

Country experiences and FMD control strategies in Azerbaijan:

Experience from the SAT1 Outbreak and National Response

FMD RAG meeting
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GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

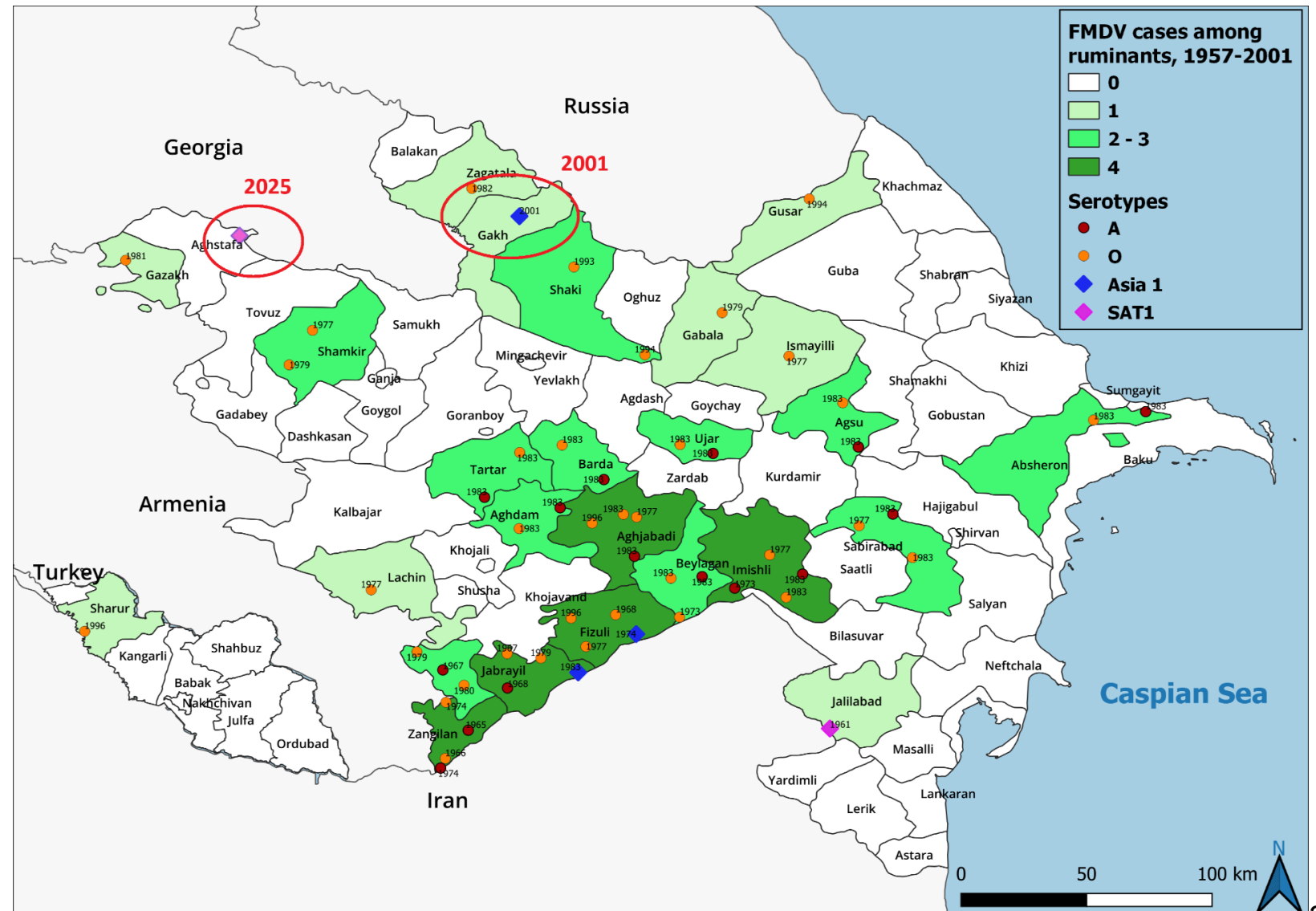


FMD Control Strategy in Azerbaijan

- Surveillance
- Vaccination
- Early Detection
- Laboratory Diagnosis
- Animal Movement Control
- Emergency Preparedness

