



World Organisation
for Animal Health



Regional FMD situation and risks

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WOAH SRRSEA

28th SEACFMD Sub-Commission Meeting
28 – 30 July 2026, Ulaanbaatar, Mongolia

Outline

- ✓ Regional epidemiological situation
- ✓ Surveillance and epidemic intelligence
- ✓ Emerging risks
- ✓ Discussion

Data sources



To receive animal disease alerts, subscribe to the [distribution list](#).

Need help or have a question? Contact [WAHIS Support](#).

WAHIS: World Animal Health Information System

WAHIS is the global animal health reference database of the World Organisation for Animal Health (WOAH). WAHIS data reflects the validated information since 2005 reported by the Veterinary Services from Member and non-Member Countries and Territories on terrestrial and aquatic Listed diseases in domestic animals and wildlife, as well as on emerging diseases and zoonoses.

WAHIS includes interactive mapping tools and dashboards to support data consultation, visualization and extraction of officially validated animal health data.



Country reports



WRLFMD/Pak Chong Laboratory report



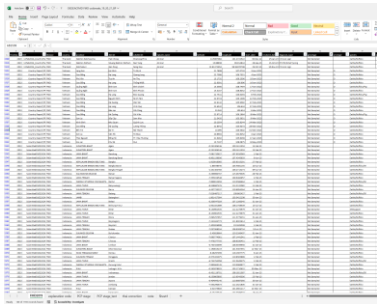
WAHIS



Scientific publications

Data analysis:

MS Excel



Power BI

SaTScan



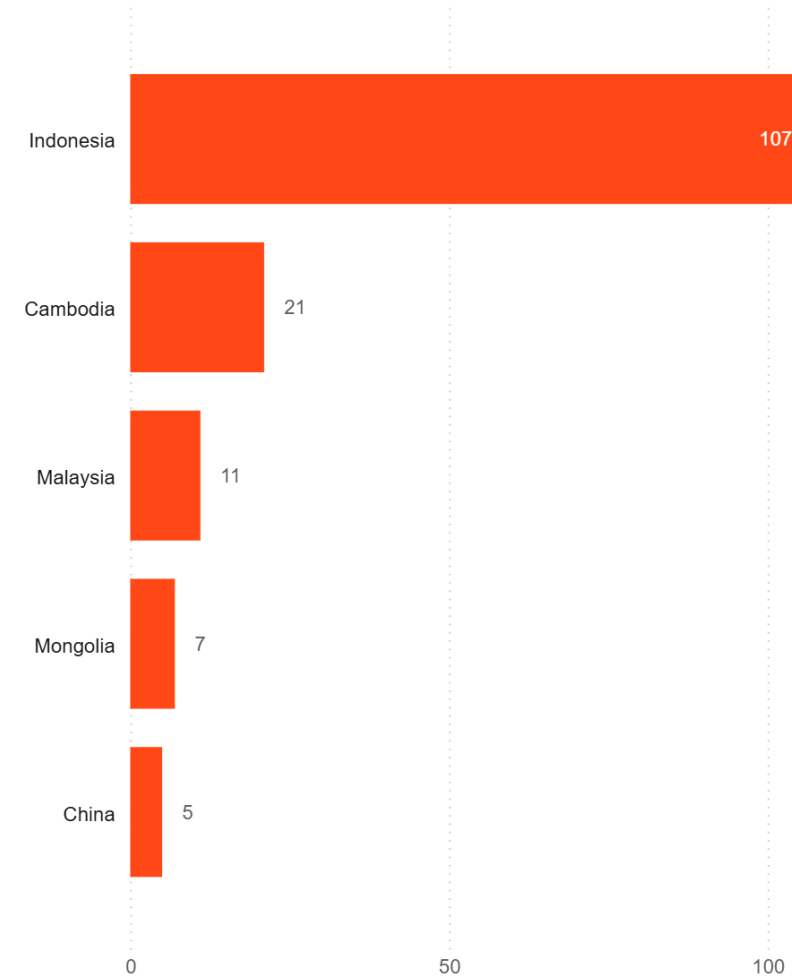
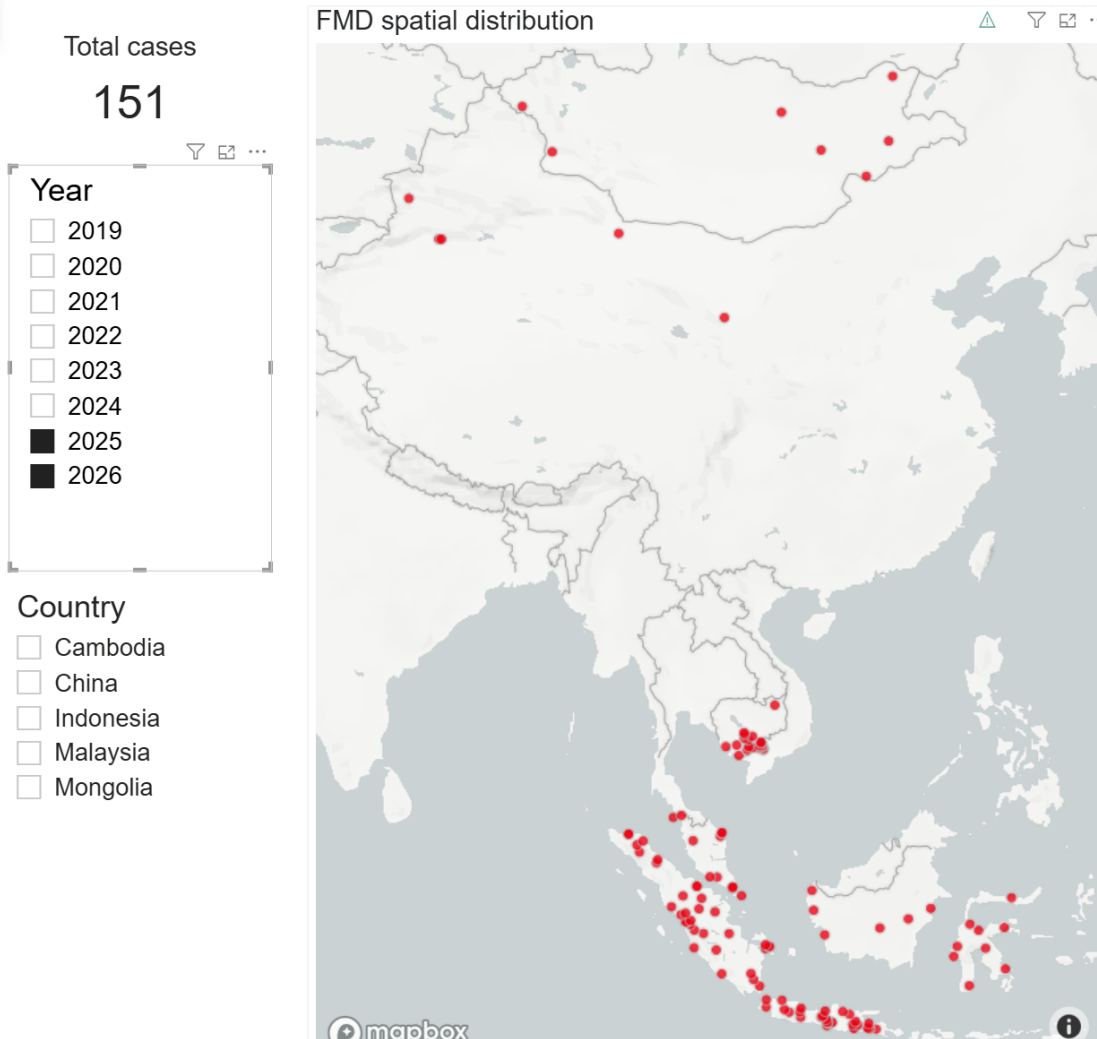
Disclaimer: compiled data from all available recourses may differ from other reports

FMD reported cases (2019-July 2026)



Country	2019	2020	2021	2022	2023	2024	2025	2026 *
Thailand	194	218	47	110	16	2	0	0
Cambodia	32	248	36	23	37	46	16	5
Indonesia	0	0	0	27	119	111	107	0
Vietnam	25	31	89	22	19	66	19	16
Mongolia	0	0	101	3	0	0	3	4
Malaysia	39	52	26	13	8	15	11	5*
Lao PDR	63	55	0	0	0	0	0	0
Myanmar	28	3	4	0	0	5	0	0
China	6	4	3	1	3	3	3	2

FMD reported cases (2025-July 2026)



FMDV Serotype dynamics

Serotype O:

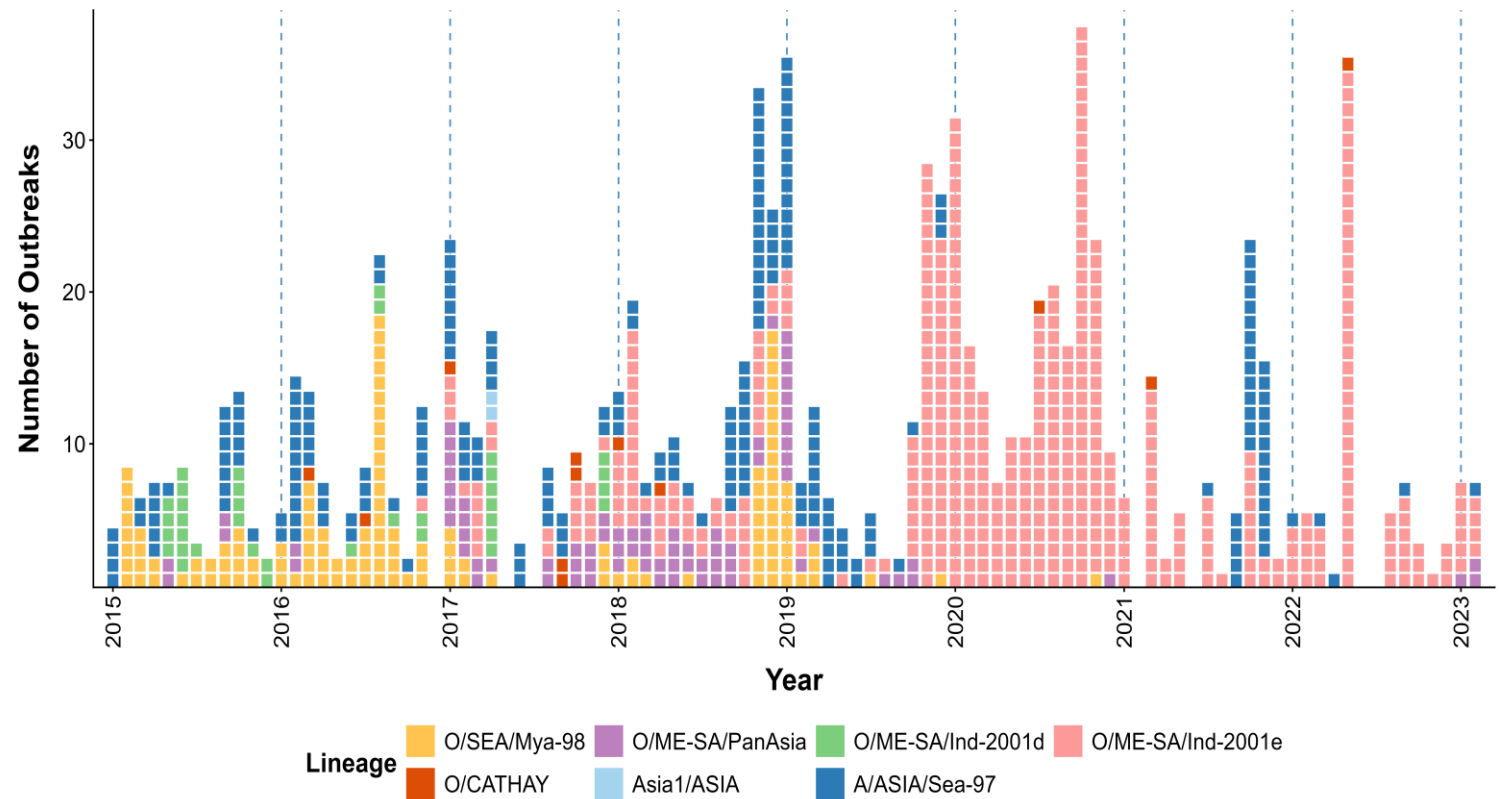
- O/ME-SA/Ind2001e
- O/ME-SA/Ind2001d
- O/ME-SA/Pan Asia
- O/SEA/Mya-98
- O/Cathay (pig adapted)

