

## Thailand charts aquaculture transformation plan at Bangkok workshop



Front row left to right: Michael Phillips (FutureFish), Tipparat Pongthanapanich (FAO), Thitiporn Laoprasert (DG Thailand Department of Fisheries), Eduardo Leano (DG NACA) and Wenbo Zhang (Shanghai Ocean University).

Bangkok, 21-22 October 2025 - Thailand convened a two-day workshop at the Department of Fisheries to shape a National Innovation and Investment Plan (NIIP) for aquaculture. The meeting formed part of FAO's Technical Cooperation Programme project TCP/RAS/4004, implemented with NACA, which is supporting India, the Philippines, Thailand and Viet Nam to prepare NIIPs and link them into a shared Aquaculture Transformation Monitoring, Evaluation and Learning System (ATMS) for Asia and the Pacific.

### Blue Transformation: from vision to implementation

FAO's Blue Transformation sets a 2030 direction for aquatic food systems that is not simply about producing more, but producing better. For aquaculture, this means climate-smart and lower-carbon growth, greater resource efficiency, strengthened aquatic animal health, and broader social inclusion along the value chain. In Asia and the Pacific, FAO and NACA translated this direction into a regional White Paper (2022) and an action guide (2023) that show how countries can move from high-level goals to practical reforms, investment pipelines and measurable results.

Within this approach, the NIIP serves as the national vehicle for action. It defines a shared sector vision and the future state Thailand aims to reach; identifies bottlenecks that impede progress; prioritises areas for policy reform, innovation and investment; and assembles a shortlist of flagship programmes and projects. It also sets out enabling measures such as standards, permitting, extension and digital services; proposes financing pathways that blend public expenditure

with private capital; and specifies the data, roles and timelines needed to manage delivery and adjust course as evidence accumulates.

### Inside the Bangkok workshop

The programme was designed to move from context to action. Short technical briefings situated Thailand's work within the regional project and illustrated how other countries have approached NIIP design. Facilitated sessions then worked through the NIIP steps. Participants reviewed recent performance and development trends in Thai aquaculture and mapped system bottlenecks such as input costs, biosecurity, market access, environmental compliance and workforce skills. They framed a transformation vision for Thailand that reflected national priorities while aligning with regional targets, describing the future state in terms of resilience to climate shocks, lower emissions intensity, improved biosecurity and welfare, fair participation along the value chain and global competitiveness.

The discussion organised reforms and investments into practical pathways: technology adoption and innovation; aquatic animal health and biosecurity; environmental performance and water quality; data, traceability and market standards; finance, insurance and risk-sharing; and skills, extension and digital advisory services. Participants outlined an initial tranche of flagship programmes and projects suitable for development partners and private investors, with indicative scope and expected outcomes. Financing options were considered, including how to combine public budgets, concessional resources and private capital, and where guarantees or insurance could help crowd-in investment.

The meeting agreed immediate next steps and responsibilities for completing the NIIP, along with the data and milestones required for implementation.

### Connecting Thailand's NIIP to the regional monitoring system

A core deliverable of the Technical Cooperation Project is a regional Aquaculture Transformation Monitoring System that allows countries to track progress in a comparable way and to learn from one another. Thailand's NIIP will be linked to this system through harmonised indicators and regular reporting. The ATMS is designed to establish a common baseline foreseen for 2026; enable comparison across countries on productivity, environmental performance, climate resilience, aquatic animal health and welfare, social inclusion and investment mobilisation; and provide an evidence base for policy dialogue and for signalling bankable opportunities to public and private investors. Periodic regional syntheses, including an initial consolidated report targeted for 2028, will highlight trends, gaps and emerging good practice that can be replicated or adapted.

For Thailand, this linkage means national progress will be visible in a regional frame. The country will be able to benchmark outcomes, share lessons, and signal investment-ready programmes that align with both national objectives and the wider regional transformation.

### Outcomes

By the close of the workshop Thailand had defined the components of a draft NIIP draft that sets a clear transformation vision, prioritises a manageable set of reforms and investments, identifies a first set of flagship programmes for detailed design, outlines feasible financing pathways, and assigns responsibilities, timelines and data requirements for implementation. Alignment with the ATMS will support transparent tracking of results over time, such as adoption of climate-smart practices, improved biosecurity, reduced environmental footprint, increased participation by women and smallholders, and mobilisation of private investment-while enabling timely adjustments as conditions evolve.

By situating national planning within a coherent regional effort, the outcomes of the Bangkok workshop will help Thailand progress from strategy to delivery, contributing to a more sustainable, competitive and inclusive aquaculture sector, and to shared monitoring and learning across Asia and the Pacific.