FMD Situation in Azerbaijan, 1957–2026

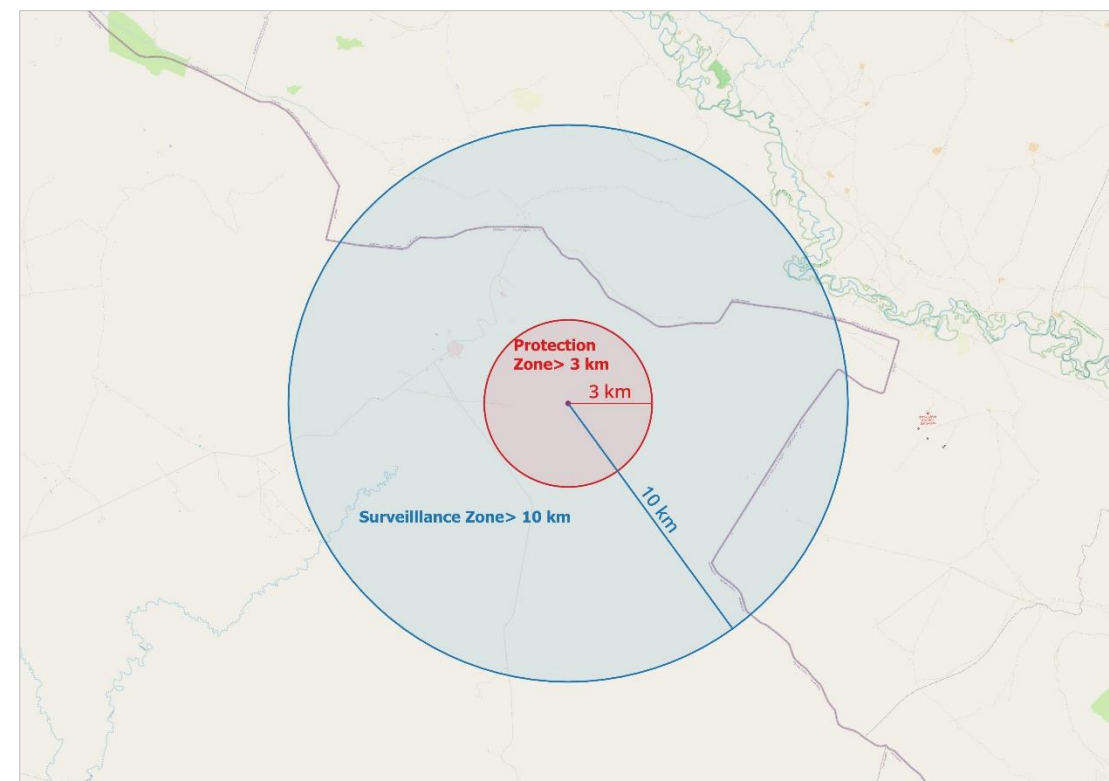
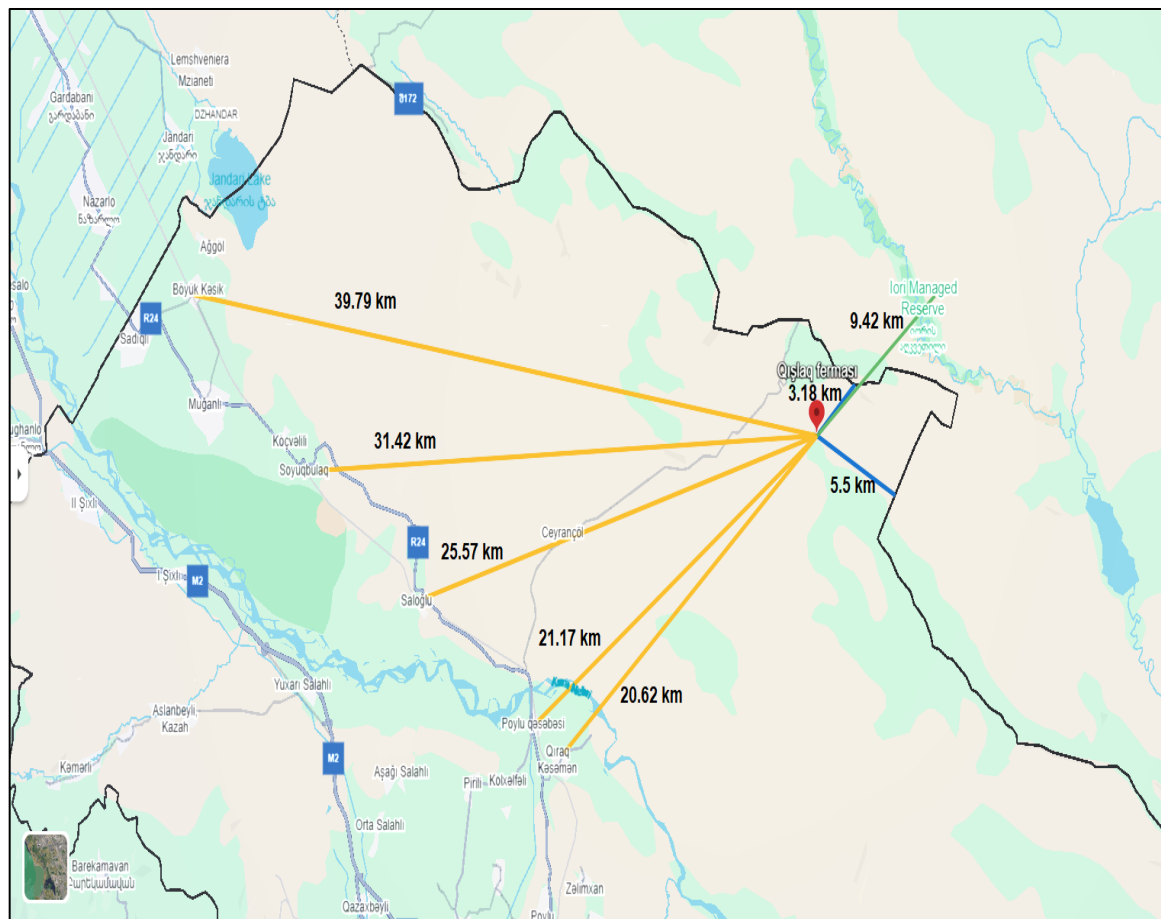
- Last outbreak before SAT1 occurred in 2001
- SAT1 detected in 2025
- First SAT1 detection in more than 60 years



