Spread of SAT1 inside Africa and beyond – and an update on FAO technical guidance and support

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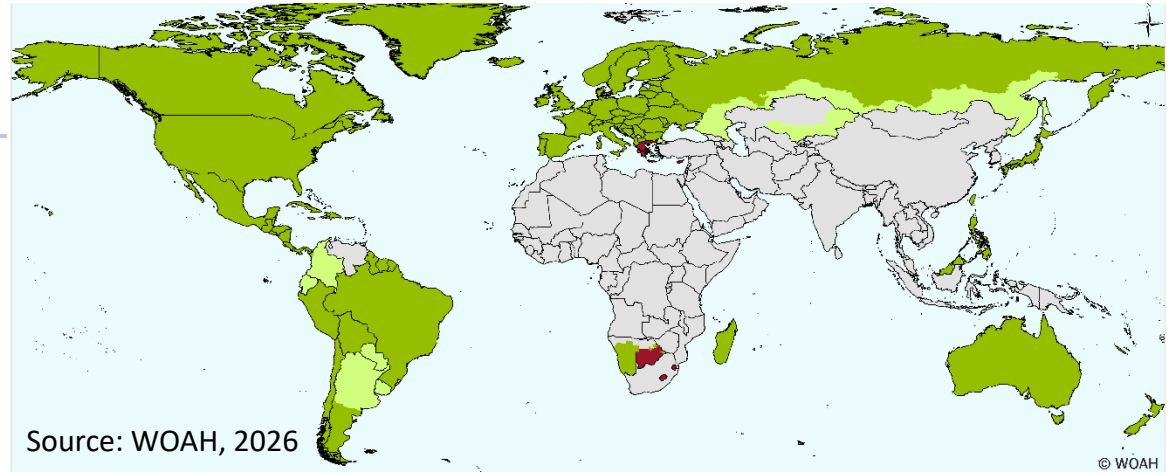
13th Meeting of the Regional Steering Committee (RSC13) of the GF-TADs for Africa