**Read more:** [Aquaculture transformation: Innovation and investment for sustainable intensification and expansion of aquaculture in Asia and the Pacific region](#).

## Report of the 3rd High-Level Meeting on Aquaculture Transformation in Asia and the Pacific Region

The third High-Level Meeting on Aquaculture Transformation in Asia and the Pacific assessed progress on the FAO/NACA White Paper 2030 transformation goals and identified priority actions for regional collaboration. Held 1-2 July 2025 at Shanghai Ocean University, the meeting brought together representatives from NACA member governments, the Pacific Community, FAO, WorldFish and research institutions.

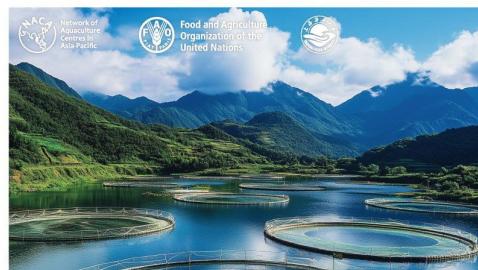
Four panel discussions addressed regional innovation assessment, implementation progress, technology showcases and investment strategies. Participants identified multiple challenges requiring coordinated action: farmer scepticism about unfamiliar technologies, limited access to expertise, misaligned incentives that prioritise profit over sustainability, and failure to direct investment towards small-scale producers. Discussions emphasised the need for knowledge-based aquaculture, better storytelling to highlight social benefits, and collaborative approaches to leverage strengths.

NACA and FAO will continue supporting National Innovation and Investment Plans in India, the Philippines, Thailand and Vietnam. Future initiatives include assessing the regional innovation ecosystem through a Technical Cooperation Programme, developing an Aquaculture Transformation Monitoring and Assessment System to track implementation, and establishing an Aquaculture Innovation and Investment Hub connecting public and private partners. The report can be downloaded from:

<https://enaca.org/enclosure/?id=1461>

Report of the  
**3rd High-Level Meeting on Aquaculture Transformation in Asia and the Pacific Region**

1-2 July 2025, Shanghai Ocean University, P.R. China



Prepared by:  
**Network of Aquaculture Centres in Asia-Pacific**  
Bangkok, Thailand

July 2025

## AquaHub Vision Workshop: Setting a direction



*Participants in the 7 October AquaHub Vision Workshop.*

Bangkok, 7 October - NACA convened a one-day, in-person working group to shape the vision, mission and strategy for the AquaHub, a startup incubator and support network for innovators in the aquaculture space. The workshop focused on establishing the AquaHub's vision, mission, values and partnership principles to define how it will operate, and the immediate steps required to mobilise partners and resources across the Asia-Pacific.

Participants began by clarifying the problems AquaHub should address and why a dedicated hub is the right vehicle. Small group exercises produced draft vision and mission statements looking to 2035, which were then refined through rapid peer feedback. This work was grounded in a brief review of AquaHub's current status and the wider innovation landscape to ensure complementarity with existing efforts.

The group reached initial consensus on a guiding architecture for the Hub: a draft vision and mission oriented to ecosystem health, community resilience and investable impact; a concise set of non-negotiable values and partnership principles to shape collaboration, due diligence and funding choices; and a simple strategy for how ideas progress through the system. Scenario work stress-tested these elements against common dilemmas to produce principles that are practical and actionable, not aspirational.

A staged support pathway was mapped from early concept to scale, using a progression from "prepare" to "grant" to "market access/accelerators" to "global." Clear entry points were identified for entrepreneurs, researchers, farmers and investors, with a view to matching support to the maturity of each innovation. The discussion also outlined core assets for the AquaHub to build: lightweight intake and screening tools

aligned to the values; stage-specific mentoring and technical support; and mechanisms that connect ventures to market channels and appropriate forms of capital.

Target participant and customer profiles for future activities were defined to keep outreach focused and stage-appropriate. Relationship-building and transparency were emphasised, including clear selection criteria and expectations for all partners. The day closed with agreement on practical next steps and a shared intent to maintain momentum as the model is tested and refined.

Immediate actions include preparing a short summary pack that captures the draft vision and mission, values, strategy and pathways, along with an internal action list; standing up the "virtual AquaHub" web presence; formalising partnership agreements; and developing tools, resources and pilot activities to validate the approach ahead of a planned follow-on innovation event in March 2026.

NACA acknowledges the support of Canada's International Development Research Centre (IDRC) and its support under the AQUADAPT programme for the project "Knowledge brokering for nature-based solutions in aquaculture and transformation in Asia-Pacific: Support to the Aquaculture Innovation and Investment Hub".

