**KEY RESULTS**

FAO procured and delivered 41783 litres of deltamethrin and 6462 kgs of Amitraz to 744 dip tanks in the 10 LFSP districts in Manicaland, Mashonaland Central and Midlands provinces.

Regular dipping being conducted in Midlands and Mashonaland Central Province. With 920,097 out of target of 1,000,000 cattle dipped.

146,176 households getting weekly dipping in summer and every fortnight in winter as per DVS recommendation.

USD 37,284 and RTGS 781,727 collected by farmers to date and used to purchase 1152 kgs amitraz and 1945 litres deltamethrin.

49 out of 54 spray races installed. One Solar powered spray race leading to use of less water, 1,000 litres for spray races against 15,000 to 20,000 for plunge dips. Spray races enabled communities to use cheaper acaricides which reduced annual dipping costs from USD19800 to USD1632 per dip tank per year.

Coopers Animal Health Pvt Ltd partnered to ensure efficient and sustainable supply of acaricides to participating dip tanks.

Reduced incidences of theileriosis reported in Gokwe District, Midlands Province by over 60% in the 2020/2021 rainy season.

**BACKGROUND**

The communal dipping programme has been significantly disrupted over the last years. A combination of a deteriorating socio-economic situation, recurrent droughts and climate change diminished the capacity of the Department of Veterinary Services (DVS) and farmers to sufficiently finance the procurement of acaricides. As a result, there was an increase in the prevalence of tick-borne diseases especially theileriosis with 50 000 cattle worth an estimated value of over US$40 million succumbing to diseases in 2019.

It was against this background that FAO and partners with support from the Foreign, Commonwealth & Development Office (FCDO) provided support for the supply of acaricides via the Crisis modifier whilst also addressing the structural challenges affecting the communal cattle dipping system. The model was implemented in 10 districts that LFSP is operating in and covered all the 744 dip tanks located within these districts. To ensure sustainability of the communal dipping system beyond the crisis modifier, LFSP proposed and together with the Department of Veterinary Services and implementing partners facilitated a model that strengthened dip tank committees to independently provide acaricides for communal dip tanks with cattle owners contributing towards procurement of the acaricides.

**THE MODEL**

LFSP provided logistical and material support to the Department of Veterinary Services to support farmers to set up 744 Livestock Dipping Committees (LDCs). All LDCs were then trained on leadership, financial management and record keeping.

![Diagram of the model](image-url)
After training FAO with funding from the Foreign and Commonwealth Development Office (FCDO), supplied acaricides on a gradual basis starting with 100 percent in the first 2 months, 75% in 3rd month, 50% in 4th and 5th month and 25% in the last month. With farmers assuming full responsibility of acaricide supplies from the 7th month onwards. To enable efficient farmer contribution LFSP capacitated farmers to set up revolving funds for acaricide procurement into which all cattle owners contribute. LDCs with assistance from traditional leaders DVS field staff, Local Government and AGRITEX officers collect contributions from farmers and pay Coopers Animal Health Pvt Ltd directly or via District Livestock Development committees (DLDCs). All acaricides purchased are then distributed to the contributing LDCs through DVS structures. This has resulted in contributing households getting weekly dipping in summer and every fortnight in winter as per DVS recommendation. The result has been for example the reduction of theileriosis by as much as 60% in Gokwe South district.

WHAT WORKED WELL?

- Designing of the model with the Department of Veterinary Services ensured adoption of the model from the onset resulting in well-coordinated implementation of the pilot model in 2 out of the 3 clusters.
- Buy in from local leadership (chiefs and headman) who attended the sensitisation meetings during the roll out phase of the model. The traditional leadership embraced the model guaranteed their support to ensure communities would participate and adopt such interventions for development of the respective communities.
- Farmers across the three clusters largely embraced the model as evidenced by their provision of labour and local materials during construction of the spray races as well as through payment of dipping levies to the LDC revolving fund.
- Capacity building of LDCs through training on leadership, revolving fund management /ISAL methodology was done for all plunge dip tank committees and most of the spray race committees.
- Practical demonstration of how to operate and service spray race equipment were done at each of the 49 sites established enabling LDCs to operate and do minor repairs of their spray races.
- Regular coordination and update meetings with key technical partner, DVS brought about implementation efficiency and model sustainability in 2 of the clusters.

CHALLENGES

- Farmers had challenges in mobilizing resources for payment of levies following three successive bad seasons that adversely affected crop production in all clusters.
- The model was not successful in one of the clusters due to lack of buy in from provincial government stake-holders.
- Covid induced travel restrictions delayed setting up of local and district revolving funds as farmers could not get merchant lines.
- The change in the mobile money regulations whereby daily limits on transactions were reduced and individuals restricted to one mobile money account made it difficult to transact and open revolving fund accounts for LDCs. This adversely affected the collection of funds for the LDC managed revolving funds leading to abandonment of this secure payment system.

LESSONS LEARNT

- Total buy in from all stakeholders from traditional/local leadership to technical partners is crucial for adoption of innovative interventions. Midlands cluster which was the most successful cluster on the model had the implementing partner and DVS jointly carrying out the awareness campaign using both physical and bulk SMS services to promote the technology. This thus emphasizes the importance of creating awareness and total understanding of new technologies by all stakeholders through awareness meetings/campaigns prior to implementation.
- There is room to upscale the model to other districts through sharing this pilot experience as a sustainable solution to the dipping policy in Zimbabwe.
- Spray race technology is faster to install and very effective and can substitute plunge dips whilst utilizing less water, less acaricides making it much more efficient, climate smart and cost effective compared to plunge dips or the use of pour-ons.
- Farmers are willing to pay and participate in technologies where they see a clear benefit to their livelihoods as such the USD 34,294 collected in Midlands in the Midlands Province was in foreign currency.
- There is a willingness by private sector suppliers to participate in direct acaricide supply arrangements as long as farmers are well organized to ensure minimum economic volumes of acaricides are assured.
- Raising the awareness and strengthening the capacity of the dipping committees through trainings is critical for the success of such innovative models. LDCs received training on leadership, group dynamics, financial management, record keeping and technical aspects of dipping like safe handling of acaricides, proper usage and storage.

CONCLUSION

Farmer managed acaricide supply models have the potential to ensure sustainable control of tick-borne diseases. The nature of tick-borne diseases is such a whole community needs to be involved as the livestock share common grazing. Control at individual level in an uncoordinated manner with some dipping and some not dipping will lead to a continuation of the existence of large populations of infected ticks to the detriment of all livestock producers in the area. Thus ad-hoc control is ineffective in avoiding future outbreaks and there is need to explore this model as its not only effective in the long run but works out cheaper than individual farmers procuring their own acaricides.