

Participatory diagnostics of animal health service delivery systems in Mali

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Workshop on the delivery of animal health services in extensive livestock production systems

Nairobi, 9-10 March 2017



Ruminant livestock sector in Mali

- Livestock is the main source of income for over 30% of the population
- 9 438 181 cattle, 12 458 525 sheep and 17 348 577 goats in 2012 (highest ruminant population in ECOWAS countries)
- 11% and 35% of the country and the agricultural GDP respectively
- 85% of rural households own ruminants
- At least 80% of woman own sheep and/or goats in areas of Mopti and Sikasso regions (project area)

- Low herd productivity  recurrent seasonal feed shortages, poor forage quality and high disease burden
- In 2006, 540,000 heads of cattle and 3.4 to 5.2 million small ruminants died, causing a loss of \$135 million, corresponding to 20% of the sectorial GDP
- In Central Mali, abortions rates are estimated at 3.3% of all parturitions and total deaths at 31.6% in cattle of 4 years of age
- Critical challenges in the delivery of animal health services

Objective of the assessment


- Assess the current situation of the animal health delivery systems in livestock value chains in Mali
- Suggest recommendations for improvement

Methods of Assessment

- Value chain stakeholder meetings
- Animal Health Innovation Platforms meetings
- Key informant interviews

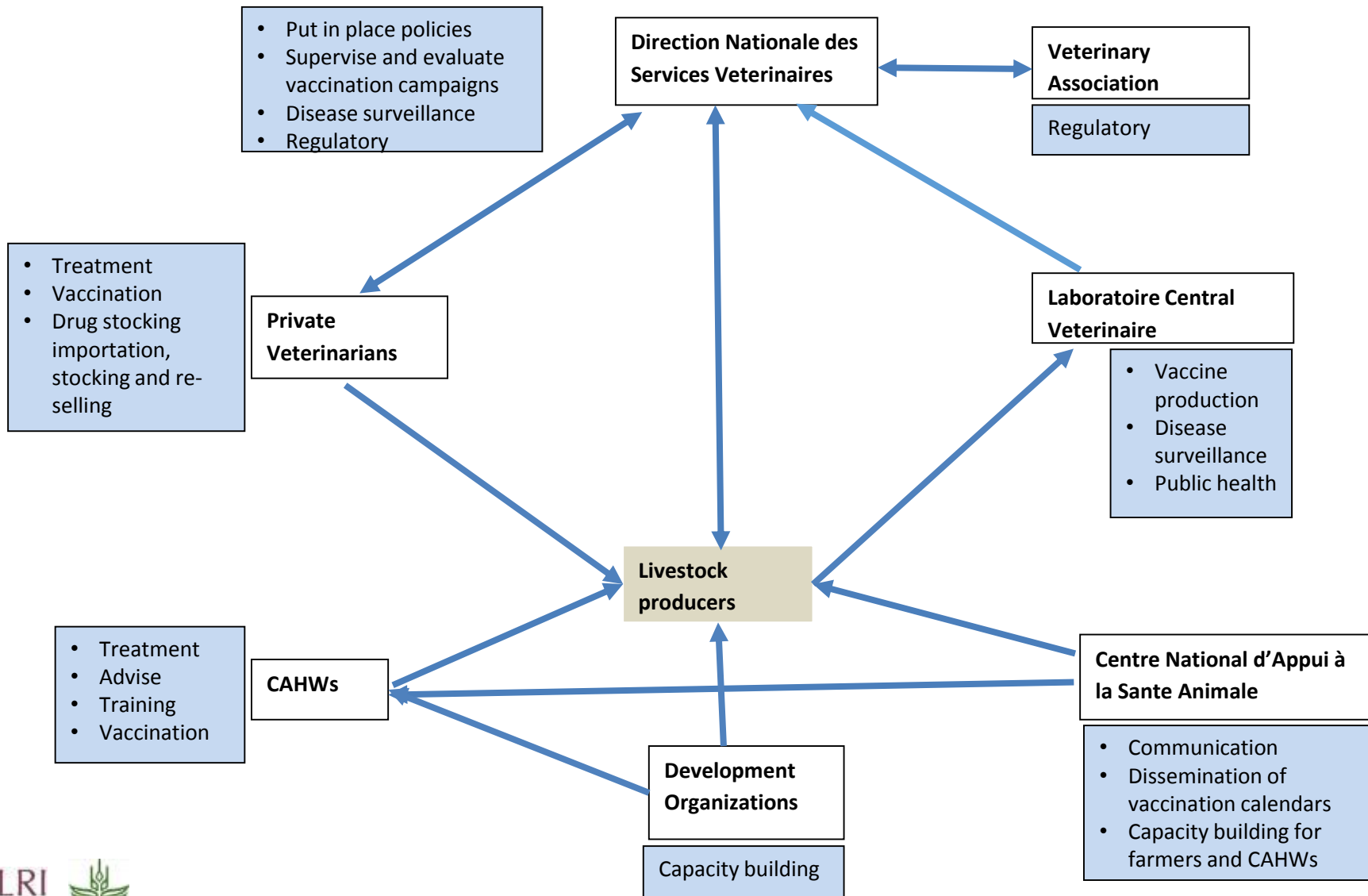


Animal Diseases Burden in Mali

- High prevalence of Contagious Bovine Pleura-pneumonia (CBPP), Peste des Petits Ruminants (PPR) and Food and Mouth Diseases (FMD)
- Parasites infections  Strongylosis, Distomatosis, Fashiolosis and Trypanosomosis especially in humid zones
- High burden of Anthrax and Blackleg (Blackquarter was considered to be highly prevalent in pastoral areas)
- High abortions rates in both cattle and small ruminants

