



Photo ILRI/Stevie Mann

INCREASING VACCINATION COVERAGE OF LIVESTOCK IN MALI THROUGH STAKEHOLDER INVOLVEMENT

KEY MESSAGES

Innovation platforms (IPs) are inclusion tools that promote multiple resources for members including learning, collaboration, and exchange of practices.

These platforms offer opportunities for empowerment, particularly for women.

Stakeholder engagement through IPs has served as an adequate sphere to improve participation of farmers to vaccination, especially women. There is a need to develop the IP sustainability strategy at the outset of the process.

INTRODUCTION

In Mali, vaccination campaigns against major endemic livestock diseases are conducted every year by the *Direction Nationale des Services Vétérinaires* (DNSV). Some of these diseases include contagious bovine pleuropneumoniae (CBPP), *peste des petits ruminants* (PPR) and bovine and ovine pasteurellosis.

However, adequate vaccination coverage that will lead to sufficient herd immunity is often hard to achieve. Some of the challenges to vaccination are (Dione et al. 2017):

- **Logistical:** for example, packaging of vaccines not suitable for producers who keep small number of animals; lack of sufficient cold chain for proper storage of vaccines especially in remote areas.
- **Socio-economic:** vaccinations that are unaffordable for some farmers; often lack of trust in the veterinarian because of the presence of poor-quality veterinary products.
- **Institutional:** non-adherence of farmers to herd registration to enable forecasting of vaccine production by producers.
- **Organizational:** insufficient awareness-training of producers and lack of transparent communication on the benefits of vaccination; vaccination campaigns that are poorly planned, monitored and evaluated. There is also a systemic lack of communication within the vaccine supply chain, leading to the inadequate flow of information about supply and demand which is needed for proper planning of the vaccination campaigns.

To address the various vaccination challenges, a multistakeholder approach through Innovation Platforms (IPs) was applied to create a sphere of learning, information sharing and interaction among vaccine supply chain stakeholders. The IP approach focused on three pillars:

- Communication and collaboration
- Knowledge sharing through collective action
- Capacity building

This IP approach has been successful in increasing uptake of vaccines by farmers and raising the health of livestock, which makes the livestock more productive.

Banner photo: Cattle at the Niamana Livestock Market, the largest of its kind in Bamako, Mali.



Photo ILRI/Michel Dione

Mass vaccination of cattle.

APPROACHES AND RESULTS

Approach

Bearing in mind that the concept of innovation systems to address complex agricultural problems is not new (Schut et al. 2019), this study focused on the practical application of the concept of IPs in the context of livestock vaccination in Mali. IPs were used as a mechanism to harness collective action to address low involvement of grassroots stakeholders in the vaccination process. IPs have empowered livestock value chain stakeholders to scale up innovations to increase livestock productivity. In 2016, through the Mali Livestock Scaling Program (MLSTP) (ILRI 2016), twenty-four IPs were put in place in the target communities of the project. The main stakeholders of the livestock vaccine chain delivery were included such as farmers, private veterinarians, vaccine producers and public veterinary services. Actors directly supporting farmers such as financial institutions and community leaders were also included (figure 1). Each IP set up a steering committee to convey meetings, develop work plans, document activities, and follow up implementation of innovations.

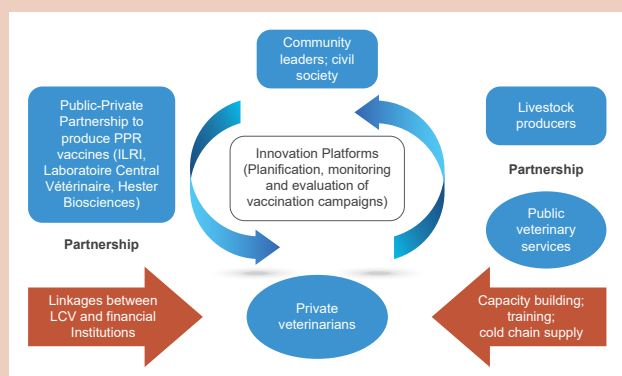


Figure 1: IP model framework.

