

MINISTRY OF FISHERIES AND LIVESTOCK

Enhanced Smallholder Livestock Investment Programme
(E-SLIP)

CBPP ERADICATION: A CASE STUDY INTO E-SLIP INTERVENTIONS TO MAINTAIN THE CONTROL OF CBPP



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1.0 ABBREVIATIONS

CBPP – Contagious Bovine Pleuropneumonia

E-SLIP – Enhanced Smallholder Livestock Investment Programme

MFL – Ministry of Fisheries and Livestock

2.0 EXECUTIVE SUMMARY

This case study was conducted to document the success of interventions of the Ministry of Fisheries and Livestock (MFL), in eradicating the deadly Contagious Bovine Pleuropneumonia (CBPP) outbreak that occurred in Kazungula district of Southern province; and how the Enhanced Smallholder Livestock Investment Program (E-SLIP) - through its Animal Disease Control Unit (ADC) has contributed to preventing another outbreak.

CBPP is a cattle disease that is endemic in Western province. Kazungula district in Southern province borders Sesheke district of Western province and was the entry point for CBPP into Southern province in 2004. The disease broke out as a result of illegal cattle movements between the two provinces and culminated into one of the worst disease outbreaks between 2005 - 2006.

Given that Southern province had the highest number of cattle in Zambia during that period - accounting for 36% of the total stock in the country – MFL intervened to contain the outbreak within Kazungula, considering the devastating effect it would have had on the cattle population in the country had the disease spread to other districts.

MFL's interventions produced the desired positive outcome and managed to contain the spread of CBPP to Kazungula, with the District last recording minimal cases of CBPP in 2017 which was once again as a result of illegal stock movement of animals.

The interventions required extensive community sensitization due to the fact that the only approved solution was test and slaughter exercises in affected kraals. E-SLIP has maintained the control of CBPP by facilitating the establishment of community taskforces to supplement the government's disease surveillance effort. The results of the MFL's interventions in eradicating CBPP in Kazungula district included:

1. Through the test and slaughter exercise, an excess of 30,000 cattle were slaughtered
2. Stock movement controls were established and are still in effect in Kazungula district as continued surveillance is taking place

3. E-SLIP facilitated the establishment and training of 53 community taskforces comprising a representative from every village in Kazungula; as one way to enhance surveillance and monitoring of cattle movements in the district
4. E-SLIP has facilitated a cattle branding exercise which will help the Ministry in identifying and tracing the movement of animals and in turn help in preventing future disease outbreaks.
5. Before the test and slaughter exercise, staff reported that Kazungula had approximately 63,200 cattle in 2005. By the end of the exercise in 2008, the cattle population dipped to 27,600. Today, however, Kazungula has been able to grow its cattle population to approximately 84,000.

Achieving these results was met with a number of challenges. Among the gravest was the hostility received from farmers who could not accept that their heads of cattle would have to be slaughtered due to their exposure to other infected animals. MFL extension service officers attested that they were constantly faced with threats of violence and some farmers interviewed also admitted to having participated in threatening staff during the test and slaughter exercise.

This hostility was aggravated by the fact that the influx of slaughtered cattle triggered a drop in the price of beef and affected farmers still feel that the compensation they received did not match what they lost or could have earned.

The farmers in Kazungula now understand why MFL intervened through the test and slaughter, they have become more attentive to illegal stock movements to prevent a similar calamity re-occurring. However, illegal stock movements continue to be a challenge and community taskforces appealed for resources to intensify their efforts. Some of the taskforce representatives interviewed said that resources such as identity cards and transport in form of bicycles would make their work easier.

Disease freedom is declared in a district after two (2) negative annual rounds of testing. District staff reported that the last case of CBPP recorded in Kazungula occurred in 2017.

3.0 INTRODUCTION

Cattle are the cultural pride of the tribes found in Southern province. The realization of the economic benefits that cattle bring are one reason why the CBPP pandemic will be forever remembered as a painful past which farmers in Kazungula are still struggling to recover from.

For farmers located in areas that are not environmentally friendly for crop agriculture, the eradication of CBPP gives hope that the cattle population that is being re-grown will give back the livelihoods that were lost.

The Enhanced Smallholder Livestock Investment Program (E-SLIP) - which was then operating as the Smallholder Livestock Investment Program (SLIP) – facilitated the test and slaughter exercise in eradicating the disease in Kazungula.

