



Food and Agriculture  
Organization of the  
United Nations

# Building resilient animal health systems to reduce the risks and impact of biological threats in Southeast Asia

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18-months highlights  
December 2023 – May 2025

## AT A GLANCE

### PROJECT:

Strengthening animal health systems  
for biological threat reduction in  
Southeast Asia

### PROJECT DURATION:

31 July 2023 - 30 June 2027

### COUNTRIES:

Cambodia, Lao People's Democratic  
Republic, Malaysia, the Philippines,  
Thailand and Viet Nam

### RESOURCE PARTNER:

Cooperative Threat Reduction  
Directorate, Defense Threat Reduction  
Agency (CTR DTRA) of  
the United States Government

## FOCUS AREAS

- Field epidemiology
- Laboratory and diagnostic
- Surveillance and early warning
- Coordination mechanisms

Animal and zoonotic diseases are severely impacting livestock production systems and people's livelihoods in Southeast Asia. These biological threats directly affect food security, animal and public health systems and ultimately economic development in the region.

With the support of CTR DTRA, FAO is supporting Member Nations in Southeast Asia improve their ability to prevent, detect and respond to biological threats.

In its first 18 months of field implementation, the project expanded regional and national capacities in epidemiology, laboratory and surveillance, and strengthened regional coordination by facilitating faster information sharing and joint action.

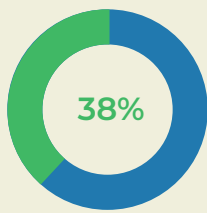


Participants of the FAO-CTR DTRA project inception meeting, held in Thailand, from 8 to 10 November 2023.

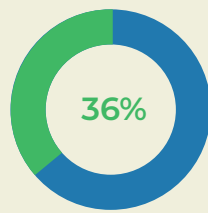


"Our aim is not only to reduce the risks and impacts of biological threats, but also to contribute creating a safer and more prosperous future for the region." – Paolo Motta, FAO Regional Project Coordinator

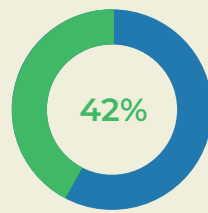
## IMPLEMENTATION PROGRESS SNAPSHOT



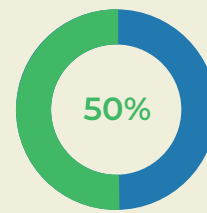
**Output 1.**  
Field  
epidemiology



**Output 2.**  
Laboratory and  
diagnostic



**Output 3.**  
Surveillance and  
early warning



**Output 4.**  
Coordination  
mechanisms

Over the first 18 months of field implementation, the project has achieved measurable progress across all outputs. The charts above summarize activity progress at the regional level against the project workplan as of May 2025.

## HIGHLIGHTS

### Enhancing the animal health workforce

Veterinarians and community level agents are being trained to improve disease prevention, detection and reporting, and to strengthen rapid response and control efforts.

### Regional-level achievements

Regional field epidemiology training programme (R-FETPV) strengthened capacities in five countries:



91 percent of the 2023 cohort and 100 percent of the 2024 cohort completed **six-month training**



Test scores of cohort 2024 on **surveillance data analysis** increased by 55 percent after training completion (from 42 to 65 percent)



Trainees conducted 21 **surveillance data analyses** and 13 **outbreak investigation studies**



A review of **Community Animal Health Worker (CAHW)** systems in four countries identified ways to improve disease detection and control at the community level.



11 **epidemiology studies** presented at the 17<sup>th</sup> International Society for Veterinary Epidemiology and Economics (ISVEE)

## Modernizing laboratory networks and diagnostics

The project is building stronger animal health laboratories for early pathogens detection through improved biosafety, biosecurity and data management.



## Advancing real-time surveillance and early warning

The project is enhancing national and regional systems to detect and respond to animal health threats more quickly and effectively.

## Driving regional coordination for collective action

The project promotes and supports regional collaboration to align priorities, share knowledge and enable coordinated preparedness and response to emerging health threats.

### Regional-level achievements

A veterinary laboratory policy roadmap has been developed, with a competency framework and training curriculum underway to strengthen veterinary laboratory leadership.

Regional laboratory coordination is being enhanced through the ASEAN Regional Animal Health Laboratory Technical Advisory Group (Lab-TAG) and advancing the 2026–2030 LabTAG roadmap endorsed by ASEAN and partners. This includes the establishment of seven priority tracks, disease expert groups reactivation, and the establishment of a knowledge platform to facilitate networking and coordination across the region.

A regional disease rumour tracking system was established, with 37 weekly reports published yearly to facilitate rapid information sharing and monitoring of disease trends.

Regional coordination was supported, and a collaborative framework for animal health surveillance including a set of 13 cross-border surveillance activities was identified.

Five regional events led to the development of one action plan to strengthen regional surveillance capacity and one roadmap for strengthening the regional laboratory network.

One-third of all activities conducted have been co-organized and co-implemented with other projects and in close collaboration with regional and national partners, increasing coordination and optimizing alignment and

### Country-level achievements

Two national laboratories in Cambodia and Lao People's Democratic Republic have adopted laboratory information management systems (LIMS) to improve sample tracking and data accuracy.

Two standard operating procedures (SOPs) for wildlife disease diagnosis developed in Cambodia.

Based on assessment findings, Cambodia has initiated an update of its surveillance strategy for major animal diseases, including avian influenza, using a One Health approach.

Based on assessment recommendations, Lao People's Democratic Republic updated regulations on animal and animal products movement and trade.

Four Member Nations developed national-level project's monitoring systems to manage and evaluate implementation effectively.

# PROGRESS TOWARDS LONG-TERM OUTCOMES

The project has established tools and methodologies to systematically track incremental progress toward the overarching goal of mitigating biological threats in Southeast Asia. While some activities are still in the early stages, substantial foundational progress has been achieved across four key technical areas:

# 1

## Epidemiological capability development

A robust methodology to assess R-FETPV trainees and graduates' competencies is nearing completion. It will quantify how trained professionals apply skills in disease surveillance, outbreak investigations and One Health. The resulting data will generate evidence on training effectiveness and workforce performance, supporting continuous improvement to the programme.

# 2

## Strategic surveillance and early warning systems

Strategic partnerships with the national authorities of Cambodia, Lao People's Democratic Republic and the Philippines have been established to systematically enhance the timeliness and quality of disease surveillance reporting from subnational to central levels. Baseline assessments are complete, providing benchmarks for future improvements in disease reporting performance.

# 3

## Laboratory networks strengthening

The Lab-TAG network has been reactivated, with comprehensive monitoring frameworks in place to track implementation of at least 50 percent of the technical recommendations. Significant progress includes Cambodia's development of a national laboratory strategic framework and the Philippines' near-completion of their implementation roadmap, collectively achieving 66 percent milestone completion across target countries.

# 4

## Regional preparedness and response coordination

Approximately one-third of activities are jointly implemented with other projects and regional partners, demonstrating efficient resource use and strong technical alignment. This coordinated approach has generated regional surveillance capacity action plans and laboratory network development roadmaps, which serve as key indicators of progress toward strengthened regional health systems.

## Protecting people, animals and the environment

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