



Food and Agriculture Organization
of the United Nations

Training workshop for North Africa on **Peste des petits ruminants (PPR)** **surveillance and epizootics** to enable disease detection, control and eradication

Virtual meeting
21-23 November 2022
10:30-13:00 CET

Concept note, agenda and list of participants



Background

The Peste des Petits Ruminants (PPR) Global Control and Eradication Strategy (GCES) was approved in 2015 under the umbrella of the Global Framework for the progressive control of Transboundary Animal Diseases (GF-TADs). Its specific objectives are (i) to eradicate PPR by 2030, (ii) to strengthen veterinary services, and (iii) to reduce the impact of other major infectious diseases of small ruminants. These objectives, in turn, will promote a small ruminant sector that contributes to global food security, human health, and sustainable livelihoods. The strategy is implemented via the PPR Global Eradication Programme, launched in 2016 and coordinated by a joint FAO-WOAH PPR Secretariat.

Countries' progress along the stages of the PPR eradication pathway, from assessment, to control, eradication and then maintenance of official PPR-free status, is assessed using the PPR Monitoring and Assessment Tool (PMAT), recently revised into a more user friendly version (PMAT2). This tool is based on the evaluation of five technical elements, namely: i) diagnostic system, ii) surveillance, iii) prevention and control, iv) legal framework, and v) stakeholders' involvement in PPR activities.

During 2021-2022, Regional Consultation meetings were held to inform the second phase of the PPR GEP (PPR GEPII); such a consultation meeting was held for North African countries on 27-29 September 2021. At these meetings, several countries highlighted the importance of establishing or further strengthening their surveillance for PPR, as the basis for understanding the epidemiological situation within the country and developing appropriate control and eradication strategies.

During these regional meetings, the formal and informal movement of animals, both locally and across national borders, was highlighted as one of the impediments to controlling the disease, including for North Africa. Based on these discussions, **an episystem approach** for detecting, controlling, and eradicating PPR has been suggested as the critical basis for PPR GEPII, which will be launched 04/11/2022.

A disease episystem is defined as a domestic small ruminant population that is capable of maintaining circulation and transmission of a virus indefinitely. This may comprise one large population or, more frequently, smaller host populations that are inter-linked through pastoral movements or value chain activities. Importantly, PPR episystems may cross national borders, or the limits of Regional Economic Communities (RECs). Defining the episystems present in a region requires conventional and participatory epidemiological approaches to understand the host populations and their contact patterns, and to map the predominant small ruminant value chains and the actors involved. This needs to be supplemented by PPR virus genome sequencing to enable molecular epidemiological analysis of the genetic relatedness between different viral strains, that in turn can provide evidence to support the existence of episystems, either driven by geographical proximity or by value chains. Control measures which are targeted to episystems will be more cost-effective and enable more rapid progress along the stepwise pathway of PPR control and eradication.

In synergy with DTRA-funded (GCP/GLO/074/USA) and EU-funded (GCP/GLO/091/EC) projects to support the PPR GEP, the FAO PPR Secretariat aims to conduct a regional training course for North African countries to provide an overview of surveillance activities relevant for the PPR GCES, to present other epidemiological aspects that may assist in defining the regional episystems and targeting control and

eradication strategies accordingly, as well as to seek updates from countries to inform ongoing support from FAO under the above-mentioned projects.

The workshop

The objectives of this workshop are:

- To sensitise countries on PPR GEP and PPR PMAT
- To provide a refresher on the clinical presentation, transmission and risk factors for PPR
- To introduce different PPR surveillance approaches, the episystems concept and the tools needed to identify episystems (including conventional, participatory and molecular epidemiological approaches and animal tracing)
- To discuss information needed to define existing episystems in the region

Organizer: FAO Regional Office for Near East and North Africa (SNE) and the FAO PPR GEP Secretariat

Dates: **Monday 21st -Wednesday 23rd November 2022**; the workshop will be organised in three morning sessions (10:30-13:00 CET)