Serotype A/ASIA/Sea-97

Serotype Asia 1

Serotype –SAT1

Regional serotype distribution



FMDV Serotype- O/SEA/Mya-98 ad O/ME-SA/Pan Asia



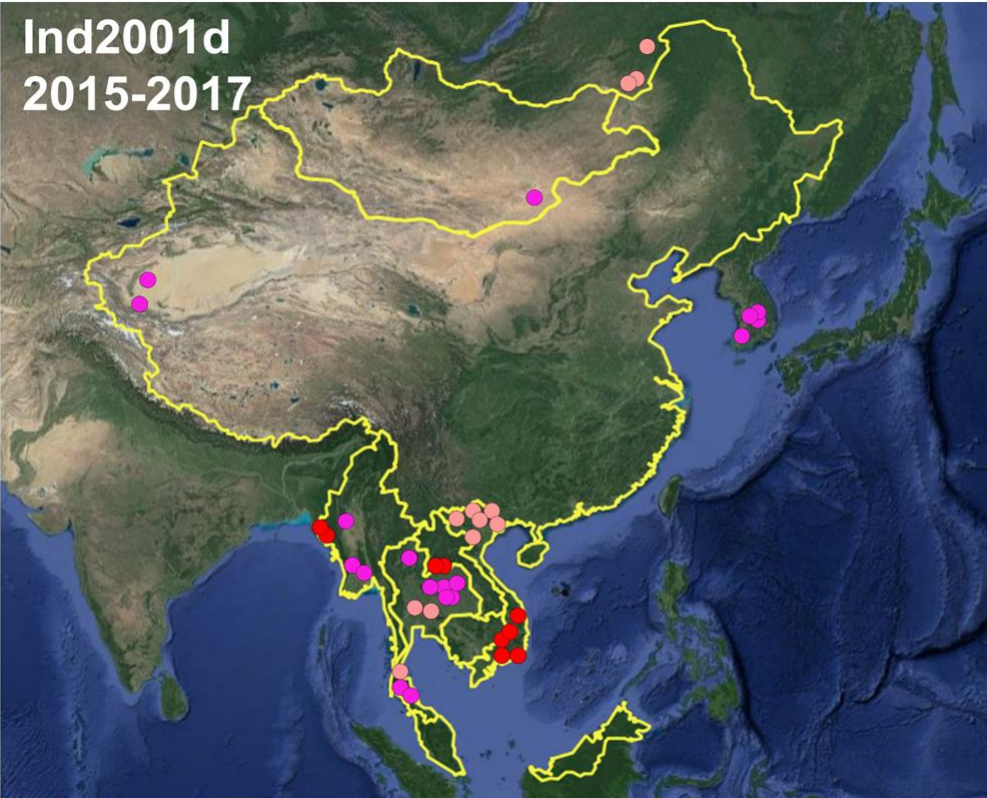
O/SEA/Mya-98

	Cambodia	China	Laos	Malaysia	Mongolia	Myanmar	Thailand	Vietnam
2015						*		
2016	*	*				*		
2017	*	*				*		
2018								
2019						*		*
2020		*						
2021						*		
2022								
2023								
2024								
2025								
2026								*

O/ME-SA/ Pan Asia

Year	Cambodia	China	Laos	Malaysia	Mongolia	Thailand	Vietnam
2015							
2016							
2017							
2018							
2019		*				*	
2020							
2023							

FMDV Serotype- O/ME-SE/Ind 2001



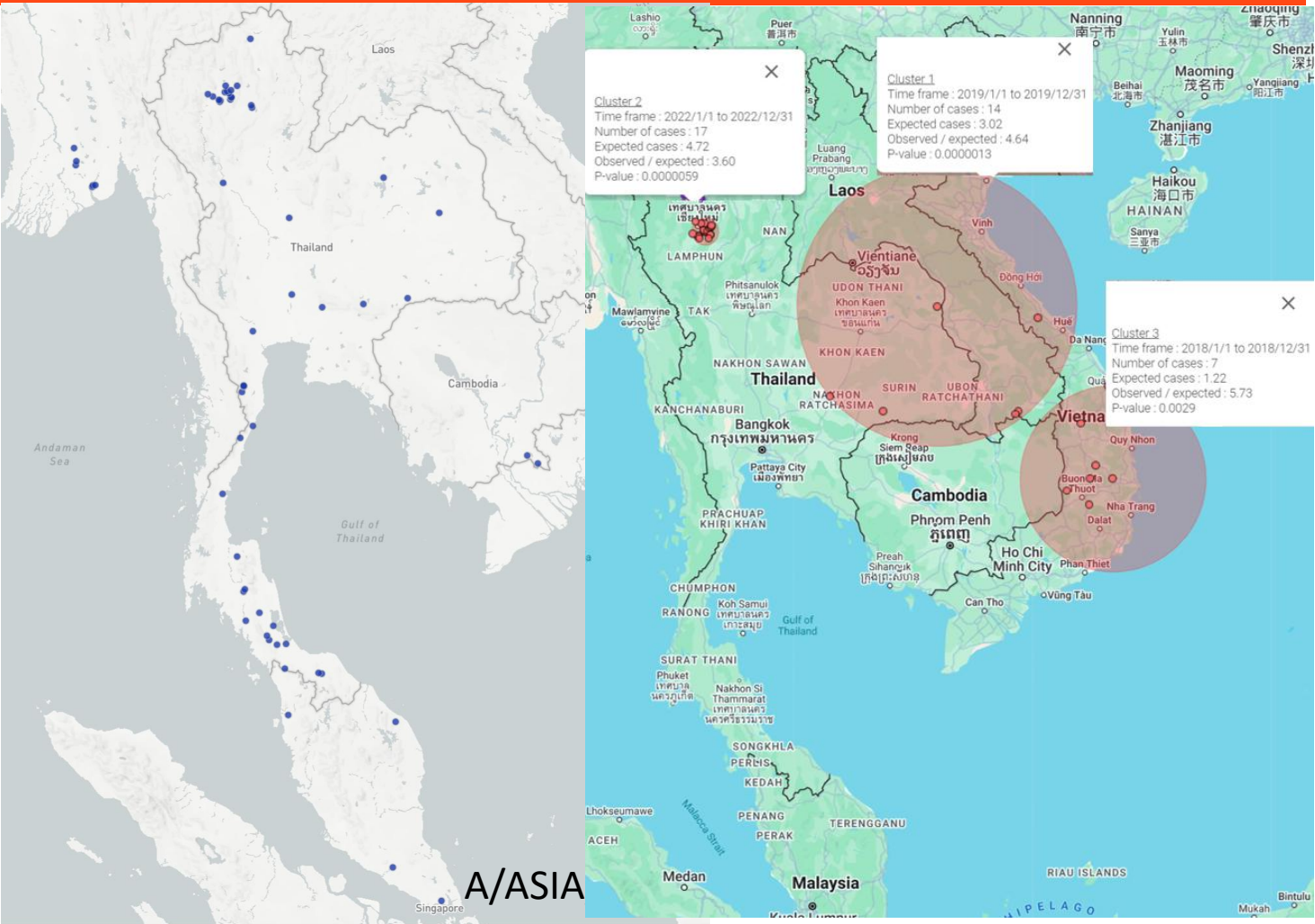
O/ME-SA/Ind2001d
2015- Laos, Myanmar (isolated 2016), Vietnam
2016- Thailand, Vietnam
2017-Myanmar, China, Mongolia, Korea and Russia



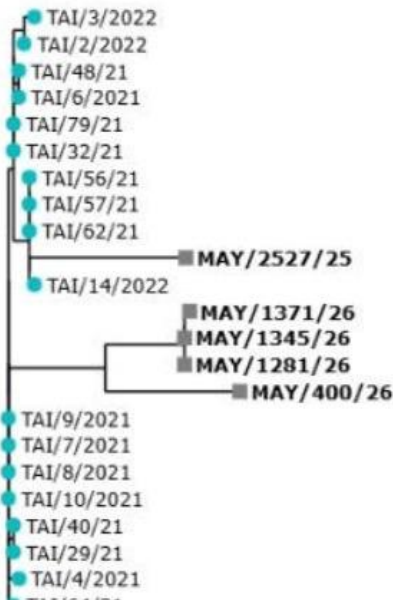
Ind2001e

Year	Cambodia	China	Indonesia	Lao PDR	Malaysia	Mongolia	Myanmar	Thailand	Vietnam
2015									
2016									
2017		*					*		
2018		*							
2019		*							
2020							*		
2021		*					*		
2022									
2023		*							*
2024		*			*		*	*	*
2025									
2026									*