Outbreak Overview

- First detection: October 25, 2025
- Confirmation date : October 29 , 2025
- Location: Jeyranchol farm, Agstafa district
- Species affected: cattle
- Serotype: SAT1
- First detection of FMDV SAT1 in Azerbaijan in more than 60 years; the last FMD outbreak occurred in 2001 (serotype Asia-1).

Map: FMDV (SAT1), 2025, Azerbaijan



Epidemiological Investigation

Farm population: 6 cattle and 150 sheep and goats

- Two cattle clinically affected
- No clinical signs detected among sheep and goats
- Typical FMD lesions observed
- Real-time RT-PCR positive
- NSP ELISA negative

Emergency Response Measures

- Stamping out of affected animals
- 3-km protection zone
- 10-km surveillance zone
- Movement restrictions
- Cleaning and disinfection
- Vaccination was not applied during outbreak containment, as SAT1 was not included in the national vaccination programme.

Surveillance Outcomes

- In total, 8 farms were identified within the protection and surveillance zones, where 844 cattle and 3,250 small ruminants were present.
- Up to 30 cattle and 40 small ruminants in the protection zone, and 20 cattle and 25 small ruminants in the surveillance zone were sampled.
- In total, 134 cattle and 345 small ruminants were subjected to laboratory testing.
- Day 14 monitoring: negative
- Day 28 surveillance: negative
- No evidence of virus circulation

Strategic Adaptation Following SAT1 Detection: Before SAT1

- Outbreak response vaccination
- SAT1 vaccination had not previously been implemented in Azerbaijan.
- Following outbreak containment, a monovalent SAT1 vaccine was introduced.
- Vaccination started on **30 November 2025** after lifting quarantine restrictions.
- All susceptible animals on the affected farm were vaccinated.

