Improving livestock vaccine uptake by women smallholder farmers in Machakos, Kenya through public-private partnerships

Livestock diseases are a major barrier to productivity for both male and female livestock farmers in Machakos County. Women livestock farmers in Kalama and Kola, who tend to own more small ruminants (goats, sheep, etc.) and poultry than men, report low vaccination rates, minimal knowledge on livestock diseases, a lack of access to cold chain storage and poor access to veterinary doctors.

A study by the SheVax+ Project, at the University of Nairobi demonstrated that private Animal Health Service Providers (AHSPs) are key players in providing veterinary services to rural smallholder livestock farmers. However, these services can reach and benefit more women goat and chicken farmers when they work in collaboration with the Government and other development actors such as credit institutions. The county government needs to include gender responsive planning that recognizes specific barriers faced by women livestock farmers in accessing adequate and timely animal health services delivery. This will help to improve livestock and poultry extension services and vaccination programs.

Key Messages

◆ Women smallholder farmers make up a vast majority of goat and chicken farmers in Machakos but are mostly left out of veterinary services.

◆ Private veterinary service providers reach more women and other marginalized farmers when they work in collaboration with the government and other development partners.

◆ Limited access to credit is a barrier for many women farmers and AHSPs vertical movement in the vaccine value chain. The veterinary department must prioritize linking them to credit partners.

◆ County government departments should adopt gender transformative planning. This will enable implementation of targeted interventions addressing specific barriers that women and other marginalized livestock farmers face.
Introduction

The Livestock Vaccine Innovation Fund (LVIF) supports the development of affordable livestock vaccines targeting diseases that impact women and men livestock smallholders and facilitates their access and use at scale. The SheVax+ project, within LVIF, is addressing the barriers faced by women smallholder farmers in livestock vaccine systems and testing models that can better benefit women and create entry points for their participation and engagement in these systems.

In Kenya, two of the most devastating livestock diseases are Newcastle Disease (ND) in poultry and Contagious Caprine Pleuropneumonia (CCPP) in goats. Research by the SheVax+ project in Kola and Kalama zones of Machakos County, predominantly inhabited by agro-pastoral smallholders showed that despite availability of efficacious CCPP and ND vaccines, many farmers continue to lose valuable livestock to these diseases. Major barriers to vaccination include farmers’ lack of information, long distance to vaccine stockists, inadequate cold chain storage facilities and low number of extension staff. For example, Kola ward and Kalama sub county with a total population of 69,980 are served by only one veterinary doctor.

Why was this study needed?

The main objective of this study was to identify specific barriers to women and other vaccine value chain actors to participate effectively in, and benefit from the livestock vaccine value chain (LVVC), and to find opportunities to address them.

Women make up the vast majority of goat and poultry smallholder farmers in Machakos, but are left out of extension, advisory, and vaccination services. In the study area of Kola and Kalama, women own more small ruminants (goats) and poultry than men and, consequently, their livelihood is more adversely affected if the livestock are not vaccinated against CCPP and ND. The situation is exacerbated by women’s lack of access to timely and adequate information on animal health, husbandry, and training.

While extension and advisory services play an essential role in driving and transforming rural agricultural development, the ratio of extension staff to farmers in Kenya has continued to widen, exacerbated by the absence of gender responsive policies within the livestock sector. The national vision to achieve the ideal ratio of 1 extension staff to 600 farmers by 2029 is seemingly unattainable at the moment. Our study, however, provided evidence of key players outside the public sector such as the private Animal Health Service Providers (AHSP) in Machakos, who provide extension, advisory, and community-based gender transformative training services on animal health. They play a key role in the vaccine value chain (VVC) by ensuring that smallholder women and men farmers access affordable and effective vaccines and other veterinary drugs.

Livestock production is characterised by gendered access to resources and information. Men farmers tend to have greater access to information on diseases, vaccines and vaccinations and are more likely to be prioritized by animal
health services interventions. Vaccine delivery systems prioritize male access and mobility even though men farmers are not necessarily involved in the day-to-day care of animals.