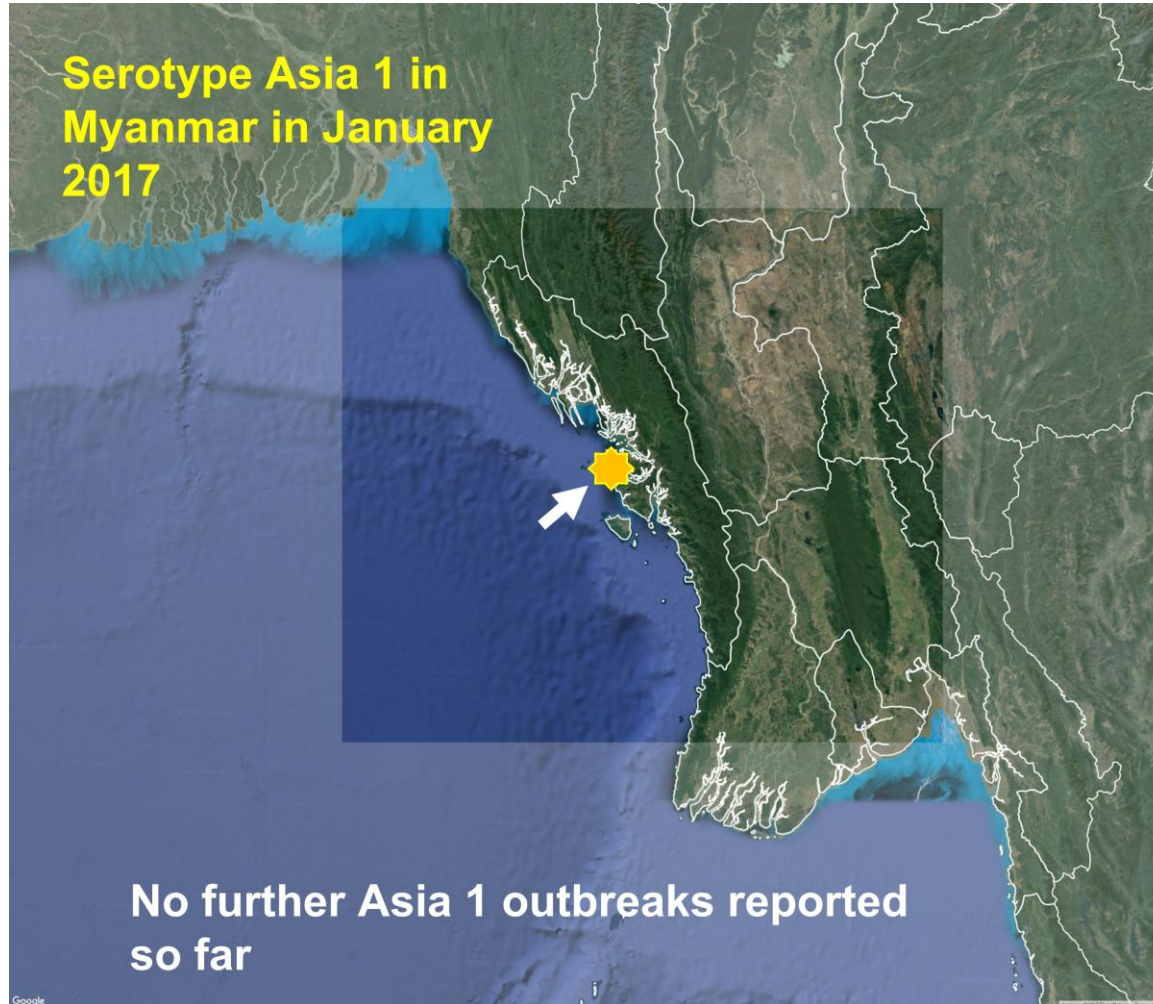
FMDV Serotype - A/ASIA/Sea-97



A/ASIA/Sea-97								
Year	Cambodia	China	Laos	Malaysia	Mongolia	Myanmar	Thailand	Vietnam
2015								
2016								
2017	*							
2018		*						
2019	*							
2020								
2021						*		
2022								
2023								
2024								
2025				*				
2026				*				*



FMDV Serotype Asia 1



Received: 4 May 2018 | Revised: 22 November 2018 | Accepted: 12 December 2018
DOI: 10.1111/tbed.13112

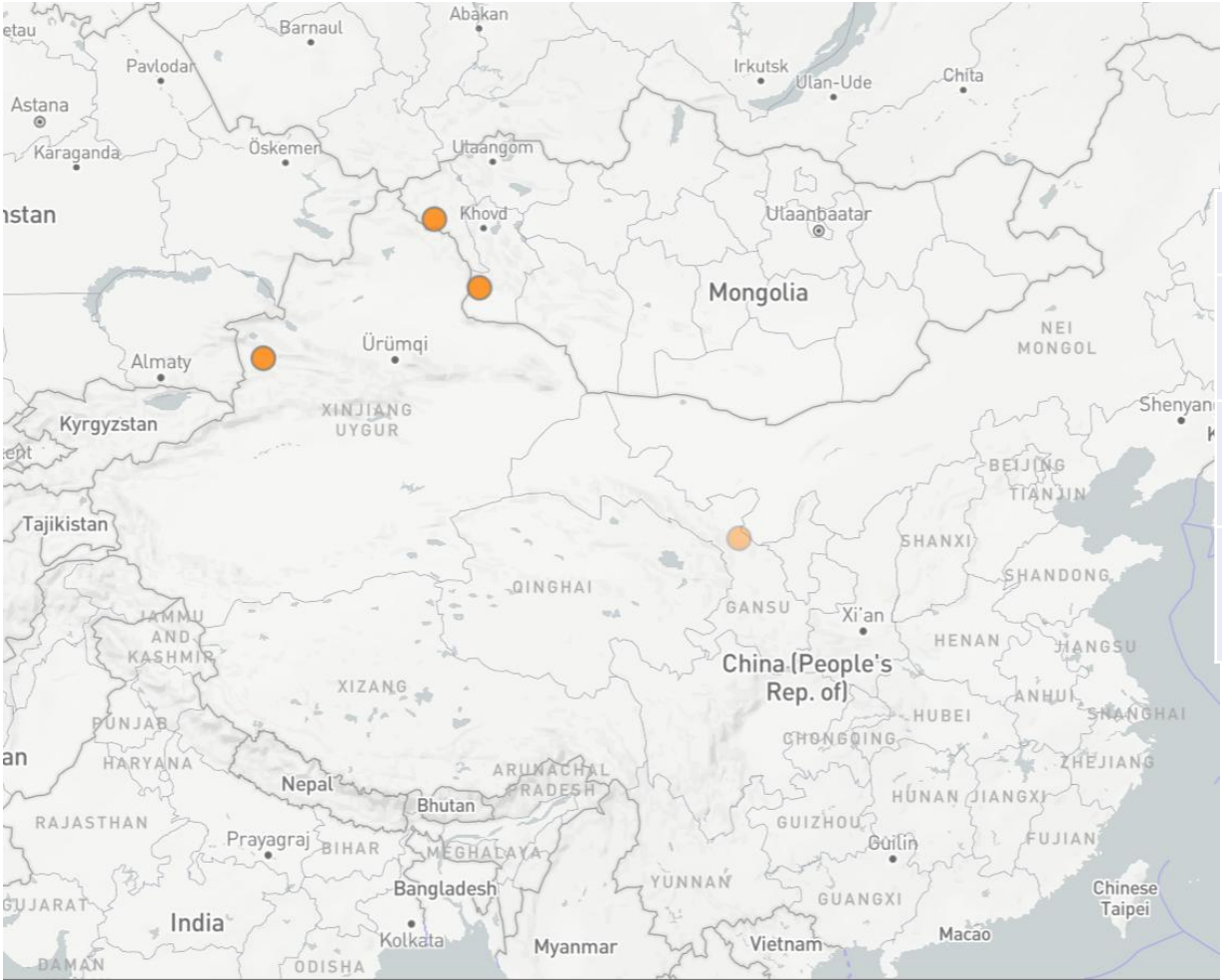
SHORT COMMUNICATION

WILEY 

Foot-and-mouth disease outbreaks due to an exotic serotype Asia 1 virus in Myanmar in 2017

Lin Lin Bo^{1,*} | Khin Sander Lwin^{2,*} | Sahawatchara Ungvanijban³ | Nick J. Knowles⁴ |
Jemma Wadsworth⁴ | Donald P. King⁴ | Ronello Abila⁵ | Yu Qiu⁵ 

FMDV SAT1



China	Gansu	Wuwei	Heshui	21-Mar-26
China	Xinjiang Uygur	Ili Kazakh	Yining	21-Mar-26
Mongolia	Hovd	Bulgan		21-May-26
Mongolia	Bayan-Ölgiy	Altai		21-May-26

Publication of the Historical Analysis of FMD in the SEACFMD Region

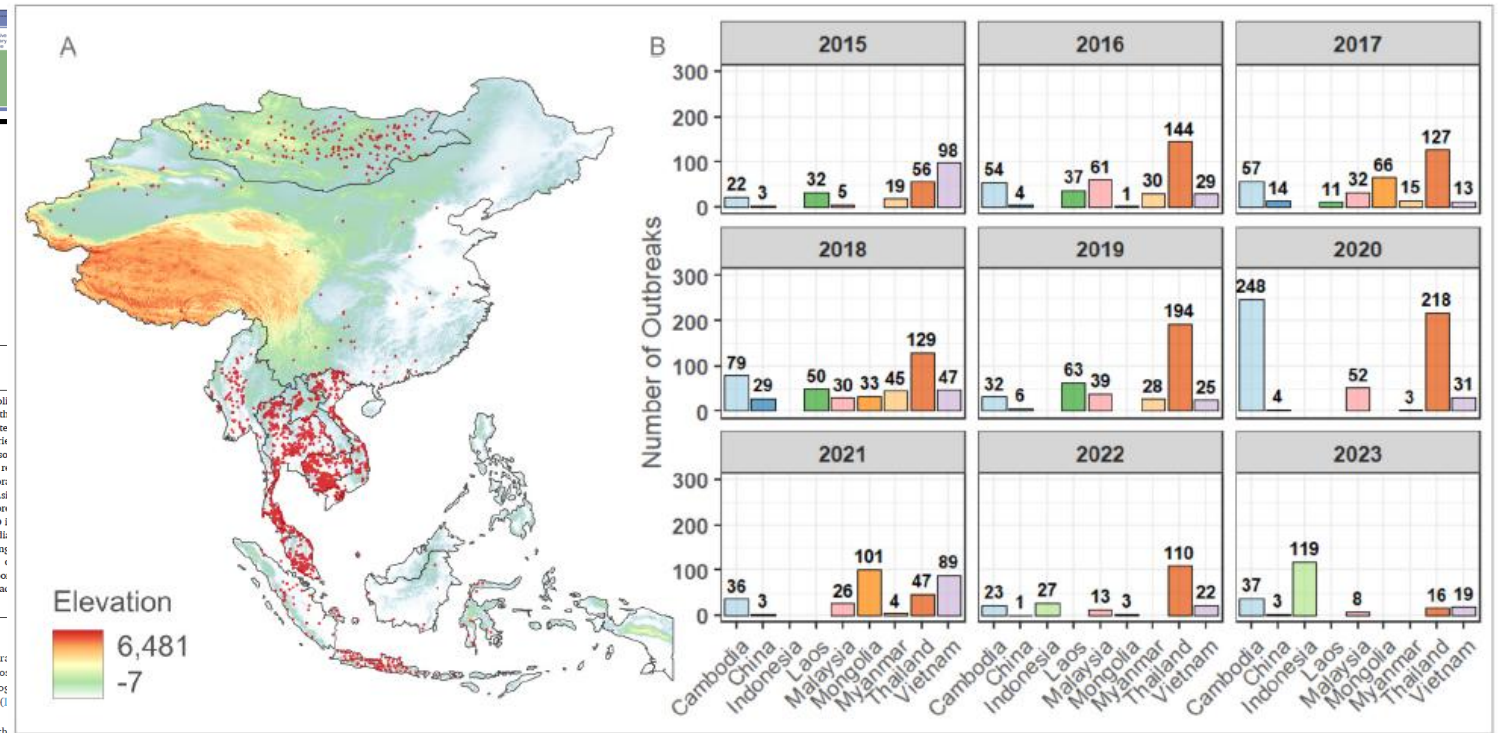
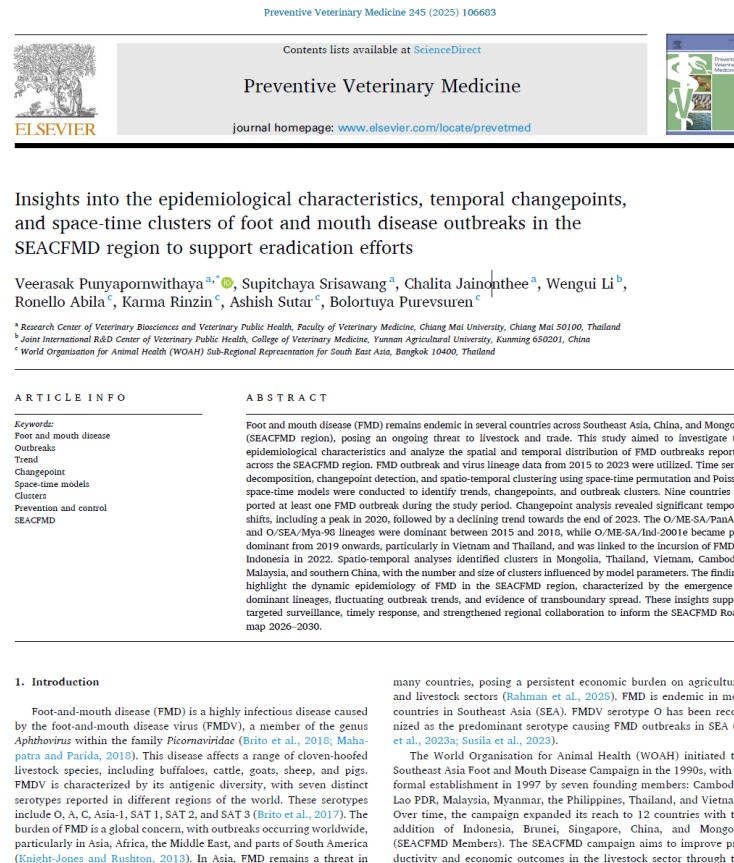


Fig. 1. Spatial distribution and number of foot and mouth disease outbreaks in Southeast Asian countries, China, and Mongolia from 2015 to 2023.

