

Initiation Stage of Network Building

Wildlife Health Network in Thailand

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From Initiation to Sustainability: Building the Wildlife Health Network in Thailand

Initiation Stage of Network Building

Thailand's context

Emerging zoonotic diseases

Avian Influenza (AI) Outbreak in 2004

Enhancing communication among

- Government sectors
 - Department of Livestock Development (DLD)
 - Department of National Parks, Wildlife and Plant Conservation (DLD)
 - Department of Diseases Control (DDC)
- Avian farmers
- Wildlife farming/Zoo

Laboratory network

National capacity building

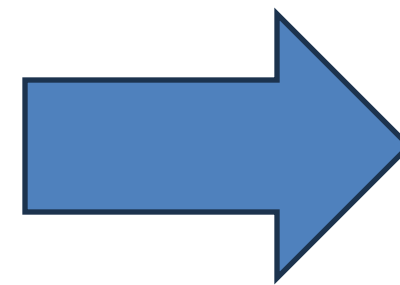


Initiation Stage of Network Building

Thailand's context

Emerging zoonotic diseases

Avian Influenza (AI)***



One Health
network



Initiation Stage of Network Building

Thailand's context

Consequently

Emerging zoonotic diseases

- Middle East Respiratory Syndrome (MERS)
- Zika
- SARS-CoV-2



Emerging diseases in wildlife

- Elephant endotheliotropic herpesviruses
- Lumpy Skin Disease
- African Horse Sickness
- African Swine Fever



Training for MERS-CoV Laboratory Diagnostic in Animals, 6 - 7 Feb 2014



Network Formulation

Network Building Approach

Collaboration through activities

- **Wildlife disease investigation**
- **Wildlife health surveillance**



Chlamydophila spp. infection in sea turtle

- Human-wildlife interface
- EIDs surveillance



Human-monkey interface

Network Building Approach

World Organisation for Animal Health Twinning Project

HEALTH INFORMATION MANAGEMENT WORKSHOP (COMPETENCY I - IV)

November 12, 2020, and March 22 - 24, 2022

Activity: Health Information Management Workshop (Competency I)

- US and Canadian Wildlife Health experts introduced the Health Information Management platform for Thailand-NWHC/MoZWE.
- Discuss challenges in wildlife disease surveillance, assess wildlife health community readiness, and plan for the development of a data management system.

Participants: Participants from Mahidol University staff and Thai partners of Thailand-NWHC/ MoZWE



Network Building Approach

A meeting for policy-driven wildlife disease surveillance in Thailand:
a collaborative wildlife health network

September 12, 2022

Objectives

- To discuss policy for moving forward with establishing a wildlife general disease surveillance in Thailand
- To discuss the policy for developing a centralized data platform

Wildlife Health Partners

- Department of National Parks, Wildlife and Plant Conservation
- Department of Marine and Coastal Resources
- Department of Livestock Development
- Universities



ONE HEALTH SURVEY

January 11 – 18, 2022

Activity: One Health survey

- Professionals in wildlife disease surveillance were interviewed for a survey project to gather detailed information on challenges and impediments to implementing wildlife disease surveillance in One Health.
- The interview aimed to collect location-specific insights to address the overall wildlife disease surveillance system challenges.

Venue: Partner institutes, Thailand (on-site)

Participants: Partners of Thailand-NWHC/MoZWE



Stakeholder attitudes and perspectives on wildlife disease surveillance as a component of a One Health approach in Thailand

Serena Elise George^{1,*}, Moniek Smink², Nareerat Sangkachai^{3,4}, Anuwat Wiratsudakul^{5,6,7}, Walasinee Sakamduang⁸, Sarin Suwanpaladee^{9,10}, Jonathan M. Sleeman¹

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⁶ U.S. Geological Survey, National Wildlife Health Center, 6000 Schroeder Rd., Madison, WI 53711, USA



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General Disease Surveillance and Outbreak investigation

May 30 – June 2, 2022

Activity: Workshop for Enhancement of the existing general wildlife disease surveillance activities.

It included co-creating a general wildlife disease surveillance plan for Thailand and developing a logic model for the surveillance system .



Train the trainers

December 6 – 7, 2022

Activity:

- To train field veterinarians and let them carry the knowledge and skill to train others in their institutions such as field data collection, biosafety and biosecurity, etc.

