



Mahidol University



World Organisation
for Animal Health
Founded as OIE



Wildlife Health surveillance in Myanmar

Winn Khant

Research Officer/WOAH Focal Point for Wildlife

Livestock Breeding and Veterinary Department/Ministry of Agriculture, Livestock and Irrigation

South-East Asia Wildlife Health Network Meeting

Nonthaburi, Thailand

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Status of wildlife disease surveillance

USAID's PREDICT Project

- *Conducted between May 2016 and Aug 2018*
- *Three sites were targeted as potential high-risk human-animal interfaces*
- *The Smithsonian Conservation Biology Institute's Global Health Program (GPH) & University of California, Davis One Health Institute*

Aim

- *to better understand how diseases are transmitted from animal to human*
- *to identify dangerous zoonotic diseases before they become pandemic threats, facilitating rapid response to currently undetected viruses*

Focus

- *Five viral families*
 - *coronaviruses (e.g., SARS/MERS), filoviruses (e.g. Ebola), paramyxoviruses (e.g., Nipah/Hendra), influenza viruses (e.g., H1N1, H5N1, H7N9) and flaviviruses (e.g., Zika)*





Status of wildlife disease surveillance

USAID's PREDICT Project

- *Collaborated among three Myanmar's Government Ministries;*
 1. *Ministry of Agriculture, Livestock and Irrigation (MOALI)*
 2. *Ministry of Health and Sports (MOHS), and*
 3. *Ministry of Natural Resources and Environmental Conservation (MONREC)*
- *Funded by the U.S. Agency for International Development (USAID)*
- *Samples testing was performed at Yangon Veterinary Diagnostic Laboratory (YVDL) and University of California, Davis's One Health Institute Laboratory)*
 - *759 samples were collected and tested (464 oral swabs, 140 rectal swabs, 155 guano samples)*
 - *RNA extraction, viral detection and sequencing*
- *Detected two Coronavirus in this study*
- *One virus has never been detected before*
- *The other virus has been previously detected in bats in Thailand*
- *Not closely related to SARS, MERS or COVID-19*



Status of wildlife disease surveillance

What is the legal basis for wildlife surveillance – law, ministerial order, etc.

Ministry of Natural Resources and Environmental Conservation

- *The Conservation of Biodiversity and Protected Areas Law (2018)*





Status of wildlife disease surveillance

Top 3 constraints/problems

- 1. Budget limitations*
- 2. Weakness in collaboration (both government & agencies)*
- 3. Networking at country level*



Linking with global reporting system

- *Brief situation on submission to WAHIS and constraints*
 - *Wildlife surveillance data has never been submitted to WAHIS*
 - *More disease surveillance activities are still needed*



Capacity Building

- *Please identify top 3 priority topics for training you need in the next 12 months*
 - *Wildlife disease surveillance*
 - *Reporting to WAHIS*
 - *Risk assessment at wildlife-domestic animals interface*

Future activities

- List 3 priority activities relating to wildlife health in your country over 2022-2023.



Wildlife disease surveillance (SARS-CoV-2)



Risk assessment at wildlife-domestic animals interface



Strengthening networks and joint investigation

Thank you for your kind attention!