<https://www.sciencedirect.com/science/article/pii/S0167587725002685>

* Corresponding author.
E-mail address: veerasak.p@cmu.ac.th (V. Punyapornwithaya).

<https://doi.org/10.1016/j.prevetmed.2025.106683>

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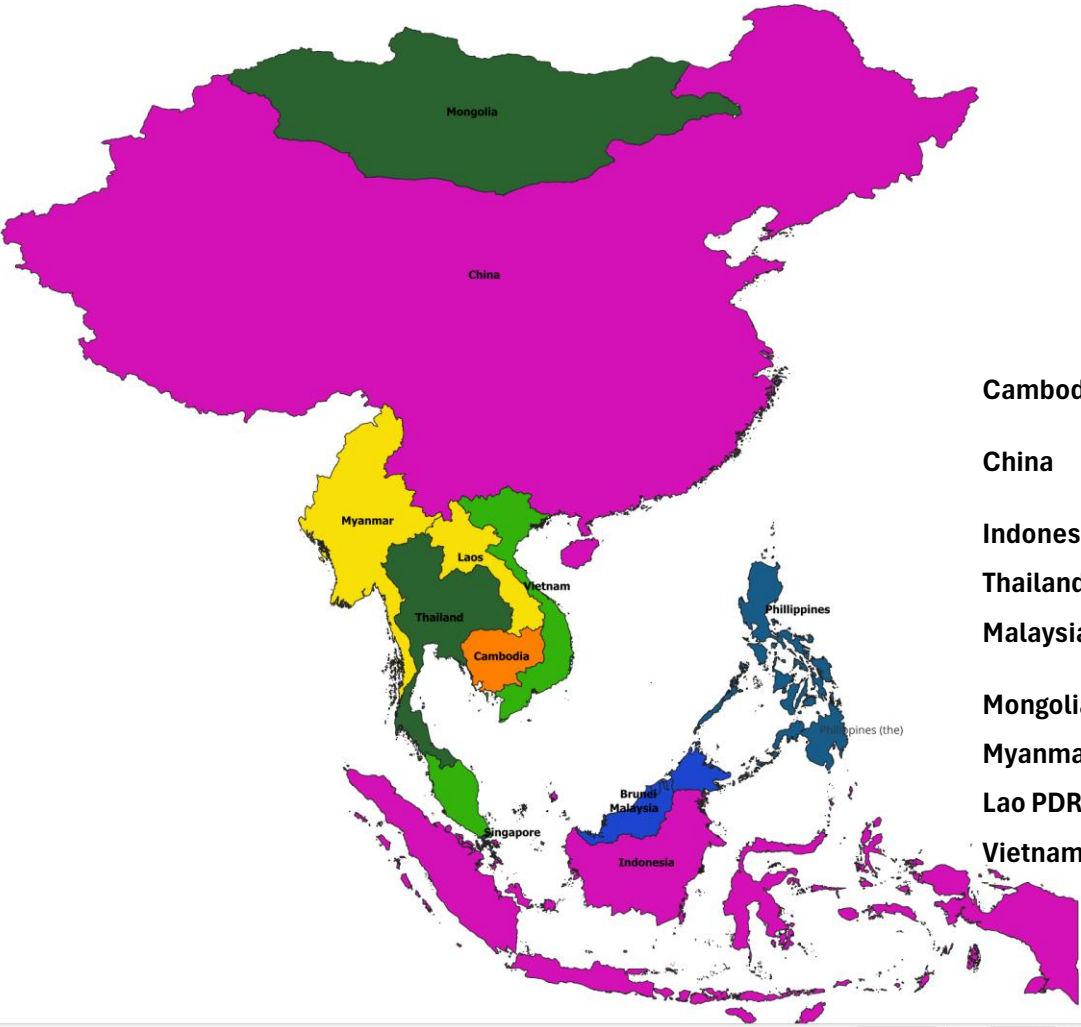


World Organisation
for Animal Health



PCP status of Members

- Brunei Darussalam
- Singapore
- the Philippines
- Sabah and Sarawak, Malaysia



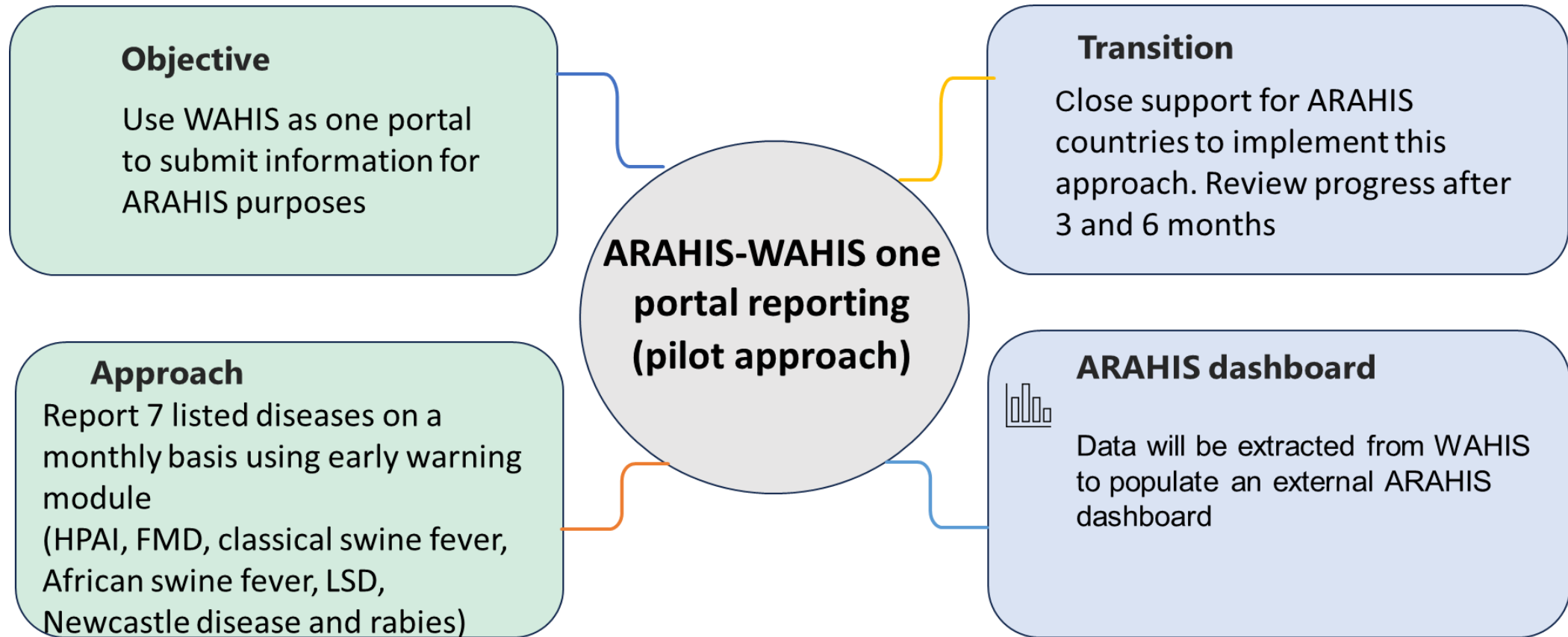
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Cambodia	1	1	1	1	1	1	1	1	1	1	1
China	4	4	4	4	4	4	4	4	4	No status	No status
Indonesia	free	free	free	free	free	free	free	No status	No status	No status	No status
Thailand	3	4	4	4	4	4	4	4	4	4	4
Malaysia	3	3	3	3	3	3	3	3	3	3	3
Mongolia	3	4	4	4	4	4	4	4	4	No status	4
Myanmar	1	1	1	2	2	2	2	2	2	2	2
Lao PDR	1	1	1	2	2	2	2	2	2	2	2
Vietnam	2	3	3	3	3	3	3	3	3	3	3

Risk monitoring and surveillance



Changes in reporting modality

ASEAN Animal health information system (ARAHIS) into WAHIS



ARAHIS into WAHIS



Real-Time Reporting

No need to wait six-month cycles for stable diseases; immediate notification and monthly follow-up reports.



"One Portal" Efficiency

WAHIS serves as the single- entry point, meeting the needs of both ARAHIS and WAHIS while avoiding duplication of effort.



Simplified Administration

A unified system allows a single focal point to manage all reporting, eliminating the need for separate dedicated roles.



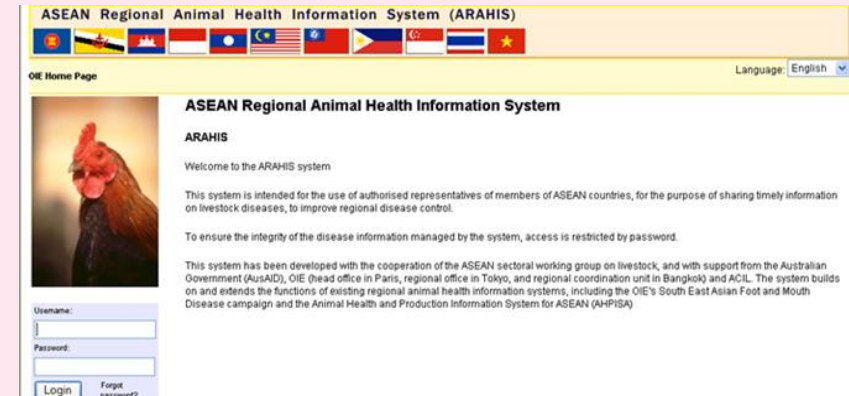
Enhanced Data Detail

The WAHIS Early Warning module enables sharing of detailed information about specific diseases.



