

World Organisation for Animal Health

Australian Aid

SEACFMD

SEACFMD Laboratory Network Meeting

2026 Country Report (Country name)

BUYANTOGTOKH.Kh

Virologist at SCVL, Mongolia

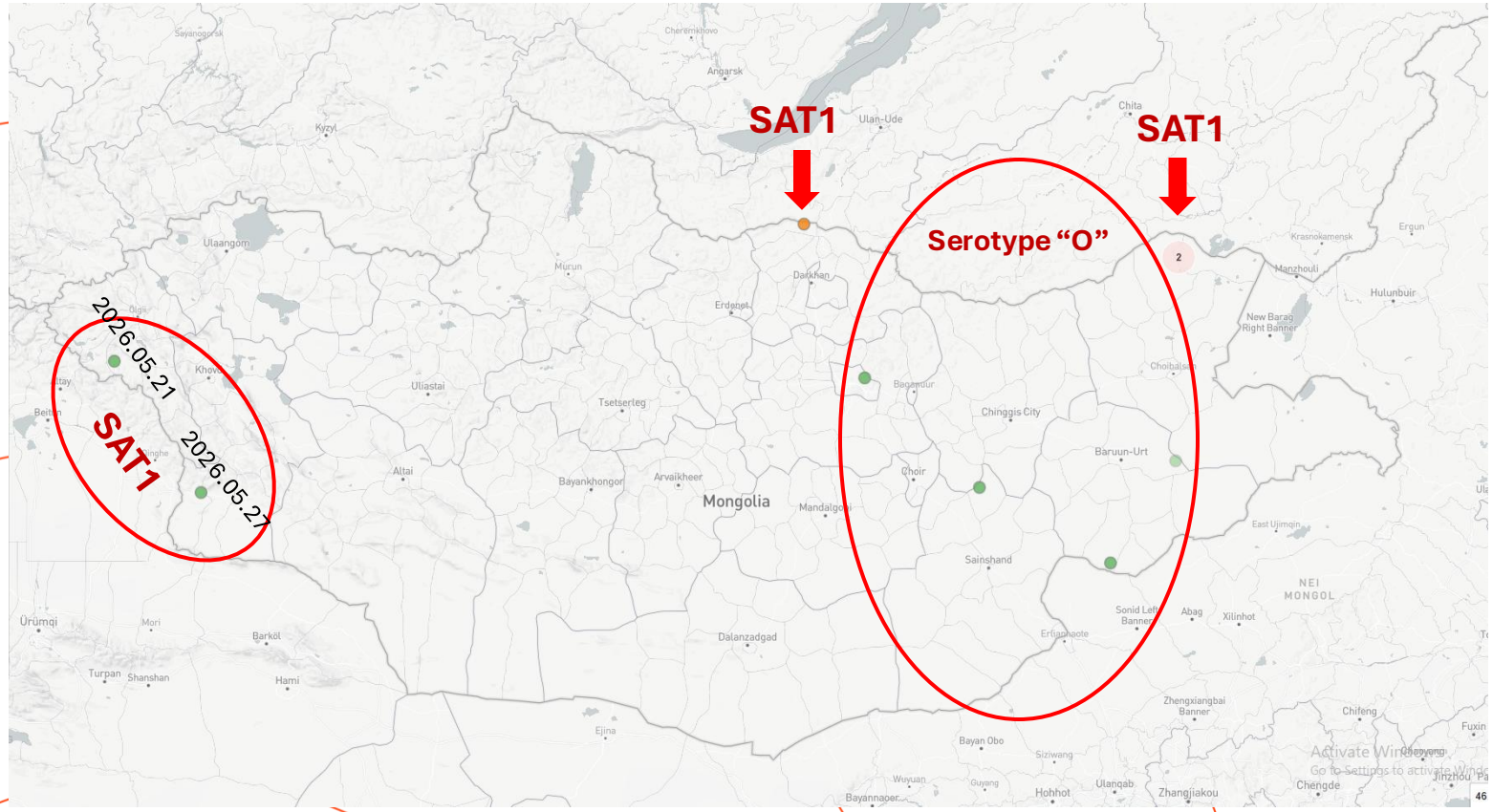
10-11 November 2026

Manila, The Philippines

BRIEF FMD SITUATION :

