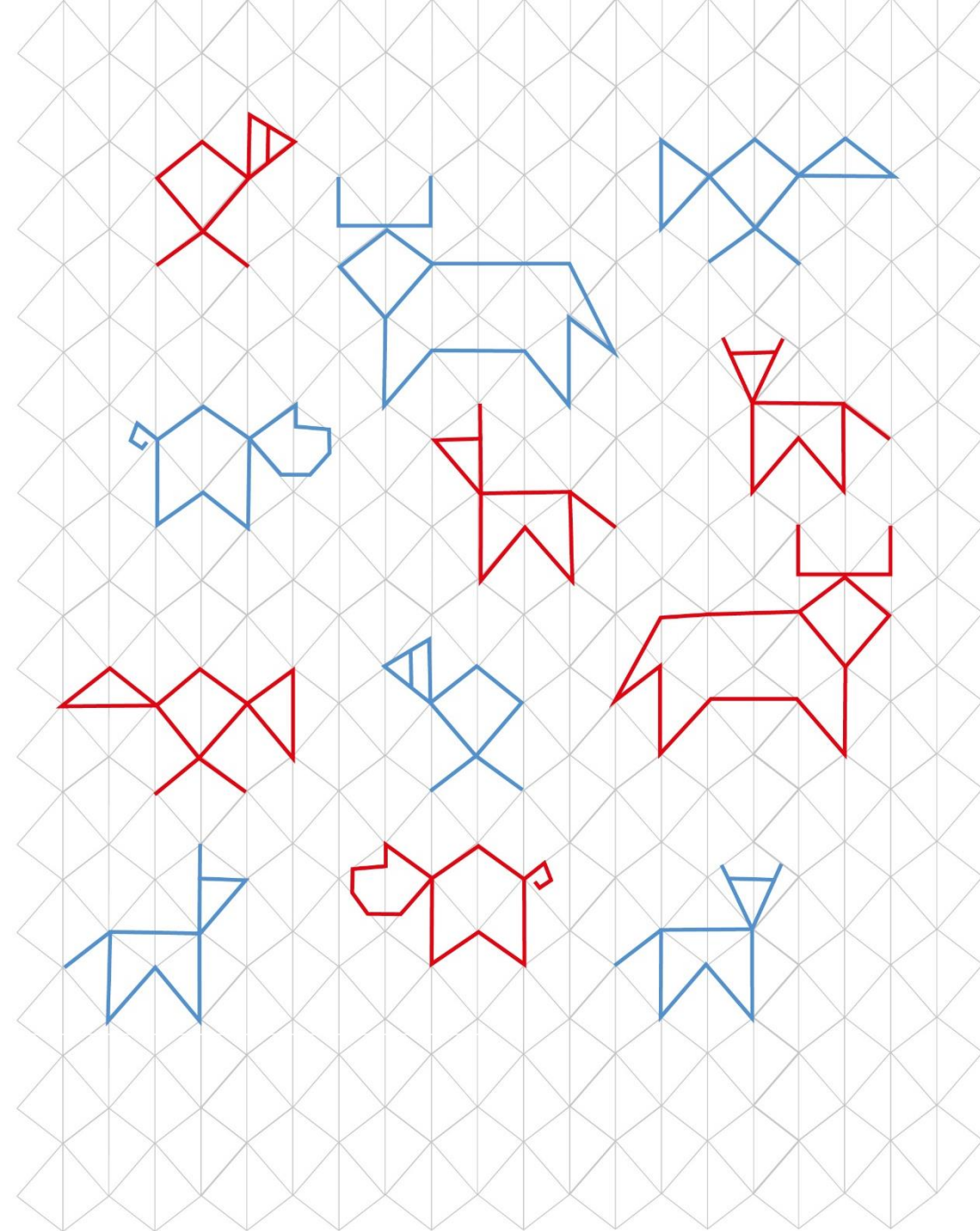


# The Middle East Strategy for Control and Eradication of Peste des Petits Ruminants

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## Executive Summary

- The Food and Agriculture Organization of the United Nations (FAO) and the World Organization for Animal Health (WOAH) launched in 2015 the Peste des Petits Ruminants Global Control and Eradication Strategy (PPR GCES) under the umbrella of the Global Framework for the Progressive Control of Transboundary Animal Diseases with the aim to eradicate PPR globally by 2030.
- Within the framework of PPR GCES strategy, the roadmap meetings for the Middle East region (Yemen, United Arab Emirates, Sultanate of Oman, The Kingdom of Saudi Arabia, Bahrain, Kuwait, Qatar, Iraq, Jordan, Syria, Lebanon, Palestine and Egypt) were organized.
- This document summarizes the actual PPR situations made available by the delegates attending the roadmap meetings, consultation meetings, PPR follow up meetings and PMAT trainings during 2015-2025, and through the PPR Monitoring and Assessment Tool (PMAT) filled by the Veterinary Authorities in these countries between 2021-2025.
- The whole document is based on the relevant information from the previous Middle East Regional Strategy formulated in 2016 and updated in 2022.
- It stresses at the national level on capacity building and strengthening veterinary services for proper epidemiological assessment, vaccination (70 - 80% immunity rate of the animal population) and monitoring and surveillance.

- In addition to estimating the implementation cost, this document emphasizes on identifying the needs in terms of activities at the country level and on the role of collaboration and harmonization among the neighboring countries through the establishment of epidemiological networks and laboratory facilities.
- In addition, the presence on the RAG board of non-voting delegates representing FAO and WOAHA in the region, along with representatives of the FAO-WOAHA PPR Secretariat, and representatives from GF-TADs, will ensure the success of the strategy.



# The Overall Objective of the Strategy

- To contribute to food security, poverty alleviation and the resilience of livestock-dependent communities in Middle East and economic growth of the affected countries.