Dynamic Visualisation

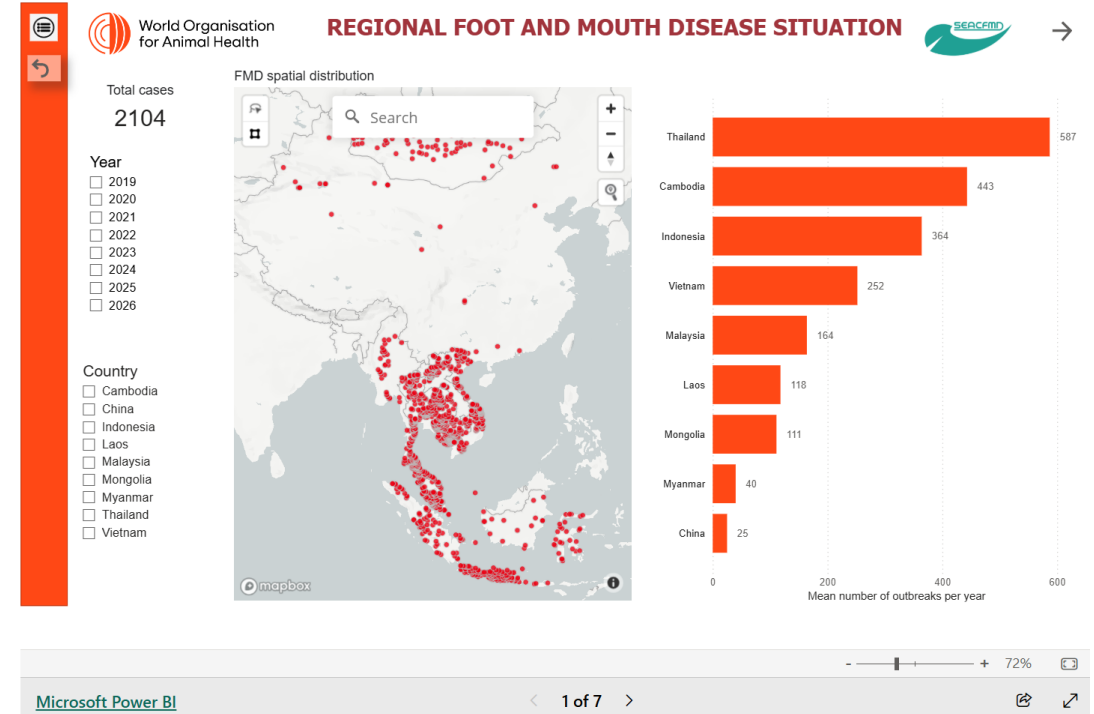
Data extraction populates a live dashboard for sharing and analysing regional disease trends in real-time.



ARAHIS into WAHIS

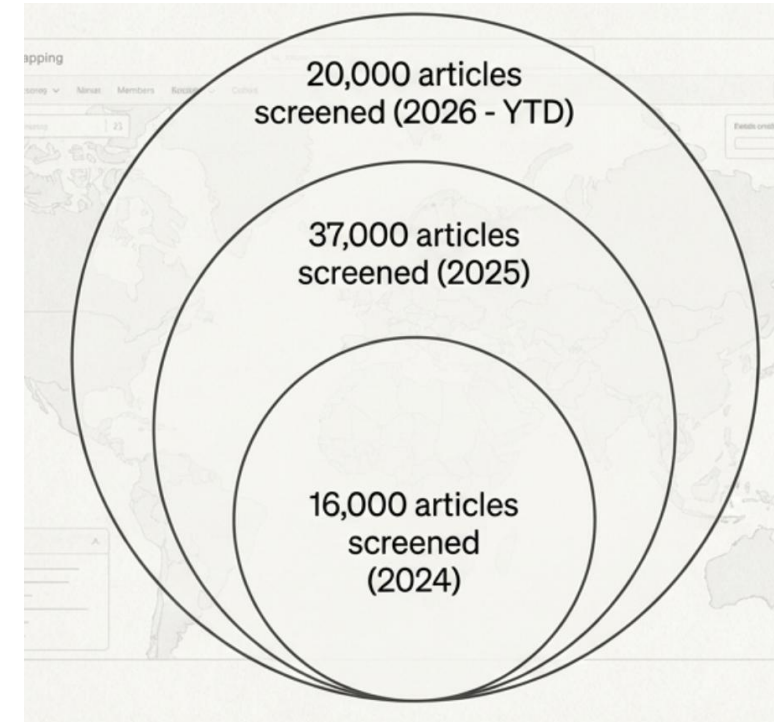
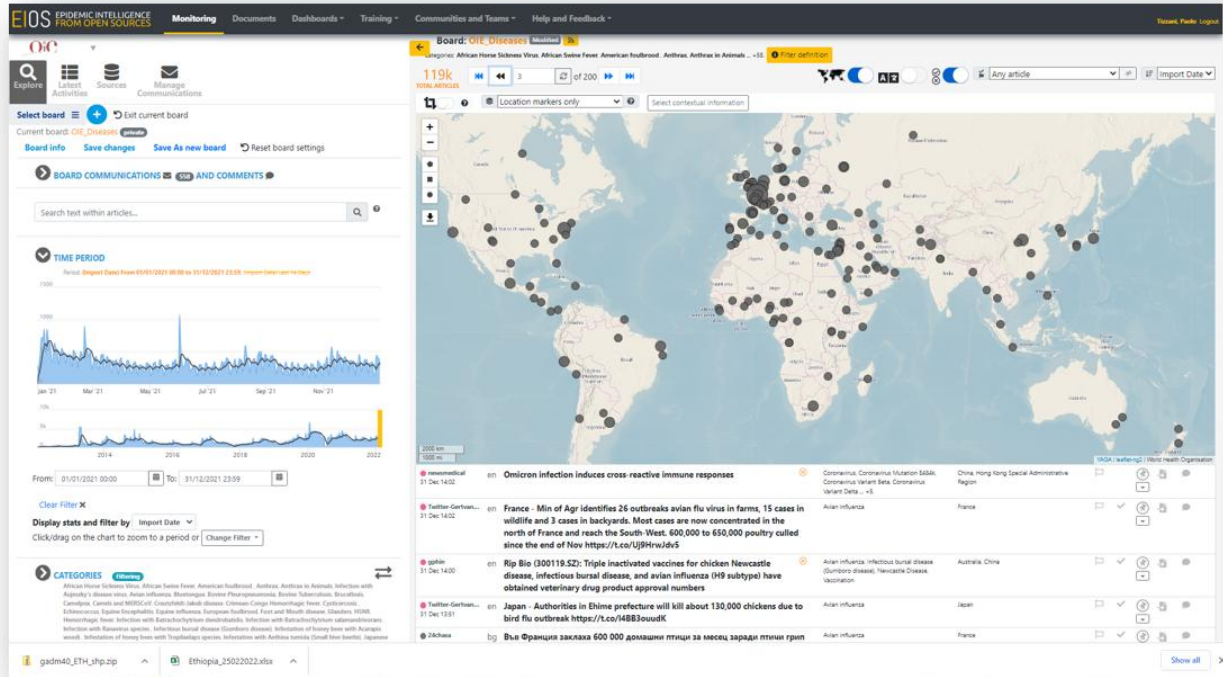
☐	●	Cambodia	FUR_3	Foot and mouth disease virus (Inf. with)	0
☐	●	Indonesia	FUR_3	Foot and mouth disease virus (Inf. with)	0
☐	●	Mongolia	IN	Foot and mouth disease virus (Inf. with)	0
☐	●	Malaysia	FUR_1	Foot and mouth disease virus (Inf. with)	A
☐	●	Malaysia	FUR_2	Foot and mouth disease virus (Inf. with)	0
☐	●	Mongolia	FUR_1	Foot and mouth disease virus (Inf. with)	SAT 1
☐	●	Mongolia	FUR_1	Foot and mouth disease virus (Inf. with)	0
☐	●	China (People's Rep. of)	FUR_1	Foot and mouth disease virus (Inf. with)	SAT 1
☐	●	Mongolia	FUR_1	Foot and mouth disease virus (Inf. with)	0
☐	●	China (People's Rep. of)	FUR_1	Foot and mouth disease virus (Inf. with)	0
☐	●	Cambodia	FUR_4	Foot and mouth disease virus (Inf. with)	Not sample
☐	●	Malaysia	FUR_2	Foot and mouth disease virus (Inf. with)	0

FMD Situation Dashboard



[South-East Asia, China and Mongolia Foot and Mouth Disease \(SEACFMD\) Campaign WOA - Asia](#)

