EVALUATION BRIEF
MAHABA LANDSCAPING STUDY - UGANDA

This evaluation brief provides a summary of the findings, conclusions and recommendations of the MAHABA landscaping study. For more information please email m.e@galvmed.org.

ABOUT MAHABA

Elanco Animal Health together with the Global Alliance for Livestock Veterinary Medicines (GALVmed) launched a new initiative to manage ticks and tick-borne diseases in Africa. Managing Animal Health and Acaricides for a Better Africa (MAHABA) aims to accomplish several related objectives including:

- Building a clear understanding of acaricide usage by Small-Scale Livestock Producers (SSPs) and related issues of acaricide resistance in target geographies in Uganda and Nigeria.
- Developing the materials and innovative methods by which to educate large numbers of SSPs on the effective use of acaricides and practical methods by which to counter resistance, avoid treatment failures and allow sustainable tick control.
- Developing and rolling out an innovative and interactive digital platform for SSPs and animal health workers in Uganda and Nigeria to help them effectively treat tick infestations and prevent Tick-Borne Diseases (TBDs).
- Providing SSPs with adapted products by registration of effective existing acaricides from Elanco’s portfolio and possibly including new packaging (small size pack) tailored to their specific needs.
- Making a broad range of products available to SSPs by geographically expanding to enable the entry of Elanco into the Nigerian market with a comprehensive product portfolio and the expansion of Elanco’s existing product range in Uganda.

ABOUT THE LANDSCAPING STUDY

| GALVmed function: Monitoring & Evaluation | Purpose: To collect data to inform the composition and nature of the subsequent monitoring and evaluation (M&E) studies to be conducted in the country. |
| Consultant study lead: Dr. Paul Bessell | Methodology: Surveys with 350 small-scale cattle producers, 40 veterinary retailers, and 25 veterinary professionals. |
| Local implementing partner: 3V Vets in coordination with District Veterinary Officers (DVOs) | |
| Dates: October - December 2022 | |
| Location: Soroti & Serere and Gomba & Sembabule Districts, Uganda | |

DISSEMINATION OF RESULTS

- The results were discussed with Elanco in two Findings Workshops at the end of 2022 and early 2023.
- The findings were presented to a group of Ugandan experts in an online workshop in March 2023.
- Farmer feedback sessions were facilitated by DVOs and held with study participants post the end of fieldwork.
In 2022, GALVmed undertook a Landscaping Study in Uganda in collaboration with Elanco and with support from District Veterinary Officers (DVOs) in the four study districts. The Landscaping Study was the first step in the Monitoring and Evaluation (M&E) activities for the project in this country. The study was targeted to answer four key questions to advance the collective understanding of the Bill & Melinda Gates Foundation (BMGF – project funder), Elanco, GALVmed, and national/local veterinary authorities:

1. What is the severity of the current / baseline TBD situation and how do TBDs compare to other constraints faced by SSPs?
2. What is the current SSP knowledge, attitudes, and practices regarding acaricide use?
3. What is the competitive landscape for acaricides?
4. What is the current use of smartphones and digital tools by SSPs, vets and retailers?

**KEY FINDINGS**

**Q1: What is the severity of the current / baseline TBD situation and how does this rate in comparison to the numerous other constraints faced by SSPs?**
- Tick infestations are ranked as a major problem by all SSPs in the study areas.
- Almost all SSPs are familiar with TBDs.
- TBDs are identified as a major problem by vets.
- Anaplasmosis and East Coast Fever are reported as the biggest disease constraints.
- Diseases relating to ticks comprise the top five disease constraints in cattle.

**Q2: What is the current SSP knowledge, attitudes, and practices regarding acaricide use?**
- Most SSPs report using acaricides to deal with ticks.
- SSPs favour amitraz-based products.
- Some product rotation is undertaken (although potentially not much compound rotation) and acaricides are typically applied as ticks are seen.
- Almost all SSPs use spray packs to apply acaricides.
- Generally, most SSP respondents report that they are content with the efficacy of products, although there is some difference in perceptions of effectiveness between the study areas.
- Although responses were mixed, generally vets agree that acaricides are effective. On the other hand, they also report that treatments result in resistance and acaricides are ineffective due to resistance.
- Few ticks are analysed, but farmers generally report good responses to treatment.

**Q3: What is the competitive landscape for acaricides?**
- There are many amitraz products available, some cypermethrins and some alphacypermethrins.
- Many products are branded and there is a wide range of brands on the market.
- Most retailers are selling four or five acaricide products.
- Acaricide products are relatively inexpensive – the mean treatment cost is around US$0.50 per animal.

**Q4: What is the current use of smartphones and digital tools by SSPs, vets and retailers?**
- Among SSPs, smartphone ownership is low. SSPs reported rarely accessing the internet and prefer other routes for animal health communications.
- Among retailers and, particularly, vets, smartphone ownership is high but not ubiquitous.
- Vets and retailers are open to using the internet and smartphone applications for communications regarding tick resistance.
CONCLUSIONS

- TBDs are a major problem. In many cases, TBDs are the stand-out problem.
- There is scope for improvement in current acaricide administration practices.
- There is evidence that resistance is becoming an issue.
- There are several acaricide product options on the market, many relatively inexpensive.
- Most SSPs do not access the internet on their phones, whereas retailers and vets do.

RECOMMENDATIONS

- M&E studies to generate indicators of the direct and indirect impact of ticks & TBDs on farm productivity.
- MAHABA implementers to identify how change to practice could mitigate the impact of ticks and TBDs.
- M&E studies to further explore the issue of resistance in the project areas.
- M&E studies to assess correct acaricide class selection and adherence to protocol in the application of existing acaricide products.
- MAHABA implementers to consider appropriate modes of communication with SSPs.

Study Limitations: The study was conducted in four districts in Uganda, which were carefully selected for their specific characteristics. Therefore, the findings may not be representative of the entire country or other regions with different farming systems, socio-economic, cultural, or environmental factors. In addition, while every effort was made to utilize rigorous data collection methods, the survey instruments may have inherent limitations in capturing certain nuances or aspects of the study topic. The results should be interpreted with consideration of these constraints.