

World Organisation for Animal Health

SEACFMD Laboratory Network Meeting

2026 Country Report (INDONESIA)

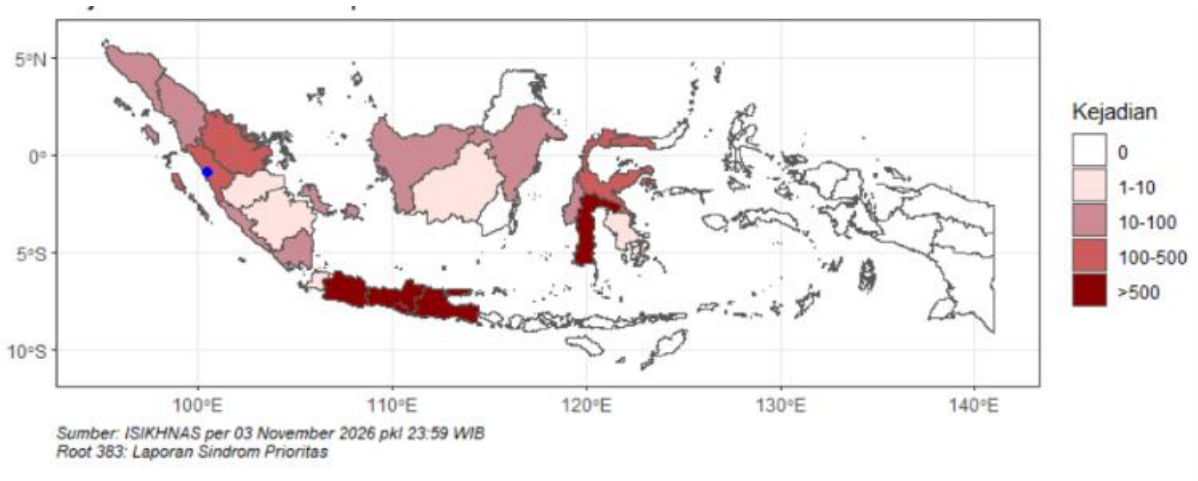
Ida Arlita Wulandari
Veterinary Officer

10-11 November 2026
Manila, The Philippines

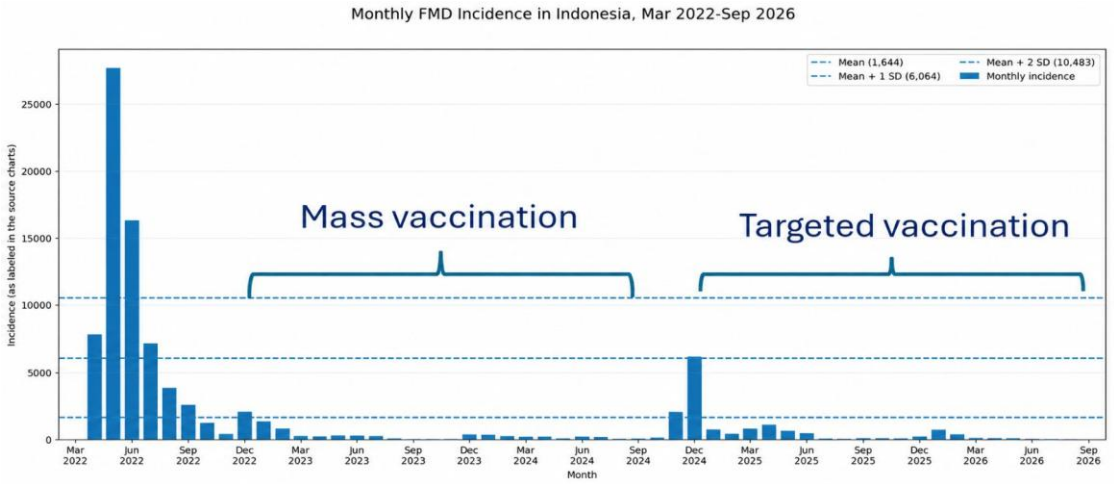
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BRIEF FMD SITUATION in INDONESIA

EPIDEMIOLOGICAL CONTEXT



Sumber: ISIKHNAS per 03 November 2026 pkl 23:59 WIB
Root 383: Laporan Sindrom Prioritas



REPORTED SITUATION FROM 1 JANUARY TO 3 NOVEMBER 2026

1,798
Reported occurence

7,014
Reported cases

17
Affected provinces

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Targeted FMD Control and Management Roadmap by Zone

OBJECTIVES

1. Progressively reduce FMD Occurrence and risk in infected areas
2. Achieve WOAH recognition of the FMD Official Control Programme
3. Maintain FMD-free areas

PERFORMANCE INDICATORS

1. Zero cases in large-scale/commercial livestock farms and breeding units
2. Reduce cases in small holder farms to zero by 2029 in the red zone and yellow zone
3. Maintain the FMD-free status of designated areas
4.

