

## Middle East Roadmaps Meeting for Foot-and Mouth Disease and pest petit ruminants

Riyadh, Saudi Arabia, 27-30 April 2025

### Recommendations

#### Considering

- The low budgetary allocations, persistent lack of investments and limited resources to strengthen animal health systems and prevention and control of transboundary animal diseases (TADs) including foot and mouth disease (FMD) and peste des petits ruminants (PPR) in some Middle East countries;
- That surveillance information is required to quantify the impact of FMD and PPR in the region and to identify circulating FMD strains for vaccine matching;
- That surveillance information and socio-economic assessments are required for targeted vaccination and adoption of the episytem approach;
- That FMD and PPR outbreak hotspots have been identified in most of the countries;
- That few countries have progressed along the Progressive Control Pathway for FMD control (PCP-FMD) and PPR Monitoring and Assessment Tool (PMAT) stepwise approach in the last decade;
- The importance of having a Regional Advisory Group (RAG) to provide leadership for countries to engage in and progress along the PCP-FMD and PMAT stepwise approach;
- That information sharing, stakeholder engagement, coordination and collaboration are critical to achieve FMD control and PPR eradication, and that this can be supported by epidemiology and laboratory networks;
- That socio-economic data is necessary to advocate for more resources for FMD control and PPR eradication;
- That use of quality-assured vaccines is critical for the control of FMD and the eradication of PPR;
- The availability of low cost conventional PPR vaccines providing long-term immunity and thermostable vaccines;
- The introduction and spread of FMDV serotypes exotic to the Middle East region (SAT1 and SAT2);

#### Participating countries:

**13 Countries:** Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Syria, and United Arab Emirates.

#### The countries agree to:

1. Elect the RAGs for Middle East region for a **3-year term (2025-2027)** as follows:

- **RAG Chair:** Oman CVO (Dr Ahmed Saif Alamri)
- **RAG Members:**

- **CVO:** Saudi Arabia (Dr Bakar Alturiaif) and Syria (Dr Abdulahi Mohammad Yousuf);
  - **Epidemiology expert:** Lebanon (Dr Bassel Al Bazzal);
  - **Laboratory expert:** United Arab Emirates (Dr Asma Abdi Mohammed)
2. Include members of GF-TADs FMD Working Group and PPR Secretariat, representatives from WOA and FAO Sub-regional offices for Middle East and PCP-FMD and PPR experts, and regional organizations (AOAD and GCC) as non-voting Members of the RAG;
  3. Use the assessments of the regional FMD Roadmap Meeting (2025) as a basis to update the provisional Roadmap for the Middle East FMD Roadmap Members, 2025-2028.
  4. Use the country self-assessment, using PMAT as a basis, to update the Roadmap for the Middle East PPR Roadmap Members, 2025-2028, subject to validation by the RAG

**The participants of the FMD and PPR Roadmap meeting identified the following recommendations**

**Overarching recommendations that apply to both FMD and PPR activities:**

**A) To foster an enabling environment for FMD control, and PPR eradication, and emergency management:**

1. **Advocate for increased investment** in FMD prevention and control and PPR eradication, effectively communicating to decision makers through policy briefs and other means, supported by socio-economic studies when key evidence gaps are identified.
2. **Increase the awareness** of stakeholders along the value chain (including livestock owners, transporters, traders, private sector and consumers) about FMD and PPR, and their control and eradication strategies, respectively. This is needed to enhance disease reporting, engage with national and regional disease strategies, strengthen biosecurity measures and ensure compliance with control measures and vaccination.
3. Continuously **improve capacity** in technical expertise (surveillance, laboratory, epidemiology, economic analysis, emergency management and vaccination) and improve infrastructure, employing virtual platforms as well as cascading knowledge at national and regional levels.
4. **Harmonize systems across neighbouring and epidemiologically linked countries** including health certification systems (cross-border movements and trade), laboratory protocols, surveillance, disease reporting, epidemiological methods and vaccination to enhance compliance, regular communications and streamline procedures and improve understanding of results.

## **B) To achieve Sustainable and Coordinated Vaccine Supply Chains and Quality Systems**

5. **Establish a regional system for vaccine procurement and quality assurance to support sustainable vaccination programs.** This includes harmonized procurement procedures, cold chain management, and mechanisms for prequalifying vaccine suppliers.