- Specifically, the strategy will improve the health and production of small ruminants in the Middle East.

The **strategy** has three main **outputs**, namely:

- (i) PPR eradicated from the ME region by 2030;
- (ii) Other small ruminant diseases (SRDs) controlled and
- (iii) Veterinary services (VS) strengthened.



The actions needed to achieve the objectives of the strategy are presented as tools and include among others:

- Epidemiological surveillance;
- Laboratory diagnostics;
- Quality/quantity of vaccines,
- Vaccination and vaccine delivery systems;
- Post-vaccination evaluation;
- Communication and awareness;
- Capacity development and utilisation;
- Research and technology;
- Coordination..



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## Context of the regional strategy in line with the Global Eradication Programme

- The next phases of the PPR GEP is focusing on the cooperation and coordination of control efforts, which are indispensable to achieve PPR freedom at the regional level.
- A phased approach with well-coordinated and harmonised activities across the region and countries is adopted given that PPR is endemic in most countries.
- This phasing is based on four different stages which correspond to a combination of decreasing levels of epidemiological risk and increasing levels of prevention and control.



The progressive step-wise approach for the prevention and control of PPR

# PPR Monitoring and Assessment Tool ( PMAT)

- The PMAT will be a major tool for structuring and planning the activities and for assessing progress in the strengthening of veterinary services and moving from one step to another.
- Thus, countries progressing along the stages will have to simultaneously develop their veterinary services to be able to fulfil the criteria for attaining freedom from PPR.

COUNTRY	2020	2021	2022	2023	2024	2025
Bahrain	3	2	3	3	3	4
Egypt	2	3	3	3	3	2
Iraq	3	2	2	2	2	
Jordan	1	1	1	1	1	
Kuwait	3	3	3	3	3	
Lebanon	2	2	2	2	2	1
Oman	2	2	3	3	3	
Palestine	1	1	1	1	1	
Qatar	1	2	2	2	1	
Saudi Arabia	2	2	2	2	3	3
Syria	2	2	2	2	2	
UAE	3	3	3	3	3	1
Yemen	1	1	1	1	1	
stage 1	4	3	3	3	4	
Stage2	5	7	5	5	3	
stage 3	4	3	5	5	6	
Stage 4	0	0	0	0	0	
Beyond stage 4	0	0	0	0	0	

Saudi Arabia, Oman and Egypt moving to stage 3



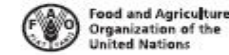
## Factors in the region that favour the eradication of PPR

