

PPR Situation & Roadmap Middle East

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9th December 2025

WOAH - PPR secretariat



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for Animal
Health
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Organisation
mondiale
de la santé
animale
Fondée en tant qu'OIE

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Mundial
de Sanidad
Animal
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PPR Regional Roadmap Meeting for Middle East

- Held jointly for PPR & FMD, 27-30 April 2025, Riyadh Saudi Arabia
- Participating countries: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Syria and United Arab Emirates
- *Hosted under the umbrella of GF-TADs | Organized by FAO, WOA, EuFMD, and WEQAA*
- *Objective: Update on PPR epidemiology, progress along PMAT, regional coordination and RAG*



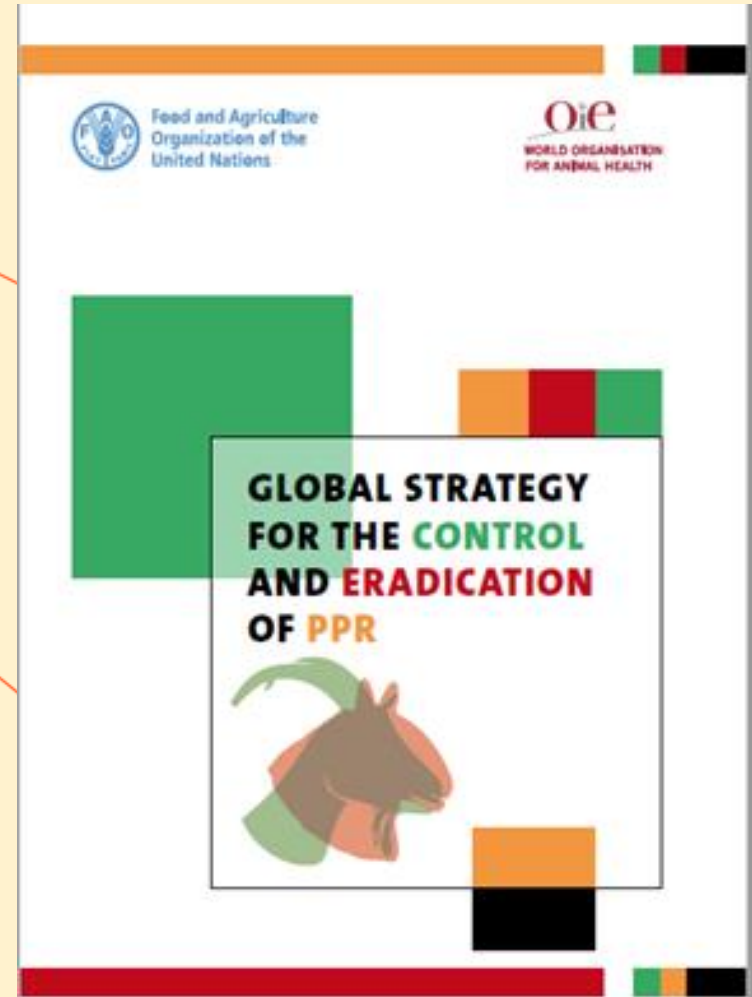
Food and Agriculture
Organization of the
United Nations



World Organisation
for Animal Health

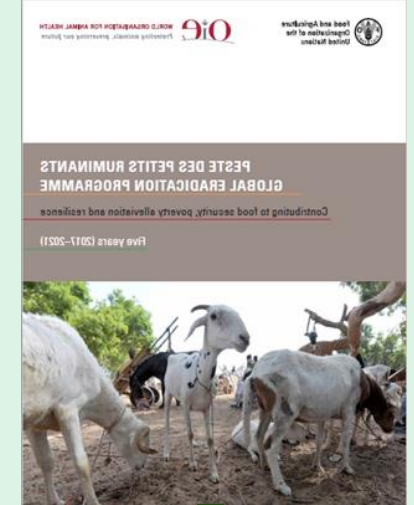


- PPR GLOBAL SITUATION: INTRODUCTION
- Highly contagious viral disease affecting sheep, goats, and wild ruminants
- Up to 100% mortality in naïve populations
- Annual economic losses: **USD 2.1 billion**
- Threatens **330+ million people** dependent on small ruminants
- 70+ countries affected
- Entrenched in endemic areas
- Links to food security, gender equity, and livelihoods
- Review meetings, capacity building and related conducted to support national Veterinary Services