**Read more:** [Knowledge brokering for nature-based solutions in aquaculture and transformation in Asia-Pacific: Support to the Aquaculture Innovation and Investment Hub](#)

## AquaHub private-sector engagement discussion at Third AQUADAPT Peer Learning Event



Pathum Thani, 5-6 October - NACA participated in the 3rd AQUADAPT Peer-Learning Event at the Asian Institute of Technology Conference Center. Partners reviewed progress on nature-based solutions (NbS) in aquaculture, shared experience and set priorities for the year ahead. The two-day programme combined project presentations, a world-café on climate resilience, and working sessions designed to turn research insights into practice.

The Peer Learning Event opened with a review of the cohort's progress against the wider Theory of Change for the AQUADAPT project. Presentations examined inclusive and equitable NbS for climate resilience and biodiversity; co-developing and testing inclusive nature-based solutions with communities; and monitoring and assessment frameworks for inclusive and gender-responsive approaches. This was followed by a report-back from working groups and consensus on programme-level priorities for knowledge sharing and synthesis into 2026.

The AquaHub project of NACA and FutureFish led a working session on "Knowledge brokering: Private sector engagement and nature-based and inclusive business models," convening researchers and practitioners to sharpen strategies for scaling NbS through market actors across the value chain, from small-scale farmers and associations to SMEs and larger enterprises. Discussion centred on pragmatic engagement models that can connect research outcomes to investable, inclusive business opportunities.

The session opened with findings and recommendations from 2024-25 private-sector scoping work under AQUADAPT. Participants shared their feedback, highlighting where there were opportunities to align NbS adoption with commercial

realities, as well as roadblocks that could be overcome through incentives, risk-sharing and collaborative arrangements.

Project teams then conducted a "private sector engagement check-in" to take stock of current engagement with firms and producer groups, identify gaps, and outline next steps to move promising innovations toward uptake. Several teams prioritised partner mapping, light-touch investment readiness work, and clearer benefit sharing to encourage farmer participation.

AquaHub also invited feedback on the design of a virtual and in-person network to support learning, enterprise development and partnering around sustainable aquaculture. Inputs from the session will be used to refine service pathways, participation criteria and the interface between research partners, entrepreneurs and investors.

Immediate follow-ups from the working session include: circulating the scoping summary to participants for targeted feedback; consolidating a private-sector partner roster with clear entry points; and aligning AquaHub's tools and mentoring offers with project needs identified in the check-in exercises.

NACA acknowledges the support of Canada's International Development Research Centre (IDRC) and the AQUADAPT programme, under the project "Knowledge brokering for nature-based solutions in aquaculture and transformation in Asia-Pacific: Support to the Aquaculture Innovation and Investment Hub".

# **Veterinary training programme:**

## **Fundamentals of farm health management in aquaculture**

The World Veterinary Education in Production Animal Health (WVEPAH), a non-profit organisation dedicated to advancing veterinary education and promoting sustainable practices in production animal health, announces registration for Module I: Fundamentals of Farm Health management in Aquaculture.

### **Programme goal**

This advanced training and certification programme was developed at the request of the World Organisation for Animal Health (WOAH) to support sustainable aquaculture development for human consumption and improve global aquaculture competencies under the “One Health” perspective. The programme prepares experts to support farmers in disease prevention, biosecurity, surveillance, and product quality, from farm to national level.

### **Certification and recognition**

The certification is granted by international institutions: Université de Montréal for quality control and academic diploma delivery, and WOAH for worldwide recognition. Certified professionals are recognised as international experts and will acquire the ability to become key auditors supporting farmers for biosecurity, disease management, prevention, surveillance, and product quality. They will also be internationally recognised in the aquaculture network as trainers for trainers, able to work at farm level, watershed level, and regional and national levels.

### **Course format and dates**

Hybrid delivery: 40 hours online + 40 hours residential

Residential week: James Cook University, Singapore Campus, 2-6 March 2026

### **Course content**

Module I adopts a holistic One Health approach to aquaculture health management. Experts will learn about:

- Pathogens
- Species specificity and physiology
- Farming structures and environmental conditions
- Feed (nutrition) and feeding
- Farm management
- Physiology and pathology
- Biosecurity and hygiene
- Diagnostic techniques and medication
- Epidemiology
- International regulations and WOAH standards

- Working with farmers at farm, watershed, national, and international levels

Through field visits and diagnostic laboratories, participants develop practical skills in necropsy, sampling, and case analysis to strengthen disease prevention and farm performance. The programme provides tools to identify limiting factors and deliver solutions in the field.