The exercise began with community sensitizations on the fact that their cattle had been exposed to CBPP and the consequences that would follow if they did not permit Ministry staff to test their animals. Community sensitization was followed by the actual test and slaughter in which blood samples from selected cattle in a kraal was drawn, and if some animals tested positive for CBPP, the whole kraal would have to be slaughtered.

An excess of 30,000 cattle were slaughtered in the exercise, reducing the then cattle population from 63,200 in 2005 to 27, 600 in 2008.

Today, statistics in the Kazungula District office reveal that the cattle population in the district has grown to 84,00.

4.0 BACKGROUND: A BRIEF HISTORY OF CBPP IN KAZUNGULA

Contagious Bovine Pleuropneumonia (CBPP) has been endemic in Western province. Kazungula is the only district outside Western Province in which CBPP spilled into. The first case of CBPP in the district was reported in 2004 and it is suspected that it entered the district through illegal stock movement from Western province.

Given that Southern province possesses the highest cattle population in Zambia according to the last Livestock and Fisheries Census (contributes 36% of the total stock), interventions by E-SLIP in Kazungula were intended to curb the spread of the disease from Kazungula to other parts of Southern province.

Control measures for CBBP involve different interventions which include:

- I. Test and slaughter
- II. Stock movement restrictions
- III. Community sensitization
- IV. Vaccinations

5.0 MAIN OBJECTIVE

The main objective of the case study was to document the success of E-SLIP interventions in maintaining the control of CBPP in Kazungula district.

SPECIFIC OBJECTIVES

- a) To highlight the activities that were undertaken to eradicate CBPP in Kazungula
- b) To document farmers' experiences of the CBPP pandemic and the effect it had on their individual households

6.0 STUDY AREA

The case study was conducted in Kazungula district in Southern province.

7.0 APPROACH TO CBPP IMPLEMENTATION IN COMMUNITIES

The interventions are a continuation of control measures that were being implemented by the Smallholder Livestock Investment Program (SLIP). The approach began with community sensitizations through district staff and media campaigns by which farmers were made aware of the threats of CBPP on the cattle population and the control measures that needed to be undertaken to curb the spread of the disease.

Given that cattle in Kazungula were already affected by CBPP, the most effective control measure was the test and slaughter. E-SLIP facilitated the resources needed for district staff to draw blood samples from selected number of cattle in a kraal to test for the *Mycoplasma mycoides Subspecies mycoides* that causes CBPP. Positive test results compelled the slaughter of all the cattle in that kraal.

As a form of compensation for affected farmers, a partnership between abattoirs was established with the government in order to secure a market for the meat of slaughtered animals.

Eventually, sentinel cattle were placed in various communities to help confirm whether or not Kazungula could be declared disease-free of CBPP.

8.0 RESULTS

Some results of E-SLIP interventions in the eradication of CBPP in Kazungula included:

1. Through the test and slaughter exercise, an excess of 30,000 cattle were slaughtered
2. Stock movement control was established and is still in effect in Kazungula district as continued surveillance is taking place
3. About 53 taskforces have been established comprising a representative from every village in Kazungula as one way to help surveillance and monitor cattle movements in the district
4. E-SLIP has facilitated a cattle branding exercise which will help the Ministry in tracing the movement of animals and in turn help in monitoring the source of future disease outbreaks.
5. Before the test and slaughter exercise, staff reported that Kazungula had approximately 63,200 cattle in 2005. By the end of the exercise in 2008, the cattle population dipped to 27,600. Today, however, Kazungula has been able to grow its cattle population to approximately 84,000.

9.0 CHALLENGES

The Disease Control Unit reported that some of the challenges which were being faced:

- i. Hostility from farmers was a major challenge. As communities doubted the gravity of the disease, they were hostile towards district and Ministry staff who had been tasked to undertake tests on the animals. Some incidences of staff being threatened and/or physically harmed occurred
- ii. Illegal stock movement was and continues to be a challenge as some farmers seek a better market for their livestock outside the district
- iii. Some farmers of the farmers remain aggrieved that they were not consulted on how much they would have preferred to sell the meat of their slaughtered cattle; some of them interviewed believe that they were not given a profitable price for the beef
- iv. Efforts from community taskforces remain limited in scope as their lack of transport has hampered the efficiency with which they can respond to news of illegal stock movements. Furthermore, some farmers remain hostile to any activities to do with CBPP and taskforce members felt the need to have identity cards to help farmers be more receptive to surveillance checks.

10.0 PARTICIPANT TESTIMONIES

Kazungula Dairy Cooperative

Kazungula Dairy Cooperative was a thriving enterprise before CBPP broke out in 2005.