## **C) To enhance surveillance to provide the information needed to control FMD and eradicate PPR**

6. Investigate the constraints on **sample collection and shipment** and develop solutions to facilitate the collection and transport (national and international), of samples to laboratories for laboratory confirmation of outbreaks and virus characterization. Countries are encouraged to work with the Reference Laboratories, which have resources to assist with sample shipment.
7. Develop mechanisms to **enable accurate and timely testing of FMD and PPR samples and reporting of results** including improving the availability of reagents, strengthening regional leading laboratories and participation in proficiency testing and inter-laboratory comparison.
8. Develop or adopt a platform **to analyse and disseminate information** about transboundary disease outbreaks in general and circulating serotypes and strains of FMD and lineages of PPR specifically, for veterinary services, vaccine manufacturers, and veterinary laboratories.

## **D) To improve FMD control and PPR eradication through strong biosecurity and movement controls**

9. Develop **biosecurity best practices** for farms, livestock markets and transporters, and encourage their adoption, following the FAO Progressive Management Pathway for Terrestrial Animal Biosecurity (FAO-PMP-TAB).
10. Improve awareness and understanding to **reduce the risks associated with animal movements at regional level, including uncontrolled and informal movements, by** consolidating existing movement information and strengthening cross-border collaborations (for example, through Memorandums of Understanding, wider engagement of stakeholders).

11. Improve livestock identification systems to **enable traceability** which will facilitate movement controls, designing effective surveillance and vaccination programmes, and post-vaccination monitoring.

### **Recommendations that are specific to FMD control**

12. **Review and (when all comments have been satisfactorily addressed) validate the regional strategy** for FMD prevention and control, and **implement the regional strategy** to enhance coordination, facilitate joint actions, share information and develop best practices.
13. Strengthen the **prevention, preparedness and response capacity for exotic FMD strains**, through risk assessment, strengthening quarantine, biosecurity, contingency planning and enhancing the protocols for safe trade with source countries.
14. **Empower private sector actors** in coordination with governments to participate in purchasing and delivering prophylactic vaccination where FMD is endemic, and government funds cannot sustain vaccination. Where the private sector is unable to contribute, governments will need to foster this capacity. Governments should ensure that quality vaccines, matched to the circulating viral strains, are available for purchase.
15. **Establish and maintain regional virus monitoring and vaccine-matching systems:**
- Regularly collect and sequence field isolates to monitor genetic and antigenic evolution of circulating FMDV strains.  
Collaborate with reference laboratories to perform **testing** to determine the antigenic match between field strains and vaccine strains (heterologous titres and determination of  $r_1$  value).
  - Use this data to guide vaccine selection and update national/regional vaccine banks accordingly.
16. **Implement structured post-vaccination monitoring and sero-surveillance**, to:
- Measure population immunity and coverage in vaccinated zones
  - Detect immunity gaps by age group or location to adjust vaccination strategy
  - Support progression along the Progressive Control Pathway for FMD (PCP-FMD) using serological evidence

## **Recommendations that are specific to PPR control**

17. **Conduct epidemiological studies** aiming to adapt the surveillance and vaccination for PPR to an **episystem (epidemiologically) based approach** with the aim of terminating PPR virus circulation.
18. **Use post-vaccination monitoring, including seroprevalence surveys**, to adjust vaccination campaign intervals and address immunity gaps.
19. **Countries that have never reported PPR, or not reported PPR in recent years**, should implement activities required for **official recognition of their PPR-free status by WOA**, whereas infected countries are encouraged to progress along the PMAT stepwise approach, and utilise the mechanism for endorsement of official PPR control programmes by WOA.
20. **Encourage the involvement of private actors and networks** in delivering PPR vaccination campaigns, particularly in hard-to-reach or underserved pastoralist areas. The national Veterinary Services should ensure PPR vaccines are available including thermostable where applicable, and of assured quality with certification provided by mandated independent institutions, and that delivery partners are adequately trained and supervised.
21. **Establish a regional PPR-free zone strategy where feasible:**
  - Coordinate surveillance and movement control in cross-border areas of low-risk.
  - Build “corridors of freedom” supported by harmonised vaccination and surveillance policies with neighbouring countries
22. **Countries progress in PPR eradication and support final eradication steps through outbreak investigation and virus tracing.** This includes conducting full epidemiological investigations for any residual PPR outbreaks and applying molecular epidemiology to trace introduction pathways and distinguish between endemic circulation and new incursions. For the last stages of eradication, countries to implement **stamping out and ring vaccination** in residual hotspots if appropriate.

The 30th of April 2025 (validated on the 30<sup>th</sup> of May 2025)