



World Organisation  
for Animal Health



# **SEACFMD Campaign:** *Lessons from the past and future challenges*

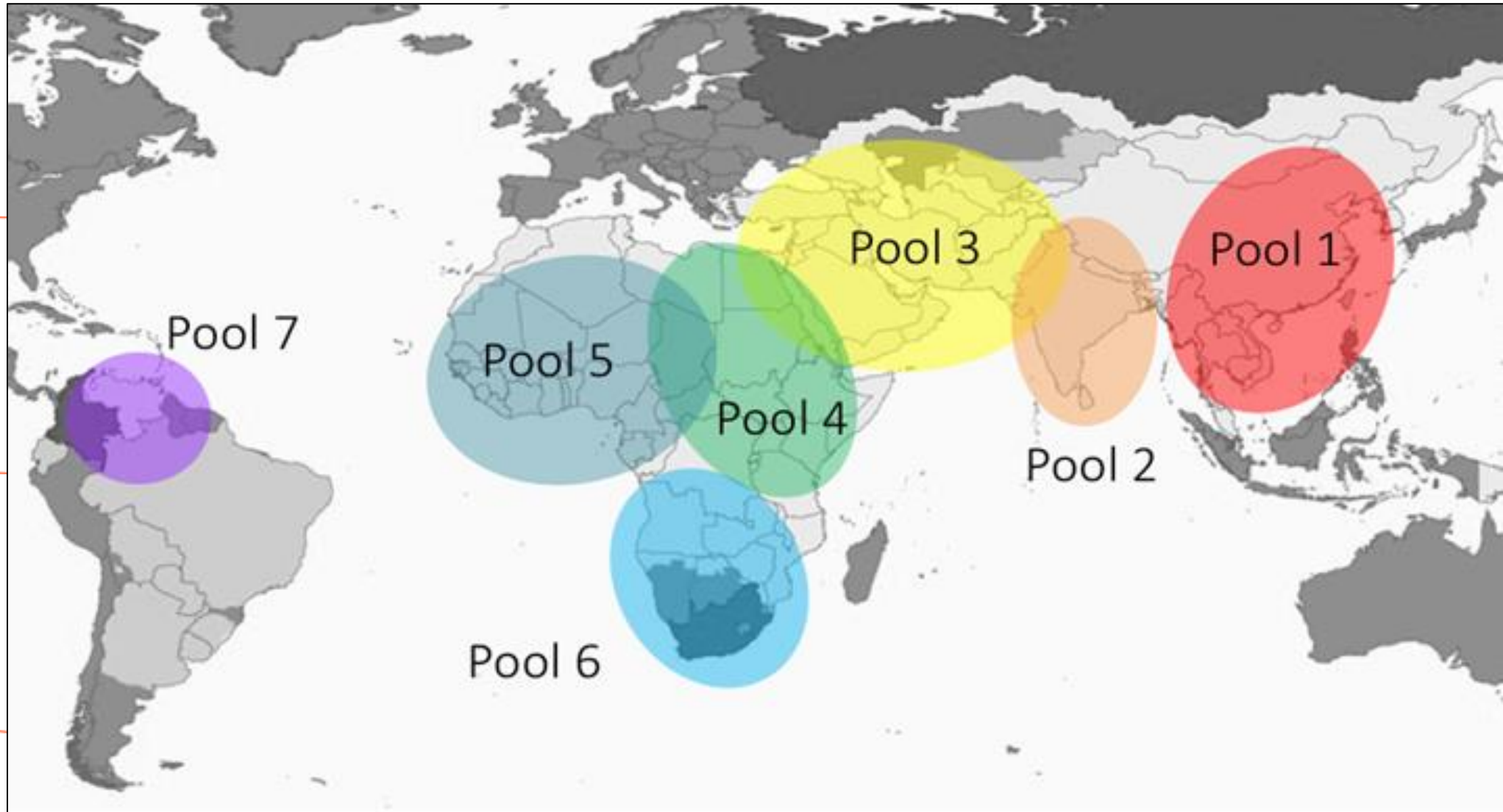
**Ronello Abila**

*Former SEACFMD Regional Coordinator (2004-2009)*

*Former Sub-Regional Representative for South-East Asia (2010-2024)*

**27<sup>th</sup> SEACFMD National Coordinators Meeting**  
20 – 22 August 2025, Luang Prabang, Lao PDR

# FMD Pool



## FMD Situation in the early 1990s

- Indonesia got an official recognition of FMD freedom in 1991
- In the Philippines, sporadic outbreaks of FMD due to serotype A, C and O , affecting mainly pigs and some large ruminants
- Countries in the Mekong were endemic with serotype Asia1, A and O
- **SE Asian countries were inspired with Indonesia success in achieving FMD Freedom, encouraging them to work together to progressively control FMD**

## The beginnings – 1991-1994

- To explore the possibility of setting up a regional programme to control FMD, the OIE International Committee created a **Coordinating Group for the Control of FMD (CGC\_FMD)** in SE Asia in May 1991 through Resolution 10.
- Two meetings were held in 1992 and 1993, and CGC-FMD recommended to set up a Sub-Commission for the control of FMD in SE Asia
- In November 2023, the OIE Regional Commission passed Resolution 3, recommending the creation of a Sub-Commission for the control of FMD in SE Asia
- In May 2024, the OIE International Committee officially created Sub-Commission for the control of FMD in SE Asia

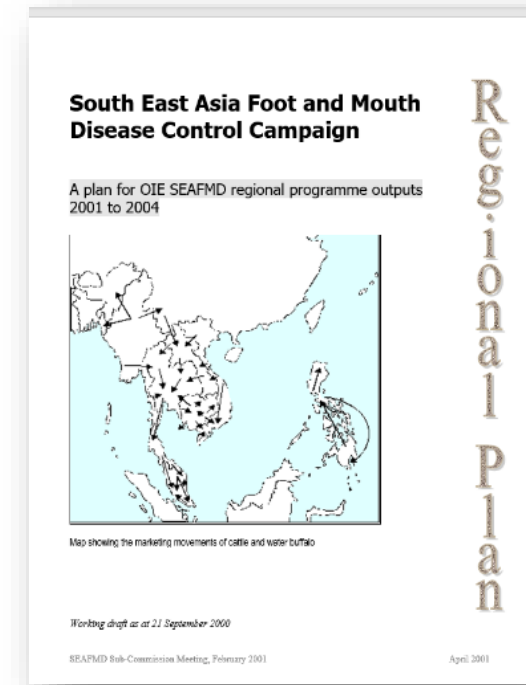


## SEAFMD 1995-1999

- 1995 – First meeting in Thailand, and hosting rotated among members
- 1996 – appointment of Country FMD Coordinators
- 1997 – The SEAFMD Regional Coordination Unit (RCU) was set up in Bangkok,
- 1998/99 - setting up FMD reporting system, Pakchong Laboratory being developed to become FMD RRL
- Philippines – FMD pandemic with incursion of serotype O Cathay topotype ; President issued order to control the disease
- Mekong countries – incursion of PanAsia O led to massive outbreaks

