

# Key pillars of an FMD control program

TAFS Conference:

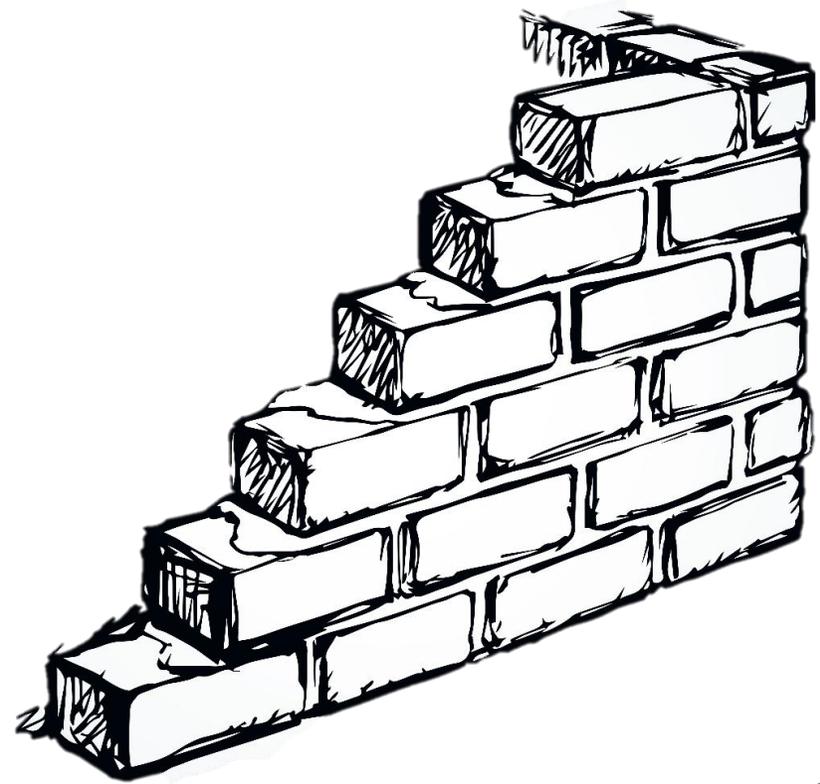
“Strengthening FMD control capacity and enhance resilience”

Prof. Dr. Ulrich Kihm, TAFS Forum & SAFOSO

3<sup>rd</sup> and 4<sup>th</sup> of March 2026, Cape Town

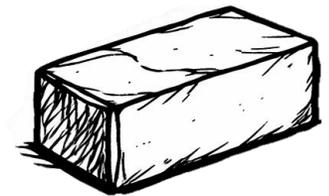
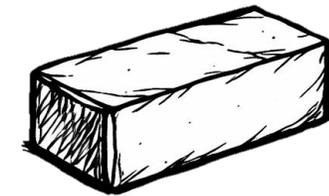
# Building a resilient livestock sector

- Strengthening disease prevention, preparedness and control
- Building effective and resilient control programs
- Adopting a holistic approach
- Fostering strong cooperation among stakeholders



# Disease control components

- Political will
- Regional collaboration
- Disease awareness
- Biosecurity
- Animal identification and traceability
- Early detection and warning systems
- Laboratory diagnostic capacity
- Vaccination
- Animal movement control & border control
- Emergency response



# Regional collaboration

- FMD control is a long process
- Many countries have achieved it

A regional approach is necessary to sustainably eradicate the disease



Figure: EUROPE WOAHP Members' official FMD status map, Feb 2026

# FMD control in Europe

- National FMD control campaigns began in the 1960's
- Nearly all countries (except 3) had annual vaccination programs



- Focus on cattle (100% coverage)
- Relied on high-quality aluminium hydroxide vaccines with Saponin



# National vaccination program in France

- Launched: 1962
- Coverage: 100% of the cattle population
- Policy change: vaccination banned in 1992

