



Food and Agriculture
Organization of the
United Nations



World Organisation
for Animal Health

8TH ANNUAL MEETING OF THE PPR GLOBAL RESEARCH AND EXPERTISE NETWORK (PPR-GREN)

25 – 27 NOVEMBER 2025 QINGDAO, CHINA



中华人民共和国农业农村部

Ministry of Agriculture and Rural Affairs of the People's Republic of China



中国动物卫生与流行病学中心
China Animal Health and Epidemiology Center

A GF-TADS initiative for
PPR control



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

Socio-economics Thematic Group

Past, Present and Future

Dr. Govindaraj Gurrappa Naidu (Focal point) (govindaraj.naidu@icar.org.in)

Dr. Ladi Chabiri (Focal point) (ladichabiri@yahoo.com)

Dr. Alia Hassan (Group Leader) (alia.hassan11@hotmail.com)

Vision

The Socioeconomic Group within PPR-GREN is dedicated to **understanding and addressing the socio-economic dimensions of PPR**, emphasizing how disease eradication affects communities, livelihoods, and local economies.

Group's Structure

The group consists of 31 members, including one leader and two focal points.

1st PPR-GREN, Vienna 17-19 April 2018

I) TOR

- **Multi disciplinary research** advocated to understand epidemiology
- Encourage research in socio-economics (**incentives for community participation, vaccine delivery systems** to control/eradicate PPR)

II) Thematic Areas

PPR epidemiology including **socio-economic factors** and the livestock-wildlife interface

III) Priority research

- Drivers for **small livestock movement**; Understanding **socioecological systems**; **Identifying risk factors**; **Tangible and intangible costs** of PPR and PPR control on households
- **Benefits of eradication** (poverty reduction, biodiversity conservation, small cycle stock shortest route to removing childhood stunting), **ease public burden, establish metrics**

2nd Meeting, Kenya 13-15 November 2019

- PPR **epidemiology including socio-economic factors** and the domestic / wildlife interface
- Session I: KDVS, Kenya –Evaluated 2006-2008 PPR outbreaks which resulted in the death of **1.2 million small ruminants** with an estimated value of **USD 23.6 million** and a **drop in milk** production of **2.1 million litres**
- Session IV: PPR Socio-Economic Impacts Global- **Case studies examining role of gender in PPR control from Asia and Africa** (Nicoline De Haan).

data and case studies to governments to change the top-down narrative on vaccination campaign and showed that **bottom-up approaches (community-based approaches)** can improve vaccination campaigns, with better targeted strategies.

Research Gaps identified

- ❑ Impact and cost of PPR at different levels (value chain approach)
- ❑ Perceptions of the value of vaccination & impact on acceptance
- ❑ Cost-benefit analysis of vaccination for increasing uptake.

Separate thematic group was established

- ❖ ‘Socio-economics (understand impact of PPR on different people, generate evidence to inform policy)’

III Meeting (virtual) 9-12, November 2020

Socio-Economics Group

Advocated to take up studies

- **Impacts of the disease across settings –to make** economic case for PPR eradication.
- **Generate evidence-for decision making, fundraising activities** for its political dialogue.

Presentations

- **Social accounting matrix**, (a reduction in agricultural GDP by 0.47% and a loss of nearly 220,000 jobs due to PPR in Ethiopia)
- **Approaches for Animal health modeling**-system dynamics modelling (that accounts for complexity of animal value chains); ECO-PPR project in east and west Africa-led by ILRI

III Meeting (virtual) 9-12, November 2020

SESSION 2: SOCIO-ECONOMICS

- More socio-economic impact studies and frameworks to enhance awareness among high level decision makers and encourage them to allocate funds and reduce the impact of PPR in their communities;- benefit–cost ratios for PPR interventions;-
 - Importance of gender and age in PPR control and eradication strategies:- ways to address the lack of accessibility to vaccines for all stakeholders, especially for women and youth;-
- in participatory modelling, designs for more gender- and youth-sensitive role-playing games.

Knowledge Gaps identified

- Socio-economic impacts of PPR in wildlife.
- Value chain barriers to vaccination should be identified.
- Livestock movement patterns should be identified with regards to their implications for PPR control.
- The willingness to pay for vaccination and the willingness to identify or mark vaccinated animals should be addressed.
- Socio-economic surveys to be developed for vaccination campaign monitoring and impact assessment

Advocacy

- Private and public sectors should remain important actors in implementing the PPR-GEP.
- The power of participatory methods and should be incorporated into national implementation plans.
- The various modelling approaches that were presented should be examined and applied to enhance the PPR-GEP II

IV meeting (Virtual) 6-8 Dec 2021

Advocacy (socioeconomics)

- ✓ Socioeconomic studies- should include both **pastoralist** and **sedentary production systems** as well as contrast **different geographical regions**.
- ✓ Assess the **socio-economic impact of PPR** (as relates to both small ruminants and wildlife) that **will assist for advocacy to invest** in PPR control from a **One Health perspective**
- ✓ Implement **gender transformative approaches** and **create awareness** (through preparation of leaflet, infographic, guidelines..) to empower **gender, youth and other value chain** actors in the PPR eradication

V GREN-Montpellier, France 7-9 Dec 2022

Session 5 Socio-economics:

- ❖ Identification of the determinants of animal mobility to better anticipate the spread of **PPR** (Senegal and Mauritania)-**cross-border movements for grazing**
- ❖ **Willingness to Vaccinate (WTV) and Willingness to Pay (WTP) for Vaccination in Senegal**-1/3rd did not vaccinate, no to ear notch, cost of vaccination is not main concern, if mortality reduces and increase value
- ❖ A “Pesto”, a co-learning serious game for unveiling obstacles and designing solutions for the local control of Peste des Petits Ruminants (PPR)-**farmers want to revaccinate animals every year, less vaccine accessibility, Participants recognized ONLY Diarrhea as a PPR symptom**
- ❖ Socio-Economic impact of PPR Vaccination in Sheep and goats in Madhya Pradesh state, India: A cross-sectional study. **Vaccination coverage increased to 80% 2016-17. Incidence appears to have rebounded after control programme ended. Large Positive BCR predicted - BCR of 5:1**

VI 28-30, November 2023, Bengaluru, India

Presentations:

- Assessment of PPR vaccination impact in Karnataka state, India: **A system dynamics model approach**, -Loss of **USD 24.76 million(2020-21)**, Benefits of 4 vaccination coverage scenarios were evaluated (flock size is high under 100% scenario)
- **Impact of PPR in smallholder systems** in Northern Nigeria

Thematic group activities implemented during 2023

- The working group meetings
- **Finalized the socioeconomic impact studies** in Ghana, Niger and the Democratic Republic of the Congo.
- Prepared leaflets summarizing the **socioeconomic impacts of PPR in 14 countries.**
- **Conducted webinar** on socioeconomic studies.
- **One PPR special prize winner** undertaken KAP study in Cameroon.

VII 20-22, January 2025, Abu Dhabi, UAE

Invited talk(1): Applying a **utilization-focused evaluation approach** to assess the LIDISKI project's effects on the prevention and control of PPR in northern Nigeria.

Invited talk(2): **Eco-PPR Project: Lessons Learned in West Africa**

Presentation

1. **Knowledge, Attitudes and Practices** of smallholder farmers regarding PPR in the five agro-ecological zones of Cameroon
2. **Cost-Benefit Analysis of PPR Vaccination: A Case for Global Investment**
3. **Partial budget analysis of vaccination** against Peste des Petits Ruminants by local herders over 12 months in Mongolia

Group's Activities

Regular Communication

- **Virtual meeting** for progress updates
- **WhatsApp group** for instant communication

Accomplished:

- **Reviewing and updating the group's Plan.**
- Associated with **FAO/WOAH/PPR-Secretariat** in organizing socio-economic meeting at ILRI, Nairobi during 11-14 May 2025
- **Prioritizing the research activities** in the annual PPR-GREN meeting based on discussions

- **Systematic review completed**
- **CBA –Case studies**
- **Issues/Barriers on PPR vaccination**

Partnership Development

- **Initiated collaboration with SEBI**, an organization that supports BMGF internal planning

Future Thematic group action points

A) Within the group

- Encourage **more research** in socioeconomic impact studies
- **Increase the number of meetings** using webinars on the socioeconomic impact of PPR.
- Turn the **outcomes of studies into policy briefs**

B) Between the thematic groups

- **Organize regular **joint sessions** with other thematic groups** to identify common interests and areas of collaboration.
- **Collaborative Research and Knowledge Sharing:**
 - **Develop joint studies** on cross-cutting topics (e.g., Cost Benefits study for vaccination program, gender in animal health, Animal mobility).
 - Share relevant research findings, reports, and data with other groups to promote evidence-based decisions.
- **Co-Organized Events and Webinars:**
 - Plan joint webinars or workshops to discuss topics of shared interest.
- **Regular Updates and Feedback:**
 - Provide periodic updates to other thematic groups on socio-economic activities.
 - **Collect feedback to improve joint initiatives.**

Research Gaps to be addressed

- **Baseline information collection** in different states/countries/ regions to assess the real socio-economic impact of PPR.
- **Conduct cost-benefit analysis** at the national, regional and global levels.
- Evaluation and cost-benefit analysis of **vaccine delivery, community-based systems for vaccination and surveillance.**
- Estimate **the cost of the end game** or verification phase (surveillance) of PPR.
- Socio-economic impact associated with different **vaccination strategies**
- **Comparative analysis of PPR eradication with other human health diseases** planned for eradication (methodological issues).
- Willingness to accept the vaccination/willingness to pay
- **Issues related to combined vaccination**, mapping disease overlap
- **Small ruminant diseases as a group vis-à-vis single disease.**

Cont.

- **Understanding of stakeholder incentives** for participation in surveillance and control programmes.
- Identifying the **challenges in implementing National strategies** towards eradication of PPR
- Involvement of the **private sector** in PPR eradication efforts
- **Economic drivers of animal mobility** and issues for PPR eradication
- **Donors' engagement** to increase funding opportunities
- **Gender and youth related studies-** importance of women/youth in sheep and goat rearing and PPR eradication
- **Biosecurity and PPR incidence**
- **Framework for converting results to policy**
- **Update on the impact of vaccination with the recent data**

Challenges-Thematic group

1. **Less numbers** in the socio-economic group (possibly we can include more-GBAD team).
2. **Obtaining funds** for socioeconomic issues/studies.
3. **Lack of field-level socio-economic data** associated with livestock production and health across production system and regions.
4. Most of the socio-economic researchers are **working on various other diseases besides PPR**, hence less involvement
5. **Capacity building** of the researchers.
6. Most **donors' support is focused on zoonosis** rather than PPR.



Thank you...