## SEAFMD 2000-2005

- 2000- First Regional FMD Strategy launched
- 2002/2003 – setting up of MTM and UMWG for FMD zoning and AMM
- 2003- Evaluation of SEAFMD Campaign
- 2004 – ASEAN endorsed the SEAFMD Campaign - Thailand designated as lead country
- Pakchong officially started as FMD RRL; SEAFMD LabNet launched



- Philippines - last case of FMD in the Philippines reported in Dec 2005
- Mekong - PanAsia continue remains dominant serotype with Myanmar 98, A, and few Asia 1 outbreaks in Mekong

## SEAFMD 2006-2010

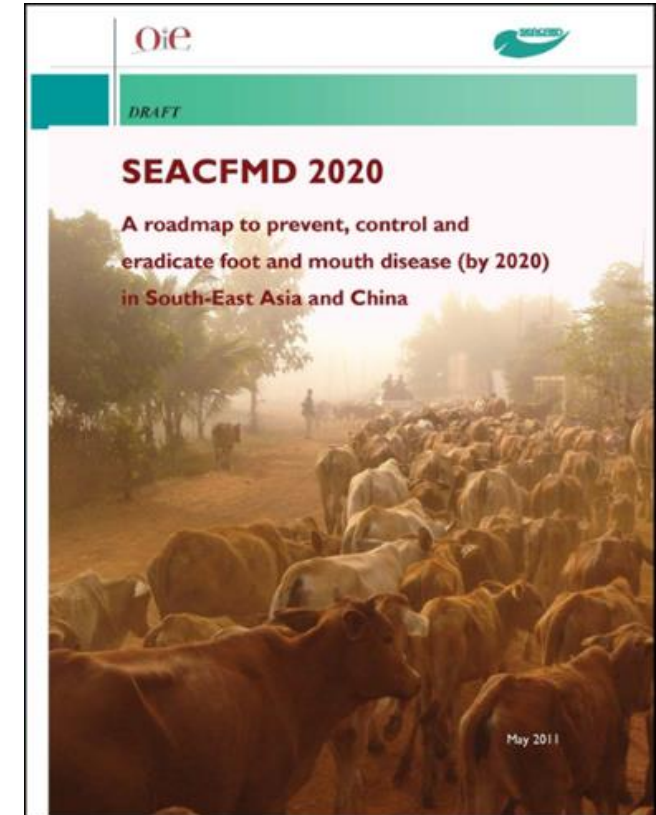
- SEAFMD Roadmap launched
- Animal movement and epidemiological studies
- Research priorities
- Socio-economic studies
- 2010- SEAFMD to SEACFMD with China and rest of ASEAN joining
- Sabah and Sarawak recognised by OIE as FMD free
- Brunei and Singapore also recognized as FMD Free



- Massive outbreaks in Vietnam; Prime Minister issue decree to control FMD
- China first reported O  
Myanmar 98 and A

## SEAFMD 2011-2015

- SEACFMD Roadmap 2011-15
- Follow up animal movement studies
- Pilot vaccination in northern Laos and central Myanmar to create FMD control zones
- Philippines recognized as FMD Free country

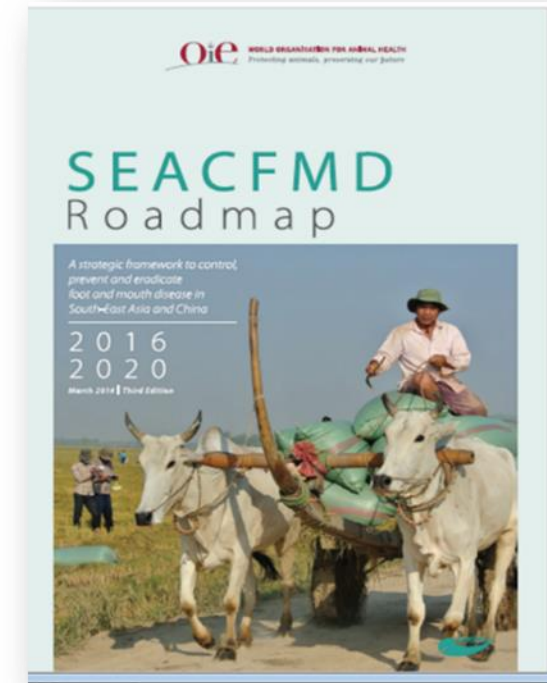


- Less of PanAsia outbreaks
- Myanmar 98 and Serotype A dominates



## SEAFMD 2016-2020

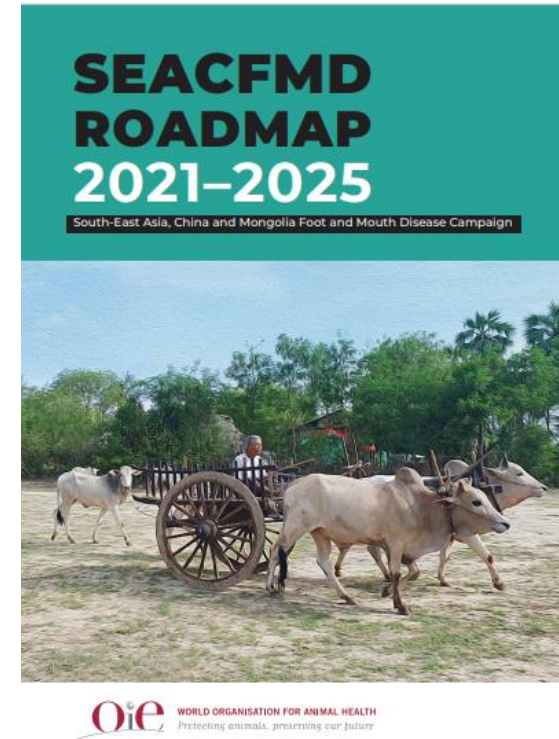
- FMD-PCP applied in then SEACFMD Campaign
- Establishment of trading zones between Myanmar-China and Laos-China
- Pilot vaccination in Southern Lao PDR and central Myanmar
- China, Mongolia and Thailand got OIE FMD-OCP endorsement
- Changes in the SEACFMD Sub-Commission governance



