

# Zambia Dairy Transformation Programme

OCTOBER 2020 NEWSLETTER



*Welcome to the latest edition of our monthly newsletter, which summarises activities carried out under the Zambia Dairy Transformation Programme (ZDTP) in October 2020.*

*Left: A farmer milking his dairy cow with clean hands.*

## Knowledge helps overcome mastitis issue

For a long time milk was being rejected by Ruth Ngulube's local Milk Collection Centre and she didn't know why.

"Before the ZDTP came, we didn't know what mastitis was," she says. "[It] troubled us ... but now the fight is over."

ZDTP Extension Officers showed Ms Ngulube and her family how to test their 16 dairy cows for mastitis using the Sunlight-detergent Rapid Mastitis Test (RMT).

After systematically separating and treating any infected animals, they found the overall health of their animals improved.

Other changes Ms Ngulube has made since joining the ZDTP in 2017 include:

- Making silage and giving fresh fodder to her animals, i.e. leaves from the local 'kapeta nsofu' tree;
- Making home-made feed supplements to reduce the Cost of Production from buying commercially-made alternatives;
- Following good milking practices, leading to less milk losses and better-quality milk overall; and
- Recording farm information on a monthly basis (i.e. financial inputs and production outputs) as part of the ZDTP's Real-Time Monitoring (RTM) initiative.

Ms Ngulube says she regularly refers to the ZDTP's monthly newsletters and sometimes copies other farmers.

Despite having been a dairy farmer for more than 15 years, she says she is enjoying it now more than ever "because I can see the benefits".

"I support my children to go to school and college and I'm doing other things [like] growing tomatoes, [raising chickens] and even goats."

Ms Ngulube tries to share her knowledge with others too, because "knowledge is power".

**For a video interview with Ms Ngulube, visit <https://vimeo.com/487058838>. For more information about mastitis, see page 2.**



*"Mastitis troubled us for a long time, but the fight is over."*

*- Ruth Ngulube, Kwanshama*

## Expanding our reach

We are continuing to work hard with the Ministry of Fisheries and Livestock (MFL) and other organisations in Zambia to support transformational change across the dairy industry. One way of doing this has been through this very newsletter, as well as our work in the field with other stakeholders such as MFL, the Dairy Association of Zambia, Lactalis (formerly Parmalat) and Zammilk. Through these efforts we've managed to increase the readership of this newsletter to over 1,100 individuals within Zambia and beyond (we have readers in Zimbabwe, Uganda and Kenya – plus further afield). We're also very pleased to announce that all copies of our newsletter are now available on the MFL website here: [https://www.mfl.gov.zm/?page\\_id=5416](https://www.mfl.gov.zm/?page_id=5416).

*Now the rains have started we're encouraging farmers to put extra emphasis on preventing mastitis, a condition that's more common when there's lots of mud and dirty water around. Here are some quick reminders about some of the key facts about mastitis.*

### **What is mastitis?**

Mastitis is an infection of the udder. It is caused by bacteria entering the teat opening.

The infection can cause visible changes in the udder and the milk. This is called clinical mastitis.

The infection can also cause more subtle changes. You may not see changes in the cow, or her milk. This is called subclinical mastitis.

### **How do cows get mastitis?**

Mastitis can be caused by different types of bacteria. When the bacteria enter the teat canal, they can cause mastitis. Therefore, it is important to have good hygiene at milking time, when the teat canals are open. Good hygiene around milking time can prevent bacteria entering the teat canal and causing mastitis.

### **Where do cows get the mastitis causing bacteria from?**

Some bacteria live in the cow's udder or on her teats.

Some bacteria live in the cow's environment, e.g. milking parlour.

Bacteria can be spread by contact with:

- Splashes of infected milk;
- Milker's hands;
- Tissues/towels used to wipe teats before milking;
- Dirty milking parlour;
- Dirty bedding; and
- Mud in kraals.