Food and Mouth Disease (FMD) Outbreak Situation in Mongolia, 2025-2026

8 outbreaks · 173 animals affected · "O" and SAT1 serotypes detected



Sukhbaatar

Uulbayan soum

2025.03.06

35 livestock

Sukhbaatar

Ongon soum

2025.12.16

4 livestock

Ulaanbaatar

Nalaikh

2025.07.10

1 livestock

Dornogovi

Ikhkhet soum

2026.05.31

1 livestock

Sukhbaatar

Ongon soum

2025.12.16

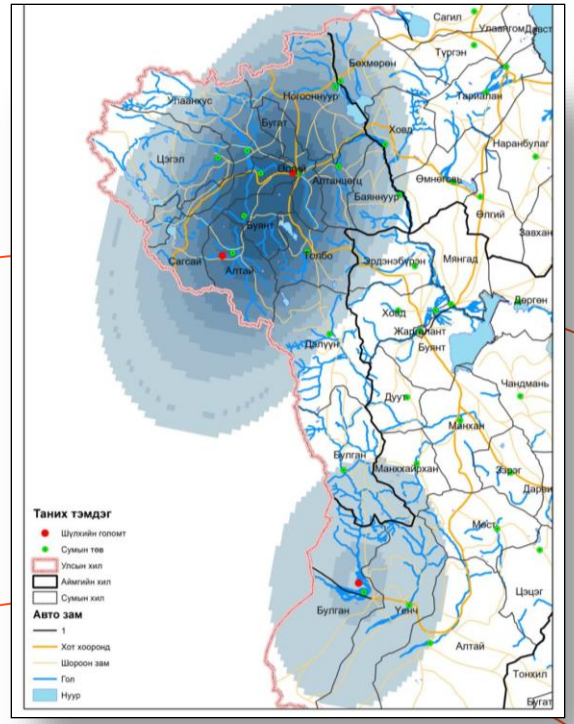
4 livestock

Serotype O | Reported outbreaks in 2025–early 2026

Conclusion/Key observation: In May 2026, outbreaks of FMD caused by serotype SAT1 were reported. The outbreaks in Bayan-Ulgii and Khovd provinces occurred within a six-day interval, suggesting the introduction and spread of a new serotype into the western region of Mongolia.

LABORATORY CONFIRMATION OF FMD SAT-1 OUTBREAK IN MONGOLIA (MAY 2026)