- Incursion of O India/2001/d and O India/2001/e

# SEAFMD 2021-2025

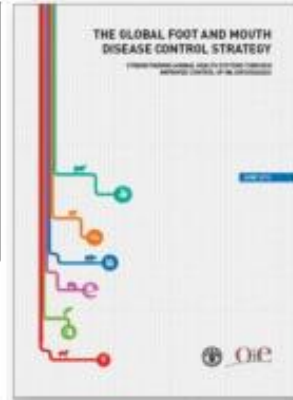
- Review of the SEACFMD from 2017-2020
- Risk assessment studies
- Price monitoring study
- Assessment of O Asia1 freedom



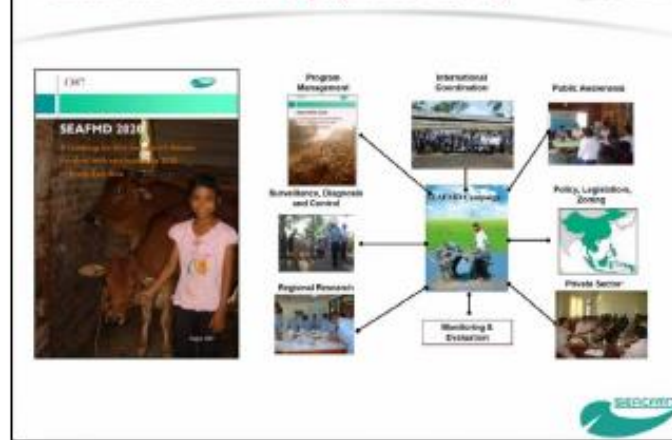
- O India/2001/e dominates
- Indonesia affected by O India/2001/e in 2022

# SEACFMD Campaign 1997-2020 Review

SEAFMD Campaign Plan 2001-2004



SEAFMD Roadmap (2006-2010)



SEACFMD Roadmap (2011-2015)



SEACFMD Roadmap (2016-2020)



SEACFMD Roadmap (2016-2020)



SEACFMD Roadmap (2016-2020)

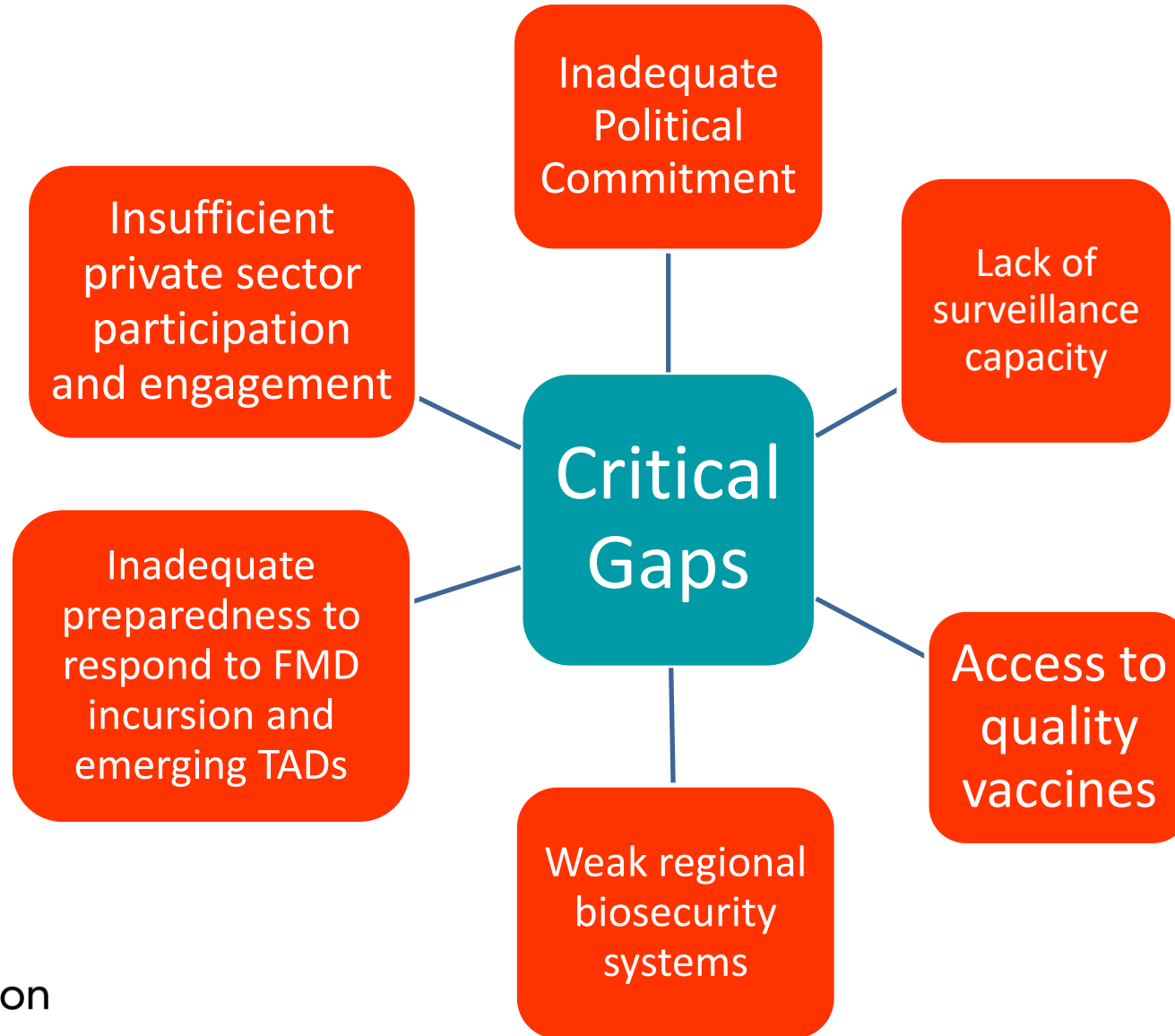


World C  
for Anim



# Critical Gaps identified during the evaluation of SEACFMD Campaign

---



# Key findings

---

- SEACFMD is well established and recognized coordination platform for FMD prevention and control which can be adapted for other TADs control
- Implementation of SEACFMD activities is highly variable among the SEACFMD Members
- Some of the capacity building programmes for FMD benefited prevention and control of other TADs (Biosecurity, surveillance, preparedness and response, laboratory, trainings, awareness etc)
- Increasing wealth in SEA & China led to altering diets & driving demand for meat & dairy products in the region; new markets & increased long distance animal movements leading to incursions of new TADS & EIDs (ASF, PPR, LSD)
- Ownership and sustainability of the campaign remains critical
- Whole of Government approach is important for enhancing FMD prevention and control