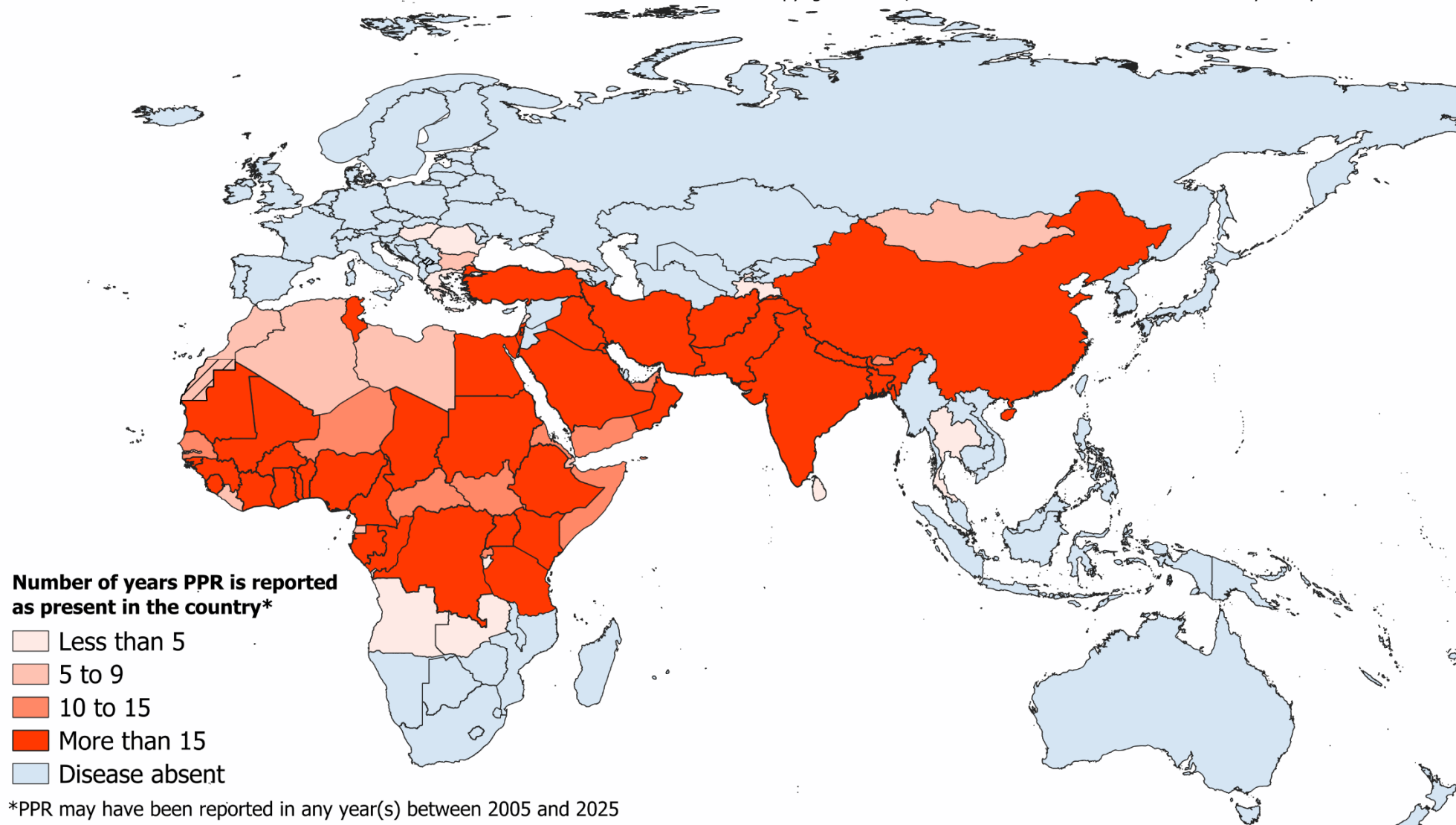
• BACKGROUND: PPR ERADICATION

- ❖ The PPR GCES guiding eradication efforts through GEP 1 (2017-2021) => GEP II & III (also known as the Blueprint).
- ❖ GCES specific objectives: **eradication of PPR by 2030**; **reinforcing Veterinary Services** and **Reducing the impact** of other **major infectious diseases** of small ruminants
- ❖ Regional consultative meetings, regional roadmaps and technical support for integration of the episystem approach been conducted across affected regions – Africa, Middle east and Asia Pacific – emphasis **proper understanding of the local disease risk** in various geographical areas and **production systems** and the dynamics of **animal movement**
- ❖ PPR Monitoring & Assessment Tool (**PMAT**) has been **revised**, available for countries



Global distribution of peste des petits ruminants (2005-2025)

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Data source: WAHIS, April 2025

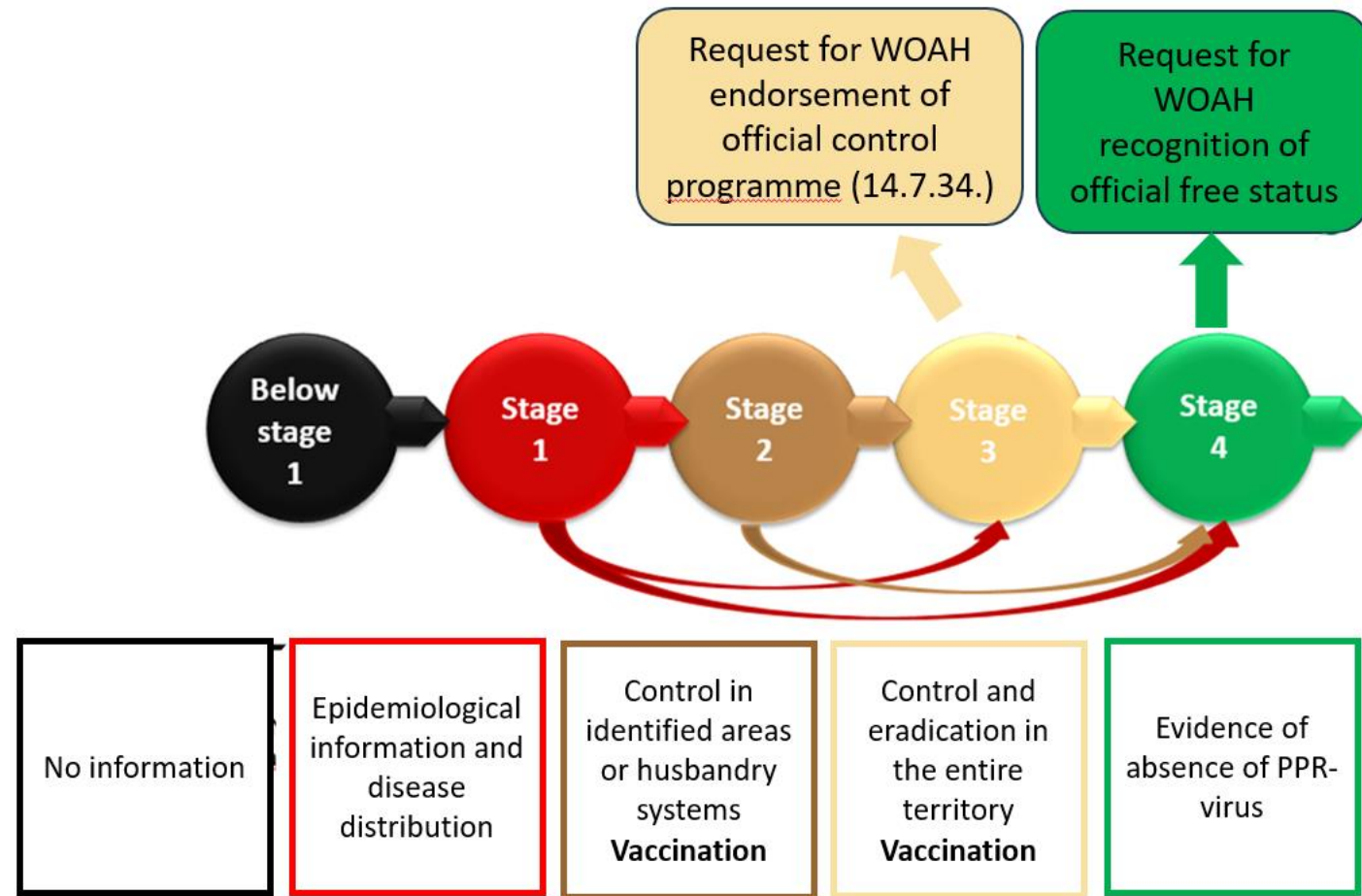
• PPR Monitoring & Assessment Tool - PMAT

- Due to its transboundary nature, the PPR GCES recognises the need for **harmonising** PPR disease control and eradication **efforts** at the national, regional, and global levels.
- This should be guided by a proper **understanding** of the **local disease risk** in various geographical areas and production systems and the dynamics of animal movement.
- The global strategy's Strategic approach is based on four different Stages, each corresponding to a combination of **decreasing levels of epidemiological risk** and **increasing levels of prevention and control efforts**.