Venue: Partner institutes, Thailand (on-site)

Participants: Partners of Thailand-NWHC/MoZWE



Thailand Wildlife Health Network Leadership Series

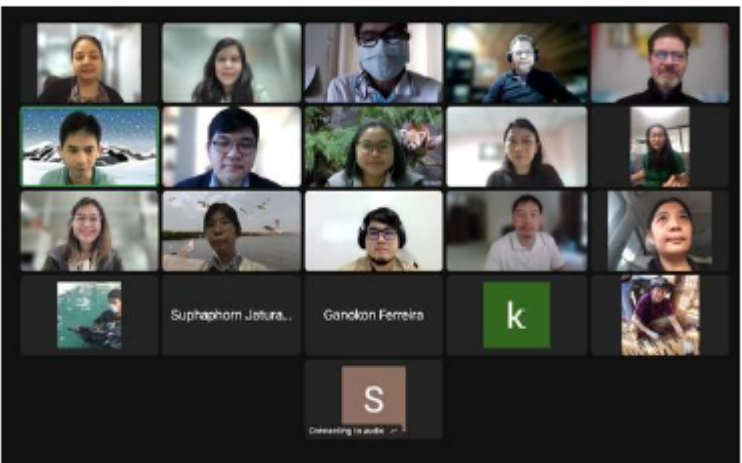
January 11 – 12, and 25-26 , 2023

Activity: Building and leading a wildlife health network

- Facilitate group discussions on vital steps in building and maintaining coalitions and networks for Thailand's national wildlife health program.
- Encourage participants to apply their learning by considering key steps in developing a collaborative wildlife health network.

Venue: Partner institutes, Thailand (Virtual meeting)