This gap between men and women farmers is exacerbated in the context of small livestock and poultry farming where the limited resources are not benefiting the female farmers who form the bulk of the producers, and who critically need the information, technical input, and advisory services.

**During a stakeholder engagement meeting held in Machakos in Nov 2022, the County Veterinary Director said “I am very happy with SheVax+ project. I consider the eight AHSPs as part of my team. Climate smart project is using them to vaccinate poultry, my office uses them as extension staff as well as for disease surveillance in the zones. I am now able to generate monthly reports to DVS in Nairobi. Disease surveillance has improved, vaccination rates across all species has increased over the past two years and farmers are now demanding for service even over weekends!”**

**Insights**

**Fostering public-private partnership will ensure women and other marginalized smallholder farmers do not miss out on adequate and timely extension and advisory services**

Our study provided evidence that fostering a public-private partnership in extension, advisory, training, and vaccination services ensures improved services to women and men smallholder farmers. This in turn improves overall vaccine access, uptake, and improved livestock production. From 2021, vaccination services offered by Veterinary Services Machakos County are undertaken by the technical private animal health service providers (AHSPs). Vaccine coverage in Machakos now goes beyond ND and CCPP as it also includes other species. The AHSPs network with farmers has greatly improved, impacting extension and advisory service. Furthermore, encouraging the Ministry of Agriculture, Livestock and Fisheries to support and train more women animal health service providers (diploma and or certificate holders) will scale up extension, advisory and vaccination services for smallholder women farmers.

![A farmer tending to her goats.](image1)

![Gender transformative training facilitated by a vaccinator.](image2)
Leveraging women’s groups and AHSPs networks with financial resources

To facilitate women’s groups and AHSPs access to credit, creative ways need to be found to encourage County Veterinary department to link such groups to financial institutions. Few to none, formal financial institutions explore the opportunity of networking with women’s groups and AHSPs despite the popularity of table banking among these groups, with some groups rotating millions of Kenyan shillings within twelve months. Women farmers and AHSPs are mostly unaware of credit packages suitable to their needs, and credit agents mostly restrict themselves to commercial farming outfits. However, the county veterinary department is in a position to link farmer groups to credit facilities, as well as invite financial agents to their farmer training sessions to improve their access to financial resources and enhance their networks. This will ensure women’s access to and control over farm implements and technologies to boost productivity.

Incorporating gender-inclusive livestock policies within Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MALFC) in Kenya and its departments can improve livestock vaccination programs

This can be achieved by fostering collaborative services between veterinary and community development service providers. Through the SheVax+ LVIF model, community development service providers, veterinary department, vaccinators, and male role models have delivered gender transformative trainings to farmers for the first time. The relevance of gender considerations and their impact on animal health was greatly appreciated by the livestock smallholders as well as service providers. The evidence indicates that targeted approaches can be applied across a range of social and cultural contexts to achieve good results from livestock and poultry vaccination programs.
Policy recommendations

◆ **Recommendation 1: Improve extension, training, and advisory services for women smallholder farmers.**

The County Department of Veterinary Services can partner with relevant NGOs and county programs such as the Climate Smart initiative to support and train more women farmers and women animal health service providers (AHSPs) at community level. This will help provide timely information, technology transfer and advisory service to the clients who need it the most.

◆ **Recommendation 2: Machakos county government should create opportunities to increase access to credit for both, women farmers’ groups and AHSPs to boost their enterprises.**

During community-level trainings, the livestock departments should ensure support is provided to women farmers enrolled in group networks. The department should also create linkages between financial institutions and women’s groups.

◆ **Recommendation 3: County government departments should adopt gender transformative planning that addresses specific barriers that women and other marginalized livestock farmers face.**

This can be achieved by fostering partnership between veterinary and community development service providers.

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**About this brief**

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