

AP Aqua Net 2: Emergency Response

Collaborative regional responses to emerging aquatic animal disease events of regional significance

Regional Workshop for WOAHA Focal Points for Aquatic Animals

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7 – 9 July 2026 | Tokyo, Japan



World Organisation
for Animal Health



Australian Government
Department of Agriculture,
Fisheries and Forestry

Overview

- Challenges of emerging diseases
- How regional collaboration can help
- Objectives of the project
- Project approach
- Progress to date

**Aquatic Code
definition of
“emerging disease”**

a disease, other than listed diseases, which has a significant impact on aquatic animal or public health resulting from:

- a change of a known pathogenic agent or its spread to a new geographic area or species; or
- a newly recognised or suspected pathogenic agent.



Challenges of emerging diseases

- New diseases emerge regularly (every few years in the Asia-Pacific)
- Often spread widely
- Can have significant impacts on production, livelihoods, trade, economies
- Diagnostic methods may not be available
- Epidemiology not understood
- Consequences not fully understood
- Response decisions must be made with significant uncertainty
- WOAHP Members may not have the expertise, capacity or resources to meet these challenges.

How regional collaboration can help

- Agreement on case definitions
 - Sharing of diagnostic methods
 - Sharing of epidemiological information
 - Research coordination
 - Utilisation of WOAHA Reference Centre expertise
 - In-country technical assistance
 - Regional collaboration workshops
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- But... regional collaboration initiatives are often ad hoc and may be activated too late for maximum effect.

Objectives of this project

1. Increased shared understanding about planning and conduct of emergency responses.
2. Increase shared understanding of the challenges responding to outbreaks of emerging diseases of regional significance.
3. Identify existing regional capabilities, networks and resources that could be deployed to support member country responses.
4. Consider how existing regional capabilities, networks or resources could be deployed in a coordinated and collaborative manner.
5. Strengthen collaboration among regional organisations, networks and member countries by developing best practice guidance on when and how regional collaboration should be activated.

Project approach

- Phased approach to the project with two in-person activities
- Together these activities will achieve all project objectives
- Activity 1 – Emergency Preparedness and Response workshop, held in Singapore in 2024 (Diana to present outcomes)
- Activity 2 – Scenario-based exercise to explore opportunities for regional collaboration (2027, to be confirmed).

Key project output

- Guide for deploying regional capabilities and resources in response to significant emerging disease events.
- The guide would define thresholds for action, actions and possible contributors (e.g. for diagnosis, surveillance planning, emergency response planning, research coordination).
- The guide would document mechanisms for collaboration in accordance with the existing capabilities, mandates and responsibilities.



AP Aqua Net 2: Emergency Response

Recap from Regional workshop on preparedness and response for emerging diseases in aquatic animals for Asia and the Pacific, 29 Oct 2024, Singapore

Regional Workshop for WOAHA Focal Points for Aquatic Animals

Diana Chee

7 – 9 July 2026 | Tokyo, Japan

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Regional Workshop on Preparedness and Response for Emerging Diseases in Aquatic Animals for Asia and the Pacific



- First preparatory workshop on 29 October 2024, Singapore
- 22 Participants from 20 Members, 3 speakers (Eduardo Leaña, Larry Hammell, Nick Moody), 11 partners from intergovernmental organisations, research institutes, universities and private sectors



Regional Workshop on Preparedness and Response for Emerging Diseases in Aquatic Animals for Asia and the Pacific

- Objectives

- Increased understanding about **planning and conducting** effective emergency responses for aquatic animal diseases.
- Increase shared understanding about the **challenges** member countries face when responding to outbreaks of emerging diseases of regional significance.
- Identify existing **regional capabilities, networks or resources** which could be deployed to support member country responses to emerging diseases of regional significance.
- Strengthen **collaboration among regional organisations, networks and member countries** to support preparedness to respond to emerging diseases of regional significance.



Regional Workshop on Preparedness and Response for Emerging Diseases in Aquatic Animals for Asia and the Pacific

- Workshop content
 - Introduction and fundamentals of effective emergency response
 - Members' experience (Indonesia, Australia, China, Vietnam)
 - Group exercises
 - 1 - Key strength and challenges
 - Prevention, Preparedness, Response, Recovery
 - 2 - Existing regional capabilities, needs, resources
 - Regional capabilities, Coordination, Resources, Partnership including PPP



- **Group Exercise 1:**
Identifying common themes of key strength and challenges to emergency response to emerging or transboundary diseases in aquatic animals
- **Group Exercise 2:**
Identify existing regional capabilities, needs, resources that could help in improve emergency response to diseases in aquatic animal

Overall findings

- Countries generally have surveillance, legislation, biosecurity measures and some diagnostic capability in place.
- Regional cooperation mechanisms (WOAH, FAO, NACA) provide a strong foundation.
- Aquatic animal health emergency systems remain less mature than terrestrial animal health systems. Common challenges were identified across prevention, preparedness, response and recovery.