Epidemic intelligence– Nonofficial news tracking

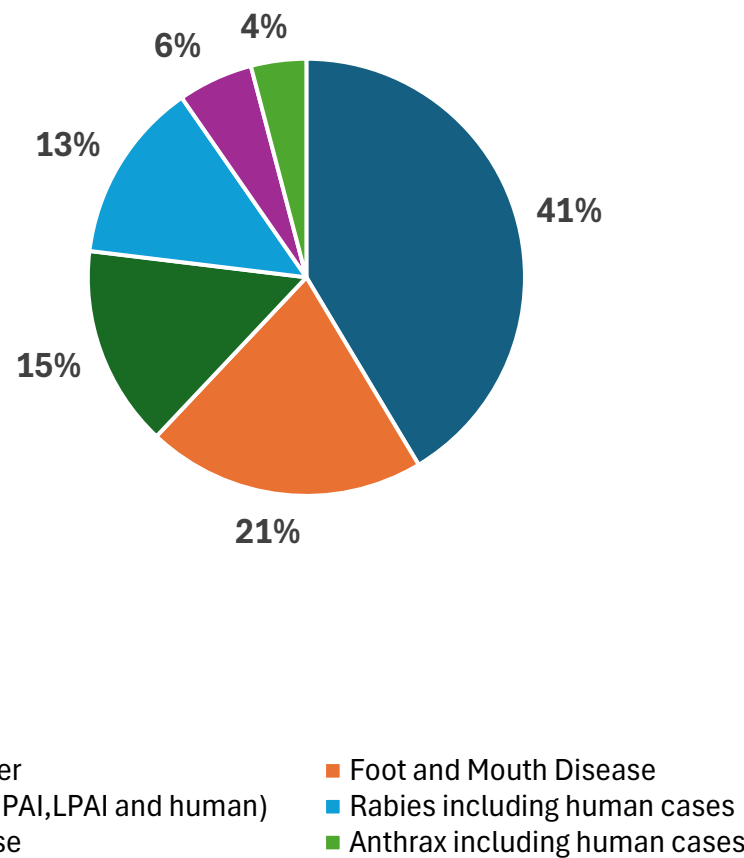


Asia and Pacific team scans twice a week

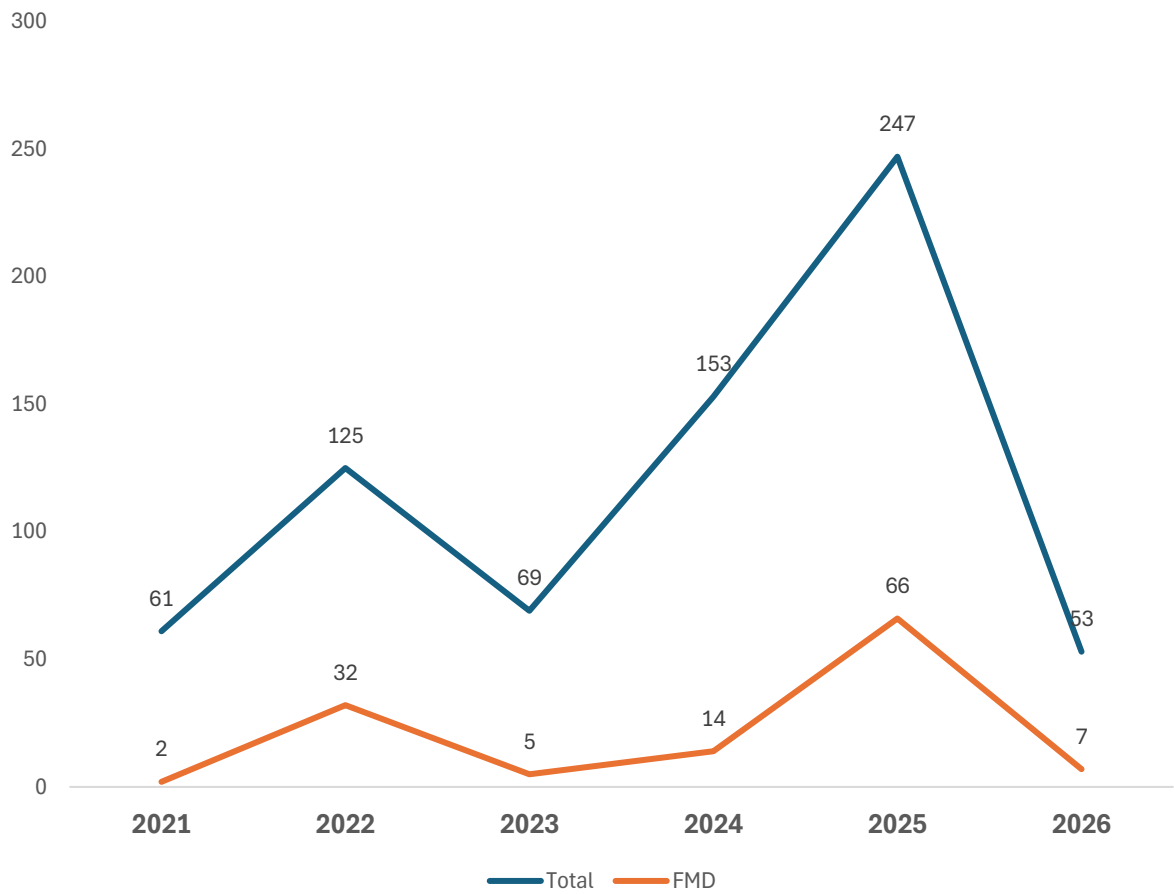
Follow up members to verify the news

Epidemic Intelligence: Non-Official News Tracking

Top 5 Diseases Detected in the News



Total detected news vs FMD news



FMDV Asia 1 study



Probability of freedom from foot-and-mouth disease virus serotype Asia 1 in Southeast Asia, China and Mongolia

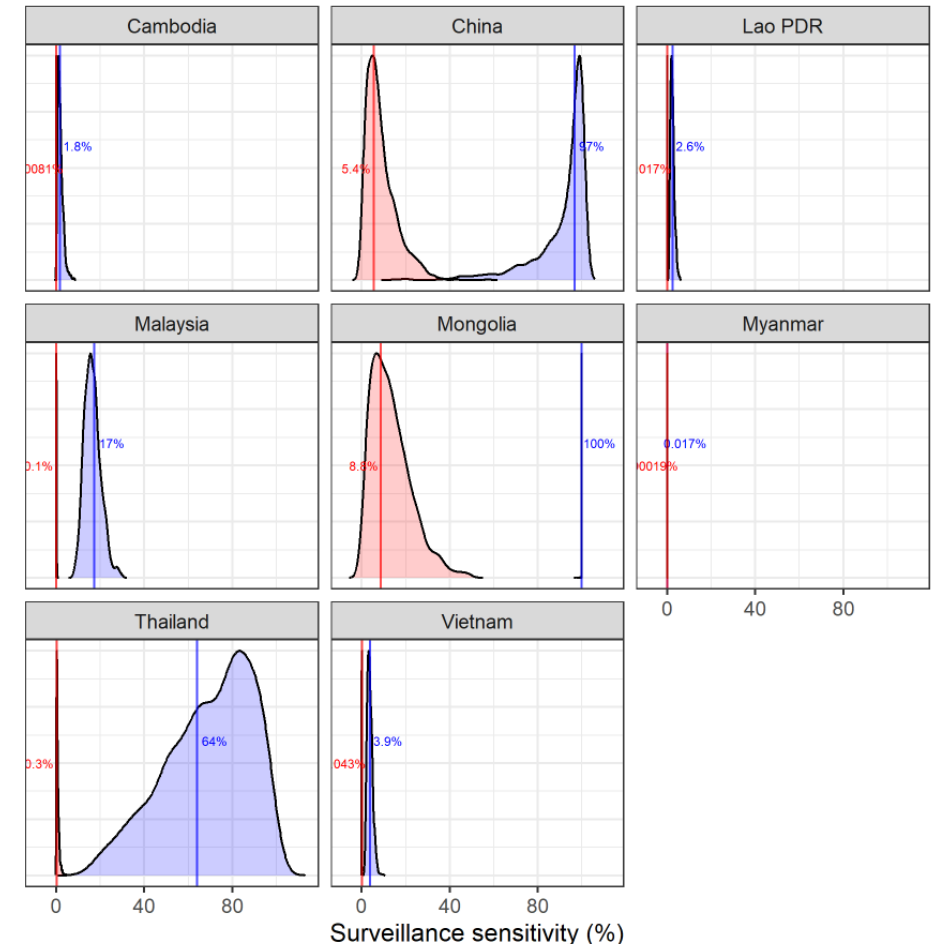
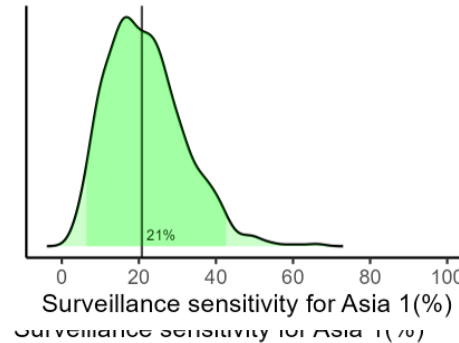
Masako Wada^{a,*}, Jun-Hee Han^a, Bolortuya Purevsuren^b, Karma Rinzin^b, Ashish Sutar^b, Ronello Abila^b, Supatsak Subharat^b

^a EpiCentre, School of Veterinary Science, Massey University, Palmerston North, New Zealand
^b Sub-Regional Representation for South-East Asia, World Organisation for Animal Health, Bangkok, Thailand

Scenario tree models:

probability of detecting FMDV of *any serotypes or specifically serotype Asia 1 by passive surveillance*

- Mongolia and China the highest surveillance sensitivity of approximately 100%.
- Thailand- a moderately high detection probability of 71%, followed by Malaysia at 16%.
- Cambodia, Lao PDR, Myanmar and Vietnam had low surveillance sensitivities of below 4%



While there are border checkpoints, unofficial movements of animals may occur with unknown frequency due to porous border security. The reintroduction risk likely varies across countries by year due to differences in policies, border security and market demands, as well as distance.

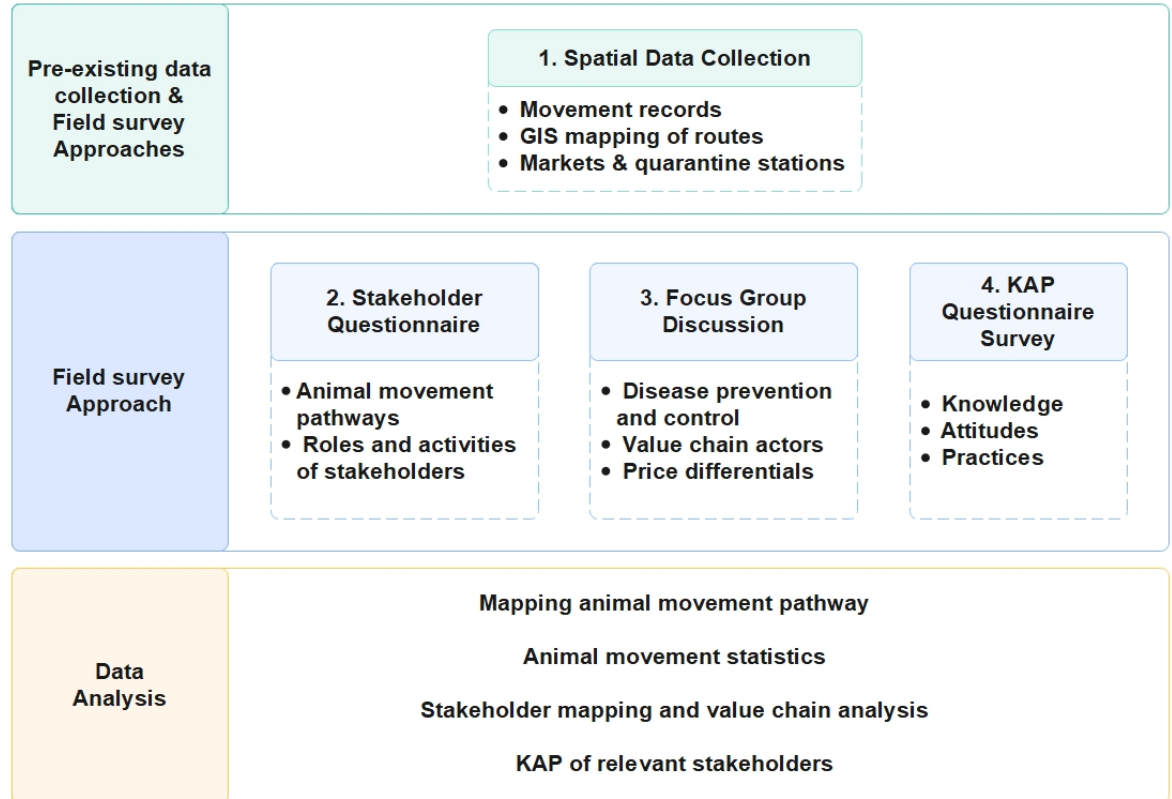
Animal movement study

Movement pathways and market chains of large ruminants in the Greater Mekong Sub-region