- In fact, the presence of **steep mountains** (Yemen - KSA and Lebanon – Syria) or rivers (Jordan – Palestine and Lebanon - Syria) may be considered to some extents as natural barriers to prevent disease dissemination.
- Little or **no wildlife** exists in the countries of the region, thus facilitating PPR control due to the lack of possibility of its spill over from small ruminants.
- The epidemiological context in the region suggests that eradication of PPR through vaccination of domestic small ruminants may be achievable. In principle, if sufficient vaccination coverage is achieved in these populations, eradication may be possible even without directly targeting wildlife.
- The **quality of the veterinary services** in terms of number of qualified veterinary staff, competency, preparedness, etc.... plays an important role in the effectiveness of disease control in general and PPR eradication.

# Developing the Regional Approach -Alignment to the Global Development Agenda

## Key control strategies towards eradication by 2030

- The strategy thus pays attention to capturing the full long-term benefits of eradication through sustainable animal health services, from the primary, community level through to strengthened veterinary services able to reach and maintain PPR-free status once vaccination programmes are suspended, hopefully by the end of 2027.
- In 2022, information based on regional consultative meetings, roadmap meetings and reported outbreaks in the most recent two years suggests a discontinuous presence of infection across the zones of Africa, the Middle East and Asia which may provide the basis for focused efforts to separate infected and at-risk populations, and target control on the populations maintaining these localized virus reservoirs (“episystems approach”).



## Country Contributions to the Regional Approach



- The production of PPR vaccine in certain countries along with vaccines against Brucellosis and Sheep and Goat Pox(SGP) would expedite the eradication of PPR and facilitate the task of controlling and/or prevention the SGP and Brucellosis.
- The continuous needs to strengthen the border inspection points through providing appropriate diagnostic tools, continuous education and training programs; well controlled borders combined with applying these rules would help in the eradication of PPR and other disease as well.
- The laboratories capable of PPR diagnosis are numerous and practically available in all countries of the region. Upgrading through the installation of new up-to-date equipment and the provision of standardized diagnostic tools very specific to PPR in addition to Capacity building is also a crucial step towards the achievement of objectives in timely eradicating PPR.

## Regional support for national efforts by the Regional Economic Community and other Regional Institutions

- It is suggested that the ME countries involved in the PPR GCES be *divided into three* groups based not only on geographical locations but also on environmental and economic conditions that may be considered as conducive to achieve such task.
- Lebanon, Syria, Jordan and Iraq constitute to a certain extent one homogeneous group or episystem.
- The *Gulf countries*: KSA, Bahrain, Qatar, UAE, Oman and Kuwait grouped under the Gulf Cooperation Council (GCC) constitute another homogeneous group of states but for the sake of PPR eradication and for geographical reasons, Yemen could be listed under this category.
- All 6 GCC countries are well-established laboratory facilities and epidemiological system to cope with PPR eradication and the control of other animal diseases.
- A close collaboration among these countries in terms of harmonization of legislations at different levels is a step further for a successful PPR eradication program .

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- Egypt for its geographical location and size would easily be considered as a standalone country in the ME region that requires close collaboration and coordination activities with neighbouring countries such as Libya, Sudan, and Gaza strip.
  - presence of several Veterinary universities and Laboratory facilities along with PPR vaccine production by VSVRI make one believe that with some coordinated efforts, Egypt has the necessary infrastructure to eradicate PPR and control other animal diseases as well.

# Vision of the Region

## The Roadmap

- Recommendations of the first PPR Roadmap meeting for the Middle East region, in Doha, Qatar from 2–3 December 2015.
- *Recommendations of 2nd Peste des petits ruminants (PPR) and 4th Foot-and-Mouth disease (FMD) Regional Roadmap Meetings – Middle East Countries. Amman, Jordan , 15 – 19 October 2017.*
- WOAHA Consultative Seminar on progress made in FMD and PPR Regional Roadmap for East Mediterranean Countries. Beirut Lebanon 11th – 13th September 2022.