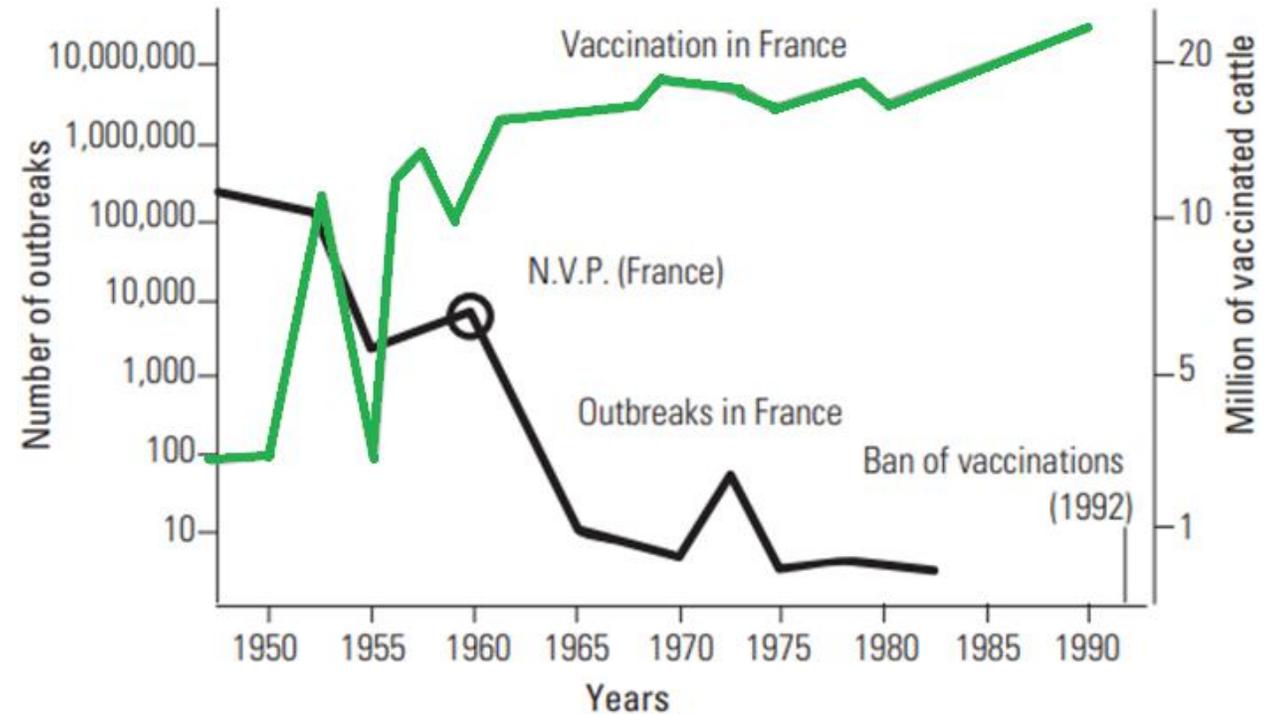


Figure: Effect of National vaccination program in France, Lombard et al., 2006

# Improvements in vaccines

## Old vaccines

Low or unsatisfactory quality

- Non purified
- Inconsistent inactivation

Limitations in the  
production processes



Stakeholder confidence: Low



Vaccination coverage: Low

## Modern vaccines

High-quality → High potency & purity

- Improved purification & concentration
- Reliable inactivants & potent adjuvants

Sophisticated  
production processes



Stakeholder confidence: Higher



Effectively reduce viral replication

# Vaccine distribution & delivery systems

- Efficient vaccine distribution and delivery
  - Ensure appropriate vaccinal coverage
- It is essential to follow the defined vaccination schedule
- Accurate record keeping
  - Critical for monitoring and control



# Strengthening disease prevention

- Understanding the risk
  - Risk analysis: Risk assessment, risk management und risk communication
  - Vulnerability analysis
- Disease intelligence
  - Understand what's happening in the region
  - New spread patterns
- Disease awareness
- Biosecurity measures
  - On farm biosecurity
  - Border control