Communication and collaboration

IPs facilitated the creation of village vaccination teams. The teams consisted of the area veterinarian, a public authority, a representative of the IP and a local leader. The vaccination team facilitated the linkage between the community and the veterinarian by setting up the vaccination dates in each village in consultation with the communities and mobilizing farmers to attend. Overall, the vaccination team supported the local planning execution, supervision and evaluation of vaccination campaigns together with the public veterinary services. IPs strengthened collaboration between the actors of the livestock value chain, and trust was restored between livestock farmers and private veterinarians.

Knowledge sharing and collective actions

IPs supported exchange and dissemination of information among livestock farmers about the benefits of vaccination through media such as local radios, triggered collective action and supported the local planning execution, supervision and

evaluation of vaccination campaigns together with the veterinary services. They facilitated the creation of market opportunities and supported capacity building and entrepreneurship of private veterinarians and their linkage to financial institutions. Through the IPs, stakeholders of the vaccine supply chain have understood and appreciated the importance of the roles that each actor plays in the vaccination process.

Capacity building

Providing livestock farmers, the opportunities to acquire new knowledge and husbandry practices were the most attractive points of the IPs. This lies in the adoption of new techniques of feeding and fodder production (especially the use of *Brachiaria*), and the technological packages for livestock fattening linked to market-oriented livestock-based entrepreneurship. IPs also supported capacity building activities by facilitating programme trainings in herd health and rolling out research activities.

Empowering women

Significant increases in participation of women farmers in the vaccination programs was documented in target communities. This was achieved by deliberately including women in the steering committee of each IP to contribute to the different activities of the IPs and raise any concerns especially those that are specific to them. Female farmer cooperatives were encouraged to diversify their sources of income through collective production and sale of mineral blocks for livestock feeding. The women also had the opportunity to engage with community level marketing activities and had access to financial institutions. Male farmers also diversified their activities with livestock fattening and the fodder production.

Increased vaccination coverage

Increased participation of farmers was shown by the increase in vaccination coverage of small ruminants and cattle (Figure 1). High vaccination rates have been reported in some communes in Mopti (Sio, Djenné and Fakala), Sikasso (Natien), and Timbuktu (Douekire) where vaccination of SRs has never been reported before.

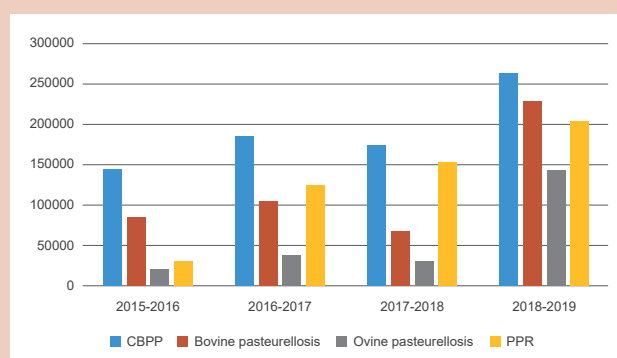


Table 1: Livestock vaccination in target communes of the project between 2015 and 2019.

CONCLUSION AND RECOMMENDATIONS FOR SUSTAINABILITY

In general, IPs have facilitated access to animal health services for men and women, the adoption of new production technologies, collective learning and access to expanded marketing networks for livestock farmers. A sustainability strategy for IPs must be designed and integrated into the process from the beginning. It could be structured around the following components :

- **Increased accountability of local actors from the initiation phase** to increase engagement and use of the innovations.
- **Inclusive participation to ensure legitimacy of the steering committee and the credibility of the IPs.** Active and inclusive participation by all actors in the livestock value chain; with clear operating rules established to promote transparency and effective management.
- **Establishing a realistic action plan supported by a resource mobilization strategy.** An action plan should be drawn up at the start with realistic priority objectives and clear messaging to demonstrate to farmers what the benefit is to them of adopting the technologies and practices.
- **Integration of the IPs into the Social, Economic and Cultural Development Plans of the municipalities by formation of a working committee.** The IPs would become an arm of the municipality, and as such could benefit from other funding opportunities available from local, regional or even national budgets. This would promote long term sustainability.

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Authors

Michel Dione¹, Ibrahima Traoré², Ahmadou Nouh Sow² and Abdou Fall¹

¹International Livestock Research Institute, Dakar, Senegal

²International Livestock Research Institute, Bamako, Mali

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Photo: ILRI/Michel Dione

Members of an innovation platform during a meeting in Farakala commune, Sikasso, Mali.

CONTACT

Michel Dione
m.dione@cgiar.org
Animal health scientist
ILRI

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