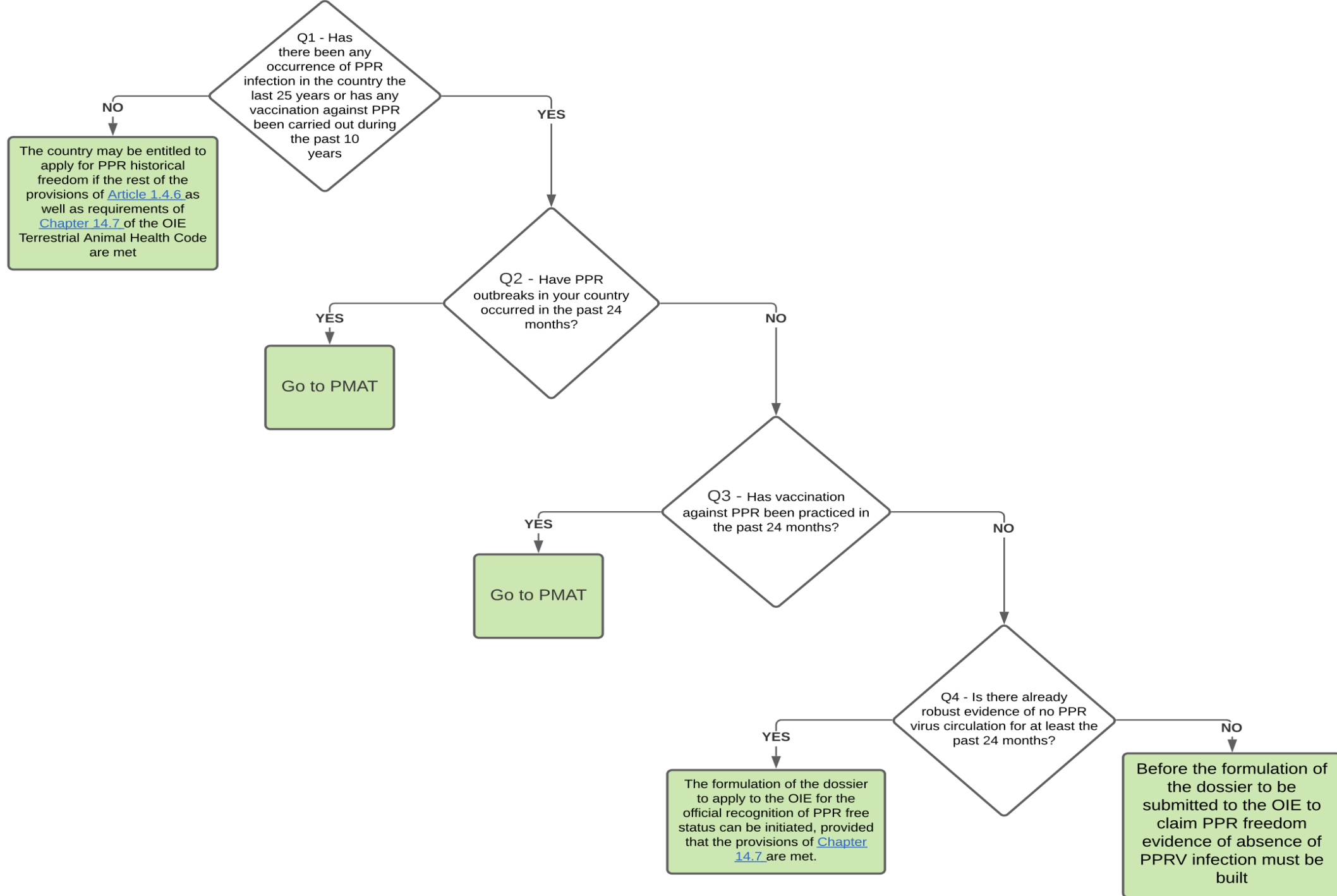




- The Post-Vaccination Evaluation (PVE) tool guides countries in assessing vaccine effectiveness, encompassing the vaccine attributes and delivery, vaccination coverage, and immune response to vaccination.
- Capacity building:
 - Reference Laboratories and the network
 - PVS with PPR specific content, lab twinning
- Surveillance and vaccination guidelines; also refer to horizontal chapters of the code (1.4-surveillance, 1.1-disease notification, 2.1-risk analysis, 3.2-evaluation of VS, 3.4-Vet Legislation, 5-Import/export procedures, 5.1-Obligations related to certification; PPR specific chapter 14.7)



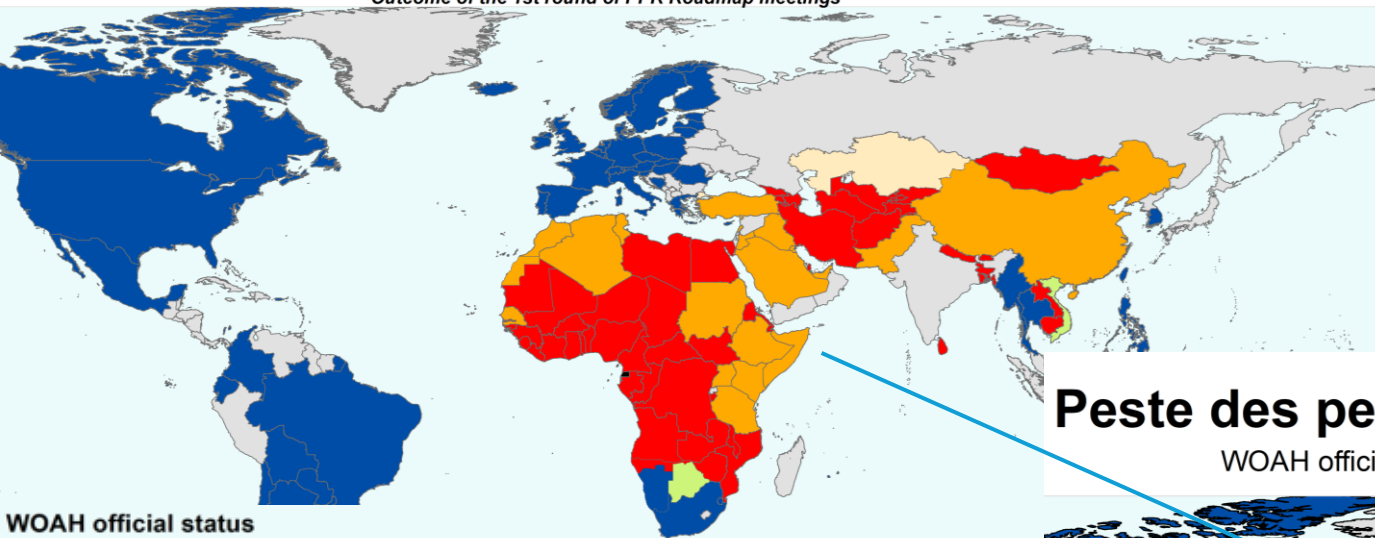
WHEN TO USE PMAT



Peste des petits ruminants global situation up to 30 April 2017

OIE official PPR free status and PPR Global Control and Eradication Strategy (GCES):

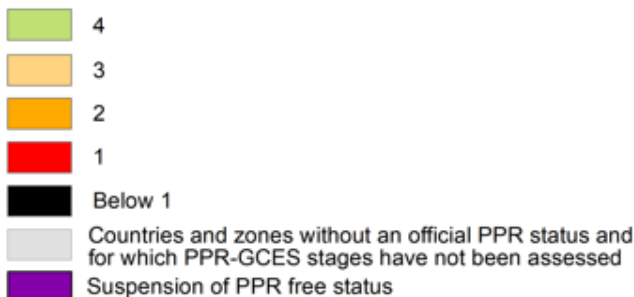
Outcome of the 1st round of PPR Roadmap meetings