- High mortality especially in small due to pasteurellosis
- Tick-borne diseases such as Cowdriosis and Piroplasmosis were less commonly cited
- Zoonotic diseases such as Anthrax, Bovine Tuberculosis, and bovine Brucellosis are reported

Roles of Institutions involved in the delivery of animal health services



Current vaccination programs in small ruminants and cattle

- Livestock vaccination is mandatory and routinely undertaken once a year for CBPP, PPR, Ovine pasteurellosis
- Anthrax, FMD and Pox are vaccinated only in endemic zones
- Black leg disease is vaccinated only in outbreak areas
- Blackquarter and Lumpy skin diseases are vaccinated on request from farmers

- Vaccines are produced by the LCV who in turns sells to the DNSV and other private companies locally or in the sub-region.
- The private veterinarians can also purchase the vaccine directly from LCV through their associations (ex. COVEM).
- Vaccination is carried out by the private veterinarians called “mandataires”.
- Farmers contributes at 100 to 125 FCFA per animal vaccinated.
- In areas where there is no mandataires, the DNSV does the vaccination using their own staffs.
- Timbuktu, vaccination is still free because it is done by running development projects through NGOs (insecurity).

Factors influencing good performances of vaccination campaigns

- Vaccine shortage
- Poor storage conditions of vaccines/cold chain
- Inadequate infrastructures (few communes equipped with vaccination runs)
- Poor knowledge of producers about the benefits of vaccination
- Lack of awareness of producers about vaccination calendars

- Lack of incentives of veterinarians to carry out vaccination in remote areas
- Inappropriate vaccine strains (case of pasteurellosis)
- Conflict of interest between herd keepers and owner of the animals
- Poor evaluation of vaccination campaigns (ex. absence of post vaccination sero-monitoring)

Management of veterinary drugs and other products

- A set of private companies are licensed by the Government to import and distribute veterinary products in the country
- Vet doctors and engineers in husbandry are licenced to operate drug stores
- Networks of retailers are clustered around the towns, not covering remote areas

Challenges in the use and management of veterinary products

- Persistence of illegal drug dealers' networks promoting unfair competition amongst drug dealers
- Proliferation of fake drugs are sold in many drugstores and markets at cheap prices
- Poor enforcement of the regulations governing trade and use of veterinary drugs (Veterinary association is weak)
- Self-medication by producers

Policy issues in the delivery of animal health services

- Conflict of interest → roles of different actors in the veterinary profession (vet doctors, engineers in husbandry, Paravets, CAHWs)
- Veterinary association not very strong
- Lack of regulatory framework in the production and supply of livestock vaccines between stakeholders (LCV, DNSV and “Mandataires”)

Recommendations for improvement of delivery of Animal Health Services

- Increase the number of veterinarians trained per year and intensify training programs for para-veterinary staff and CAHWs
- Facilitate of contractual arrangement between financial institutions and “mandataires”
- Use of ICTs to support dissemination of information on vaccination campaigns
- Insurance for farmers who get their animal culled during outbreaks if (they had been vaccinated)

- Introduction of traceability systems for livestock to reduce on corruption on movement permits, and enhance the control of trans-boundary diseases
- Innovation Platforms to foster synergies among livestock value chain actors through
- Review and enforce policies and regulations

Intervention in the FTF MLSTP to improve delivery of health services

- **Animal Health Multi-stakeholder's Platforms**
 - ✓ Information sharing on vaccination calendar
 - ✓ Collect data of animal population for vaccination
 - ✓ Coordination and evaluation of vaccination campaigns
 - ✓ Induce changes in practices, behaviors and attitude
- **Business models for “mandataires”**
 - ✓ Facilitation of contractual arrangement between “mandataires” and banks for loans in order to be able to place enough quantities of vaccines at LCV

- Build capacities of “mandataires”
 - ✓ Support logistics (motor bikes)
 - ✓ Cold chain
- Public Private Partnership
 - ✓ Case of PPR thermostable vaccine (ILR, Hester Biosciences, LCV)



Acknowledgements

This work is financed by
USAID

It is implemented in a partnership with
AMEDD, AVSF, CNASA, CRS, DNSV, LCV, SNV,
OMA

It contributes to the CGIAR Research Program on
Livestock



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ILRI thanks all donors and organizations which globally support its work through their contributions to the [CGIAR system](#)

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