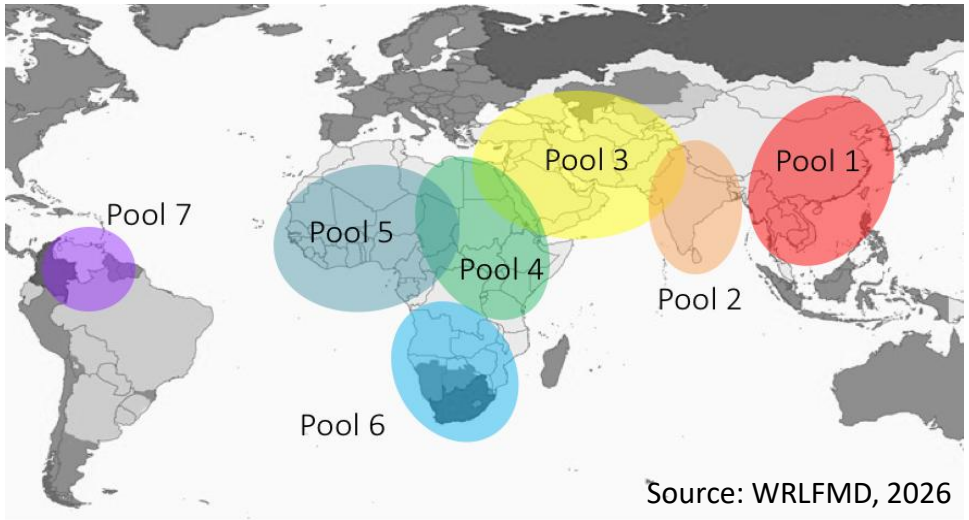
Abuja, Nigeria, 10 November 2026

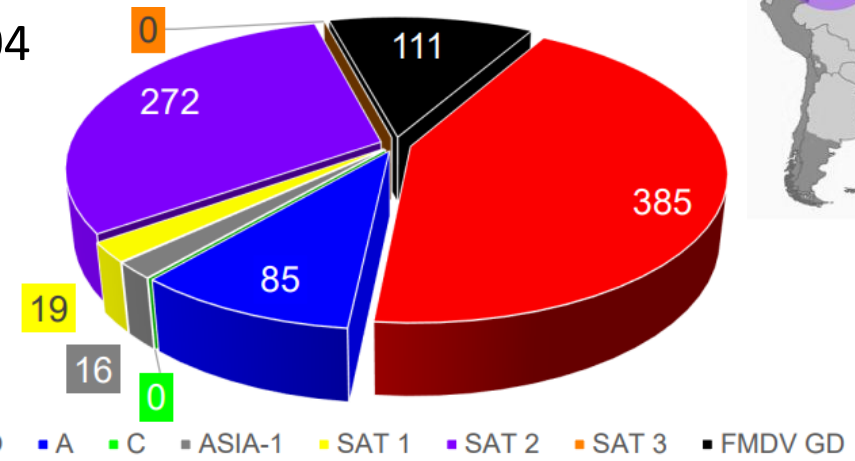


Global FMD Distribution

- FMD has been eradicated from large parts of the world.
- Where endemic, viruses tend to cluster within 7 pools
- Serotypes: O, A, C, Asia-1, SAT1, SAT2, SAT3
  - O is dominant globally
  - C not seen in field since 2004