# Challenges to achieve a SEACFMD Free region !!!



# Circulating FMV strains in South-East Asia

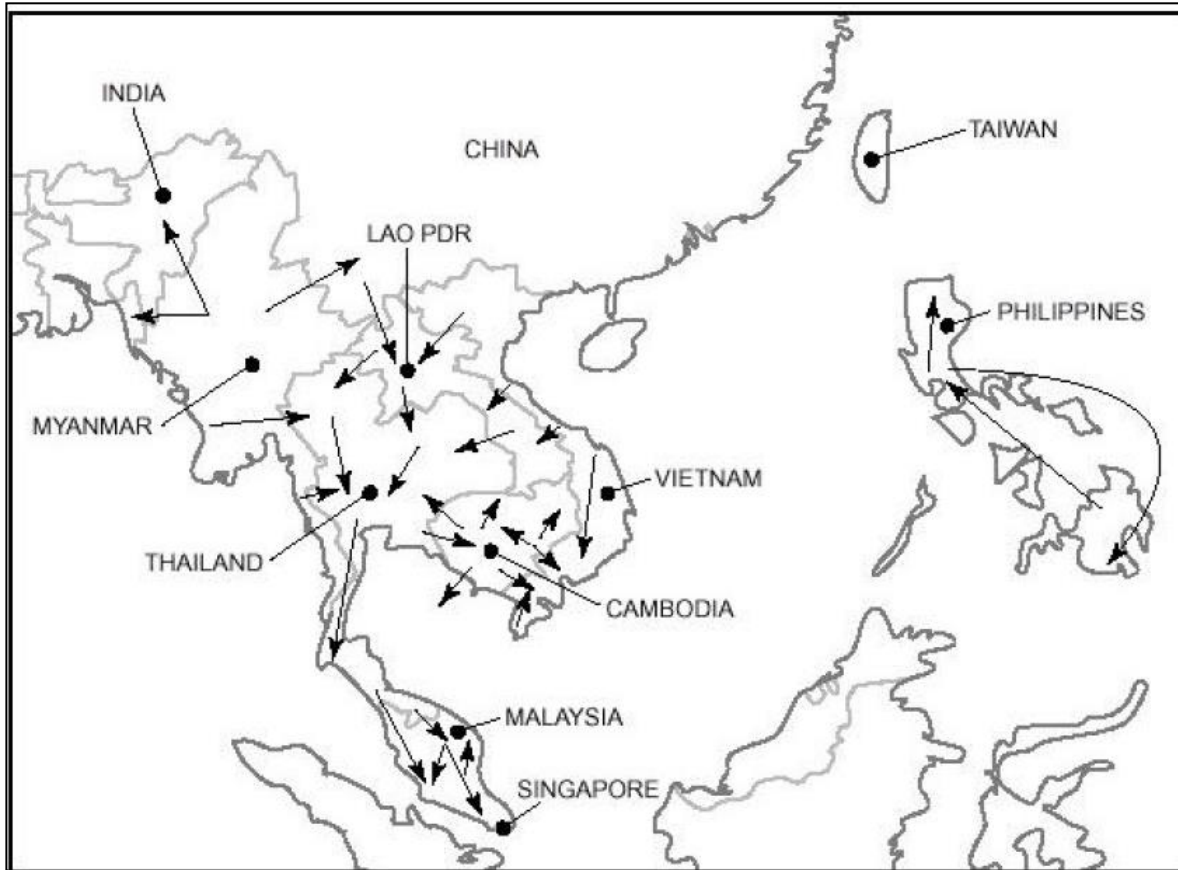
Country	O					A		Asia-1
	ME-SA/Ind-2001e	SEA / Mya-98	CATHAY	ME-SA / PanAsia	ME-SA/ PanAsia-2	ASIA / Sea-97	ASIA/Ind	
Cambodia	2024	2016		2024		2016		
Laos	2020	2017		2023		2018		
Malaysia	2022	2016	2005	2023	2009	2022		
Myanmar	2021	2021				2021	2010	2017
Thailand	2024	2018	2012	2019		2022		
Vietnam	2023	2023	2018	2023		2017		2007
PR China	2023	2020	2022	2019		2019		2009
Indonesia	2025							
Mongolia	2022	2018		2017		2016		

\*Recent papers: Khanh et al., (2025)

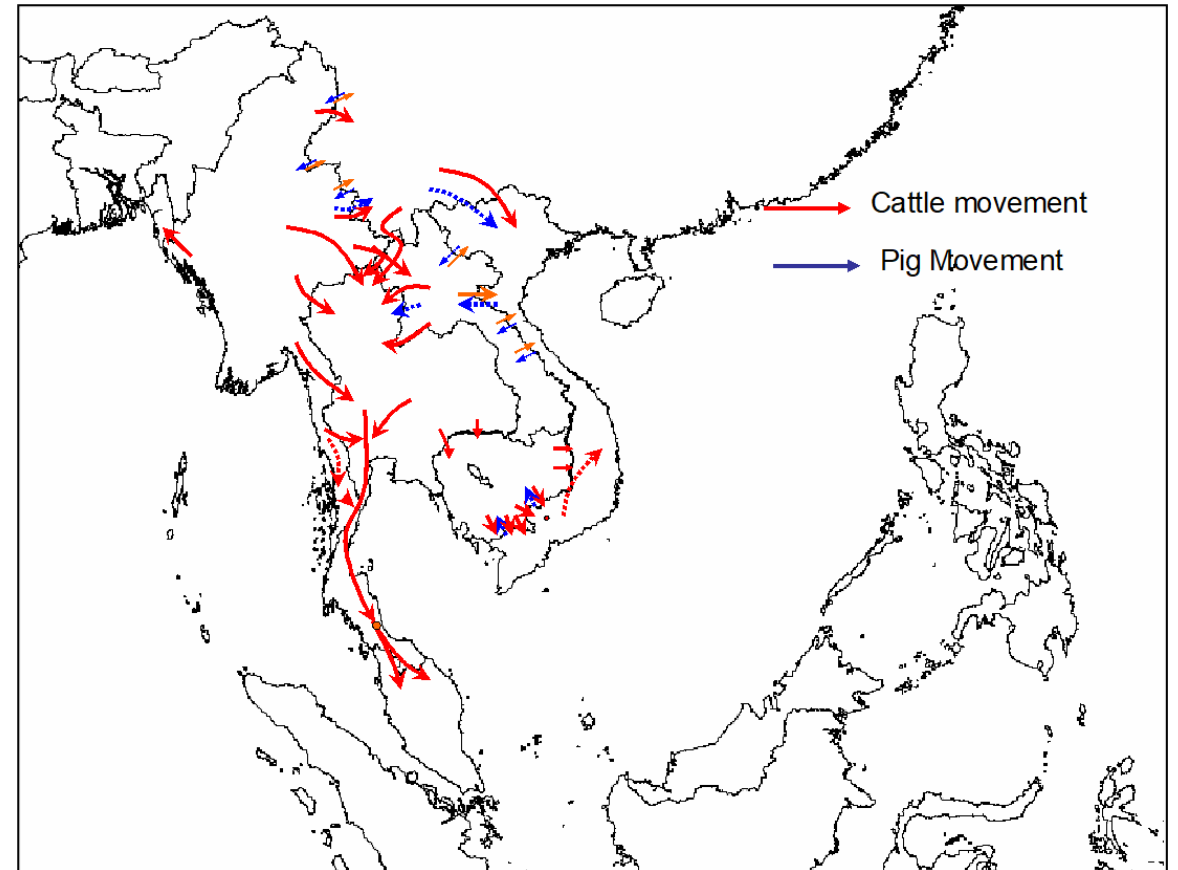
[www.pirbright.ac.uk](http://www.pirbright.ac.uk)

