



Coccidiosis Innovation platform
Nongoma: Mpongo dip tank, Nkungwini area
26 October 2023



Goat Value Chain Innovation Platforms facilitated by Goat Agribusiness Project

In 2016, the Goat Agribusiness Project (GAP) set up Innovation Platforms for the Indigenous Goat Value Chain in South Africa.

In recent years, innovation platforms (IPs) have become increasingly prevalent in the agricultural development arena to bring together value chain actors for the purpose of creating linkages, surfacing and discussing issues, defining possible solutions and creating research agendas, coordination of activities, disseminating research, streamlining and improving the value chain process, amongst other things.

With the goat value chain in South Africa being underdeveloped and few formal horizontal or vertical linkages existing, GAP has been facilitating IPs for almost 8 years now with the goal of building relationships and providing a useful forum among the value chain actors in favour of rural, smallholder farmers. While innovation platforms are not new, there is no record of any IPs related to goat value chains in South Africa to date.

Goat farmers have been able to interface directly with relevant stakeholders to help solve their problems. Goat farmers have been able to voice their concerns, constraints and issues related to commercialisation of their herds. This has been discussed in the innovation platform forum with government, NGOs and researchers. Over the years, research has been conducted and brought back to the forum for discussion and dissemination. In addition to knowledge transfer through the innovation platforms, scientists are involved in publications, short course lectures and other talks. Numerous innovations have come from these platforms and been tested across KwaZulu Natal and incorporated into the Indigenous Goat Production Handbook.

The IP was held at Vusumuzi Robert Zwane's home.

Purpose of the IP:

There are farmers from different areas to discuss the problems we are facing, especially goat diarrhoea. For them to share the strategies that they have tried and what worked, and what didn't work. From that, what can be taken going forward.

1. Diarrhoea and causes of Diarrhoea

Causes of diarrhoea

- Worms
- Ulcers in intestines
- Eating disorders
- Sorghum
- Dirty water
- Kids mostly get Diarrhoea from infected mothers

Coccidiosis and cryptosporidiosis

Coccidiosis

- It is a bacteria that lives in manure and soil, if a kid finds it, it causes ulcers in the intestines
- The intestines also become filled with air
- The kid shows diarrhoea for a short period and dies
- It affects kids after 4 weeks of age
- Diarrhoea becomes bloody
- Rectal straining with mucus in it
- The symptoms last for less than a week



Female farmers discussing their experiences with different treatment interventions.

Cryptosporidiosis

- It affects kids of less than 4 weeks of age
- It is not curable with sulphur-based medicine

2. Discussions on treatment interventions

- Supa Calf – this intervention was used as a prevention method in some farmers and for others, it was used as a treatment method, the medicine cost R1 100 and a 10kg kid was administered a 20ml and a 5kg kid a 10 ml, a cost per ml is 11 cent which makes it R2, 20 per 10kg kid.
- Baycox – it stops diarrhoea but it is hard to find it, and it is the most expensive as it costs R12 per kid
- Molovite – kids were eating it and getting nutrition, but most farmers say kids were not eating it
- Kyrotrim- this medicine costs R2,20 per kg and it needs to be repeated

Farmers' experience with SupaCalf

(a product that reduces oocyst shedding of both coccidia and cryptosporidia)

- Mrs Yengwa from Ncunjana – I had a diarrhoea problem in my home and they came to use supacalf since then it stopped but the only thing now is that the goats are weak and loses weight but there is no diarrhoea
- Mr Ngubane from Ngubevu dip – I had 17 kids and 7 of them died because of diarrhoea and MRDP team came to administer the SupaCalf, at that time there was no diarrhoea in my kraal but the kids were not in good condition and I saw a difference they are now in good condition
 - Mr Zulu from Nswempe dip- I have used SupaCalf in my kraal on 14 kids only one of them had diarrhoea at that time and since then my kids are well and I have not seen signs of diarrhoea in my kraal

- Mr Mncube from Ncunjana– I have used SupaCalf for the whole kraal and I was also given a bottle of medicine to use when I see a diarrhoea in my kraal and it helped me because my goats had their tails down they were not showing good health but I saw a big difference now they are well.



Farmers gathered around Vusimuzi Robert Zwane's kraal

Farmers experience with Baycox

(Treats and controls coccidiosis caused by Eimeria species)

- Mr Zwane from Mpongo dip – in 2022, more than 20 goats die because of diarrhoea but in April 2023, I used Baycox in my kraal on 7 kids, and I have seen the difference. The kids are no longer dying of diarrhoea, but they are dying from hunger and loss of condition.
- Mr Jabulani Gumbi from Madaleni dip – we used Baycox on 24 kids and when we started, 4 of those kids had diarrhoea and it stopped from there, other kids that were dying were only dying because of hunger so the Baycox was very helpful.
- Mrs Mgaga from Mpongo dip - more than 20 goats have died of Diarrhoea but she used Hitet for her goats to drink it and the diarrhoea stopped.

3. Way forward:

First will be to see ways to get medicine to farmers in different places, Since it is not easy to get these medicines in our local vet shops like Supa Calf, the best way will be to use our mobile vet youth so that they will be able to sell it by doses and also use the small containers to sell it to farmers of which they need to write all the important information on those containers like the expiry date and the dosage.

Also since we have heard from farmers that SupaCalf works both ways as a treatment and as a prevention method, a farmer needs to see which method will be suitable for him or her, but also farmers need to understand that the Supa calf

is not the answer to all the diarrhoea because it can be caused by different things.

Other Problems raised by farmers that field managers need to train on:

- Foot rot
- Loss of condition
- Tape worm cyst
- Mother goats having insufficient milk