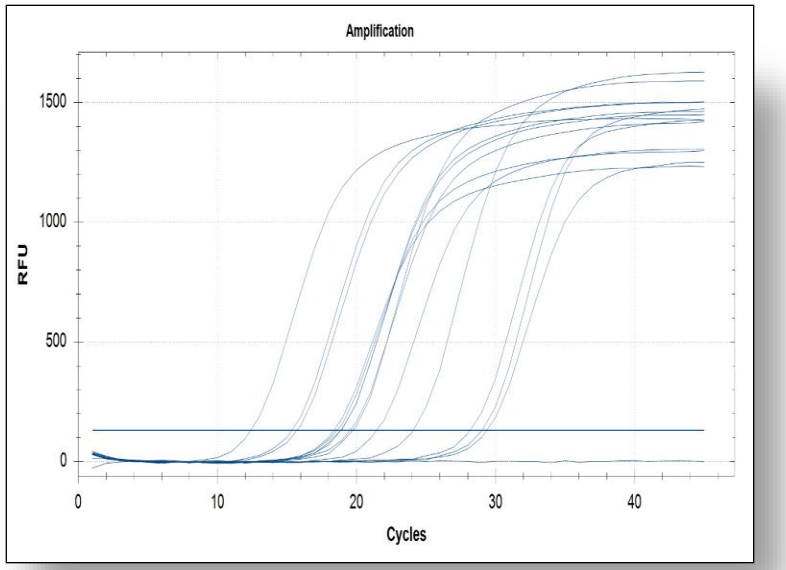
SAT-1 outbreak in Western Mongolia



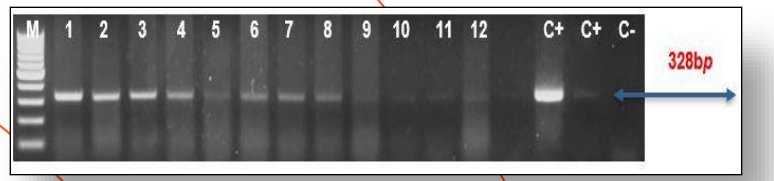
IZSLER Antigen ELISA



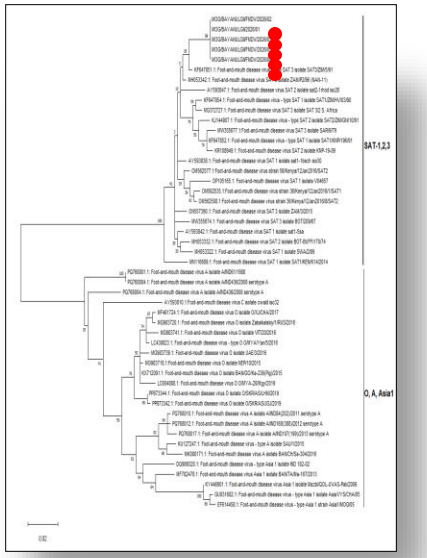
WOAH recommended qRT-PCR (3D)



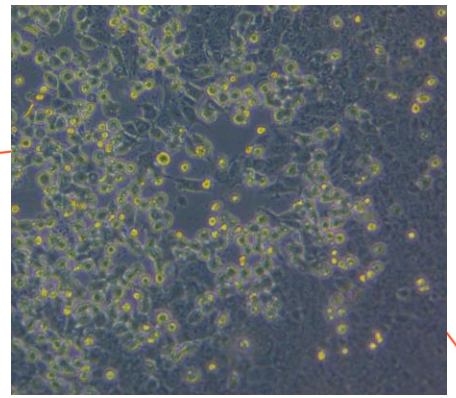
WOAH recommended RT-PCR (5' UTR)



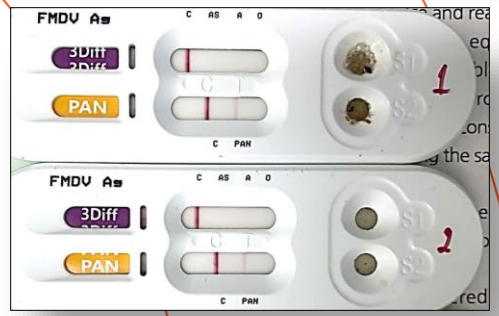
Sanger sequence confirming SAT-1 (3Dpro gene)



Virus Isolation (LFBK-αvβ6)



MEDIAN VDRG® FMDV 3Diff/PAN Ag Rapid kit



SAT 1 IN MONGOLIA: THREE REGIONAL LABORATORY REPORTS

Vesicular Disease Diagnostics Report - Final

Lab Reference WRL Batch Number: WRLFMD/2026/000012
Report Date: 04/06/2026
Report Number: 15211

UKAS TESTING 4025

Date Received: 01/06/2026 **Country of Origin*:** Mongolia
Date Tests Completed: 04/06/2026

Your Reference*	WRL Reference	Description of Sample*	Serotyping Result by Cell Culture/ELISA	PCR Result
MOG/SAT1/FMDV/01/26	MOG 5/2026	Collected 23/05/2026 YAK EPITHELIUM, TONGUE TISSUE	SAT1	FMDV GD
MOG/SAT1/FMDV/02/26	MOG 6/2026	Collected 23/05/2026 YAK EPITHELIUM, TONGUE TISSUE	SAT1	FMDV GD
MOG/SAT1/FMDV/03/26	MOG 7/2026	Collected 23/05/2026 YAK EPITHELIUM, TONGUE TISSUE	SAT1	FMDV GD
MOG/SAT1/FMDV/04/26	MOG 8/2026	Collected 23/05/2026 YAK EPITHELIUM, TONGUE TISSUE	SAT1	FMDV GD