# Key driver on cross-border spread of FMDV

## Animal movement (1998)



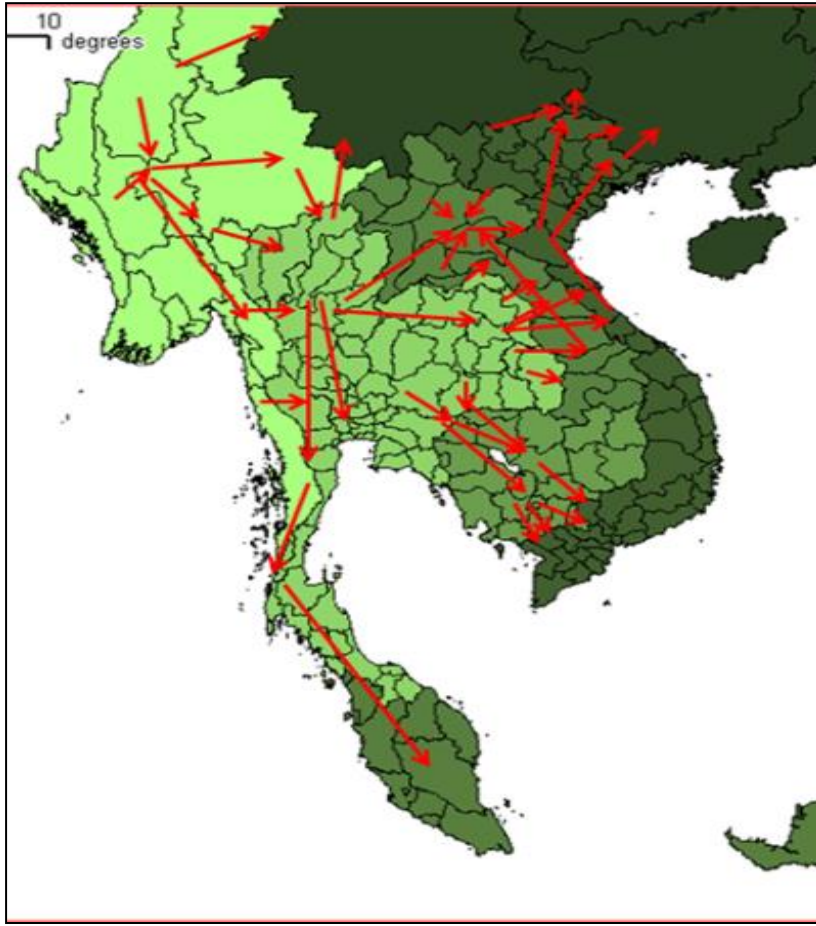
## Animal movement (2006)