WOAH official status

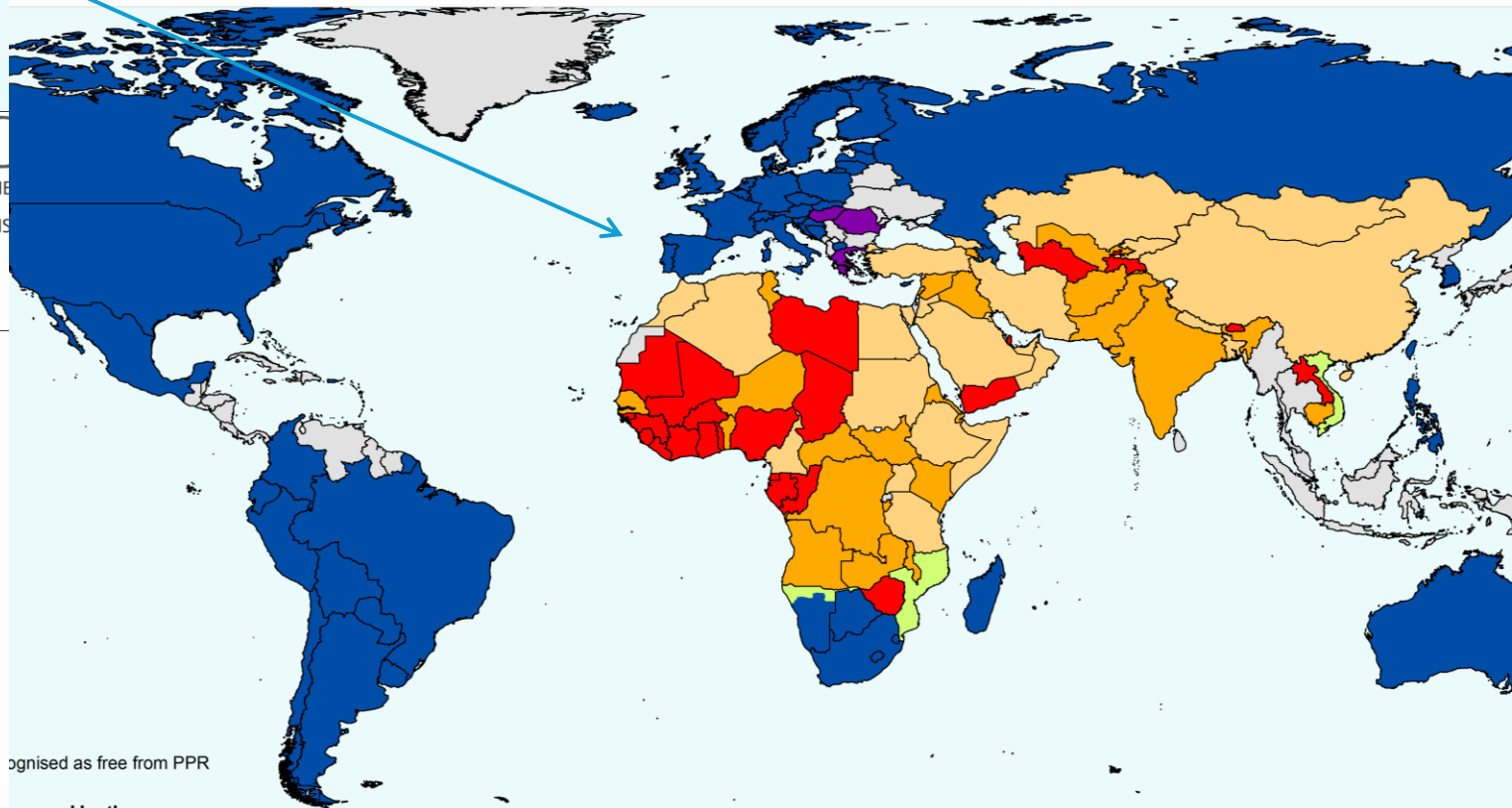
Members and zone recognised as free from PPR as of May 2024

PPR GCES stages as self assessed by the countries during their last PPR regional/epizone roadmap/consultation meeting (2017 - 2024)



Peste des petits ruminants global situation up to May 2025

WOAH official PPR free status and PPR Global Control and Eradication Strategy (GCES)



ognised as free from PPR

essed by the



• Middle east RMM

- Countries at different stages of the PMAT
- Varying levels of capacities - surveillance, vaccination, diagnostics, and stakeholder engagement
- Challenges:
 - Low investment, limited resources/Funding gap,
 - Lack of surveillance data
 - Slow progress along PMAT steps
 - Illegal animal movement,
 - Gaps in biosecurity and surveillance

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

RAG Chair: Oman CVO (Dr Ahmed Saif Alamri)

RAG Members:

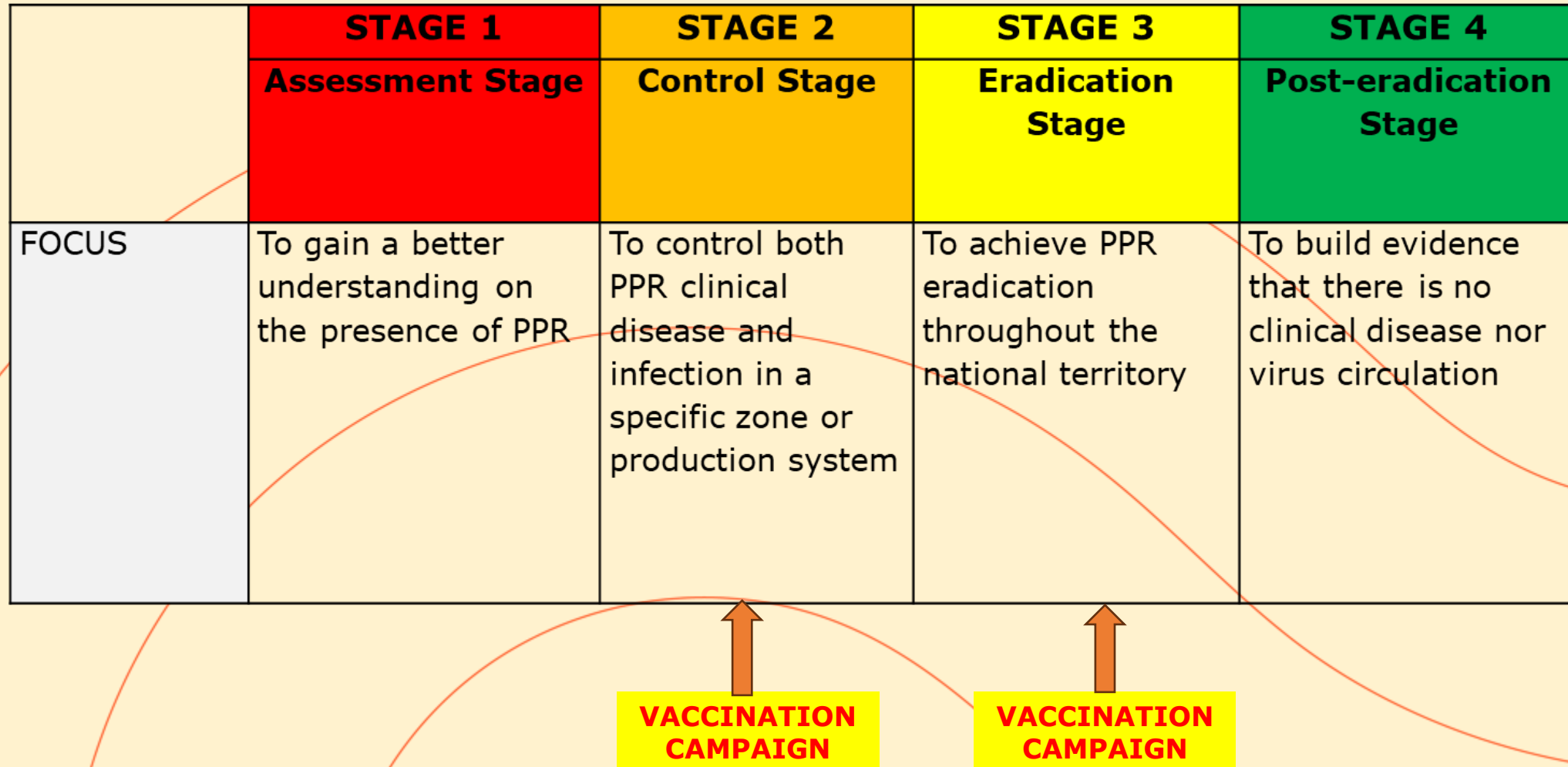
CVO Saudi Arabia (Dr Bakar Alturiaif)