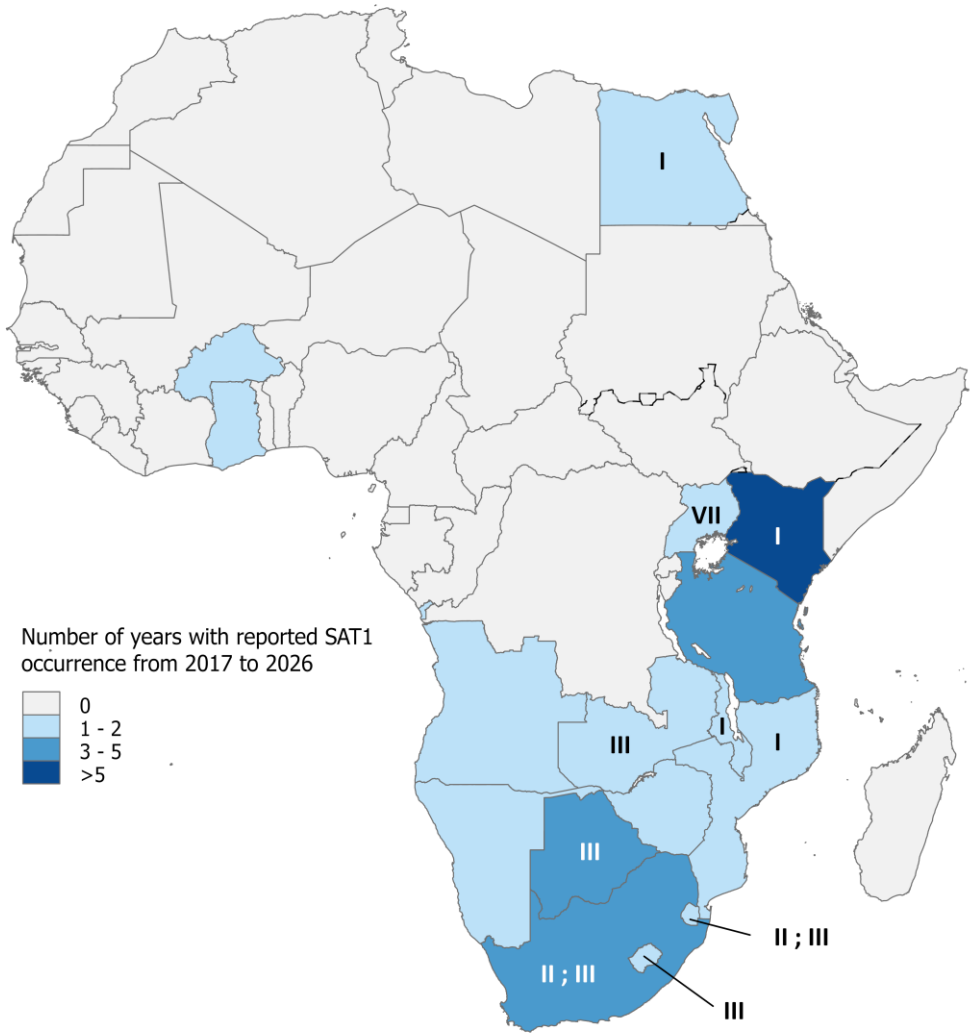






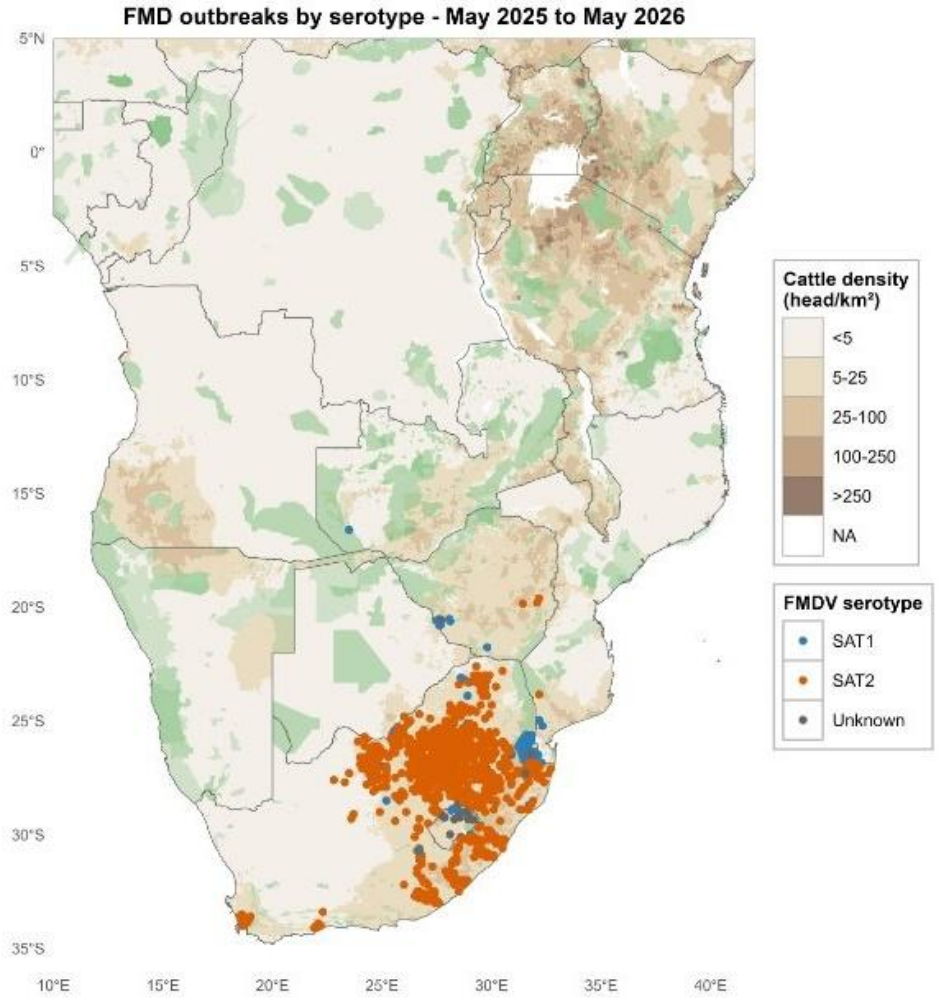
SAT1 within Africa

- Most genetically diverse of SAT serotypes
- In eastern Africa, often associated with severe epidemics
- Mainly reported from eastern and southern Africa
- Important role of African buffalo in southern Africa (impala also implicated)
- Historic sequences indicate movements from southern to eastern Africa, then westwards across the Sahel