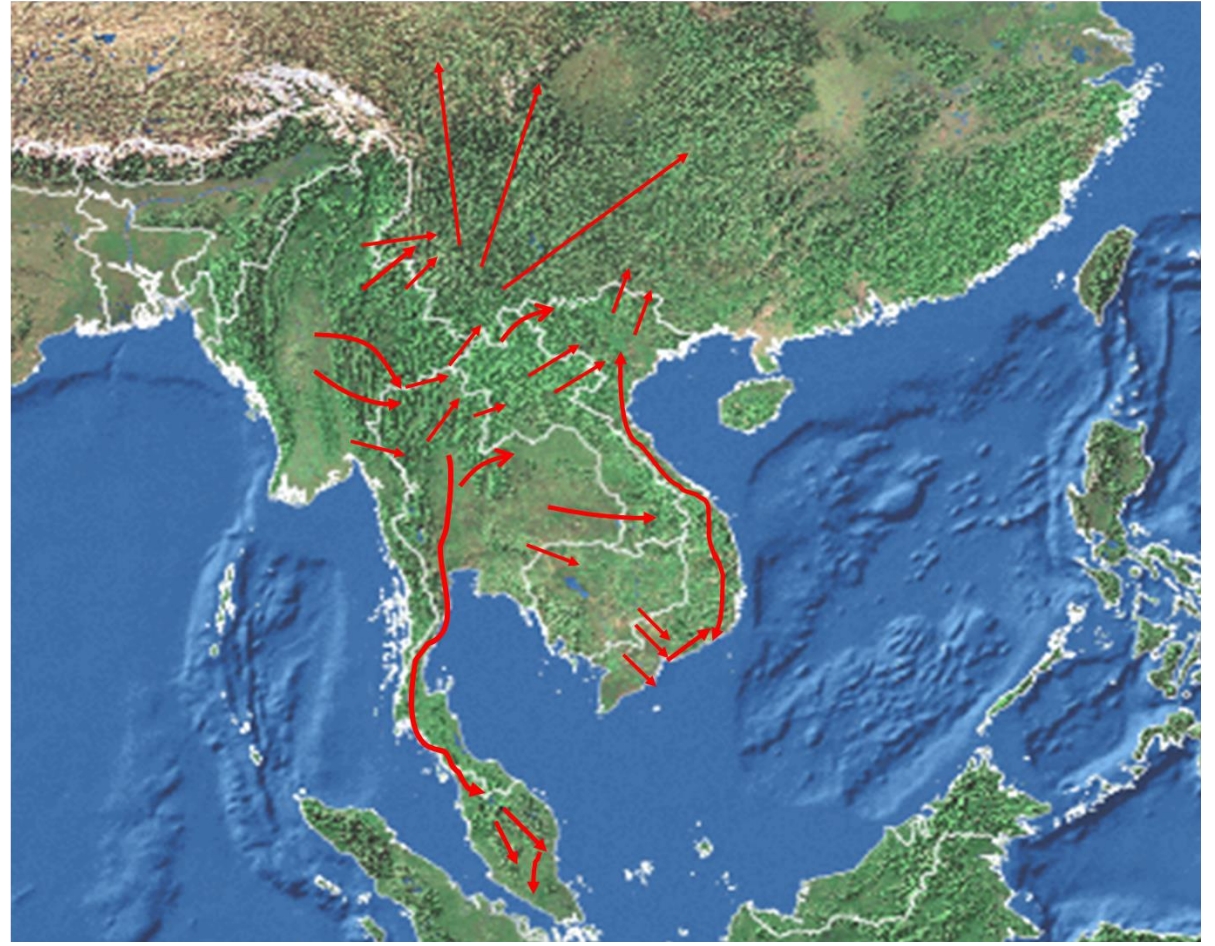


# Key driver on cross-border spread of FMDV

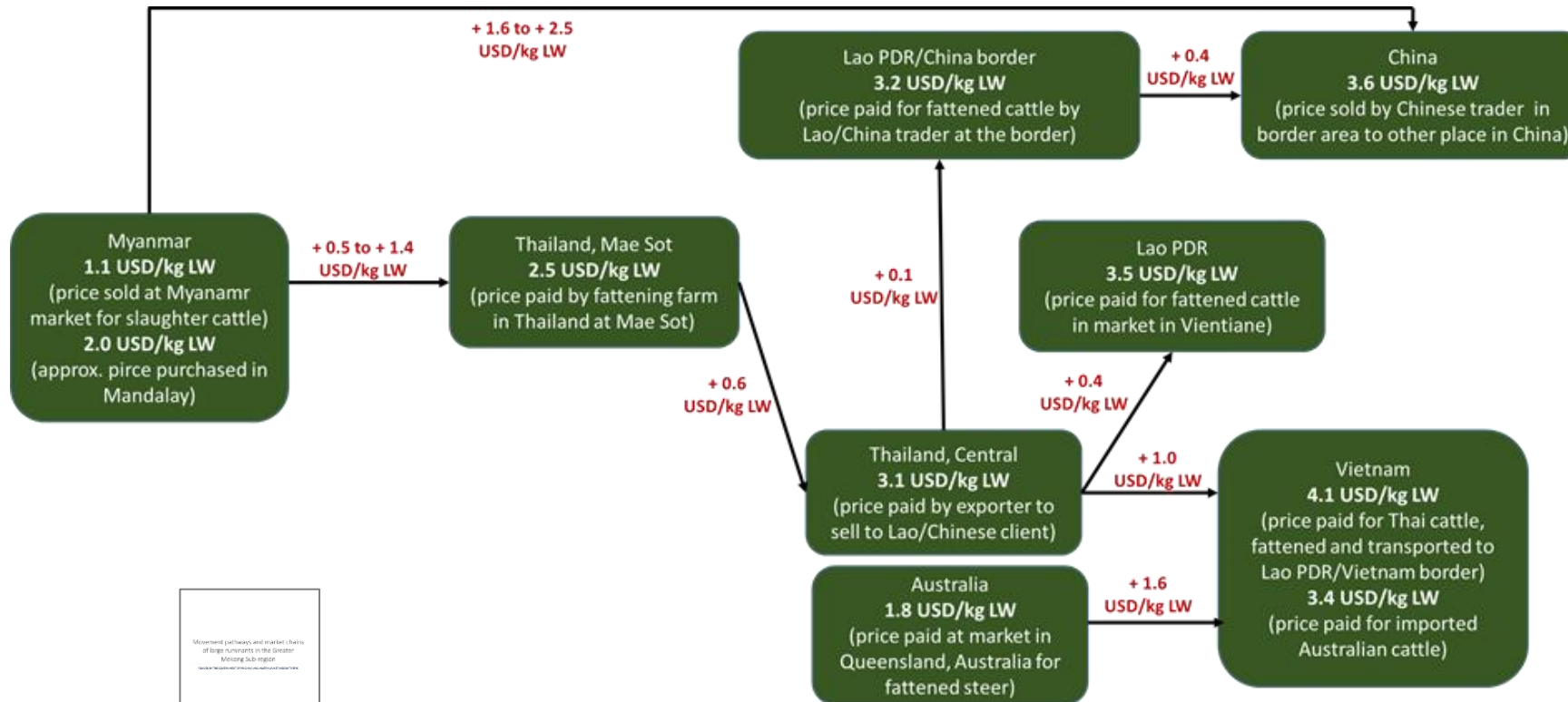
Animal movement (2009)



Animal movement (2013)



# Cattle price differentials across the region

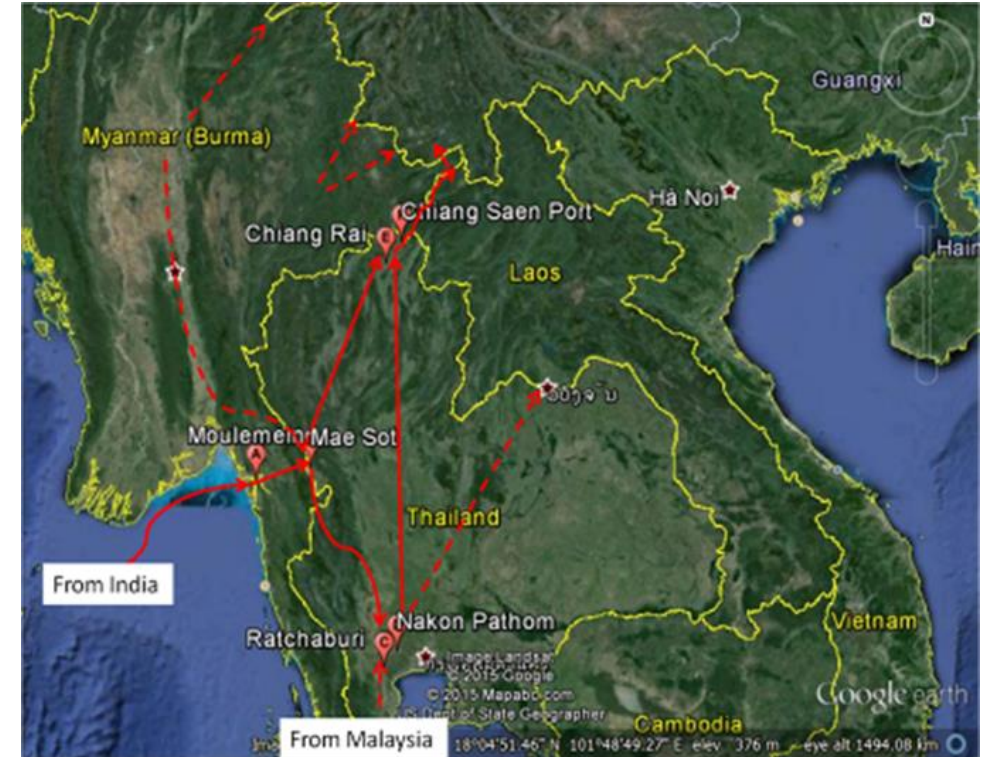


[http://www.rr-asia.oie.int/fileadmin/SRR\\_Activities/documents/movement.pdf](http://www.rr-asia.oie.int/fileadmin/SRR_Activities/documents/movement.pdf)