CVO Syria (Dr Abdulahi Mohammad Yousuf)

Epidemiology expert: Lebanon (Dr Bassel Al Bazzal);

Laboratory expert: United Arab Emirates (Dr Asma Abdi Mohammed)

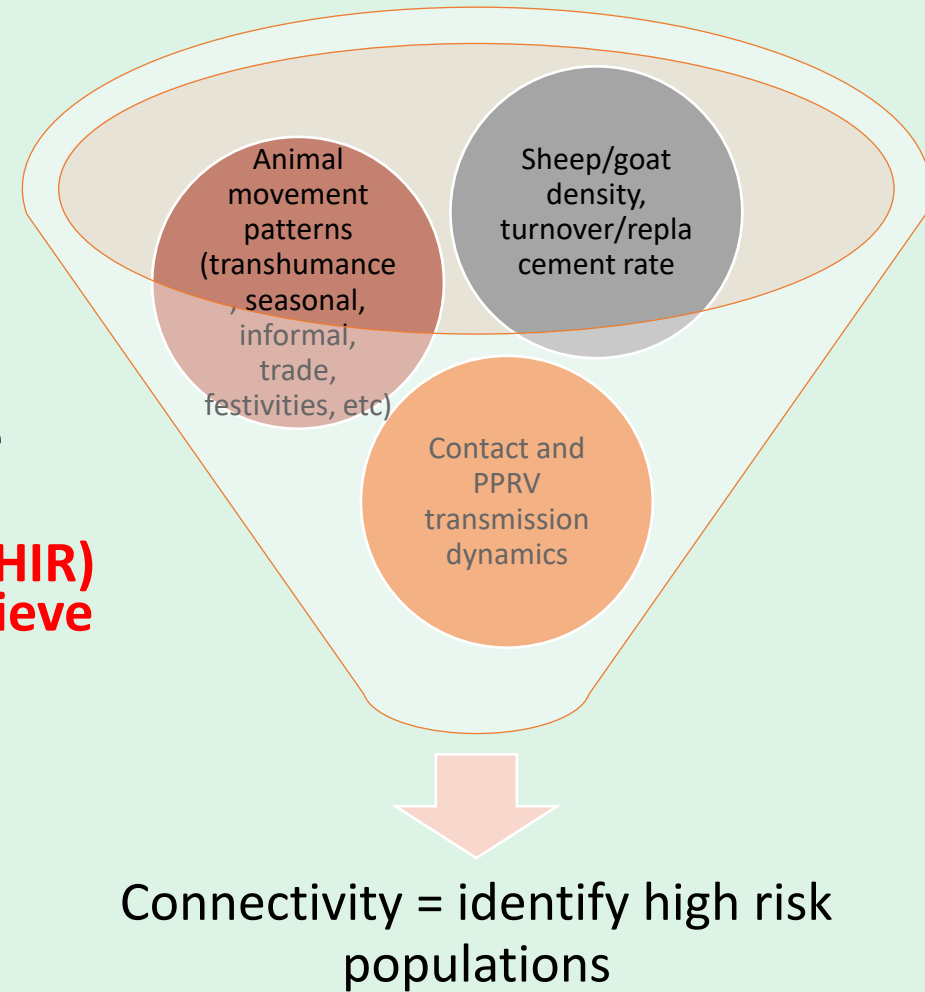
VACCINATION STRATEGIES - PMAT STAGES



PPR Vaccination Strategies

General Principle (GCES):

- **Vaccination of animals during two successive years**
- **Followed by the vaccination of new animals (Age > 3 months old) in the herd for one or two more successive years**
- **Conducts Vaccination to obtain a Herd Immunity Rate (HIR) equal to at least 70% for at least 3 Years in order to achieve virus elimination from the region.**
- **Episystem approach** – connectivity (animal population, movement patterns & interactions)
- Thermotolerant vaccines commercially available
- A Good PPR vaccine protects sheep and goats for at least 3-5 years after **a Single SHOT.**





Bahrain

PMAT: Completed $\geq 80\%$ of Stage-3 activities and can consider moving to Stage-4

No PPR reported – over 25 years, zero positives on seology (2023-24 survey)

Strong surveillance (domestic/wildlife) and legal/stakeholder systems – notifiable, sanitary mandate, compensation, movement control and AITS

Lab capacity - ELISA/RT-PCR in use; PT participation

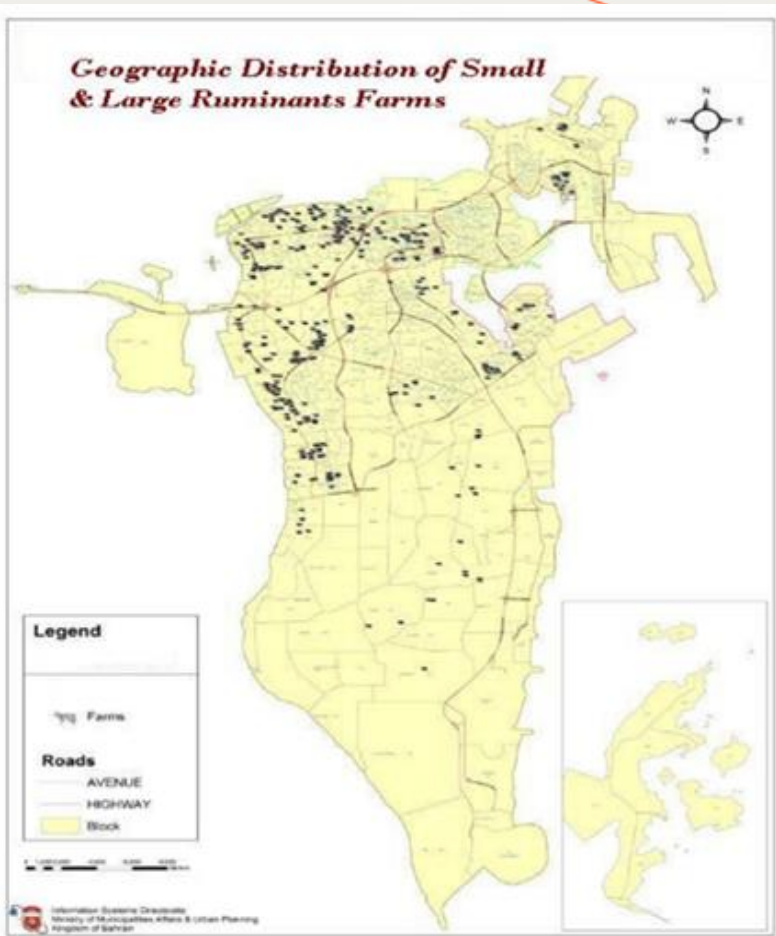
Contingency plan - establishing a comprehensive response strategy

Animal movement monitoring being implemented to prevent the illegal importation & use of vaccines.