Participants: Partners of Thailand-NWHC/MoZWE

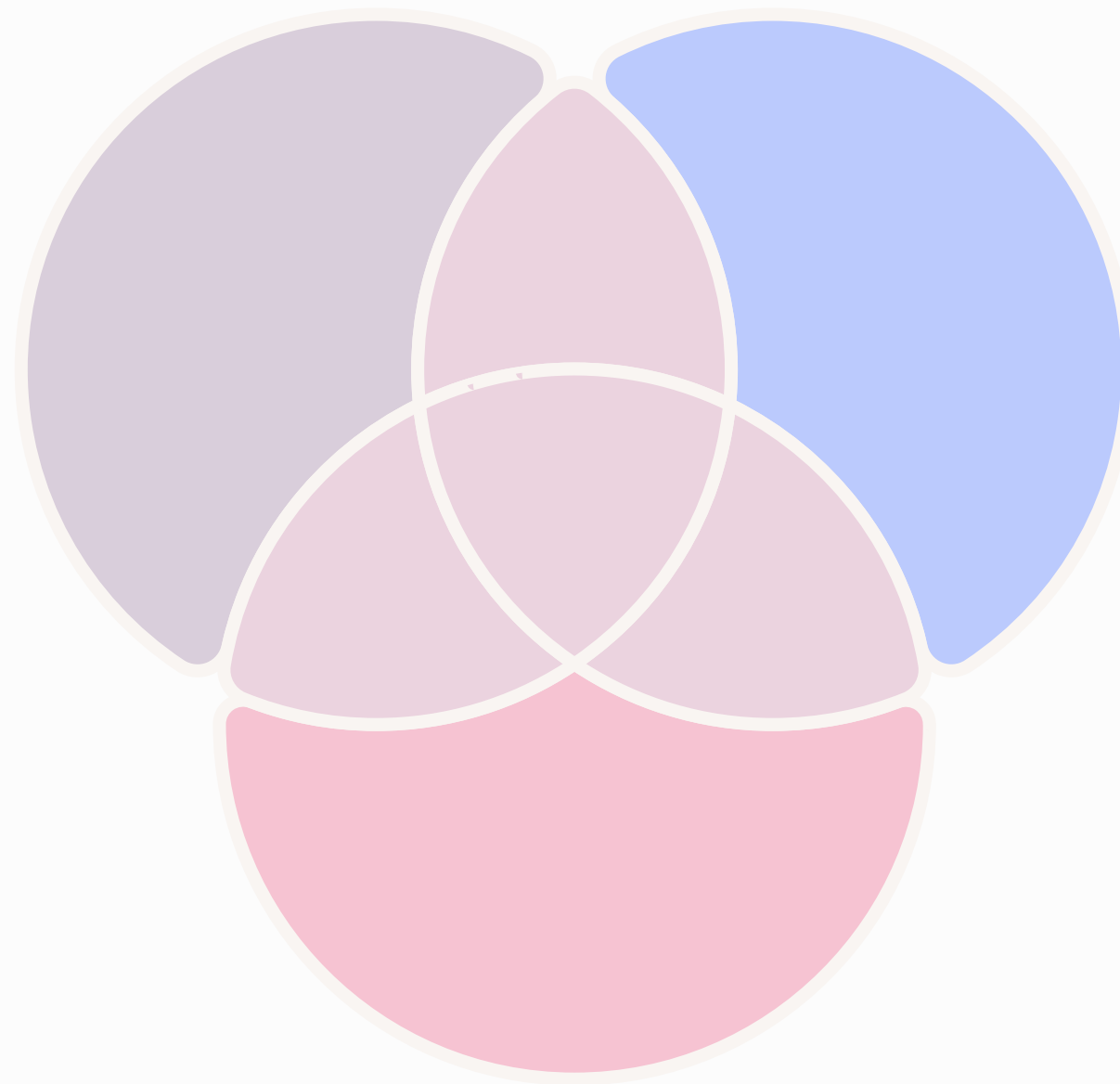


Network Formulation

Key points to address when taking early steps in networking nationally

System-wide approach

- Holistically approach
- Participatory approach
- Multi-strategies



Enhancing collaboration

- Repeated engagement with agency leadership
- Understanding of the network value due to personal change
- Continuing engagement by activities

Building trust

- Clear objectives and transparency in all activities
- Active participation of stakeholders

Network Formulation

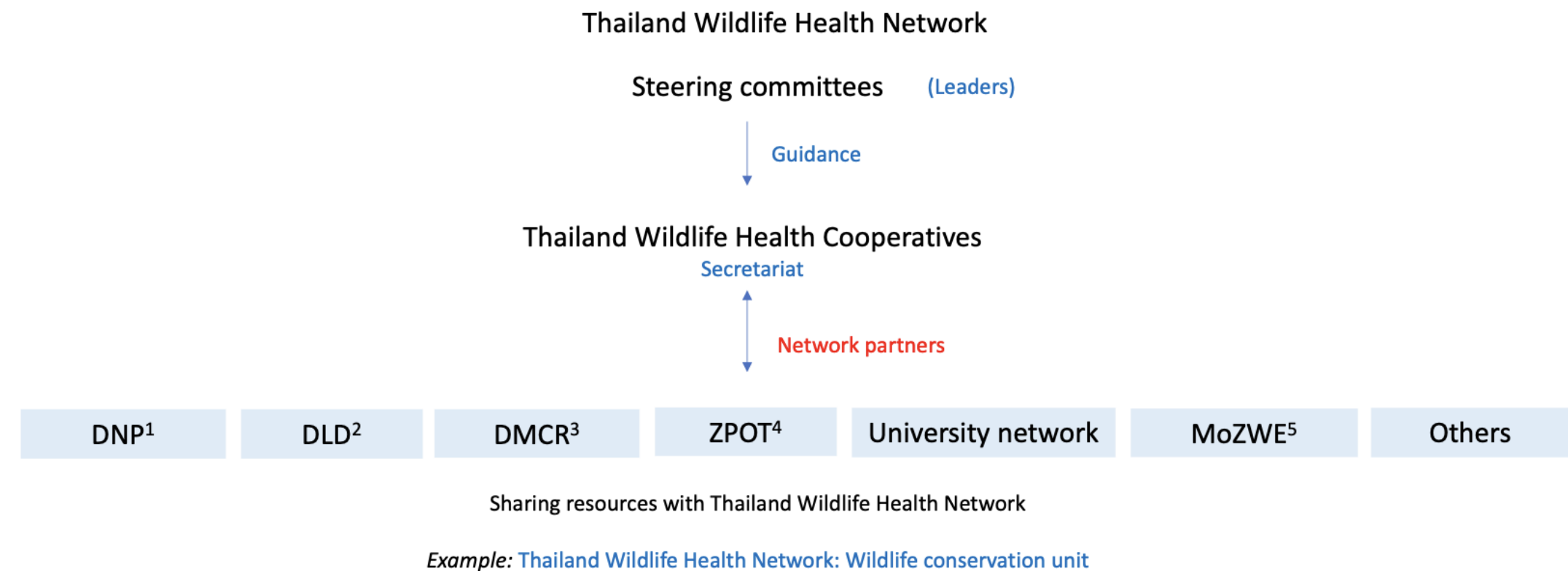
Best practice model Thailand Wildlife Health Network