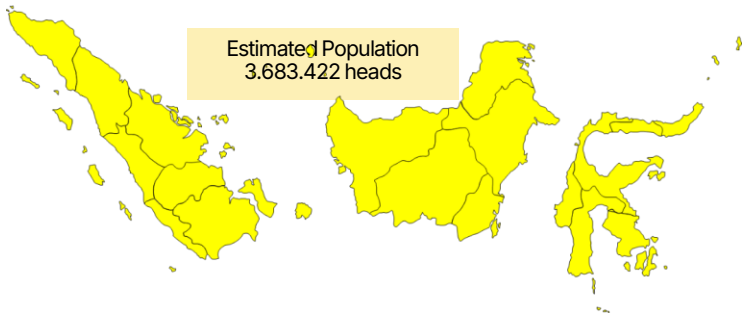
FMD CONTROL AND MANAGEMENT TARGETS BY ZONE, 2025-2029

Control Zone

Population: 30% of the national livestock population, livestock received from the red zone, restricted animal movements within the zone; ekstensive farming, sporadic disease occurence

KEY ACTION

Five years of continuous vaccination (synchronized vaccination period), treatment, surveillance, and livestock movement control.



Eradication Zone

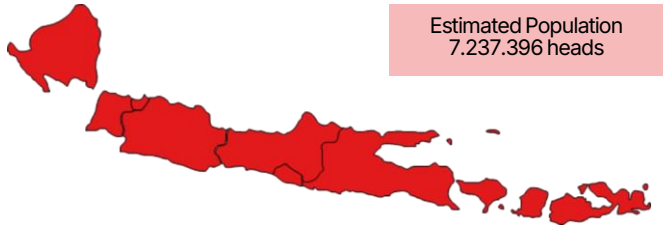
Population: 60% of the national livestock population

Major livestock production areas; high livestock density and inter-island movement; high disease incidence; intensive farming.

KEY ACTIONS

Five years of continuous vaccination (synchronized vaccination period), treatment, surveillance, and livestock movement control.

Priority Intervention

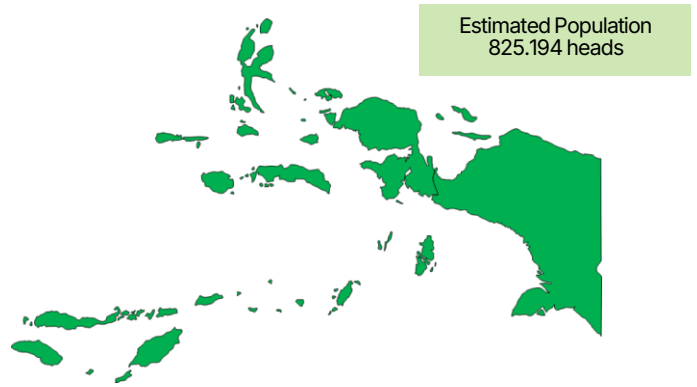


Prevention Zone

Population: 10% of the national livestock population; Limited livestock movement; extensive farming; FMD-free areas

KEY ACTIONS

Surveillance, early detection, emergency preparedness, and biosecurity



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FMD Surveillance

FMD Surveillance Activities and Sample Numbers

IVLAB
Indonesian Veteriner Labs Information System

PASSIVE SURVEILLANCE

3,646 samples received in 2025

Passive surveillance data represented samples tested at BBVF Pusvetma only and did not reflect the national total.

2 Jan-5 Nop 26 = 2996 samples

ACTIVE SURVEILANCE

18.675 samples (2025)

Targeted sampling in high-risk areas and animal populations;

POST-VACCINATION MONITORING

3,845 samples (2025)

Antibody response assessment across 8 provinces (administration level 1) and 62 districts/cities (level 2).

MOLECULAR SURVEILLANCE

136 samples (2022–2025)-VP1 Sequencing

VP1 sequencing: 78 (2022), 24 (2023), 5 (2024), 29 (2025).

qRT-PCR: 2954 samples (2025)*

* data from Pusvetma only, not national total

FMD-FREE AREA SURVEILLANCE/RISK-BASED

1,648 samples (2025)

Monitoring in designated FMD-free areas to support early detection and protection.

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Current Projects and Programmes Supporting Laboratory Capacity Building

Project / Programme	Implementation Period	Main Focus Areas	Donor / Supporting Organisation	Laboratory Capacity-Building Activities / Outputs
Vaccine Development				
Vaccine development support	2022–2023	FMD vaccine development and production capacity	AIHSP	Technical assistance and mentoring for FMD vaccine development.
Diagnostic Development				
FMD Virus Neutralisation Test (VNT) development	2023	Serological testing and neutralising antibody responses	AIHSP / WRLFMD	Technical collaboration in development and optimisation of FMD VNT.
Molecular Surveilance & Sequencing				
1. FMD virus molecular characterisation	2022–ongoing	Molecular epidemiology and genetic characterisation	FAO, in collaboration with WRLFMD	Support for molecular characterisation of FMD virus samples through WRLFMD.
2. Integrated Virus Monitoring (IVM)	Ongoing	National sequence data integration and molecular surveillance	FAO / relevant national partners	Development of an integrated database of FMD virus sequences from across Indonesia.

