

Eradicating *Peste des petits ruminants* (sheep and goat plague) to fight rural poverty

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Peste des petits ruminants (PPR), or sheep and goat plague is a fast spreading and devastating viral disease that affects and kills small ruminants. Since its initial identification in Côte d'Ivoire in 1942, the disease has spread to over 70 countries in Africa, the Near and Middle East, and Asia.

The FAO and the OIE, supported by their respective membership, have jointly agreed that the control and eventual eradication of the disease by 2030 will contribute majorly to achieving the United Nations Sustainable Development Goals (SDGs), in particular the elimination of poverty (SDG1 – “No poverty”) and the end of hunger and malnutrition (SDG2 – “Zero Hunger”).

Fighting rural poverty

PPR, year after year, deeply affects the lives of some 300 million of the world's poorest families, whose livelihoods depend on sheep and goats.

Over 80% of the world's sheep and goat population is at risk of becoming infected by the disease, which can kill over 90% of animals exposed. PPR causes annual global losses estimated at US\$1.4 billion to US\$2.1 billion.ⁱ

PPR has spread at an alarming rate over the past 15 years, reaching regions previously free of the disease.ⁱⁱ If left uncontrolled, it will spread even further, causing additional losses and hardship for millions of farmers and herders, most of whom are women, whose livelihoods depend on sheep and goats.

Sheep and goats also play an important cultural role for many people around the world, both in their day-to-day lives as well as in their religious belief systems.

The eradication of PPR will preserve the income and asset base of 300 million families. Sheep and goats are a source of regular income, a means to capitalize savings and a safety net to face hard times. Selling animals or their products provides resources required to access food, as well as educational and social services for their families.

PPR eradication will foster the economic empowerment of women in parts of the world where empowering women is game-changing. Women are often responsible for such small domesticated animals for both providing food and better nutrition for their families and selling the related products in local settings.

Ensuring food security and nutrition

Animal source food from sheep and goats is an essential part of the daily diet of many people and contributes to overcoming malnutrition. Moreover, the sale of animals allows for the purchase of other food and a diversified diet. This is particularly important during food gaps in the dry season.

Sheep and goat milk and meat are of high nutritional value, particularly for children, as they provide high quality protein and essential micronutrientsⁱⁱⁱ critical for growth and cognitive development.

Eradicating PPR tackles food insecurity and malnutrition, resulting in a lasting positive impact on the nutritional status of some of the most vulnerable populations.

Strengthening resilience and national economies

A PPR outbreak is an emergency due to its rapid and high animal mortality rate. It disproportionately affects the livelihoods and can decimate the savings of vulnerable and poor populations.

In the absence of vaccination, the cost of treatments of symptoms places a great burden on the budget of livestock owners. Even when animals survive the disease, they lose productivity.

Small ruminants and their products are internationally traded commodities, particularly in Africa and the Near and Middle East. PPR considerably affects export earnings and creates supply shortages.

The inability of families, communities and institutions to anticipate, absorb or recover from sheep and goat plague can compromise national and regional development efforts, and negatively impact decades of development achievements.

People become destitute when they lose their assets due to disease. Such outbreaks can therefore trigger migration movements and create volatile security situations, particularly when they occur in areas of food insecurity and conflict.

Sheep and goats are moveable assets that can be relocated in times of climatic stress or volatile security situations. Eradicating PPR will therefore sustainably improve the resilience of poor farmers and their communities, and enable them to better manage other shocks and threats, particularly in crises-prone and fragile environments, mitigating further migratory trends.

Eradication will also increase the economic potential for farmers and other participants in the value chains of sheep and goat meat, milk, wool, leather and fibre. In aggregation, eradicating this disease can contribute to an increase in agricultural GDP in many low- and middle-income countries.

The path to the control and eventual eradication of *Peste des petits ruminants*

Eradication of PPR from the planet is technically achievable. It will have major development impacts, particularly for the poorest populations – but it requires sufficient political and financial investments:

- The disease can be eradicated worldwide by 2030. This requires a globally concerted effort to support both national and regional actions to control and subsequently eradicate the disease.

- PPR is readily diagnosed, and a reliable, inexpensive and high quality vaccine is available that confers lifelong immunity to vaccinated animals.^{iv}

- Strengthening the capacities of national Veterinary Services to control and eradicate this disease will also generate wide-ranging benefits in the fight against other animal diseases.

- Engagement of communities in the implementation of the eradication programme will also result in professional and income generating opportunities in poor and rural areas, namely through training and capacity-building of veterinary para-professionals and community animal health workers.

An international conference on PPR endorsed a global strategy in April 2015, targeting the control and eradication of the disease.^v FAO and OIE governing bodies have endorsed the strategy based on a broad international consensus, and have established an FAO-OIE joint global secretariat to guide the eradication of PPR.

An initial PPR global eradication programme for 2017-2021 has been developed by FAO and OIE, through an inclusive and peer-reviewed process. It will contribute to control the disease and be a first step towards eradication. The cost of this initial five-year programme, launched in October 2016, is estimated at USD 996 million.^{vi}

The emerging international consensus and political support for the eradication of PPR – or sheep and goat plague - the technical feasibility and high rates of return on investment that span generations, and the proven

FAO-OIE partnership in successfully eradicating transboundary animal diseases – such as rinderpest – are all strong guarantees of success.

A PPR pledging conference, hosted by the European Commission, will be organized during the first semester of 2018 in Brussels. Country Representatives, development partners and stakeholders will be mobilized to gather resources for the implementation of the programme.

ⁱ Sheep and goats are reared within a variety of production systems and provide also milk, meat, wool, fibre, and skins. PPR eradication therefore comes with a high cost/benefit ratio, as was previously achieved with rinderpest, the first successfully eradicated animal disease.

ⁱⁱ In 2016, it was reported for the first time in Georgia (over 800,000 small ruminants) and Mongolia (over 50 million small ruminants).

ⁱⁱⁱ This includes, inter alia, Vitamins A, B2, B12, D, as well as folate, iron and calcium.

ⁱⁱⁱⁱ An initial assessment of the country's epidemiological situation is crucial followed by the establishment of a functional surveillance system. There are no latent carrier states or wildlife reservoirs for this disease, which further simplifies the eradication efforts.

ⁱⁱⁱⁱⁱ Considering PPR's similar epidemiological profile, lessons learned from the successful eradication of

rinderpest were the basis for the policy recommendations.

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