# Key driver on cross-border spread of FMDV

- 2009 in China – Serotype O/Myanmar 98 due to movement of cattle from SE Asia
- 2016 in Laos and Vietnam – 1<sup>st</sup> detection of India O/2001/d
- 2017 – 1<sup>st</sup> detection of serotype O/India/2001/e in SE Asia
- 2022 – 1<sup>st</sup> incursion of FMDV in Indonesia caused by serotype O/India/2001/e



## Meat Consumption forecast

Figure 1 China population, actual and projected

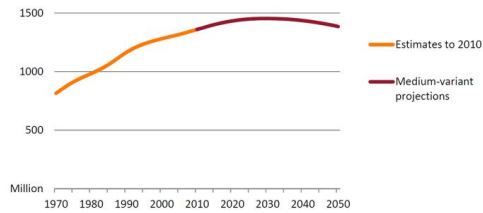


Figure 4 Per person income by income group

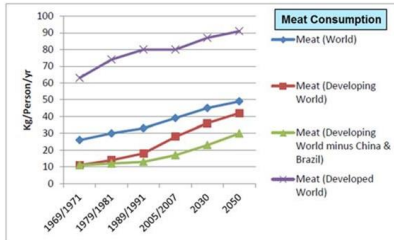
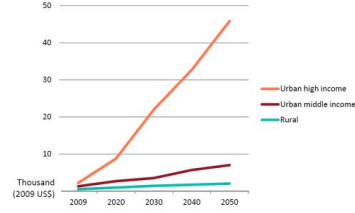
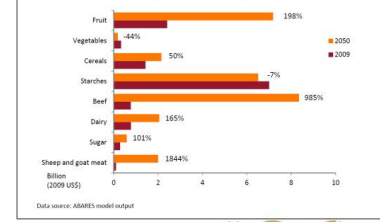


Figure 16 Imports of selected agricultural commodities, China



World Organisation  
for Animal Health  
Founded in 1924

## Faster cross border movements

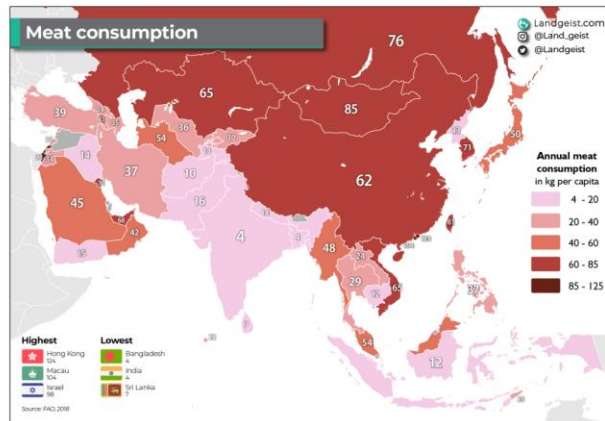


ADB gives \$82M for roads



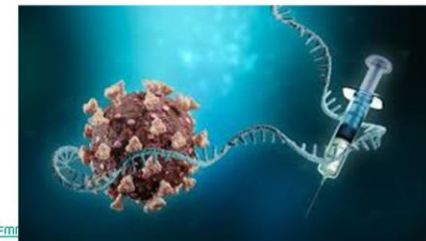
World Organisation  
for Animal Health  
Founded in 1924

## Meat consumption distribution



World Organisation  
for Animal Health  
Founded in 1924

## Fast technological developments



World Organisation  
for Animal Health  
Founded in 1924

## Targeted interventions

- Reduce FMD prevalence by targeting hotspots and critical points
  - Decreasing the prevalence 'at source' and critical points along the animal movement pathways
- Hotspots = foci, endemic source
- Critical points = amplification point

# Vaccination

- Use of effective vaccines proven to control and eventually eradicate FMD ( experience in South America)

## Purpose of Vaccination

- Vaccinate to protect susceptible hosts / prevent clinical disease
- Vaccinate eliminate the virus from the source

## Systemic vaccination strategy

Progressively establish immune cattle/buffalo population

Coincides with major flow of animal movement

Majority of animals that are moved, originate from low vaccinated areas

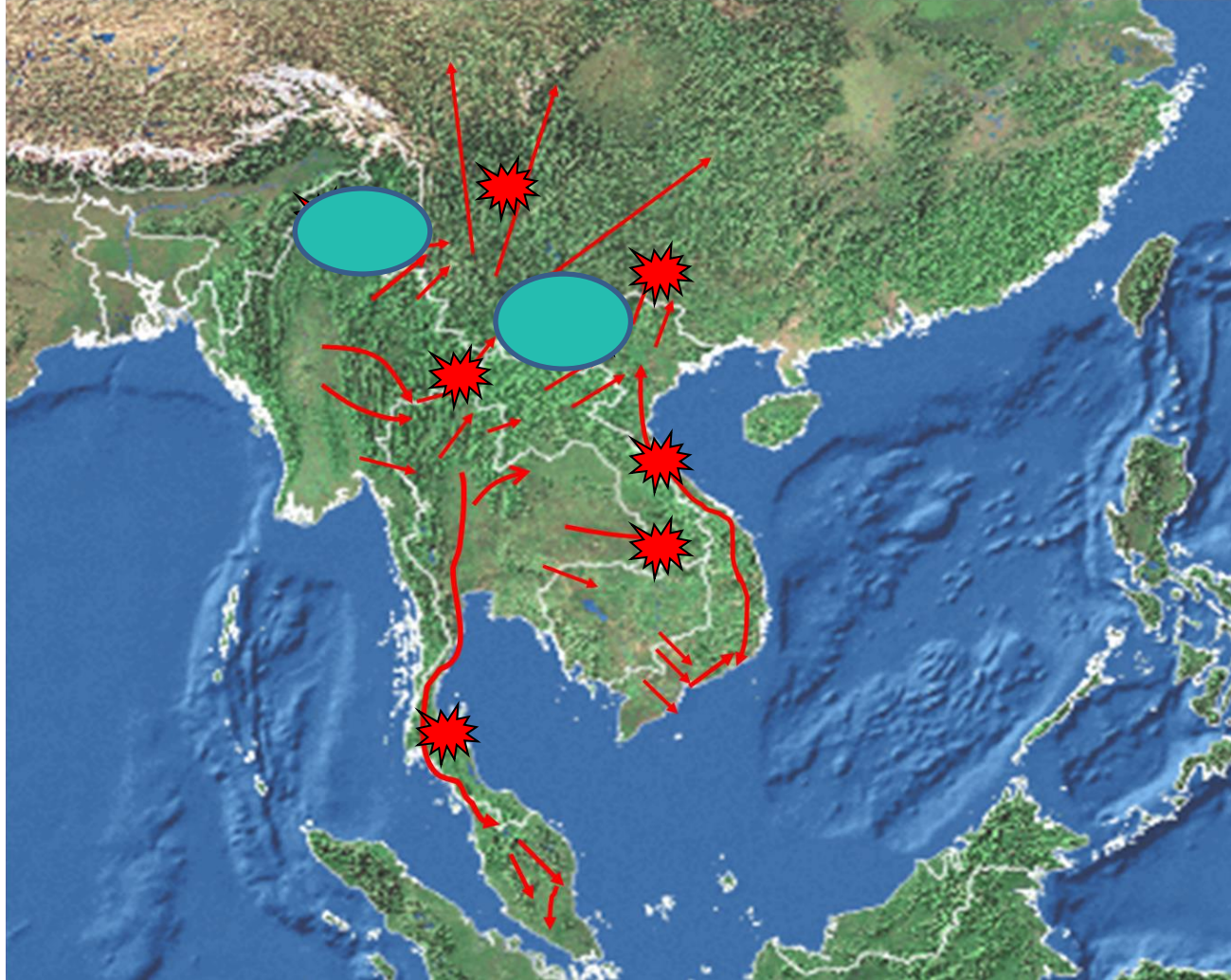
## Strategic/targeted vaccination strategy