Report Authorised By: Dr Carrie Batten
Head of Non-Vesicular Reference Laboratories
Date: 04/06/2026 08:10:01

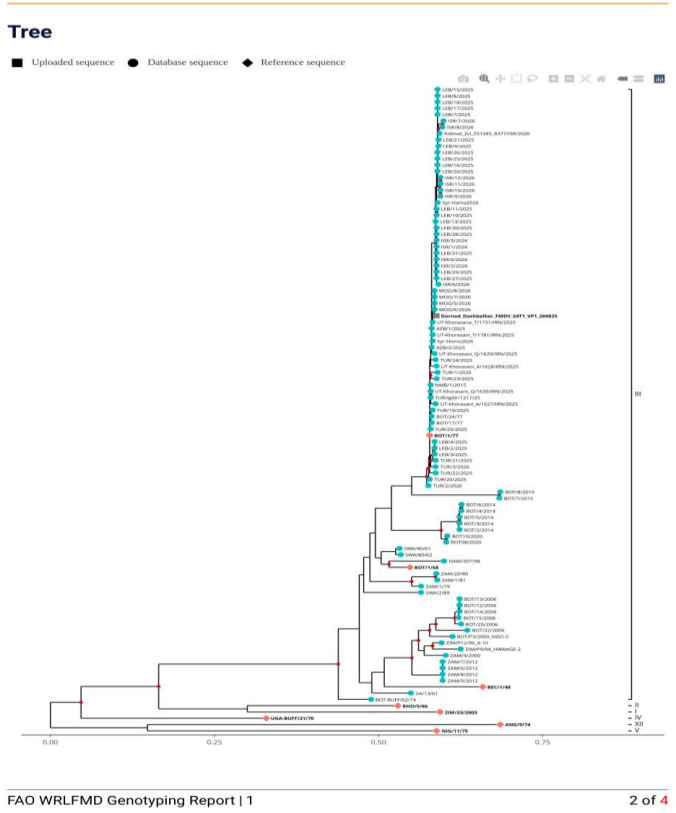
Final results are determined subject to acceptable test validation unless otherwise stated. Matrices included in our ISO/IEC 17025 scope of accreditation for virological tests (Virus isolation and antigen detection ELISA) include Tissue, unspecified (WRL-SOP-2, -6 and -39). Specific matrices included for molecular tests (real-time RT-PCR; WRL-SOP-2 6, -35 and -42) comprise Tissue Epithelium, Oesophageal Washings (Probang), Serum, EDTA Whole Blood and Milk for FMDV and related viruses, and Faeces for SVDV. Full details of our accreditation schedule can be found at https://www.ukas.com/wp-content/uploads/schedule_uploads/00002/4025Testing-Single.pdf. Specimen types that are not included in this list will be tested following the same rigorous methods described in our schedule of accreditation, however ISO/IEC 17025 accreditation cannot be claimed for these matrices.

SOPs: WRL-SOP-35, WRL-SOP-26 and WRL-SOP-42 (rRT-PCR), WRL-SOP-2 (Virus Isolation), WRL-SOP-6 and WRL-SOP-39 (Ag-ELISA)