2015

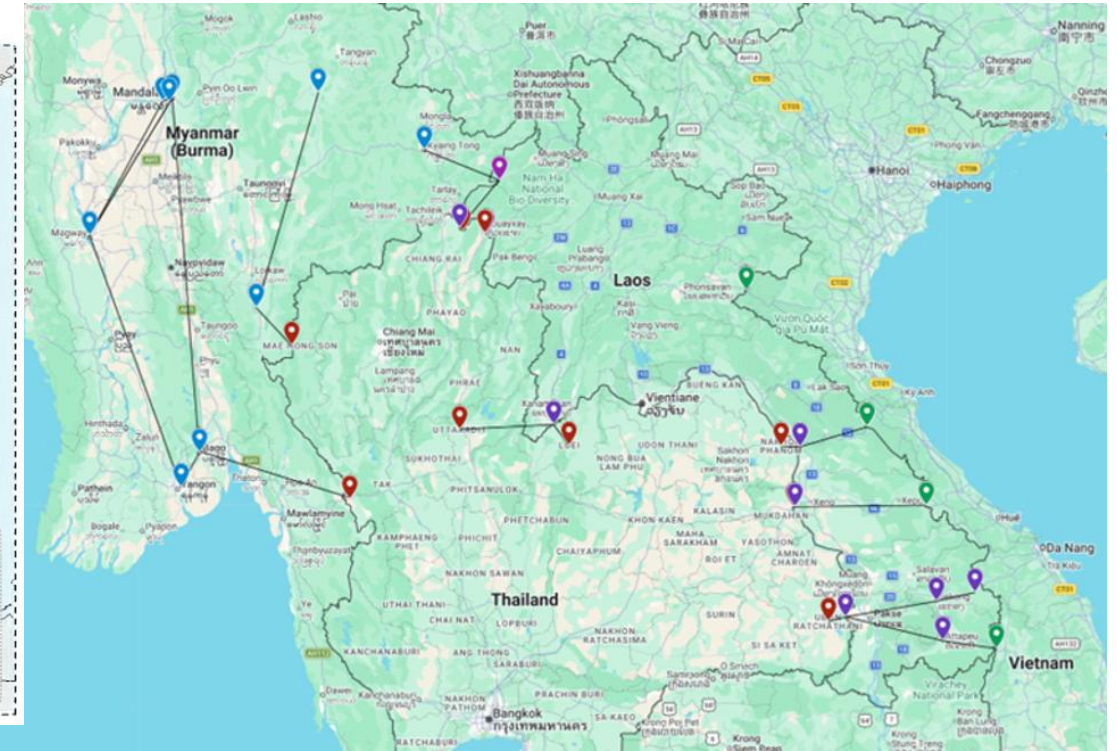
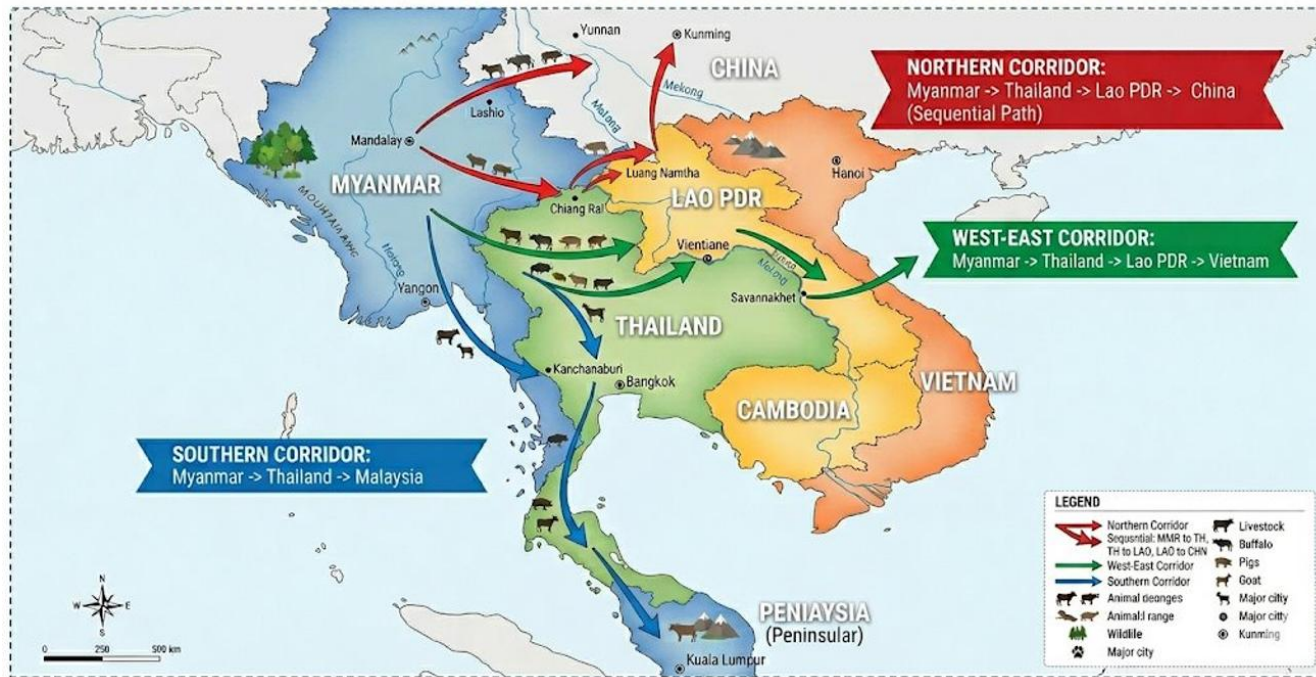