To heighten **biosecurity at entry points** and in-country sequencing capacity; **Complete border biosecurity plan** and deploy **check-point/CD stations (standardize)**;

Digitalization: Animal Disease Information System (ADIS) and broader reporting **digitalization** are pending improvements

- Public-Private Partnerships (PPPs) Identify opportunities for:
 1. Private veterinary clinics to assist in **awareness campaigns**
 2. Livestock sector stakeholders (importers, traders) to **co-finance** animal health services





Egypt

PPR outbreaks been decreasing over the years (2023-3,2024-1,2025-0)

Animal movement key driver – cross border, markets, grazing, festivals

Lab diagnostic capacity, ISO 17025, serology – ELISA, PCR

Mechanism for cold chain monitoring

Massive vaccination is periodically implemented through one national vaccination campaign/ year

Herd immunity data = cessation of vaccination;

Challenges with animal movement monitoring and implementation of biosecurity measures

Overall level of achievement by Stage and Technical element in %

14

Technical element	Stage 1	Stage 2	Stage 3	Stage 4	Averages across stages
Diagnostic	100.00	100.00	100.00	-	75.00
Surveillance	83.33	75.00	65.00	-	55.83
Prevention&Control	77.77	71.43	75.00	20.00	61.05
Legal Framework	70.00	91.67	33.33	66.67	65.42
Stakeholders	93.32	75.00	41.67	16.67	56.66
Averages within stages	84.88	82.62	63.00	20.67	

Take away :

- Targeted assessments, PPR control in hotspots, e.g. markets.
- Annual PVM (coverage + serology) - targeted herd immunity measurement
- Operationalize movement monitoring & biosecurity SOPs
- Policy - add compensation clause
- Intensify sanitary measures at border posts and movement monitoring



Jordan

Sporadic PPR cases

Lab diagnostic capacity – ELISA/PCR;
participation PT

Animal movement control in place and
electronic ID;

Vaccination ongoing annually targeting >3
mons, no PVM, coverage 65%

No wildlife surveillance (susceptible)

Contingency plan not tested

Overall level of achievement by Stage and Technical element in %

Technical element	Stage 1	Stage 2	Stage 3	Stage 4	Averages across stages
Diagnostic	100.00	100.00	100.00	66.67	91.67
Surveillance	58.33	37.50	35.00	37.50	42.08
Prevention&Control	88.88	71.43	25.00	40.00	56.33
Legal Framework	50.00	33.33	25.00	91.67	50.00
Stakeholders	93.32	75.00	50.00	41.67	65.00
Averages within stages	78.11	63.45	47.00	55.50	

- Plan for PPR eradication, adopt vaccination strategies
- Include wildlife surveillance, camels
- Conduct annual PVM, herd immunity
- Validate contingency plan, simulation exercises

Qatar

- PMAT Stage 3
- Mass vaccination ongoing
- No PPR cases reported
- Syndromic surveillance
- Digitization for movement control (Microchipping)
- Use of digitized data for targeted assessments and control interventions
- To define plan for cessation of vaccination

Lebanon

- No PPR reports since 1997, animal movement controls in place (*Beirut Port, Akkar, Bekaa, South*); transhumance practices
- No surveillance or awareness in 2024; to restart surveillance
- Vaccination conducted, systematic implementation constrained
- Diagnostic capacity for serology & PCR and participation in PT >3 years ago;
- Engagement with RL for diagnostic support recommended – PT, sequencing, inter-lab comparison testing
- Resubmit PMAT
- Need for resource mobilisation, PPP & engagement of stakeholders



Overall level of achievement* by Stage and Technical element in %

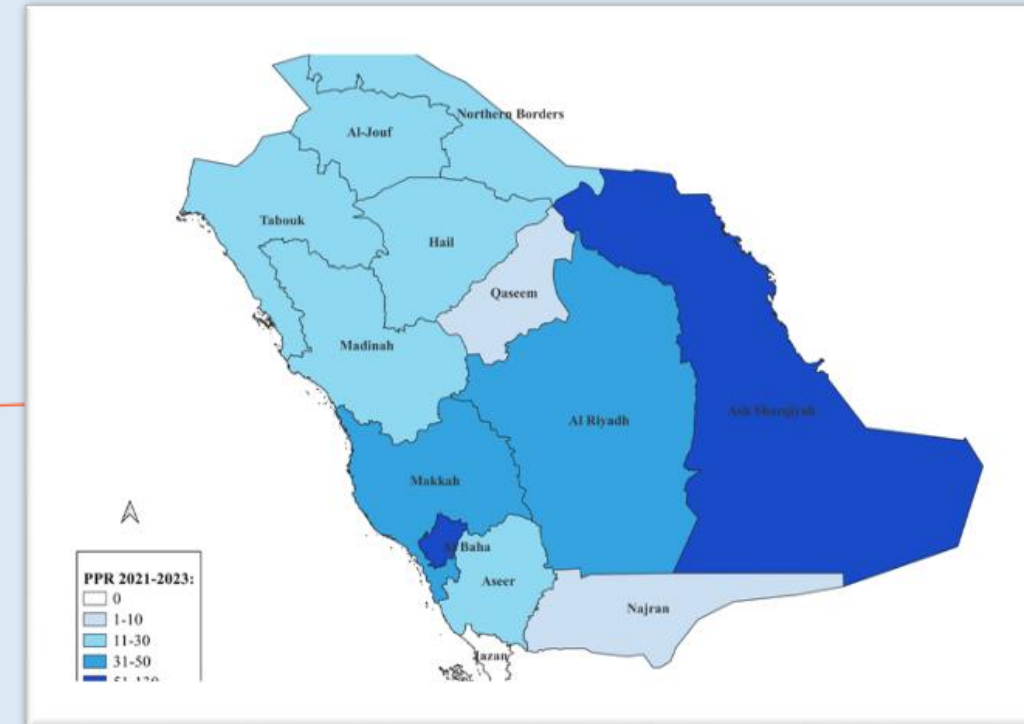
Technical element	Stage 1	Stage 2	Stage 3	Stage 4	Averages across stages
Diagnostic	100.00	100.00	-	66.67	66.67
Surveillance	8.33	25.00	40.00	75.00	37.08
Prevention&Control	22.22	42.86	-	-	16.27
Legal Framework	70.00	-	16.67	58.33	36.25
Stakeholders	46.66	35.71	33.33	41.67	39.34
Averages within stages	49.44	40.71	18.00	48.33	

Palestine

- Control stage PMAT 2; vaccination conducted – hard to reach areas
- Diagnostic capacity for RT-PCR in central and peripheral labs
- NSP endorsed and supportive legal framework
- Gaps with molecular sequencing and participation in inter-lab comparison & PT; no genetic data submitted
- To engage in wildlife surveillance currently missing
- To improve stakeholder engagement to address biosecurity gaps - SOPs
- Conduct annual PVM and herd immunity monitoring
- The process of identifying stakeholders involved in SR value chain has been started
- Communication and awareness material has not been developed