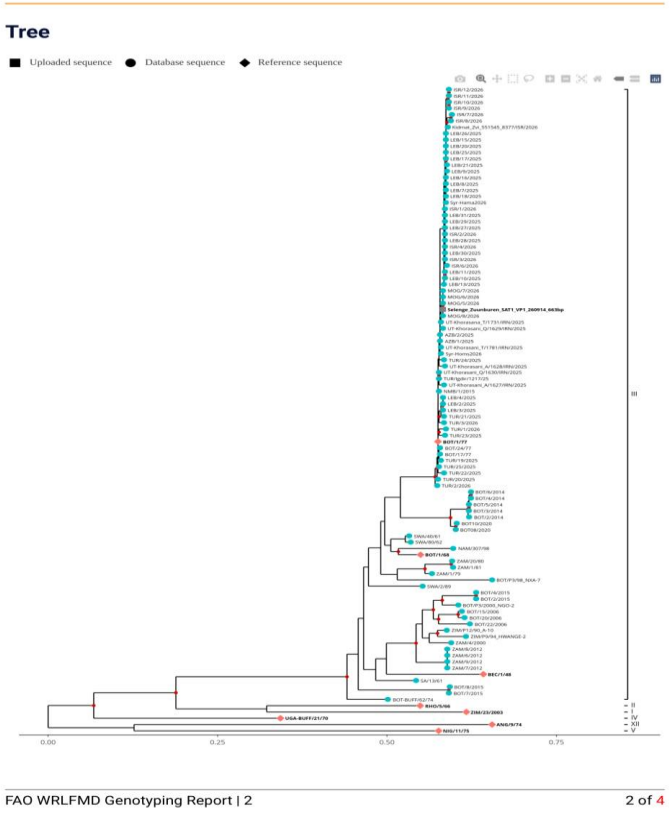
NVD - No Virus Detected FMDV GD - FMDV Genome Detected SVDV GD- Swine Vesicular Disease Virus Genome Detected SVV GD - Seneca Valley Virus Genome Detected (not accredited) VSVNJ GD - Vesicular Stomatitis Virus New Jersey Genome Detected (not accredited) VSVIND GD - Vesicular Stomatitis Virus Indiana Genome Detected (not accredited) NGD - No Genome Detected * Data supplied by the customer.

Page 2 of 2

4/4 samples confirmed SAT-1
WRLFMD report: 4 June 2026



SAT-1 / Topotype III
VP1 identity: 99.70%



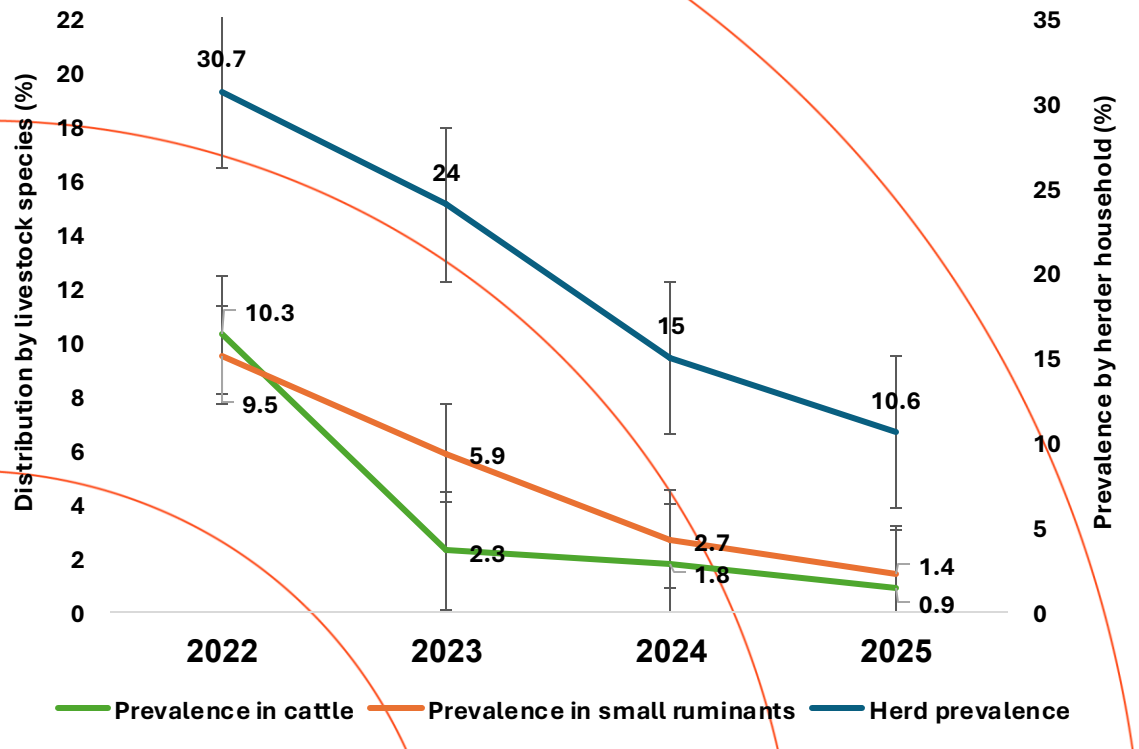
SAT-1 / Topotype III
VP1 identity: 100.00%