# Communication and Awareness

- Engage farmers and other stakeholders
  - Clear and accessible communication
- Targeted awareness campaigns
  - Tailored to the group
- Use the right communication channels
  - Different media and approaches
- Utilize new technologies to enhance effectiveness

FMD control requires Commitment from all stakeholders



# Awareness for FMD Prevention

- Keep stakeholders informed
- Sustains disease control efforts
  
- Levels of Awareness:
  - National: Prevent entry of the FMDV into the country
  - Farm: Implement biosecurity measures to prevent FMDV introduction and further spread



Figure: WOAHA FMD awareness materials

# Early disease detection & warning systems

- Rapid disease detection is crucial for containing outbreaks and minimizing their impact.
- FMD cannot be clinically distinguished from other vesicular diseases
- Requires awareness and commitment from stakeholders



Source: FAO & DEFRA

# Surveillance capacities

- Regular surveillance:  
Clinical observations +  
Serological testing
- Monitor occurrence/prevalence of  
FMD & characterize circulating strains
- Requires established notification  
procedures and follow-up actions





# Immediate action

- Follow official guidelines: containment, vaccination, quarantine, culling
- Implement strict measures: disinfect facilities and equipment, limit visitors
- Trace and monitor contacts: neighbouring farms, transport vehicles, markets and animals



FMDV  
spread



# Animal identification & traceability system

- Allow the identification of animals throughout the production chain

Essential information for:

- Keeping track of vaccinated animals
- Risk assessment
- Sanitary certification
- Market access



# Animal movements controls

## Animal health verification :

- Ensure animals show no clinical signs of FMD
- Verify animal health records before transport or farm entry
- Only animals that tested negative for FMD are allowed to move



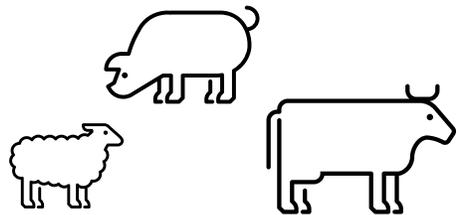
FMDV  
spread



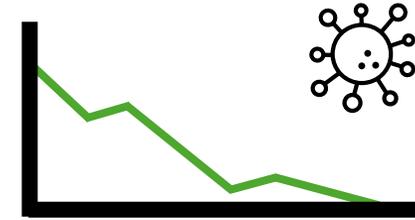
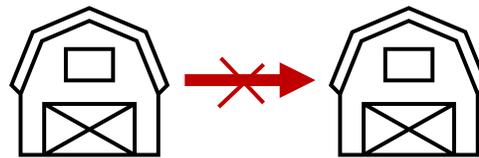
# Stopping Virus Circulation



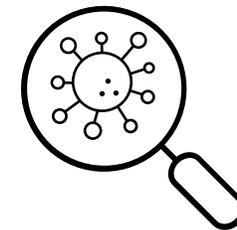
Consistent control measures: vaccination biosecurity, movement control etc



Limit virus spread within and between farms



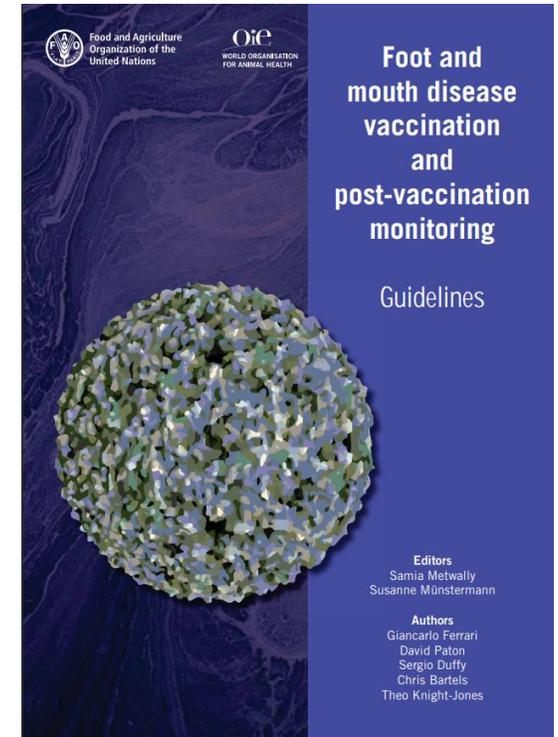
**Elimination** of the virus is achieved **over time**