Workshop on Developing Strategy for Thailand Wildlife Health Network



July 13, 2023

Best practice model: Thailand Wildlife Health Network



¹DNP = Thailand Department of National Parks, Wildlife and Plant Conservation

²DLD = Thailand Department of Livestock Development

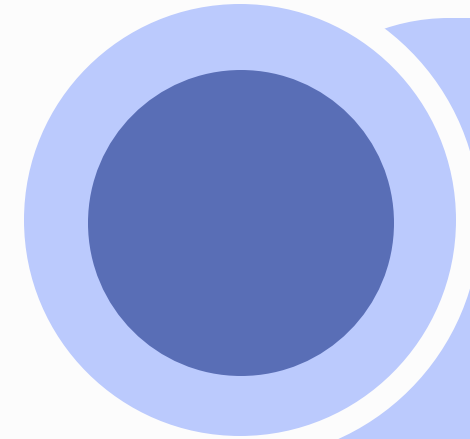
³DMCR = Thailand Department of Marine and Coastal Resources

⁴ZPOT = Zoological Park Organization of Thailand

⁵MoZWE = The Monitoring and Surveillance Center for Zoonotic Diseases in Wildlife and Exotic Animals, Mahidol University

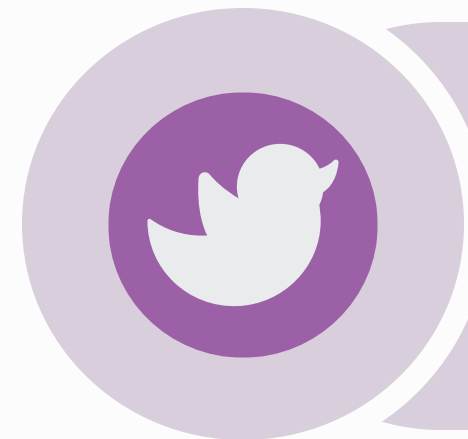
Network Formulation

Strategies for Thailand Wildlife Health Network



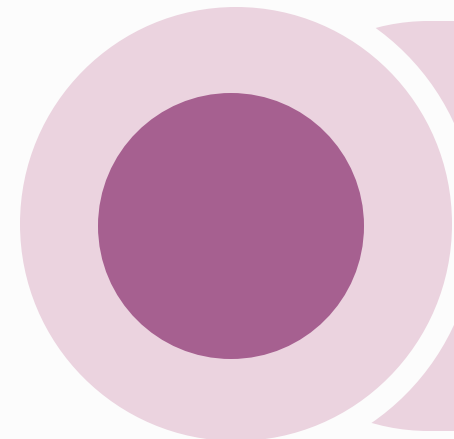
To strengthen the network

Strengthening the network through clarification of roles, responsibilities, and operating procedures, and establishment of interagency MOUs and data sharing agreements



To enhance knowledge

Enhancing knowledge through continuing professional development



To sustain the network

Sustaining the network by developing the wildlife health information system

Wildlife disease surveillance:
a component of a One Health
approach in Thailand

Values of Wildlife
Disease Surveillance

- Most beneficial:
 - Disease control
 - Early threat detection
 - Identify known or novel zoonotic diseases
 - Building trust