Samples from two regions have been sent to APQA, Korea for whole-genome sequencing (WGS).

SURVEILLANCE

Changes following the implementation of vaccination tactics

№	Year	Number of provinces	Number of soums	Number of herders	Number of animals sampled per herd	Total number of samples	Age of animals included in surveillance
1	2022	22	236	631	16	10052	6-24 months
2	2023	22	366	945	16	9112	Up to 12 months of age
3	2024	22	202	631	16	10072	Up to 12 months of age
4	2025	22	297	1239	16	19840	Up to 12 months of age



3-fold

Reduction in herd-level infection rate

30.7% → 10.6%

7-fold

Reduction in overall infection rate

9.7% → 1.3%

Changes in infection levels following the implementation of vaccination strategies against FMD, starting in the fourth quarter of 2022.

SURVEILLANCE

Results of ELISA testing using the NSP ELISA assay, 2025

1.3%

Overall infection rate

249 / 19,840 · CI 1.1–1.4%

11%

Herd-level prevalence

131 / 1,239 hot ail · CI 9–12%

0.9%

Large ruminants (cattle and yaks)

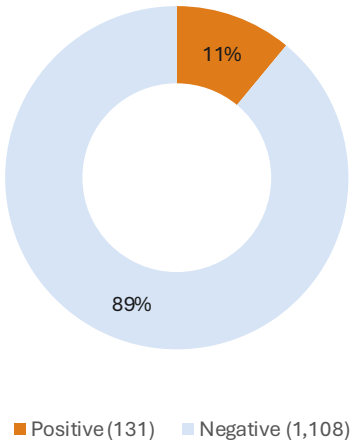
46 / 4,967 · CI 0.7–1.2%

1.4%

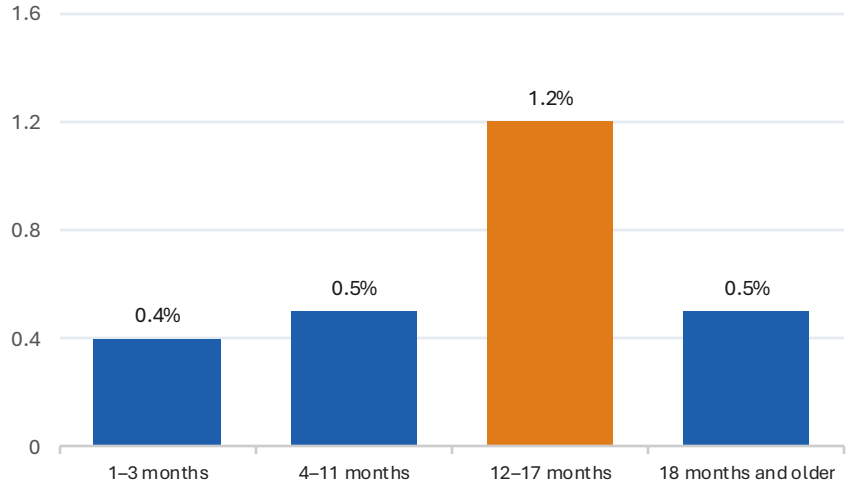
Small ruminants (sheep and goats)