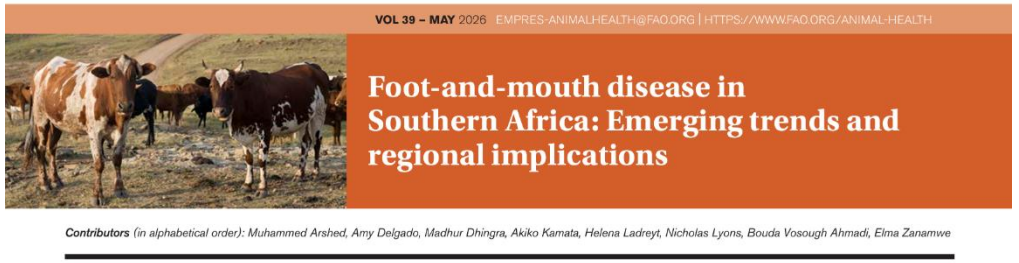
Number of years between 2017-2026 that countries reported SAT1 Topotypes indicated where available. Source: WRLFMD, WOAH immediate notifications, WOAH six monthly reports

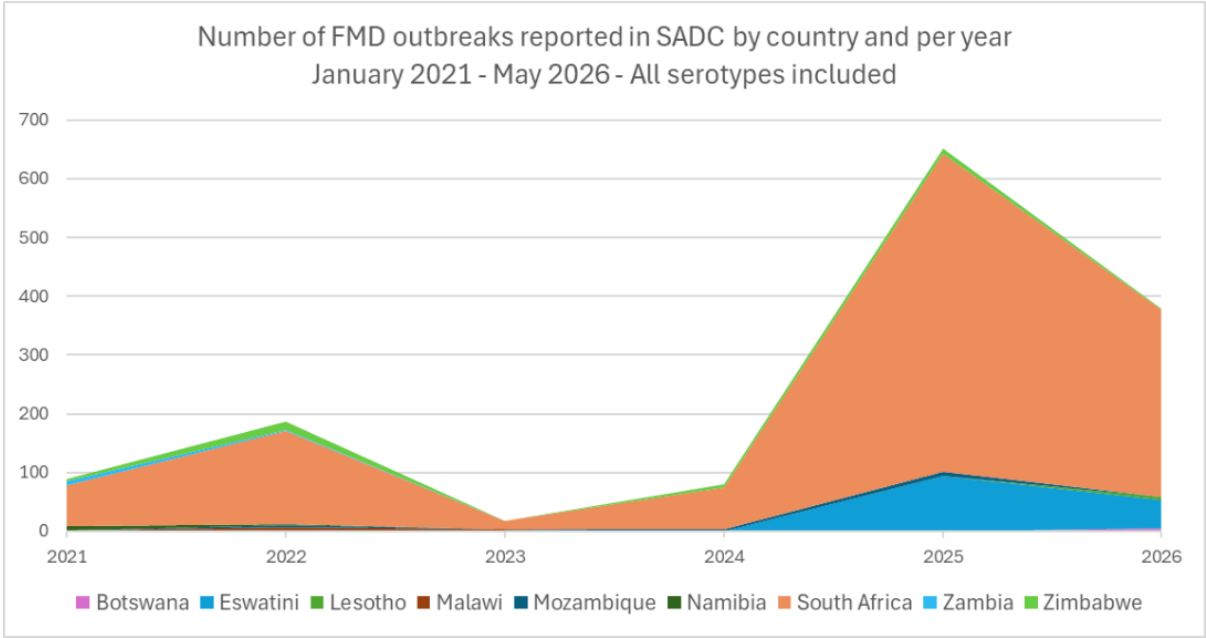
Southern Africa



Food and Agriculture Organization of the United Nations

empres watch





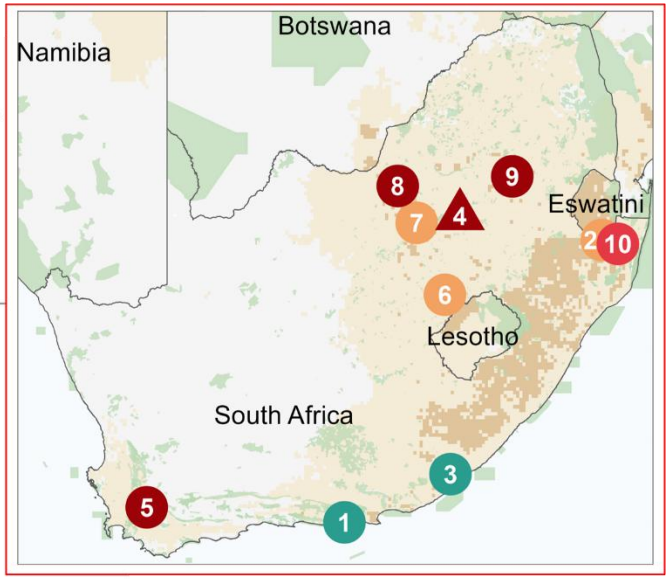
Zoom on South Africa FMD situation

Food and Agriculture Organization of the United Nations

empres watch







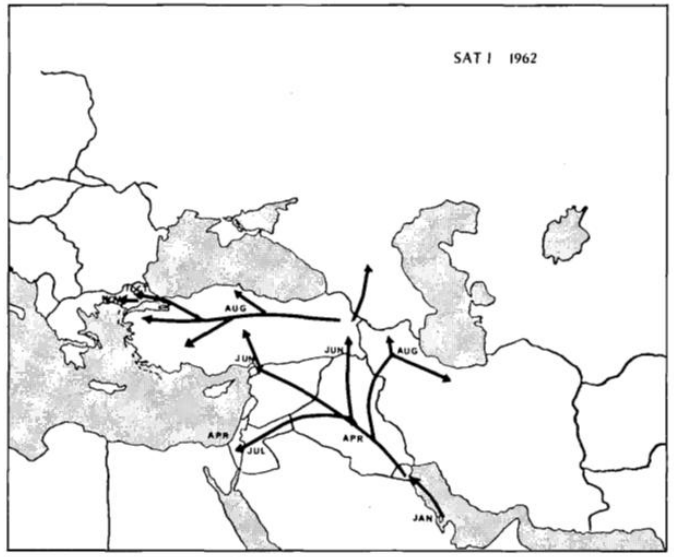
KZN: KwaZulu-Natal.

- Change in the topotypes over the past few years.
- Since last year:
  - SAT1 topotypes II and III
  - SAT2 topotype I
  - No SAT3 reported since November 2024.

WRLFMD®

FMD dynamics between Africa and Asia

- Incursions from Eastern Africa to the Middle East is seen on a semi-regular basis.
  - 1961: SAT1
  - 2000: SAT2
  - 2012: SAT2
  - 2022: SAT2 topotype XIV
  - 2023: SAT1 topotype I
  - 2025: SAT1 topotype I
- Some remain localised, some become widespread
- Not restricted to SATs
  - e.g. 2025: O topotype EA2 (Bahrain Quarantine Station)



