

PANORAMA

Thematic portfolio



Pastoralism and sanitary challenges



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PERSPECTIVES

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A pilot project named 'Vaccine Standards and Pilot Approach to PPR Control in Africa' (VSPA) was implemented from 2012 to 2014 by the OIE in partnership with the African Union Panafrikan Veterinary Vaccine Centre (AU-PANVAC) and with the scientific support of the Centre for International Cooperation in Agricultural Research for Development (CIRAD). It was funded by the Bill & Melinda Gates Foundation.

Objectives

- 1) establish a PPR vaccine bank for Africa (component 1)
- 2) strengthen continental capacities in terms of quality control of PPR vaccines (component 2)
- 3) develop a pilot strategy to determine how to most effectively combat PPR in West Africa (component 3).

Component 1 was implemented in West Africa, component 2 throughout sub-Saharan Africa and component 3 in Burkina Faso and Ghana.

PPR affects almost 30 million small ruminants every year. The disease has sizeable negative socio-economic impacts on the income of livestock farmers and it affects a large number of countries in Africa, the Middle East and Asia. Eliminating the disease will result in improved productivity, food security and income generation and is key to poverty reduction.

Multiple small ruminant production systems exist. Animals can be raised in marginalised extensive production systems or by smallholders with limited access to services. PPR control strategies can therefore prove to be very complex. They require a good understanding of these production systems and the design of targeted, risk-based approaches that can be adapted to different contexts.

Vaccination is the major method used in PPR-endemic regions but, to be effective, the vaccination programmes have to cover a high percentage of the small ruminant populations and use a wide range of delivery systems.

To ensure that vaccination is effective, high-quality vaccines have to be made permanently and easily available. To meet this prerequisite, [a PPR vaccine bank was created](#) (component 1) and [the laboratory capabilities to produce such high-quality vaccines were supported](#) (component 2), particularly by strengthening the AU-PANVAC in order to regularly monitor and control all PPR vaccines manufactured in Africa, in accordance with OIE standards. A quality control strategy for PPR vaccines produced in Africa was developed [1].

In order to take the many epidemiological and socio-economic contexts into account, it was indispensable [when implementing the VSPA project, and in particular its component 3](#), to increase the number of trials and to monitor and precisely evaluate the vaccination conditions in order to determine the effectiveness rate of the various vaccine delivery systems and define a scientifically sound control strategy.

Results

Within two years, a large amount of work was completed in the field and a substantial quantity of data was analysed.

The data and conclusions of the pilot strategy were used in the drafting of the Global

| *Strategy for the Control and Eradication of PPR*

From the results of these trials and using various vaccination delivery scenarios, the VSPA project enabled lessons and conclusions to be drawn, which made a crucial contribution to the [Global Strategy for the Control and Eradication of PPR](#) [2] being prepared by the OIE and FAO. This strategy was subsequently presented to and endorsed by the participants at the [OIE/FAO International Conference for the Control and Eradication of Peste des Petits Ruminants \(31 March–2 April 2015 in Abidjan, Côte d'Ivoire\)](#).

The implementation of the three components of the VSPA project was successful. It showed the importance of establishing a regional PPR vaccine bank and of strengthening AU-PANVAC's leading role in supporting and managing a vaccine quality control strategy in Africa. Regarding the implementation of the pilot strategy (component 3), all expected results were achieved. The methods and strategic options, particularly for vaccination schemes, were tested and these tests made it possible to identify the factors which are important for the success or failure of PPR control programmes.

PPR can be controlled and eradicated and rapid results can be obtained at the national level and in some regions. Global eradication is a long-term objective.

PPR eradication can be used as a flagship strategy for controlling other small ruminant diseases and it must be based on strong Veterinary Services. The OIE will continue to support its Member Countries in developing the implementation of a PPR global eradication programme together with FAO as part of the [GF-TADs programme \(Global Framework for the Progressive Control of Transboundary Animal Diseases\)](#).

Acknowledgments

The VSPA project was implemented with the strong involvement of many professionals, including the authorities of Ghana and Burkina Faso and particularly the Veterinary Services authorities (Lassina Ouattara, Joseph Savadogo, Philipp K.B. Salia, Stephen Ockling, Germaine Minoungou, Amadou Dicko and Joseph Awuni) and their teams, OIE Bamako and Headquarters staff (Daniel Bourzat, Yacouba Samake, Joseph Domenech and Alain Dehove), AU-PANVAC staff (Karim Tounkara, Nick Nwankpa and Charles Bodjo), CIRAD researchers (Renaud Lancelot, Fanny Bouyer, Marisa Peyre, David Chavernac, Pachka Hammami and Geneviève Libeau), vaccine-producing laboratories staff, an independent expert (Pierrette Mefomdjo) and the donor, the Bill & Melinda Gates Foundation, deserves special mention.

We should like to take this opportunity to pay tribute to the role played by Daniel Bourzat, who passed away on 18 August 2017. With his great experience of livestock farming in the Sahel, he was the linchpin of the pilot strategy to combat PPR in West Africa.

<http://dx.doi.org/10.20506/bull.2018.2.2879>

AROUND THE WORLD

► SUCCESS STORIES

A pilot project to determine the most effective strategies to control and eradicate

PPR

KEYWORDS

#Africa, #African Union Panafrikan Veterinary Vaccine Centre (AU-PANVAC), #Centre de coopération internationale en recherche agronomique pour le développement (CIRAD), #eradication, #GF-TADs, #Global Strategy for the Control and Eradication of Peste des Petits Ruminants (PPR-GCES), #Peste des Petits Ruminants Global Eradication Programme (PPR-GEP), #peste des petits ruminants (PPR), #Vaccine Standards and Pilot Approach to PPR Control in Africa (VSPA)

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Photo: Daniel Bourzat

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