205 / 14,873 · CI 1.2–1.6%

Herd-level Positive/ Negative Ratio



Seropositivity by Age Group



By Sex

Female **1.4%**

Male **1.1%**

1 out of 9 herds tested positive · P = 0.02 (large vs. small ruminants)

Source: 2025 Serological Surveillance Report

Current Projects and Programmes Supporting Laboratory Capacity Building

Project / Programme	Implementation Period	Main Focus Areas	Donor / Supporting Organisation	Laboratory Capacity-Building Activities / Outputs
Project 1	2024–2028	Collaborative FMD Research Project	Animal and Plant Quarantine, Korea	FMDV Characterization and Comparative Studies (Korea–Mongolia)

Important changes since 2023 SEACFMD LabNet meeting

1. Early awareness of regional SAT 1 outbreaks.
Unofficial information from neighboring countries.
Early assessment of potential cross-border risks.

2. Laboratory preparedness.
Preparation for SAT 1 detection and diagnosis.
Availability of diagnostic methods and reagents.

3. Rapid laboratory diagnosis.
Timely identification of the SAT 1 serotype.
Rapid confirmation of suspected cases.

4. Effective outbreak response.
Timely implementation of control measures.
Successful containment of the outbreak.

5. Regional cooperation and information sharing.
Strengthening communication with regional partners.
Sharing experience on emerging FMDV serotypes.

Best Practices and Experiences to Share



1 International Expert Support

WOAH and FOA experts-August 2026

- Assessment in the western provinces where SAT-1 was detected
- Recommendations provided used for future policies and decision-making

2 Regional Cooperation

Mongolia-Russia-China

- Information exchange and collaboration with veterinary, research and industrial institutions
- Cooperation on disease diagnosis, vaccine procurement and vaccine production

3 Government support and Funding

Ministry of Food Agriculture and Light Industry and Government level

- Regular updates on outbreaks spread and epidemiological situation
- Additional funding secured FMD prevention and control activities

4 Legal and Regulatory Framework

Guidelines and legislation

- Revision of national guidelines for the prevention and control of highly contagious animal diseases
- Amendments to relevant laws and regulations are underway

Collaboration and network needs



Bioinformatics Support

Hands-on training and technical support in whole-genome sequencing and bioinformatics.

Advanced Serology Diagnostic Training

Practical training in advanced diagnostic serology /SNT, VNT/ techniques and molecular epidemiology.

Regional Information and Data Sharing

Timely exchange of information on emerging FMDV serotypes and cross-border outbreaks.

Epidemiological Analysis and Risk Assessment

Technical training and knowledge sharing in epidemiological analysis, disease mapping and risk assessment.

2026–2028 way forward

PROPOSED ACTION

Priority Action	Expected Result	Regional Support / Collaboration Needed
1. Strengthening FMD diagnostic capacity	Improved capacity for rapid and accurate FMD diagnosis, including emerging serotypes.	Technical support, diagnostic protocols and reference materials from WOAH Reference Laboratories.
2. Molecular characterization and sequencing	Improved FMDV characterization, genetic analysis and molecular epidemiology.	Hands-on training, sequencing technology and bioinformatics support from regional reference laboratories.
3. Advanced technical training for laboratory staff	Improved staff competency in serology /SNT, VNT/ diagnostics	Training opportunities, expert exchanges and laboratory attachments in reference laboratories.
4. Strengthening regional laboratory networking	Improved regional information sharing and preparedness for emerging FMDV serotypes.	Regular communication, collaborative research and experience sharing among SEACFMD LabNet Members.
5. Strengthening FMDV Epidemiological Data Analysis and Risk Assessment	Improved capacity for FMD epidemiological analysis, risk assessment and evidence-based decision-making.	Technical training in epidemiological modelling, spatial analysis and risk assessment, and collaboration with regional experts.

THANK YOU



E-MAIL ADDRESS

buyantogtokh@scvl.gov.mn