Technical equipment: The virtual meeting will be held by Zoom

Languages/Interpretation: English-French with simultaneous interpretation, organised by FAO SNE

Target countries (6): Mauritania, Morocco, Algeria, Tunisia, Libya, and Egypt

External participants from each country: FAO-SNE; FAO Country officers (for each country); PPR National Coordinators; National epidemiologists; National laboratory coordinator, Veterinary services personnel, Field/official veterinarians, private veterinarians, persons from academic research institutions, specific national centers, analysis laboratories, small ruminant value chains and Arab Maghreb Union

[anticipated 5/6 participants per country = 30/36 external participants total]

Training sessions:

- i) Present basic concepts about PPR (aetiology, disease transmission, risk factors, pathogenesis)
- ii) Provide an overview of surveillance and disease management activities relevant for PPR control and eradication (including syndromic surveillance, outbreak investigation, and data and sample collection)
- iii) Introduce the episystem concept and its relevance for the control and eradication of PPR
- iv) Introduce specific surveillance and epidemiological activities (participatory and molecular), and animal identification and tracing approaches that can contribute to determining the episystem(s) present
- v) Working group discussion to identify existing episystems within the region

Provisional agenda

Day 1: 21 st November		Facilitator: FAO SNE
Time allocated (CET)	Topic	Speaker
10:30-10:50	Welcome addresses and overview of workshop objectives	FAO SNE & PPR Secretariat
10:50-11:10	Introduction to PPR GEP, PPR PMAT and PPR disease 'basics'	PPR Secretariat (Camilla Benfield)
11:10-11:25	Overview of PPR in the region	FAO SNE (Soufien Sghaier)
11:25-11:35	Q and A / discussion	All
11:35-11:45	BREAK	
11:45- 12:05	Syndromic surveillance	PPR Secretariat (Hassen Chaka)
12:05-12:25	Outbreak investigation for PPR	PPR Secretariat (Giancarlo Ferrari)
12:25-12:45	Morocco experience of implementing surveillance-informed PPR eradication	Morocco
12:45-13:00	Q & A/ Wrap-up discussions	All

Day 2: 22 nd November		Facilitator: PPR Secretariat
Time allocated	Topic	Speaker
10:30-10:50	Welcome and recap from previous day	PPR Secretariat
10:50-11:10	Introduction to PPR episystems	Jeffrey Mariner (PPR GEP Core Expert team)
11:10-11:50	Overview of components of different surveillance systems and activities (focusing on OIE guidelines)	PPR Secretariat (Laura Falzon)
11:50-12:00	BREAK	
12:00-12:20	Risk-based surveillance for PPR	PPR Secretariat (Giancarlo Ferrari)
12:20:12:40	Questionnaire and data collection-form explanation	PPR Secretariat (Laura Falzon)
12:40:13:00	Q & A/ Wrap-up discussions	All

Day 3: 23 rd November		Facilitator: Tbd
Time allocated	Topic	Speaker
10:30-10:50	Welcome and recap from previous day	<i>PPR Secretariat/FAO-SNE</i>
10:50-11:10	Participatory epidemiology and participatory disease surveillance	<i>Jeffrey Mariner</i>
11:10- 11:30	National Animal Movement and Animal Identification Tracing	<i>FAO Georgia</i>
11:30-11:40	BREAK	
11:40-12:00	Introduction to PPR virus sequencing and molecular epidemiology	<i>PPR Secretariat (Satya Parida)</i>
12:00-12:10	Q & A	<i>All</i>
12:10-12:30	Plenary group discussion on epizootic identification, including joint activities for animal movement tracing etc	<i>All (Facilitator: Camilla Benfield/ Giancarlo Ferrari/ Jeff Mariner)</i>
12:30-12:50	Plenary group discussion on actions arising and country needs	<i>All (Facilitator: Camilla Benfield/ Giancarlo Ferrari/ Jeff Mariner)</i>
12:50- 13:00	Concluding remarks and close of workshop	<i>PPR Secretariat/FAO-SNE</i>

