- Social impact assessment
- Building local cooperatives

Training Methodology

- Interactive expert-led presentations
- Real-life case studies and simulations
- Group discussions and peer learning
- Practical demonstrations and site visits
- Action plan development and coaching

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
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