Group exercise 1 output

Phase 1: Prevention

CURRENT STATE / STRENGTHS



India utilizes aquatic disease surveillance and Member health strategies.

Bangladesh operates dedicated quarantine facilities under its Quarantine Act.



Fiji maintains a Biosecurity Act with emergency funding.

China and Korea have established regional control systems, accredited labs, and active monitoring legislation.



CHALLENGES



Capacity building & awareness gaps (South Asia).

Limited lab access & ERP funding (Pacific).



Complex management of shared water bodies across jurisdictions.



SOLUTIONS



Incorporating emergency response into Member disaster plans.

Fostering cross-border regional collaboration.

Training for aquatic health services and farmers.



Enhancing quarantine capabilities through improved risk analysis competency.



Phase 2: Preparedness

CURRENT STATE / STRENGTHS



Focus on Member-level preparedness & coordination through regional bodies (NACA, WOAHA).

Successful examples:
Australia's White Spot Disease response
& Vietnam's TPD response.



Role of Aquatic Focal Points

CHALLENGES



Lack of formal emergency strategies.

Infrequent simulation exercises.

Shortage of aquatic specialists/veterinarians.



Reputational barriers discourage disease reporting.

Difficult to prioritise disease

Financial limitations

SOLUTIONS



Member-managed disease prioritisation.

Engaging directly with farmer associations to drive behaviour change.



Implementing rapid in-situ diagnostic testing.

Learn and collaborate with Terrestrial ER





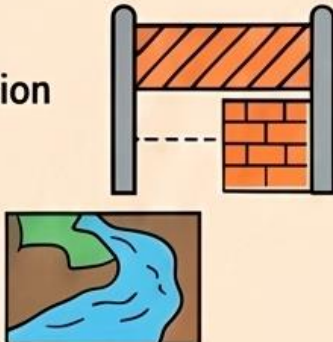
Phase 3: Response

CURRENT STATE / STRENGTHS



Established systems for reporting mortalities.

Zoning, compartmentalisation & quarantine protocols already in place within some Member states.



CHALLENGES

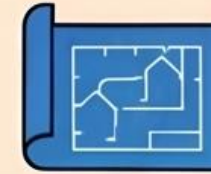


Lack of contingency funding.



Logistical difficulty of manual dead fish removal; aquatic preparedness significantly lags behind terrestrial animal health.

SOLUTIONS



Preparing contingency plans through TTx/G0x exercises.

Utilising existing infrastructure like barges for transport.



Collaborating with police or military for biosecurity enforcement.



Phase 4: Recovery

CURRENT STATE / STRENGTHS



Public-private partnerships (e.g., New Zealand's government-industry agreement).

Compensation schemes in Japan.



Post-action reviews conducted in Australia and New Zealand.



CHALLENGES



Difficulties in managing stakeholder/consumer trust.



Transition to recovery is often ad hoc.

Notable lack of formal mechanisms to support reopening of farms after a disease event.

SOLUTIONS



Incorporating recovery into simulation exercises.

Establishing industry-supported assistance funds.



Sharing regional tools (e.g., New Zealand's vaccination experiences, multi-Member workshops).



Gaps Identified

- Limited aquatic animal health workforce and specialist expertise.
- Coordination & Governance Insufficient contingency planning and simulation exercises.
- Transboundary risks from shared water bodies and aquatic trade.
- Variable laboratory and diagnostic capacities.
- Weak incentives for disease reporting.
- Lack of sustainable emergency response and recovery funding.

Key Lessons Learnt

- Preparedness before crisis – contingency plans, simulation exercises, recovery planning
- Regional integration and links are needed.
- Farmers and industry are critical partners for early detection and reporting.
- Communication and trust are essential

Future Work

1. Be prepared - Develop and test aquatic animal disease contingency plans.
2. Build up workforce and technical capability, through development and specialist training.
3. Enhance laboratory networks and proficiency testing.
4. Improve risk communication and industry engagement.
5. Establish compensation and emergency funding mechanisms.
6. Expand regional collaboration and information sharing.

What to work on now

1. Regional emergency preparedness framework.
2. Simulation exercises for aquatic disease outbreaks
3. Regional laboratory network for aquatic diseases.
4. Guidance on zoning/compartmentalisation and outbreak management.
5. Sharing of recovery experiences and best practices.
6. Build Trust: Strengthen public-private partnerships and farmer engagement.



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Thank you