Provisional Roadmap

Provisional baseline Stages established during the First PPR Roadmap meeting for the Middle East (Doha, Qatar, December 2015)								Provisional Roadmap established during the First PPR Roadmap meeting for the Middle East (Doha, Qatar, December 2015)								
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bahrain	2	3	3	4												
RSA	2	2	3	3	3	3	3	4								
Kuwait	2	2	3	3	3	4										
Oman	N.A															
Qatar	1	2	2	3	3	4										
UAE	2	2	2	2	3	3	3	3	4							
Iraq	2	2	2	2	2	3	3	3	3	3	4					
Jordan	2															
Lebanon	2	2	2	3	3	3	3	4								
Palestine	N.A															
Syrian Arab Republic	N.A															
Yemen	N.A															
Egypt	1	1	2	2	2	3	3	3	4							

N.A= not assessed (countries were absent)

## ANNEXES

### Annex 1 - Updated PPR Stage Progression 2017 – 2030

*(based on country self assessment)*


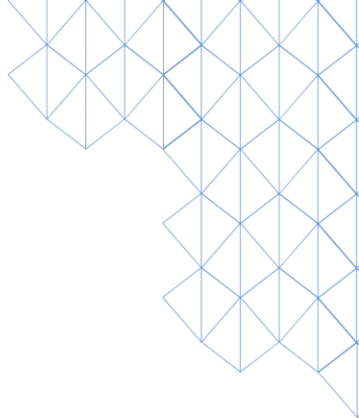
- **GF-TADs Consultative Seminar on Progress Made in the FMD and PPR Regional Roadmap for East Mediterranean Countries, 2021**
- **FAO/WOAH Consultative Seminar on progress made in FMD and PPR Regional Roadmap for East Mediterranean Countries. Beirut Lebanon 11th – 13th September 2022.**


Middle East [13]	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Bahrain	1	4	FREE											
Egypt	2	2	3	3	3	3	4	FREE						
Iraq	2	2	2	2	3	3	3	4	4	FREE				
Jordan	2	2	2	3	3	3	4	4	4	FREE				
Kuwait	3	3	3	4	FREE									
Lebanon	2	2	2	3	3	3	4	4	FREE					
[Oman]														
Palestine	1	1	1	2	2	2	4	4	4	FREE				
[Qatar]	2	3	3	4	FREE									
Saudi Arabia	2	4	4	4	4	4	FREE							
Syria	2	2	2	2	2	3	3	3	3	4	4	4	FREE	
United Arab Emirates	2	2	3	3	3	3	4	4	FREE					
Yemen	1	1	2	2	2	3	3	4	4	FREE				

## Programme Approach (to achieve this vision)

- The Strategic Approach of the Global Strategy is based on four different Stages.
- The four stages correspond to a combination of decreasing levels of epidemiological risk and increasing levels of prevention and control.
- The Stages range from Stage 1 – where the epidemiological situation is being assessed, to Stage 4 – when the country can provide evidence that there is no virus circulation either at zonal or national level, and is ready to apply for the WOAHP official country status of PPR freedom.
- Stage durations are variable and depend on the context: the speed of progression is according to each country's decision and possibilities, depending on the epidemiological situation, the capacity of the Veterinary Services and the political commitment with appropriate investments.



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- However, the Global Strategy foresees the following duration for each Stage
    - Stage 1: minimum 12 months and up to 3 years
    - Stage 2: 3 years (from 2 to 5 years)
    - Stage 3: 3 years (from 2 to 5 years)
    - Stage 4: 24 months and up to 3 years.



**More importantly the ME regional strategy will try as far as possible to align to the GCES but with 4 outcomes as describe in PPR GEP document focusing in regional activities as national ones will be described in the respective National Strategic Plans.**



## **First level Outcome 1 :**

PPR regional eradication by 2030 achieved and the effects of other high-impact threats and zoonotic infectious diseases of small ruminants reduced , regional activities related to this outcome:

- 1) **Support to the diagnostic and surveillance systems**
- 2) **Epidemiological assessment**
- 3) **Strengthening of surveillance systems and Episystem**
- 4) **Regional Epidemiology and Laboratory Networks**
- 5) **PPR Strategy and Technical plans**



## PPR Strategy and Technical plans

- Countries/territories entering the PPR control and eradication step-wise approach are expected to develop a National Strategic Plan (NSP).
- The NSP will indicate the objectives, activities and associated costs to be undertaken in the next 3 to 5 years with an overall objective to achieve PPR eradication in the country in the long run and thereby meet the global deadline of 2030 for eradication worldwide.