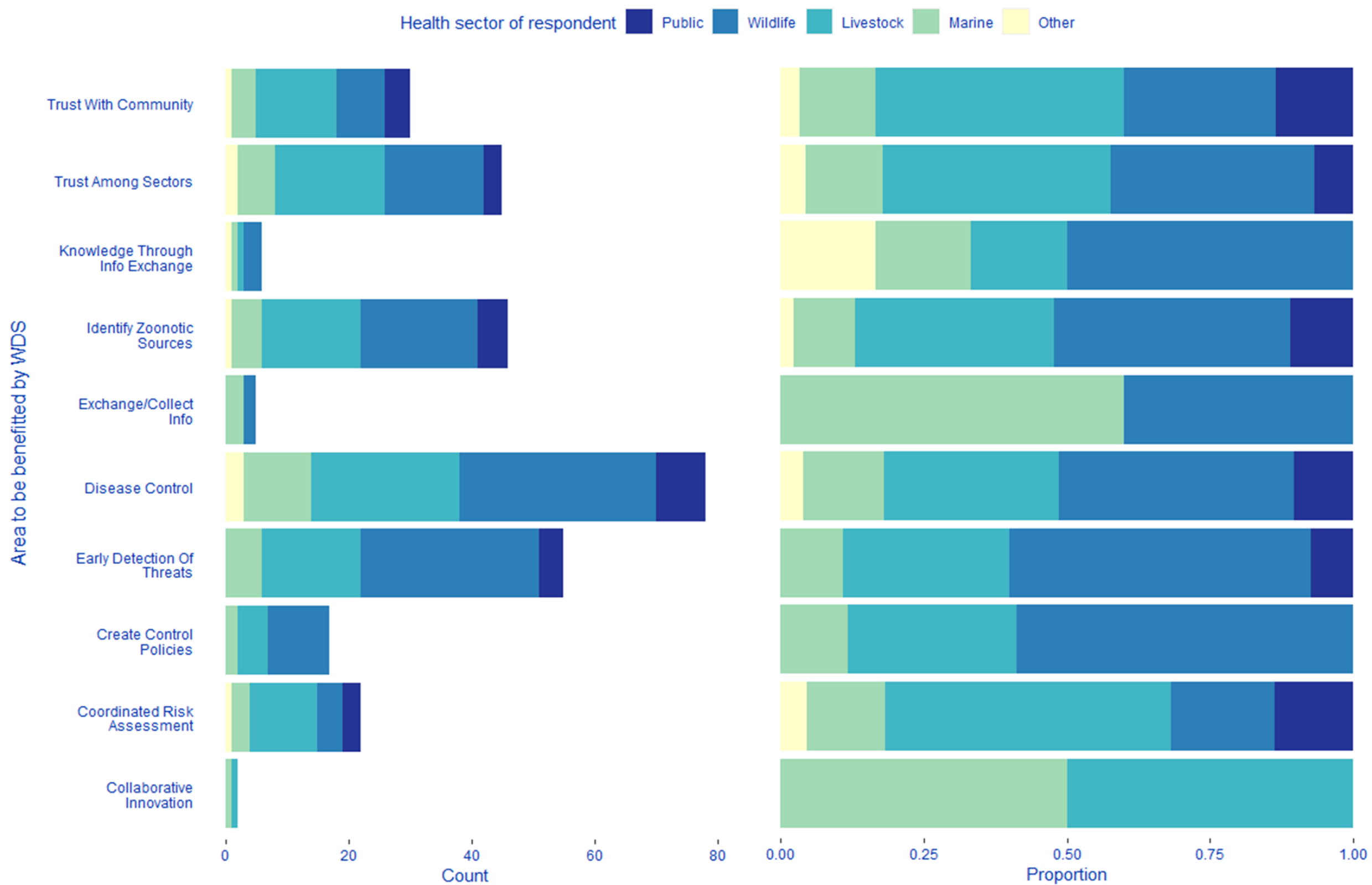


Figure 2. Total count (left) and proportion (right) of online survey respondents that ranked an outcome of WDS as first, second, or third most beneficial, colored by sector of respondent.