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Current Projects and Programmes Supporting Laboratory Capacity Building

Project / Programme	Implementation Period	Main Focus Areas	Donor / Supporting Organisation	Laboratory Capacity-Building Activities / Outputs
Molecular Surveilance & Sequencing				
3. FMD Sequencing capacity development	2024	Human resource development and molecular diagnostic capacity	FAO, with technical training support from WRLFMD	Training of Indonesian laboratory personnel in FMD virus sequencing at WRLFMD.
Quality Assurance & Proficiency Testing				
1. REDS Project	2023–ongoing*	Strengthening the national FMD laboratory quality assurance system through Network Quality Control (NQC) implementation.	REDS / Australian Government / ACDP	Development of NQC materials, proficiency testing, and preparation for ISO/IEC 17043 accreditation.
2. FMD proficiency testing participation	2022–ongoing*	External assessment of diagnostic laboratory performance	FAO / WRLFMD	Financial support for participation in FMD proficiency testing.

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Current Projects and Programmes Supporting Laboratory Capacity Building

Project / Programme	Implementation Period	Main Focus Areas	Donor / Supporting Organisation	Laboratory Capacity-Building Activities / Outputs
Quality Assurance & Proficiency Testing				
3. FMD proficiency testing participation	2026	External assessment of diagnostic laboratory performance	REDS / Australian Government / ACDP	Financial support for participation in FMD proficiency testing.
4. FMD proficiency testing provider	2024-ongoing	Development of national proficiency testing provider capacity and quality management system.	REDS / Australian Government / ACDP	Financial support, technical assistance, and expert mentoring for the development and implementation of national FMD proficiency testing, including preparation for ISO/IEC 17043 accreditation.

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Important Changes Since the 2023 SEACFMD LabNet Meeting

Key developments, improvements and emerging priorities in Indonesia

01 Stronger national reference role

The national FMD reference laboratory role was formalised, supporting more coordinated diagnostic services, surveillance and technical guidance across the country.

02 More structured quality assurance

Network Quality Control (NQC) is now supported through preparation, distribution and routine utilisation reporting. Participation in external FMD proficiency testing continues.

03 Expanded molecular and field surveillance

Molecular characterisation using VP1 sequencing has strengthened understanding of virus circulation. Post-vaccination monitoring and vaccine-matching support also inform control activities.

04 Developing national PT capability

With REDS/ACDP support, Pusvetma is developing its capacity to organise national FMD proficiency testing, strengthen technical competence.

EMERGING PRIORITIES Preparedness for emerging serotypes such as SAT-1 • Advanced diagnostic and sequencing skills

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Best Practices and Experiences to Share

Practical approaches that can be useful to other SEACFMD members

NQC DISTRIBUTION & REPORTING

Structured NQC materials support consistency of FMD testing. Progressive NQC-use reports are shared with laboratories across Indonesia.

PROFICIENCY TESTING

Inter-laboratory & intra-laboratory performance assessment identifies diagnostic gaps and informs corrective actions.

INTEGRATED MOLECULAR SURVEILLANCE

qRT-PCR detection combined with VP1 sequencing and phylogenetic analysis helps characterize viral circulation.

RISK-BASED SURVEILLANCE

Sampling priorities reflect epidemiological risk, animal movement and protection of FMD-free areas.

QUALITY MANAGEMENT

Method verification, internal quality control and corrective actions are integrated into routine laboratory operations.

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Collaboration and Network Needs

Priority areas for technical exchange with SEACFMD members and reference laboratories

SAT-1 DIAGNOSTIC PREPAREDNESS

Exchange validated protocols, reference materials and approaches to confirmatory testing.

MOLECULAR EPIDEMIOLOGY

Share VP1 sequence data, phylogenetic findings and analytical approaches.

PT & QUALITY ASSURANCE

Exchange experience on PT design, performance evaluation and ISO/IEC 17043 implementation.

REFERENCE LABORATORY NETWORKING

Strengthen access to technical expertise, confirmatory testing and harmonised procedures.

VACCINE PREPAREDNESS

Share information on emerging serotypes, vaccine matching and laboratory evidence supporting vaccine selection.

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2026–2028 Way Forward

Proposed actions for national laboratory strengthening and regional collaboration

Priority Action	Expected Result	Regional Support / Collaboration Needed
1. Strengthen risk-based FMD surveillance	Earlier detection in high-risk areas and protected zones	Exchange risk-assessment methods and surveillance protocols
2. Enhance SAT-1 diagnostic preparedness	Improved readiness for rapid detection and confirmation	Validated protocols, reference materials and technical consultation
3. Expand molecular surveillance and data sharing	Improved understanding of viral circulation and genetic changes	VP1 sequence exchange and phylogenetic collaboration
4. Strengthen NQC and proficiency testing	Improved reliability and comparability of laboratory results	PT harmonisation, reference materials and technical exchange
5. Advance ISO/IEC 17043 readiness	Stronger PT provider competence and quality assurance	Peer learning, mentoring and experience sharing among reference laboratories

Focus: epidemiological intelligence • laboratory quality and molecular surveillance • regional preparedness

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THANK YOU

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