Saudi Arabia

- Highest outbreaks reported in Western & Northern regions (2021-2023).
- Animal movement highest risk – imports, nomadism, trade, informal
- Strong surveillance, diagnostic capacity, engagement with RL , reporting system, mass vaccination, monitoring of vaccine coverage, herd immunity & supportive legal framework
- To enhance engagement of private sector in control activities -PMAT recommendations – involvement in vaccination campaigns, surveillance,
- Vaccine demand (70m doses in 3 years)
- Enhance AITs, movement control, infrastructure at quarantine stations



Overall level of achievement by Stage and Technical element in %					
Technical element	Stage 1	Stage 2	Stage 3	Stage 4	Averages across stages
Diagnostic	100.00	100.00	100.00	33.33	83.33
Surveillance	95.83	100.00	20.00	25.00	60.21
Prevention&Control	100.00	85.71	-	15.00	50.18
Legal Framework	100.00	100.00	83.33	66.67	87.50
Stakeholders	93.32	100.00	25.00	16.67	58.75
Averages within stages	97.83	97.14	45.67	31.33	



Iraq



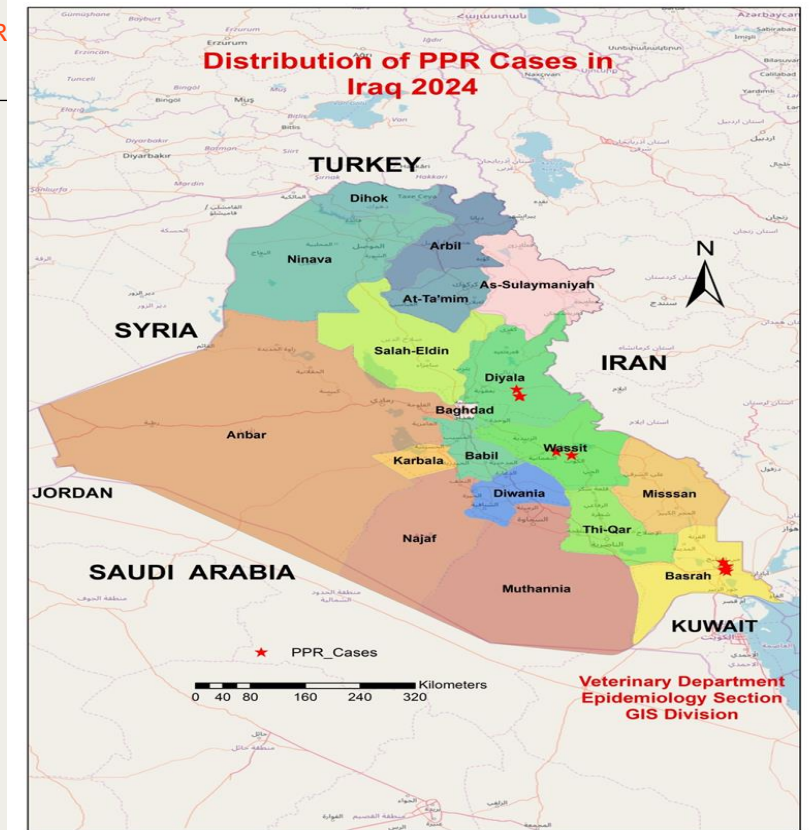
PPR continues to spread, animal movement across governorates major driver, also detected in wildlife



Vaccination campaigns with inconsistent coverage, no PVM, limited resources



Need for enhanced surveillance & diagnostic capabilities, targeted vaccination, cross-sector collaboration



Control measures implemented:

- Movement restrictions,
- Quarantine protocols,
- Disinfection procedures,
- Culling of infected animals



Regional Roadmap

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Recommendations

Overarching

- Advocate for **increased investment** and **stakeholder awareness** – **opportunities** to work with **private sector** for surveillance and vaccination campaigns + monitoring
- Improve technical **capacity** (surveillance, labs, epidemiology, biosecurity, vaccination)
- Harmonize systems **across countries** for certification, reporting, and vaccination.
- Establish regional vaccine procurement and quality assurance systems.
- Enhance surveillance and sample shipment mechanisms.
- Strengthen **biosecurity** and **movement controls**, including livestock identification for traceability.

PPR-Specific

- Adopt an **episystem-based** approach for surveillance and vaccination.
- **Progress** along PMAT and seek WOAHA recognition for PPR-free status.
- Involve **private actors** in vaccination campaigns.
- Coordinate **cross-border** surveillance and movement control.
- Use seroprevalence surveys for campaign adjustments.
- Apply stamping out and ring vaccination in residual hotspots.

Partnership opportunities (PMAT)

Workforce enhancement

- **Surveillance and Diagnosis:**
 - Understanding of case definition - PPRV recognition and differentials
 - Reporting : Easy access to reporting systems and pathways (private and communities); integration of ante and post-mortem (PVS CC – major cities, abattoirs, export facilities) , wildlife, atypical species (mixed herds) surveillance data, included under VS chain of command
 - Participate in appropriate sample collection and submission – sample type, collection and transport requirements (WOAH manual)
 - Contribute data on Animal Identification and Traceability
 - Implementation of disease -free zones or compartments
 - **Reported cases fully investigated & characterized within 30 days from estimated onset (80% outbreaks systematically investigated especially in vaccinated populations - SOP)

Prevention and control

- Targeted **assessments** (including vaccination coverage, post vaccination monitoring),
- **Vaccination** planning and delivery & funding, vaccine supply; emergency funding kitty?
- Implementation of **biosecurity**, support safe trade of animals – awareness to deter illegal movement
- Access in **hard to reach areas** for access to animal health services
- **Contingency plan** – formulation/refining, simulation and actual implementation
- Involvement in **national PPR monitoring plan**