Source: Brooksby, 1986

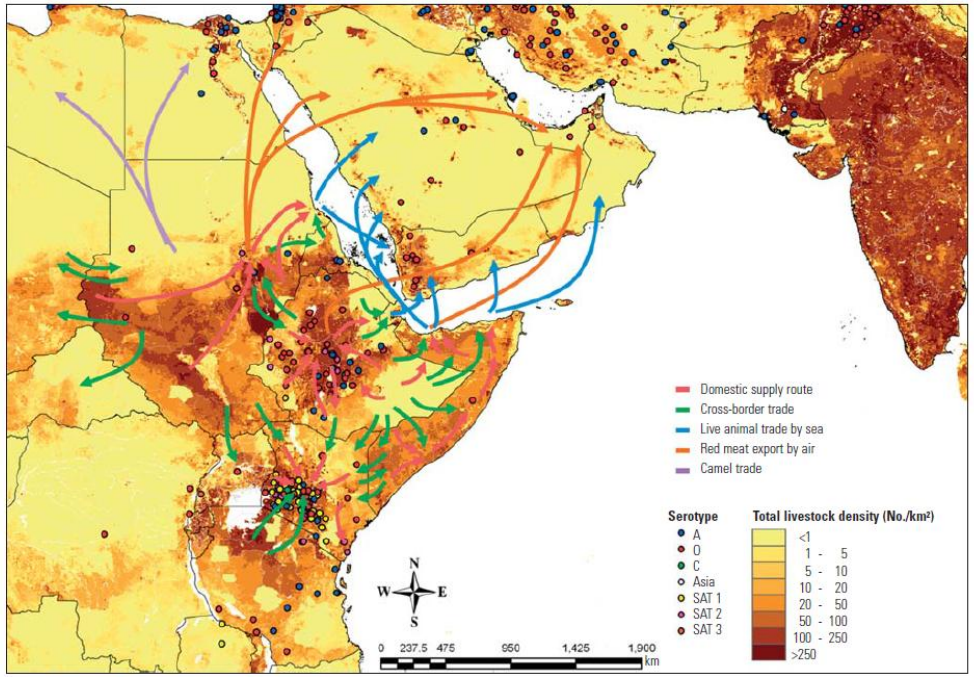


Fig. 4
Mapping cattle density, foot and mouth disease isolates, livestock movements and intra-/extra-regional trade routes in East Africa
Total livestock density layer data sourced and adapted from *Gridded livestock of the world*, Food and Agriculture Organization of the United Nations (76)

Source: Di Nardo *et al*, 2011

Serotype SAT1 – Movements out of Africa

- **2022** — **SAT2/XIV** in Iraq, Jordan, Türkiye, Oman and Bahrain
- **Early 2025** — **SAT1/I** in Iraq and Bahrain - spread to Kuwait, Türkiye and Egypt
- **Late 2025** — Detection of **SAT1/III** in Iran and Türkiye closely related to a vaccine strain (>99% identity)
- **2025-2026** — **SAT1/III** outbreaks in Europe (Cyprus and Greece)
- **Mar/Apr 2026** — **SAT1/III** cases reported in China (two provinces)
- **May 2026** — **SAT1/III** cases in Mongolia (Bayan-Olgii Province)

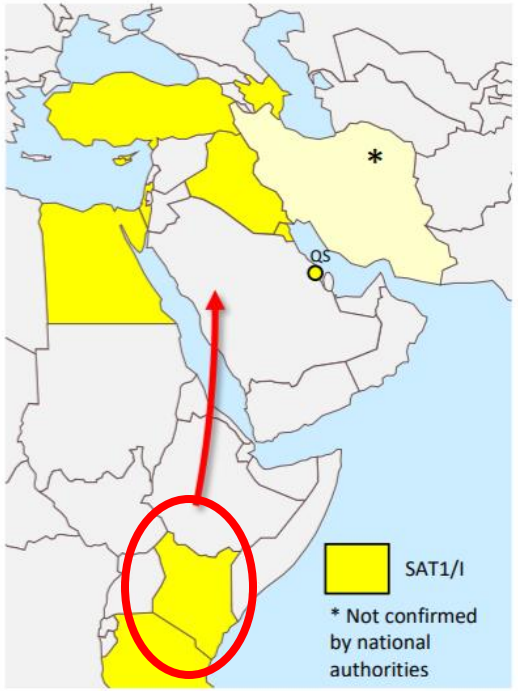






Serotype SAT1

Topotype I



Country	SAT 1/I Pool 4 (East Africa)	SAT 1/III Vaccine strain
Bahrain (QS)	January 2025	
Iraq	January 2025	
Kuwait	April 2025	
Iran		October 2025 *
Türkiye	May 2025	November 2025
Egypt	July 2025	
Azerbaijan		October 2025
Lebanon		November 2025
Israel		January 2026
Cyprus		February 2026
Syria		January 2026*
China		March 2026
Greece		March 2026
Palestine	April 2026 – topotype not yet reported	
Mongolia		May 2026
Libya	July 2026 – topotype not yet reported	

Topotype III

- **November 2025**: vaccine strain was first detected in **Türkiye** – origin unknown
- Subsequently reported in **Iran** (by University) and **Azerbaijan**
- This has spread dramatically in all directions from Cyprus to China
- Countries have reported severe disease, and seen cases in cattle, sheep, goats, yaks and pigs