Animal movement pathways and value chain study in Asia

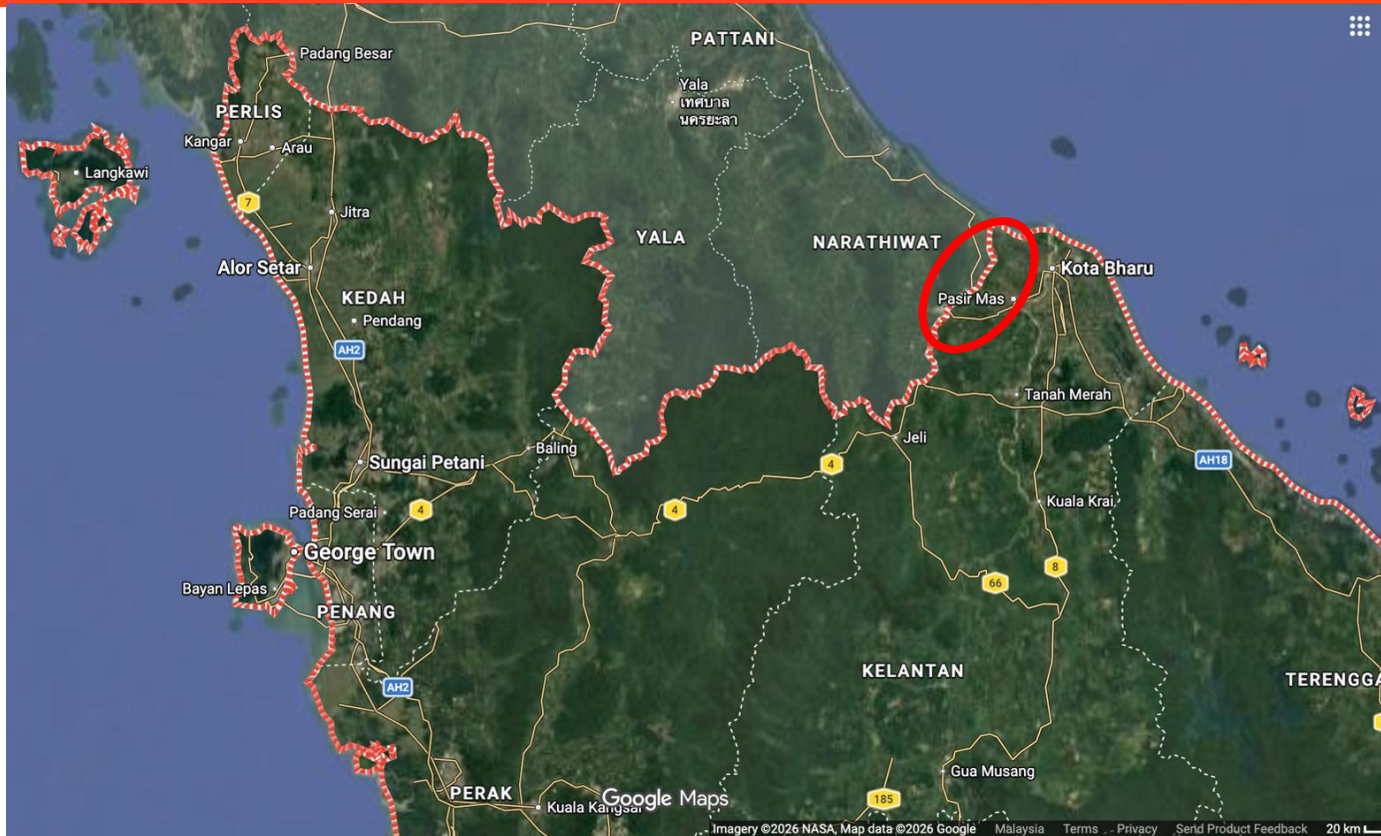


Mapping exercise

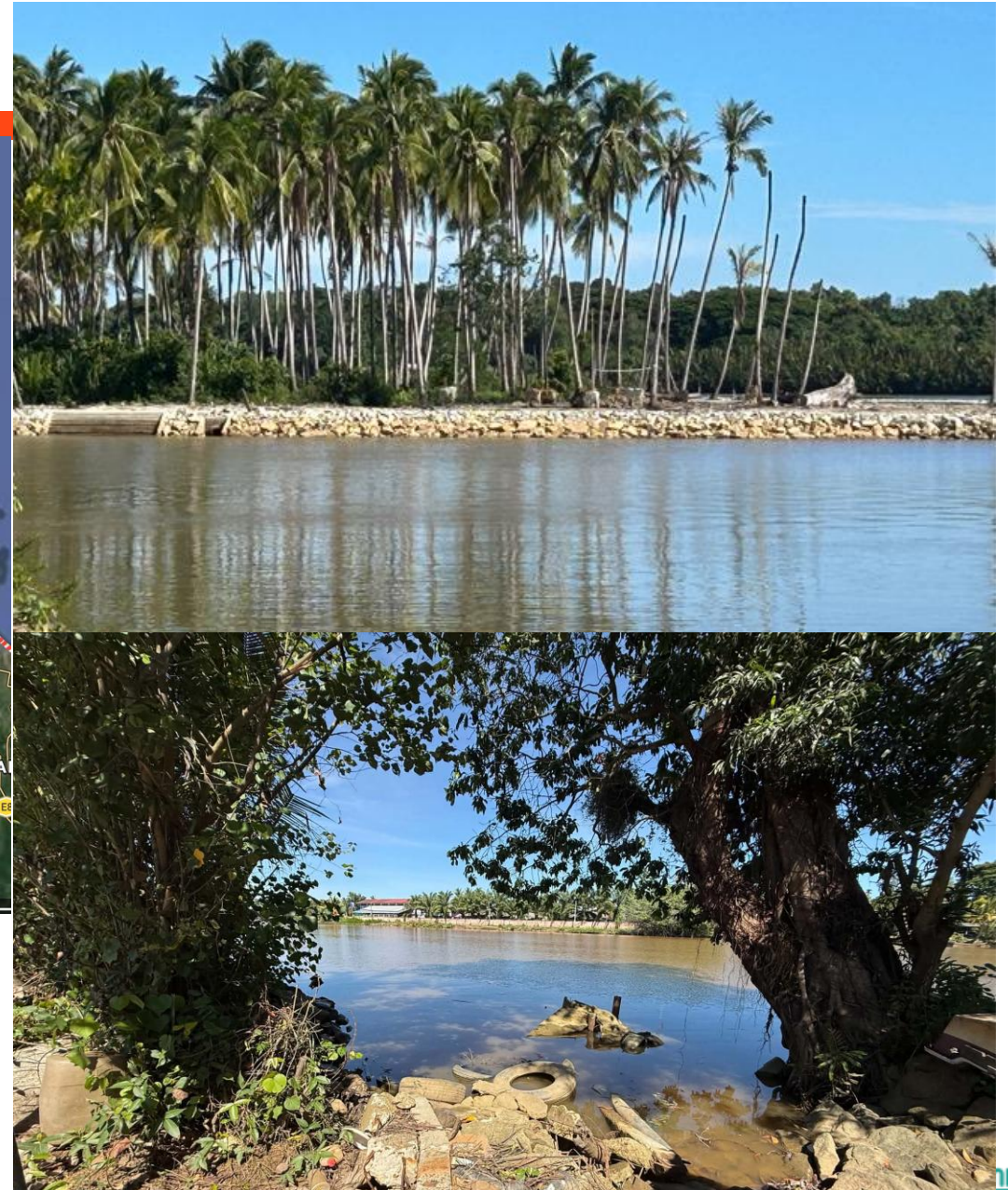
MEKONG REGION: MAJOR CROSS-BORDER ANIMAL MOVEMENT PATHWAYS



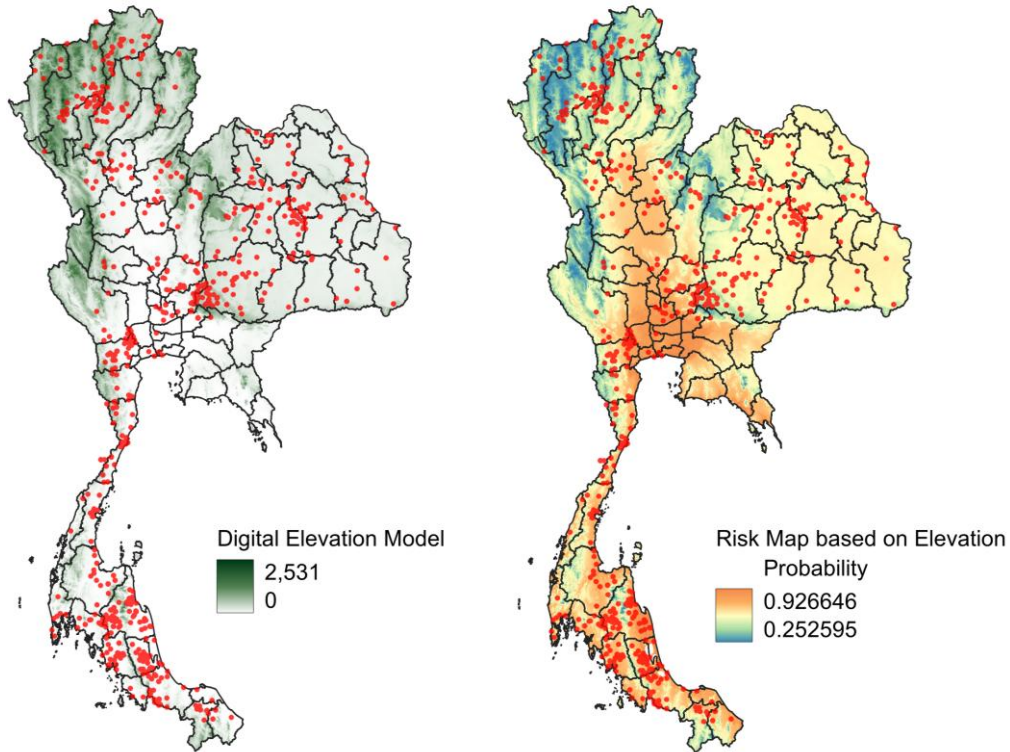
Cross-border animal movement



The Golok River (Sungai Golok) is a 103-kilometer transboundary waterway that serves as a natural border between Malaysia (Kelantan state) and Thailand (Narathiwat province).



Risk mapping Upper Mekong region



Source: Dr Veerasak, Chiang Mai University

Multi-Criteria Decision Analysis (MCDA)

Data layers:

- Animal population density

Generate data from animal movement study:

- Live cattle market locations
- Animal movement pathway
- Surveillance check point location/ cross border check point
- Road and land types (Data from Satellite)

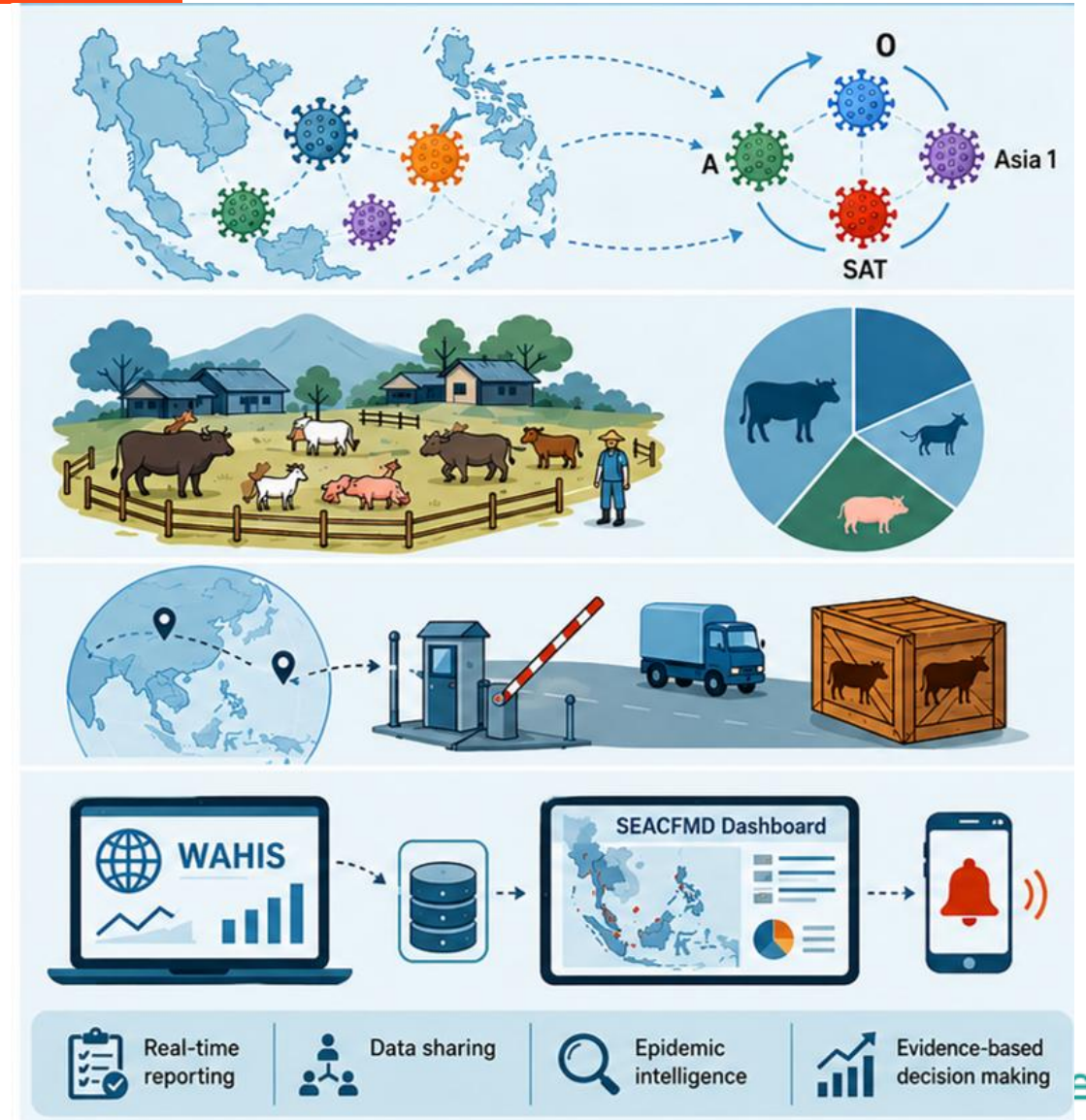
Data based on Expert opinion:

- 15 representative from UM countries (3 per Country) + 5 from International Organization

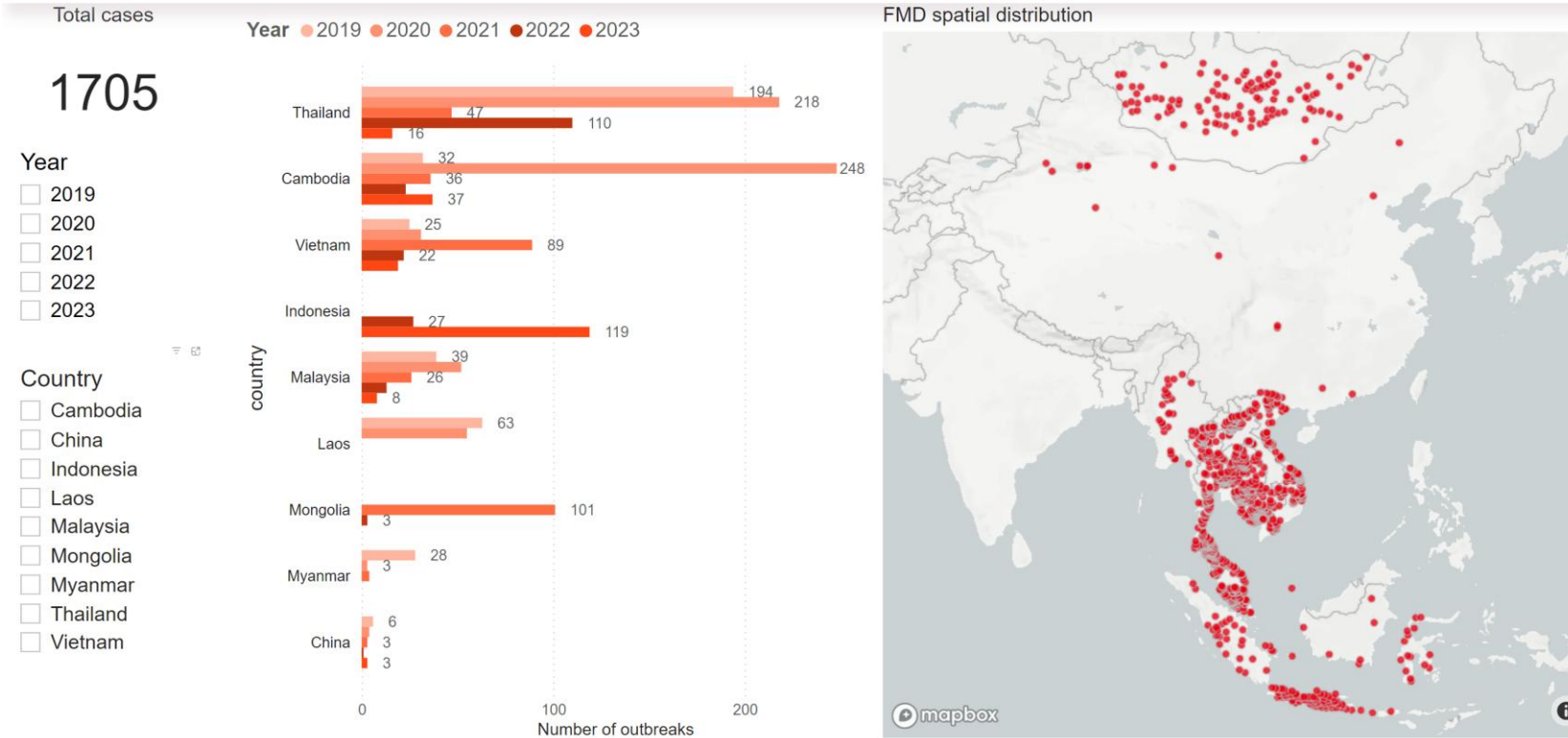
Key observations

- FMD remains endemic in SEACFMD Region
- Serotype O continues to predominate
- Serotype A detected in Malaysia and Vietnam
- SAT1 detected for the first time in China and Mongolia
- Cross-border animal movement continues driving spread
- ARAHIS-into-WAHIS integration is active, providing a single portal for regional data sharing
- Epidemic intelligence supports timely disease reporting and real-time information sharing

Challenges/Discussion



FMD OUTBREAK



Thank You