

SUSTAINABLE AND SMART SHRIMP FARMING

Integrating Eco-Friendly Practices, Digital Tools, and Climate-Resilient Technologies



04 - 10 October 2026



Asian Institute (AIT), Thailand



PROGRAM BACKGROUND

The global population is projected to reach 9.7 billion by 2050, placing unprecedented pressure on food systems already strained by climate change, resource degradation, and environmental challenges. In this context, fisheries and aquaculture remain critical sources of protein and livelihoods, with shrimp farming emerging as one of the most dynamic and profitable sectors worldwide.

Shrimp farming in Southeast Asia particularly in Thailand has evolved into a highly sophisticated industry, yet continues to face mounting challenges including disease outbreaks, water pollution, habitat degradation, and social equity concerns. Ensuring long-term viability requires sustainable and smart approaches that balance profitability with environmental and social responsibility.

In response, AIT Extension, in collaboration with the Aquaculture and Aquatic Resources Management (AARM) Programme at AIT and FutureFish, has developed this professional training program to build the capacity of practitioners and policymakers to apply eco-friendly practices, digital tools, and data-driven technologies for climate-resilient shrimp production.



PROGRAM OBJECTIVES AND LEARNING OUTCOMES

This training program aims to build participants' capacity in sustainable and smart shrimp farming by integrating eco-friendly practices with modern technologies such as IoT-based monitoring, precision feeding, and data-driven farm management. By the end of the program, participants will be able to:

- Apply sustainable farm management and biosecurity practices in shrimp farming.
- Utilise smart technologies for real-time monitoring and data-driven decision-making.
- Implement strategies for reducing environmental impacts and improving water quality.
- Assess the economic and environmental performance of shrimp farming systems.
- Develop farm-level action plans for climate-resilient and sustainable aquaculture.



PROGRAM CONTENTS

The training integrates expert-led classroom sessions, hands-on practical exercises, and field visits to model shrimp farms and research facilities in Thailand. Group exercises and experience-sharing sessions reinforce learning from both technical and managerial perspectives. Key thematic areas include:

- Global and regional trends in shrimp aquaculture
- Sustainable aquaculture and nature-based solutions (NbS) in shrimp farming
- Pond design, pond preparation, feeding, and water management practices
- Biosecurity and health management strategies
- Disease prevention, risk management, and early warning systems
- Application of smart technologies and automation tools in shrimp farming
- Waste management and nutrient recycling techniques
- Climate-resilient and Integrated Multi-Trophic Aquaculture (IMTA) Systems
- Market access, traceability, and certification standards (ASC, BAP)
- Economic and investment perspectives in smart aquaculture
- Field exposure to model shrimp farms and technology demonstrations
- Group Action Plan (GAP): participants develop and present farm-level action plans for peer review and discussion

Training Design: 2.5 days of expert-led classroom sessions; 2 days of field visits to shrimp farms and research facilities; half-day of Group Action Plan (GAP) development and experience-sharing workshop.

Medium of Instruction: English (Thai interpretation available during field visits)

Training Fee: Please register or contact us to receive the information on the training fee and other related expenses.



TARGET PARTICIPANTS

This program is designed for professionals and organisations working across the aquaculture and fisheries value chain, including:

- Shrimp farmers and aquaculture practitioners
- Officers from fisheries and environmental departments
- Researchers, academicians, and extension workers
- Private sector investors and agritech entrepreneurs
- NGO and development professionals working in aquaculture and coastal livelihoods



PROGRAM DETAILS

Duration	04 – 10 October 2026 (7 days, including arrival and departure)
Venue	Asian Institute of Technology (AIT), Pathum Thani, Thailand
Program Fee	Please register or contact us to receive the information on the training fee and other related expenses.
Language	English (Thai interpretation during field visits)
Certificate	Certificate of Completion awarded by AIT Extension
Registration Deadline	13 September 2026 (International) 20 September 2026 (Thai and Visa on Arrival)



ORGANISED BY

Organised by AIT Extension in collaboration with the Aquaculture & Aquatic Resources Management (AARM) Programme at AIT, and FutureFish.



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Register Now:

<https://forms.gle/puUdW6DRzLjpZ4rT6>