### **What can I do to prevent mastitis?**

This is through ensuring cows can be milked in a clean dry place and that milkers maintain good hygiene. It is also wise to regularly test milk for signs of sub clinical mastitis which if left untreated can develop into clinical mastitis.

### **How can I check for signs of sub-clinical mastitis?**

You can check for signs of sub-clinical mastitis using a Rapid Mastitis Test (RMT). The test looks for high levels of Somatic Cells. These include cells produced by the cow to help fight off diseases and infections such as mastitis. With the support of our Milk Quality Expert Greg Braggins, we've developed a low cost RMT using Sunlight dishwashing liquid.

### **RMT Recipe**

Mix four parts potable water with one-part Sunlight detergent. Add 2mls of the detergent/water mix to 2mls of fresh raw milk; the milk you are testing should be from the third or fourth squirts from individual quarters. With a high Somatic Cell Count (SCC), a liquid resembling 'snot' will appear in your tested milk. If this occurs, safely discard the milk and do not send this milk for sale.

**For more information about mastitis, see the following fact sheets (available at <https://www.zambiadairy.com/fact-sheets>):**

- M01\_On farm milk quality
- M02\_Cleaning after milking
- M03A\_Mastitis
- M03B\_Mastitis prevention and treatment
- M03C\_RMT and subclinical mastitis
- M05\_Designing a milking parlour

## National Animal Health Policy under development

Over the past few months we've been working with a core team at MFL who are developing a National Animal Health Policy. As part of this process, we supported MFL to carry out a comprehensive situational analysis of the various aspects of animal health within Zambia.

This considered questions such as:

- How animal health systems and services are governed and managed in Zambia;
- The different aspects of maintaining animal health and welfare in Zambia (from disease identification, diagnosis and treatment to prevention and control);
- The veterinary side of public health (e.g. food safety of animal products such as milk); and
- How animal health and product safety are maintained during the trade of animals and their products.

To validate the results of the situational analysis and understand the challenges faced by different actors across the animal health sector, we held four workshops in Lusaka at the end of October.

These workshops were attended by 51 people from across MFL and 19 other organisations.

We had attendees representing most sub sectors (e.g. dairy, poultry, wildlife) and specialisms (private vets, processors, public health and local council).

At each workshop everyone discussed the Strengths, Weaknesses, Opportunities and Threats (SWOT) to animal health.

This information has been used to develop the draft policy which is currently being reviewed by the members of the MFL core team and other colleagues from the Department of Veterinary Services.

The next step will be to incorporate any comments and feedback before sharing the document with other stakeholders for review and validation.



*Above: A group discussing the Strengths, Weaknesses, Opportunities and Threats (SWOT) in relation to Zambia's animal health sector.*

## Planting underway on nine new demonstration plots

This year the ZDTP is co-funding nine demonstration sites. This includes one plot in each of our original six target cooperatives (Liteta, Chibombo, Bamakasi, Fisenge, Kwanshama and Mufulira) and three plots in areas where we've started working with other cooperatives at the request of local farmers and MFL Extension Officers – namely, Mumbwa and Chikuse near Bamakasi.

Seeds and fertiliser are being provided by the ZDTP, with host farmers in charge of land preparation and any other labour requirements (e.g. planting, weeding, harvesting).

The aim of these plots is to emphasise the 'seed to feed' principle, highlighting methods for the production of silage and home-made concentrates, the storage of crops post-harvest and strategic feeding for adult animals and young calves.

If you'd like advice on what to plant to feed your cows during 2021, please get in touch with Kelvin Mulusa, the ZDTP's Field Extension Manager, on 096 372 3368.



**The ZDTP is focused on supporting dairy farmers to improve their productivity, milk quality and linkages to urban markets. The views expressed in this publication are those of the implementers of the programme and do not necessarily reflect those of the New Zealand Government. For further information, please contact ZDTP Country Manager Tania Thomson on [tania@primeconsultants.net](mailto:tania@primeconsultants.net) or +260 96 456 4206.**