### **Programme objectives**

Deliver comprehensive farm health management training applicable at farm, watershed, and national levels

Strengthen collaboration with farmers to improve disease prevention, biosecurity, and responsible antibiotic use

Enhance communication between veterinarians and producers for better health outcomes

Promote a One Health approach supporting food security and public health

Develop global capacity in reporting, surveillance, and holistic farm auditing

### **Who should attend**

Veterinarians and aquaculture professionals seeking worldwide certification in Aquaculture Production and Health.

### **Registration and fees**

The course fee (€2,600) includes access to course materials, examination administered by Université de Montréal, membership in a private Facebook group, dinners, and two coffee breaks per day during the residential week. Accommodation, transportation, health insurance, and travel visa expenses are not included.

### **Programme and Registration**

Please download the programme below or visit the World Veterinary Education in Production Animal Health website for full details and registration download the programme below or visit the World Veterinary Education in Production Animal Health website for full details and registration.

- Programme: <https://enaca.org/enclosure/?id=1463>
- Website: <https://www.wvepah.org/aquaculturemoduleisingapore2026>

# Reported Aquatic Animal Diseases in the Asia-Pacific Region during the First and Second Quarters of 2025

Reports received in 2025, as of the 2nd quarter, only came from few member governments including: Australia, Hong Kong SAR, India, Indonesia, Malaysia, Myanmar and Saudi Arabia. Listed below are the reported aquatic animal diseases covering the first and second quarters of 2025. The original and updated reports can be accessed at the Quarterly Aquatic Animal Disease report page.

## Finfish Diseases

- **Infection with epizootic haemopoitic necrosis virus:** Australia in wild juvenile (6 months to 1 year of age) redfin perch (*Perca fluviatilis*).
- **Infection with *Aphanomyces invadans* (EUS):** India in great snakehead (*Channa marulius*).
- **Infection with Koi herpesvirus (KHV):** Indonesia and Malaysia in common carp (*Cyprinus carpio*).
- **Infection with Tilapia lake virus (TiLV):** India in tilapia (*Oreochromis niloticus*); Indonesia in tilapia (*O. niloticus*); and, Malaysia in tilapia (*Oreochromis* spp.).
- **Viral encephalopathy and retinopathy (VER):** Australia in farmed jungle perch (1-2 years of age (*Kuhlia rupestris*)); and, Indonesia in pompano (*Trachionotus blochii*).
- **Enteric septicaemia of catfish:** Indonesia in common carp (*C. carpio*).

## Crustacean Diseases

- **Infection with white spot syndrome virus (WSSV):** Indonesia in whiteleg shrimp (*Penaeus vannamei*).
- **Infection with yellowhead virus genotype 1 (YHV-1):** Malaysia in black tiger shrimp (*P. monodon*).
- **Infection with infectious myonecrosis virus:** Indonesia in *P. vannamei*; and, Malaysia in *P. monodon*.

- **Infection with infectious myonecrosis virus (IMNV):** Indonesia in *P. vannamei*; and, Malaysia in *P. monodon*.

- Hepatopancreatic Microsporidiosis caused by *Enterocytozoon hepatopenaei* (HPM-EHP): Indonesia in *P. vannamei*; and, Malaysia *P. vannamei* and *P. monodon*.

## Amphibian Diseases

- **Infection with Batrachochytrium dendrobatidis:** Australia in an unknown species of amphibian.

## Other Diseases

- India reported Infection with Tilapia parvovirus in *O. niloticus*.

Prepared by: Eduardo Leaño, Director General and Senior Programme Officer (Health and Biosecurity)

## PhD scholarships in marine sciences: Shanghai Ocean University PhD Programme 2026

Shanghai Ocean University (SHOU) is offering full scholarship PhD programmes in a wide range of marine sciences 2026. Disciplines include aquaculture, biology, fisheries resources, marine science, food science and engineering, fishery economics and management, and marine engineering and information.

## Scholarships

The scholarships are open to non-Chinese citizens under 35 years old who have a master's degree with a good academic record and outstanding research potential. The scholarships cover tuition, accommodation, medical insurance and include a monthly stipend.

## Applications

Applications are due 1 February 2026. For details of the programmes, eligibility criteria, required documentation and application procedures, please



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NACA is a network composed of 20 member governments in the Asia-Pacific Region.



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download the prospectus linked below. If you have any questions, please email [admissions@shou.edu.cn](mailto:admissions@shou.edu.cn) or add the Admissions Officer Ms. Louise as a contact on Facebook or WeChat (louise2shou).

- Download the prospectus: <https://enaca.org/enclosure/?id=1462>

## Postgraduate opportunities

Postdoc positions are available for excellent graduates and full-time faculty positions are available for excellent international postdocs.

## Contacts

International Student Office, Shanghai Ocean University  
Application portal  
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