Wildlife disease surveillance:
a component of a One Health
approach in Thailand

Challenges and Opportunities

- Top challenges
 - Accessing data within one own’s sector
 - Lack of legal authority
- Priority Areas for Improvement
 - Sufficient personnel
 - Sufficient budget
 - Communication between sectors, especially marine sector

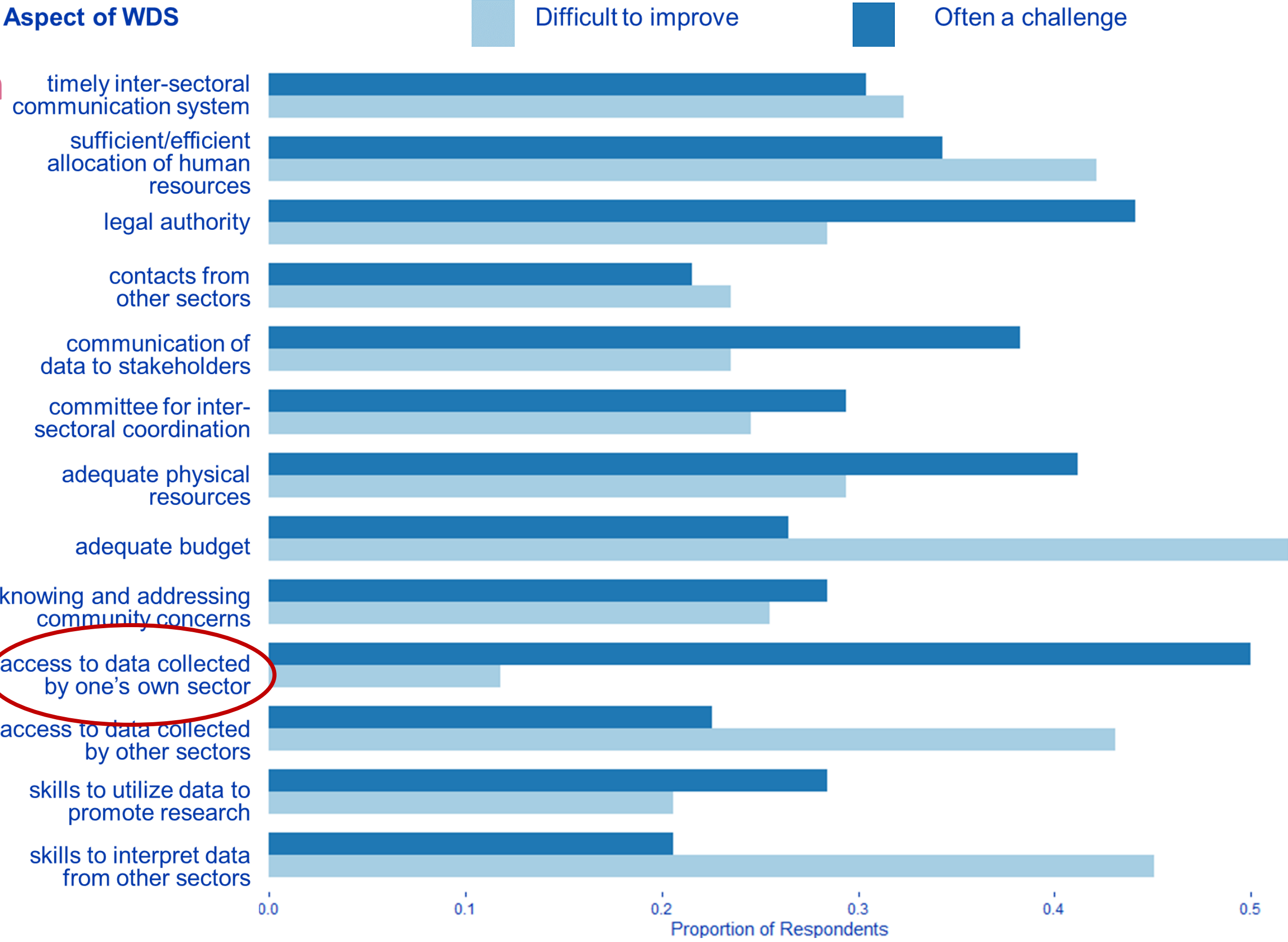


Figure 3. Proportion of online survey respondents (n=102) that labeled each aspect of WDS as “difficult” or “very difficult” to improve and “often” or “very often” a challenge based on a 5-point Likert scale.

From Initiation to Sustainability: Building the Wildlife Health Network in Thailand



Improving communication

- **Ongoing engagement**
 - Top-down and bottom-up approaches
 - Iterative collaboration among wildlife health partners



Building trust

- **Participation of wildlife health partners in regular meetings**
- **Building trust as a benefit of wildlife health surveillance augurs well for the success of the network**



Funding support

- **To support all activities in long term**

Thank You



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