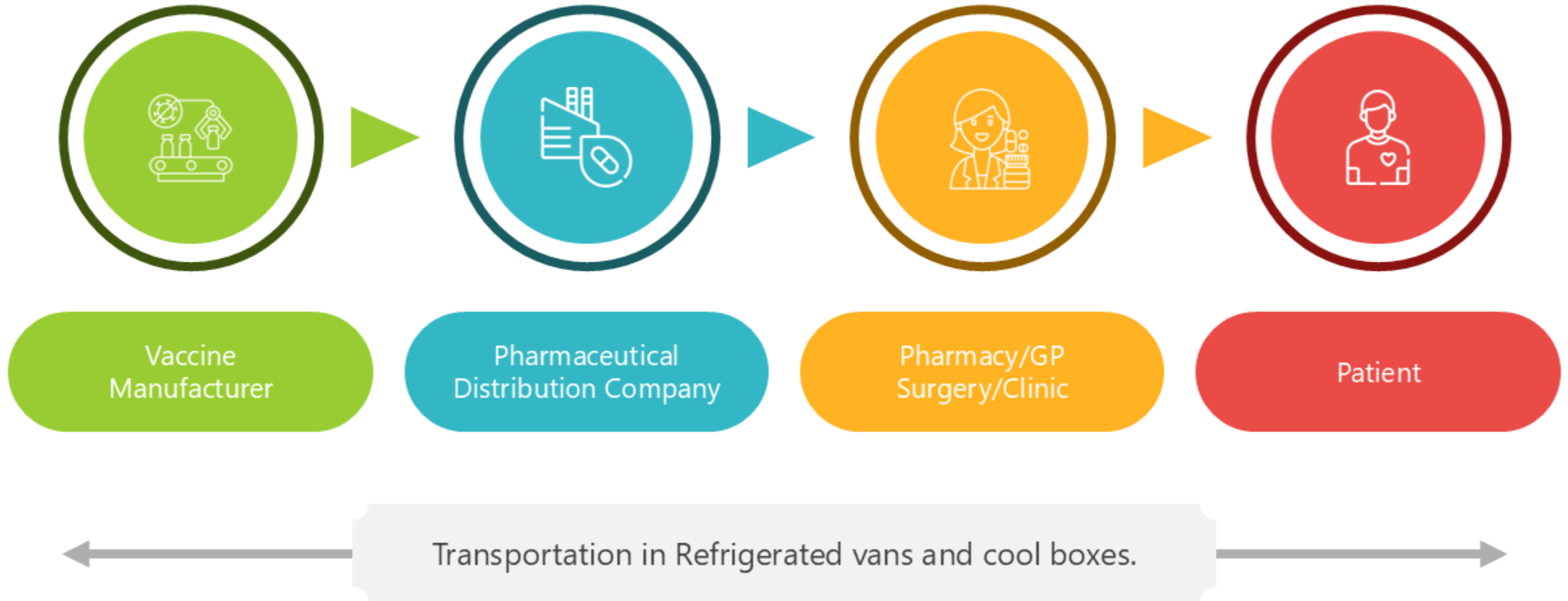
Stakeholder engagement

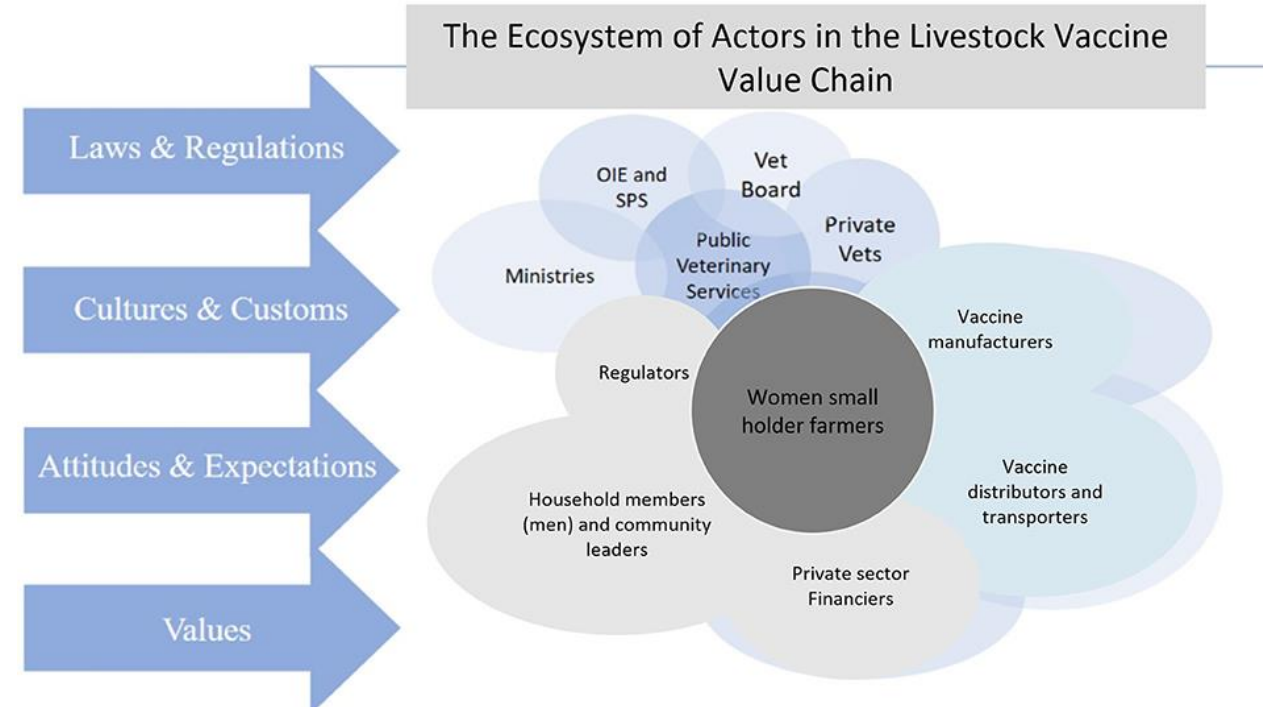
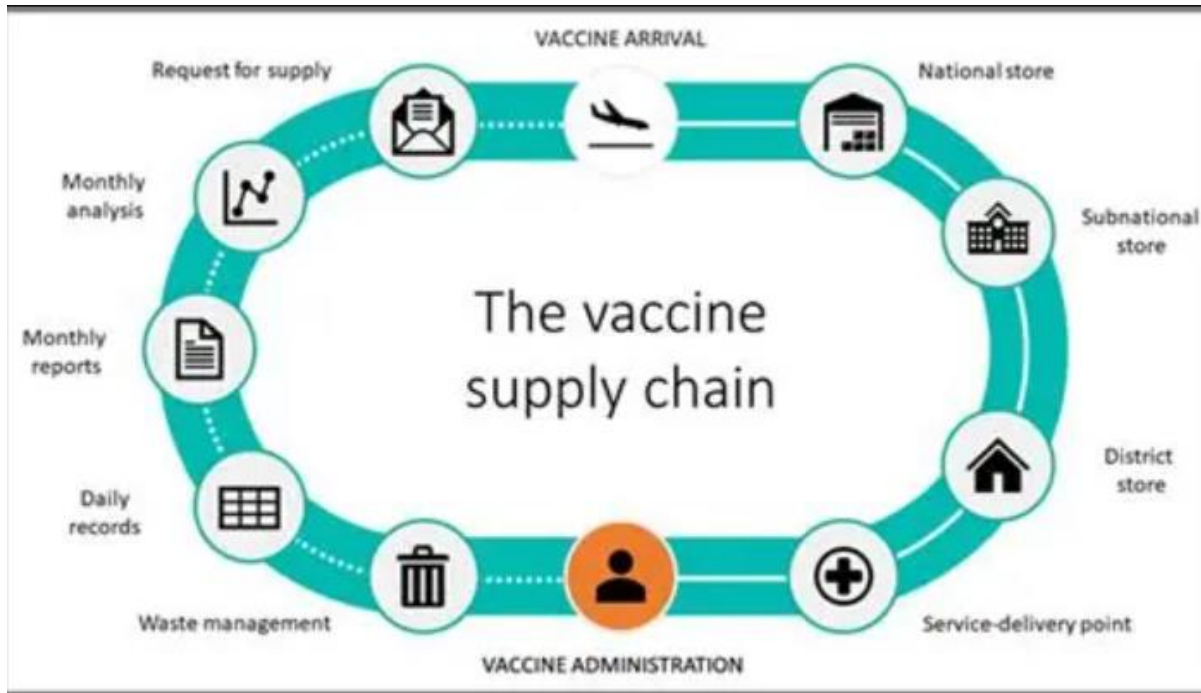
- Dissemination and training on risk communication and **awareness** material

****Including for other priority small ruminant diseases **Contribute to AMR/AMU**

Vaccine Supply Chain

Typical Cold Chain





Thank you

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