Consistent with the PPR GCES, the NSP is an advocacy document to be complemented by Technical Plans listed below and annexed to the NSP:

- **National Assessment Plan** (for countries entering Stage 1)
- **National Control Plan** (for countries entering Stage 2)
- **National Eradication Plan** (for countries entering Stage 3)



## PPR Strategy and Technical plans

- Each technical plan will have to be completed sequentially according to the Stage a country is progressing towards.
- In addition, as a final step to eradication, the countries/territories will be encouraged to complete the dossier required to apply for the WOAHP official recognition of PPR free status.
- Each Regional Economic Community will be supported by the programme to develop its regional strategy (or strategic plan) using the template provided by the secretariat.

## **Second level Outcome 2:**

Enhanced access of all stakeholders, including women and the rural poor, to livestock and livestock product markets through better animal health status and more accurate animal health information to inform trade decision-making, regional activities related to this outcome:

- 1) Stakeholder awareness and engagement.**
- 2) Strengthening Veterinary Services**

## **Third level Outcome 3:**

Enhanced access to animal health value chain markets, their inputs, and services that are designed to meet the specific needs of target communities, women, youth, and the rural poor, including the strengthening of public-private-community partnerships for the control of transboundary and zoonotic animal diseases, regional activities related to this outcome:

- 1) Support countries in enhancing value chain, value addition and trade in animal**
- 2) An overview of Public Private Partnerships in the Middle East**

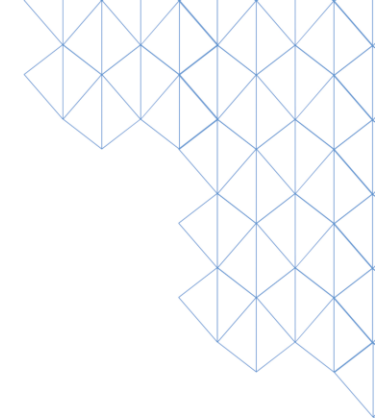


#### **Fourth level Outcome 4:**

Enhanced coordination and delivery of animal health programmes within the context of human, animal, and environmental health, regional activities related to this outcome

##### **1) Coordination**

##### **2) Capacity development, research and technology**





Budget

Partnerships

Emergency  
preparedness and  
contingency planning

Resource  
mobilisation  
strategy



## Conclusion

- The PPR epidemiological situation and the status of control and eradication activities appear largely homogeneous in the Middle East, since the disease is endemic or suspected to be present in the entire region apart from Bahrain, which is also the only country where vaccination is not conducted.
- This is reflected by the low advancement in the PPR GCES stepwise approach, with 13 out of the considered 15 countries being either at Stages 1 or 2 and the many being at Stage 3 & Bahrain at stage4.
- In this context, the highest priority action to be taken should therefore be the strengthening of surveillance systems, not limited to disease investigation and reporting, but also including the animal identification and traceability of both within-country and cross-border animal movements.
- This would ensure a full understanding of the local epidemiological scenario, including the role of wildlife and atypical hosts, thus informing and improving the planning and impact of vaccination efforts.

## Conclusion

- There is a crucial need to identify PPR episystems as a basis for monitoring and management and to update National Strategic Plans in line with the Blueprint for PPR GEPII, which emphasizes an episystems-led approach.
- Enhanced access to animal health delivery services, the development of Public-Private-Community Partnerships and strengthened multi-sectoral and multi-stakeholder partnerships.
- The status of the Middle East as a major Small Ruminant importer and exporter globally underlines the need for a clear prioritization of PPR in national strategies and livestock development planning, as well as a focus on robust import and export controls.
- Coordination of PPR surveillance and control activities with those of other relevant SR diseases in the region, such as sheep and goat pox, brucellosis and foot-and-mouth disease, could also be better leveraged to mutually improve their cost effectiveness.
- A crucial role will be played by the RAG and REC during PPR GEPII, and commitment and leadership at the regional level will be a prerequisite for achieving the vision of a PPR-free world by 2030.