Source: WRLFMD, 2026

* Outbreaks not confirmed by the national authorities

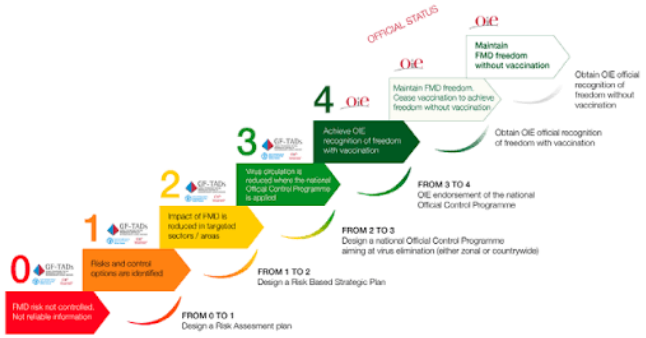
QS = Quarantine station

Technical guidance and support from FAO

- TCPs
- Development of control strategies
- Regional strategies (East and West Africa)
- Vaccine procurement
- Post-vaccination monitoring

Under GF-TADs FMD working group

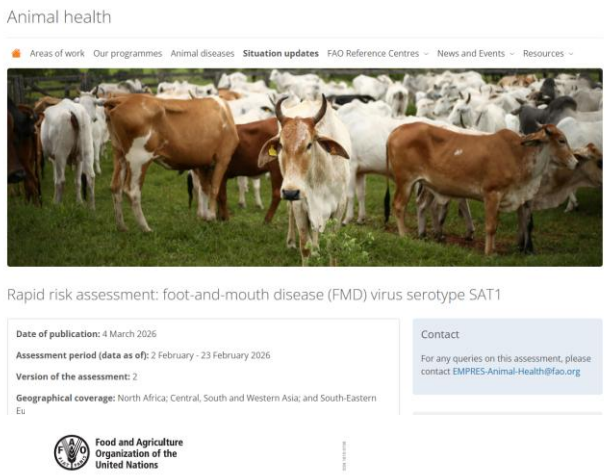
- Support implementation of PCP-FMD:
  - Risk assessment Plans
  - Risk-based strategic plans
  - Official control programmes
- Roadmap meetings
- Two webinars earlier this year

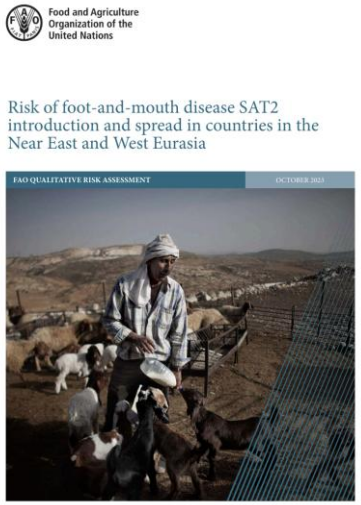


GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES
Food and Agriculture Organization of the United Nations
World Organisation for Animal Health

Risk Management Support from FAO

Surveillance, Risk assessment, Early Warning



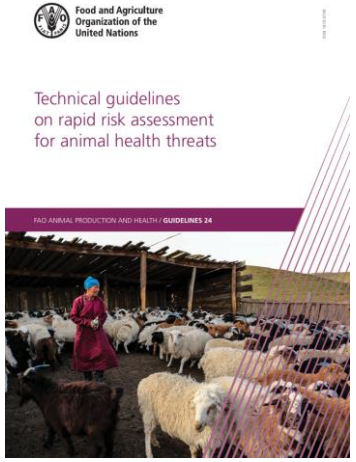


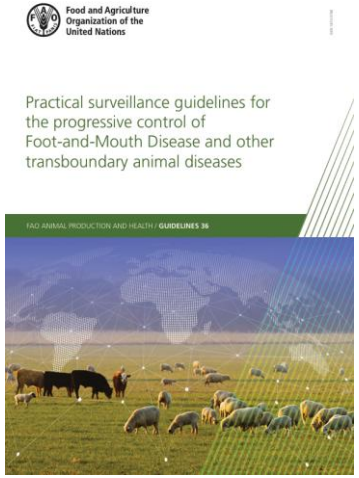














FAO Emergence Response Missions

Recent example: FMD SAT1 in Mongolia

Thank you