# Proving freedom from FMD

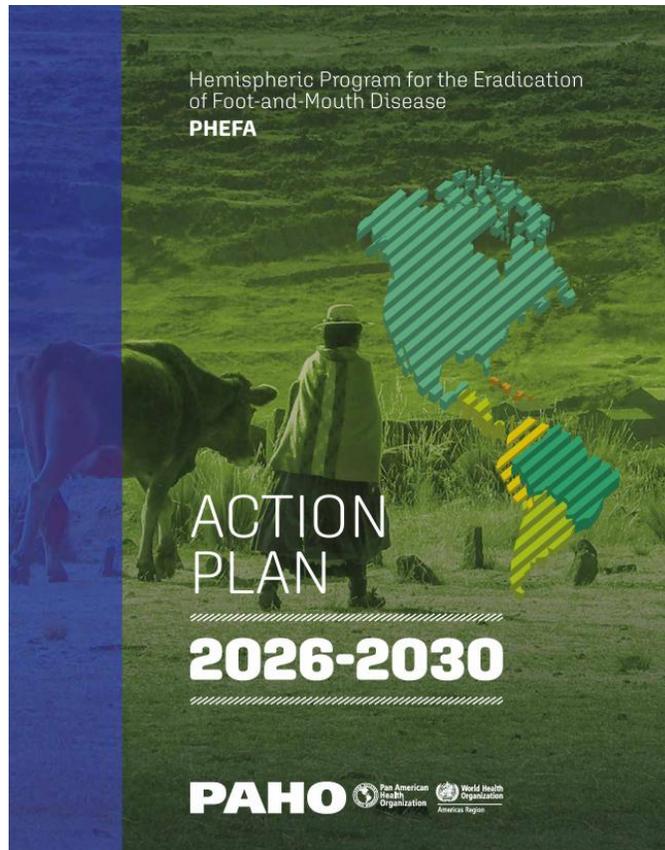
## A long-term goal

- The absence of virus circulation can be proven through diagnostic tests
- DIVA tests demonstrate freedom from infection by confirming the absence of non-structural protein (NSP) antibodies.