Complementary and in support of systemic strategy

Protect hotspot areas while immune status of national population is being established

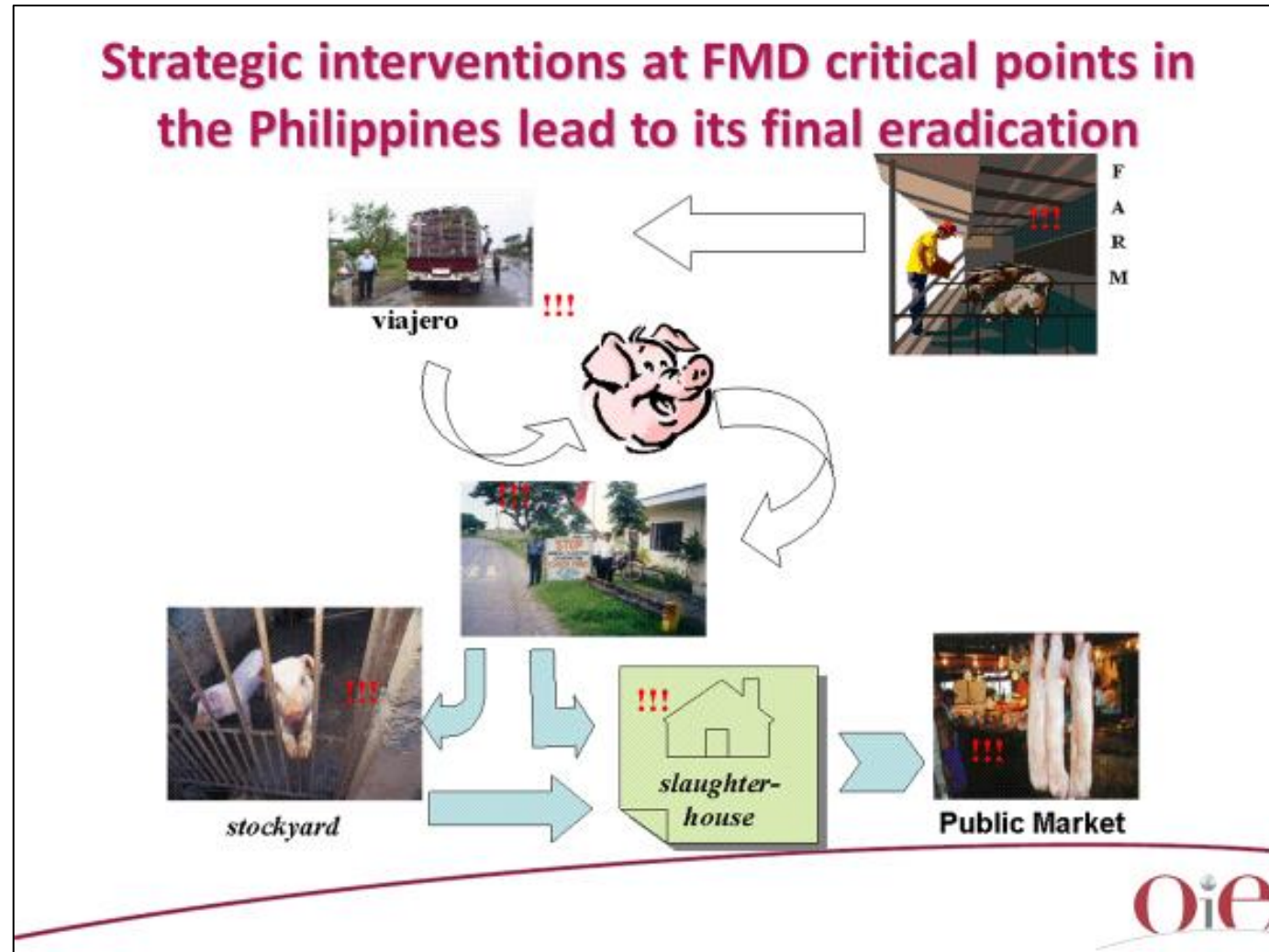


## Intervention at the source and critical points along the Risk Pathway





# Looking back at FMD Eradication in the Philippines



# Managing the risks of possible FMD incursion

- 1<sup>st</sup> occurrence of FMD O-Cathay topotype outbreak in the Philippines in 1994 was detected in Rizal
- 1<sup>st</sup> occurrence of ASF in July 2019 was also in Rizal



# Key Challenges in the prevention and control of FMD

- Illegal animal movements
  - Poor understanding of market forces that influence high risk animal movements
  - Porous borders
- Poor surveillance
- Poor vaccination coverage from due to lack of resources
- Question of quality vaccines or ineffective vaccination strategies in countries implementing mass vaccination – need to evaluate vaccination program

**Political commitment is a key.**  
**Politicians easily support during FMD crisis.**  
**How to sustain political support is a challenge !**





Thank You