After SAT1: FMD Vaccination Policy in Azerbaijan

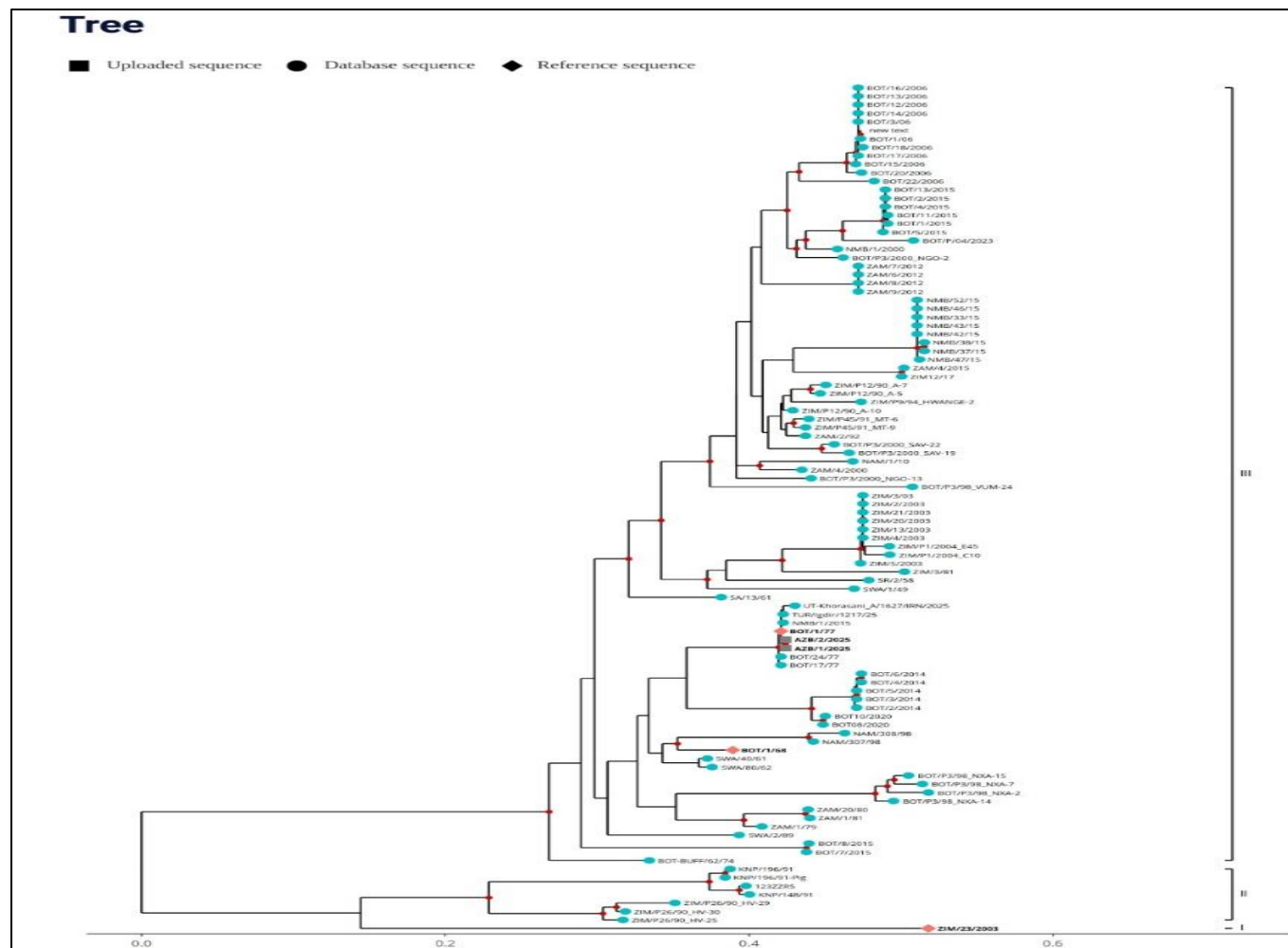
Period	Cattle	Sheep & Goats
2001–2023	O, A, Asia-1	O, A
2024–2025	O, A, Asia-1, SAT-2	O, A, SAT-2
Since 2026	O, A, Asia-1, SAT-1 , SAT-2	O, A, SAT-1 , SAT-2

Monovalent SAT-1 vaccine is additionally used in selected high-risk areas as part of a targeted vaccination strategy.

Genetic Characterization of FMDV SAT1

- **Key findings from WRLFMD (Pirbright Institute)**
- Samples AZB/1/2025 and AZB/2/2025 were confirmed as FMDV SAT1.
- VP1 sequencing identified the virus as belonging to **SAT1 Topotype III**.
- Both Azerbaijani isolates showed **100% nucleotide identity** with each other.
- Closely related viruses included:
 - ▶ NMB/1/2015 (Namibia)
 - ▶ TUR/Igdir/1217/25 (Türkiye)
 - ▶ UT-Khorasani_A/1627/IRN/2025 (Iran)
- Phylogenetic analysis demonstrated clustering within the SAT1 Topotype III lineage.

FAO WRLFMD Genotyping Report | WRLFMD/2025/000020



Lessons Learned

- Importance of early detection
- Rapid laboratory confirmation
- Emergency preparedness
- Flexible vaccination policy
- Regional information sharing

Future Priorities

- Strengthening risk-based surveillance
- Maintaining vaccination readiness
- Improving preparedness
- Enhancing regional cooperation
- Progressing within PCP-FMD framework

Key Conclusions SAT1 Outbreak

- First SAT1 outbreak in Azerbaijan in more than 60 years; the last FMD outbreak occurred in 2001 (serotype Asia-1)
- Rapid detection and laboratory confirmation.
- No evidence of secondary transmission.
- Follow-up surveillance remained negative.
- Source of infection could not be conclusively determined.

Conclusions

- The SAT1 outbreak provided an opportunity to test and strengthen the national FMD control system.
- Surveillance, rapid response, laboratory confirmation and adaptive vaccination policies were key elements supporting successful containment of the outbreak.



**Thank you for your
attention!**