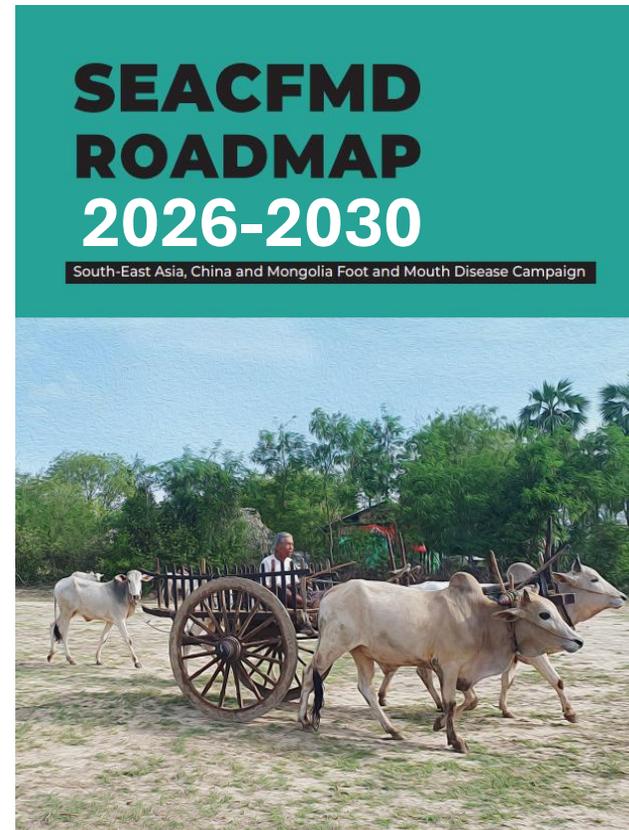


# Current FMD campaigns

## South America



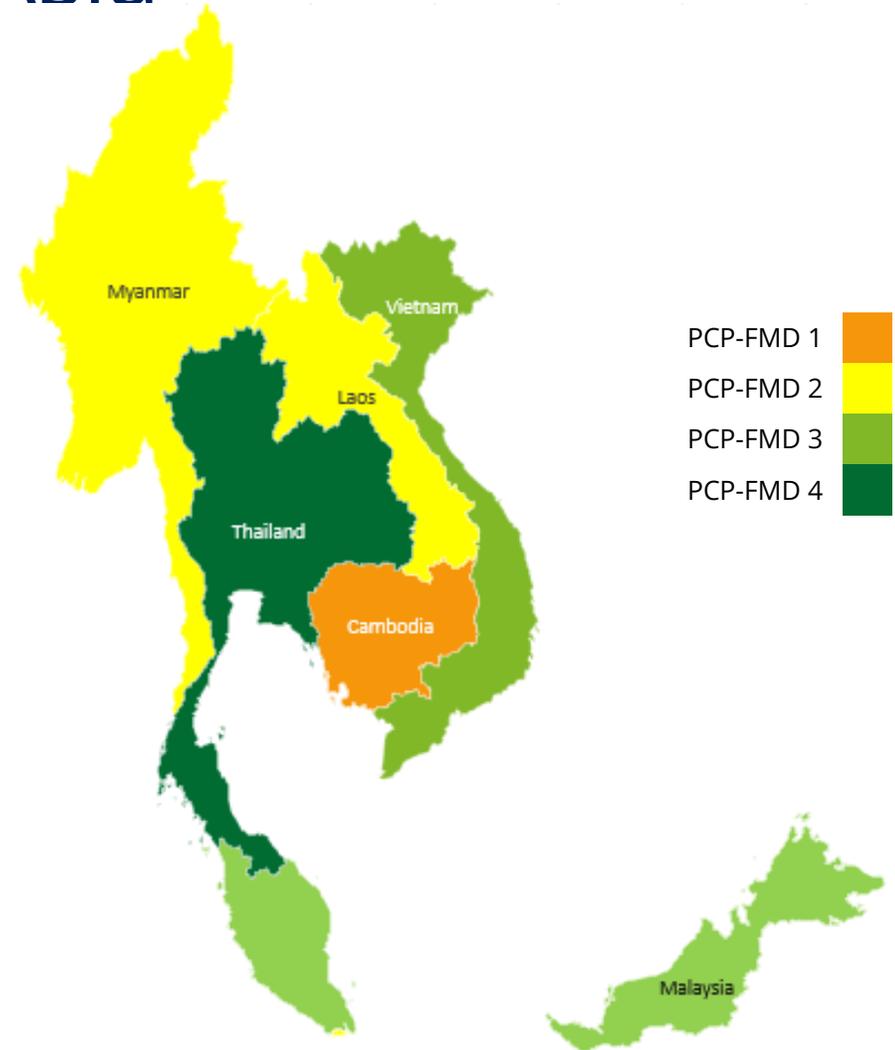
## Southeast Asia



# FMD control in Southeast Asia



- Officially formed in 1997
- Goal: Progressive control and eventual eradication of FMD in the region



Source: PCP-FMD Dashboard

# Working together

- Enhancing Public-Private Partnerships
  - Strengthen collaboration between governments, private sector, and farmers
- Capacity building and knowledge-sharing
- Strengthening regional cooperation and coordination
- Open and transparent communication

Thank you for your attention!