“ We used to collect between 800 – 1000 litres per day,” Cooperative Secretary, Fredrick Sikasola, disclosed.

With a boost in form of dairy equipment and some dairy cattle from the Zambia Agribusiness Technical Assistance Centre (ZATEC), Kazungula Cooperative was embarking on dairy production when the government began the test and slaughter exercise. The dairy cattle that they received fell prey to the exercise.



Members of Kazungula Cooperative showcase some of their dairy products

Kazungula Cooperative decided to diversify into poultry production and established a milling plant as a way of keeping their group economically vibrant. This has helped the cooperative gradually re-establish the dairy production that once was to an even better place than it was before

Case study from Sikaunzwe Veterinary Camp

“I was ready to fight someone for my cattle when the district staff came to tell me that they wanted to slaughter my animals. I totally refused! But the very day after the staff came, I lost 2 cattle in the morning...On the third day after, I lost 4 in one day, the next day 5 and I knew that the officers were telling the truth. My cattle were just dropping dead and then I realized that the disease which had come into our community was bad,” Robert Siman’goba who is a Chairman of CBPP Taskforce of Sikaunzwe Camp.

He was compelled to surrender his herd of 100 cattle to the test and slaughter exercise. Robert explained that for the farmers in Sikaunzwe Veterinary Camp their cattle was literally all they had before the CBPP pandemic broke out. He said the disease contributed to their low crop yields as farmers could not afford to hire draught power from the few cattle owners around and neither could their plough their fields as much using manual labour.



“ I am an old woman – I have no more strength to cultivate with a hoe and I do not have enough money to hire cattle for draught power,” Patricia - a member of Sikaunzwe camp – lamented

The farmers in Sikaunzwe have been compelled to diversify into small scale business enterprises as they said that the environment of their area has been degraded by

climatic changes such as flash floods and silted soil which do not favour crop production.

Though they have appreciated the eradication of the disease, they appealed to Ministry staff to facilitate a much-needed restocking of cattle in Kazungula, to help them improve their household incomes.

11.0 LESSONS LEARNED AND RECOMMENDATIONS

- 1) Farmers in Kazungula continue to bemoan the implications of the continued stock movement control. It is recommended that farmers be helped in establishing infrastructure such as abattoirs and dairy plants to help them get returns on their cattle investments.
- 2) Some farmers interviewed felt that compensating them with even half of the herd that was slaughtered rather than monetary compensation would have helped them more. This is because livestock was not available for purchase as a stock movement control measure. As such, some farmers were forced to use some of their monetary compensation to meet expenses that their cattle would have helped them meet. In the long run, farmers have struggled to regrow the herds they lost.
- 3) The cattle restocking exercise being undertaken by E-SLIP should give a priority to the Kazungula farmers. The farmers expressed the need to restock with dairy cattle as well as dual purpose cattle in order to assist them restore the livelihoods.

12.0 WHAT MADE E-SLIP INTERVENTIONS SUCCESSFUL IN THE ERADICATION OF CBPP?

The decision to isolate Kazungula through stock control movements was harsh but much needed intervention that helped prevent the spread of CBPP to the rest of Southern province. E-SLIP, operating as SLIP at the time, undertook extensive community sensitization exercises through which farmers are still able to understand and appreciate why the intervention of test and slaughter was necessary.

The establishment of local taskforces also helped strengthen the Program's efforts and reduce hostility during the interventions because the taskforces comprised of members of the local communities who were considered credible and trustworthy.

However, one notable difference that E-SLIP is making, is by facilitating district cattle branding which will help both local taskforces and Ministry staff track livestock movements and trace the origins of future disease outbreaks.

CONCLUSION

The E-SLIP interventions to control the spread of CBPP from Kazungula to other districts in the Southern Province were devastating to many farmers who have developed a change in mind-set towards animal health. From the interviews, the community taskforces are vigilant and have proved to be helpful to district staff most especially with surveillance of stock movements within Kazungula.

The outbreak of CBPP in Kazungula began with illegal stock movement of cattle from Western province into Southern province. E-SLIP has since embarked on regular vaccinations in Western province and other provinces endemically affected areas such as North-Western and Muchinga provinces.

To prevent new or re-infections, vaccinated buffer zones have been established along borders of Angola and Tanzania while regular surveys are also being undertaken as part of surveillance of the eradication.

E-SLIP interventions have contributed positively to cattle disease prevention in Kazungula and farmers have understood the need to invest in the health of their livestock.