







## **Zambia Dairy Transformation Programme**

**AUGUST 2019 NEWSLETTER** 



Welcome to the latest edition of our monthly newsletter, which summarises activities carried out under the Zambia Dairy **Transformation** Programme (ZDTP) in August 2019.

Left: Kwanshama farmer and Milk Collection Centre Manager Ngoza Banda Mwaba is proud of what her community has achieved in terms of milk quality.

### Team member spotlight: Wesley Chilambe

Wesley Chilambe's background means he has no trouble relating to the farmers he works with as a ZDTP Extension Officer. "I know what I am talking about because I grew up on a farm," he says. Wesley was born in Chingola, in the Copperbelt, and was raised by the late Henry Oosthuizen, who was a co-owner of Torborough Farms. After his studies, Wesley became the farm manager on Mr Oosthuizen's farm and worked there for three years until his mentor sadly died. "The moment he died was heart breaking, a tragedy for me," Wesley says. "He was the one who introduced me to agriculture. He taught me Artificial Insemination (AI), and [practical] farm management. He sponsored and educated me from Grade 10 up until Grade 12 and even sent me to college to study general agriculture. Lastly but not least, he gave me love and passion for animals." Wesley says Mr Oosthuizen had a lot of plans specifically for him. "He made me the made me the way I am. He wanted me to study abroad." After leaving Torborough Farms, Wesley became dairy manager at another farm, managing 350 dairy animals. He then joined the ZDTP as an EO, which says he enjoys because it's hands on and is strengthening his CV as an agriculturalist. "I am with my farmers and their animals most of the time. I'm like a link between the ZDTP and farmers." There are about 300 farmers in the cooperative Wesley works with (Fisenge), of which about 200 are actively producing milk to supply to their local Milk Collection Centre. He says he is trying to pass on his "love and passion" for animals to the farmers he is working with, as well as the technical skills in relation to things like growing fodder and making silage. He is happy that more farmers are now promising to grow fodder and / or expand their existing fields. Wesley says his vision for the future is to one day put all his knowledge and skills in to practice on his own farm. He likes the fact that the ZDTP employs national staff, like himself, because "this is our land". He says he hopes the farmers he is working with will be able to stand on their own feet when the ZDTP eventually winds up.



"Mr Oosthuizen gave me love and passion for animals. He made me the way I am.'

Wesley Chilambe **ZDTP Extension Officer** 

### Extension team tracking well

ZDTP Dairy Farm Management Specialist Jørgen Henriksen visited Zambia for several weeks in July and spent time with each of our Extension Officers (EOs), carrying out farm visits and providing support and advice. Jørgen identified notable improvements in farmers' practices since his first visit in September 2017, such as better access to water for animals – now provided 24/7 – and a committed focus on producing silage. He also noted significant professional development in the EOs themselves (see the interview with Jørgen on page 3 for more information). With these new practices now 'hardcoded' into many farmers' minds, the ZDTP is now focusing farmers minds on the importance of culling unproductive males/low yielding cows and improving the uptake of feeding cows according to their stage of lactation.

# Milk Collection Centre manager Ngoza Banda Mwaba pleased with improved milk quality

Kwanshama farmer and Milk Collection Centre (MCC) Manager Ngoza Banda Mwaba, pictured below, says she is proud of what her community has achieved in terms of milk quality.

Mastitis was a major issue for the Kwanshama Dairy Cooperative Union, when the ZDTP started working with its farmers; 75 per cent of the milk being delivered to the cooperative's MCC was being rejected by the processors.

Mrs Mwaba says that for a long time the cooperative did not know why the milk was being rejected because they were not testing it themselves. "The ZDTP ... introduced the mastitis test [and] encouraged us to treat the animals. After that, that problem was over."

Mrs Mwaba has now learnt how to make a testing reagent using Sunlight detergent, which "has really helped us in terms of reducing operations costs as it is very affordable compared to buying Californian Mastitis Test Solution (CMT), which is quite expensive. We give some to the farmers ... so that they can also do the test on the farm".



"Through the ZDTP, I have been able to develop myself and improve on the services I offer to farmers and the community at large. I want to learn more and enjoy sharing knowledge with others as this motivates me."

Mrs Mwaba says the ZDTP has also taught farmers how to milk hygienically on their farms and keep their utensils clean. As a result, better quality milk has meant better payments as the milk is graded by the processor and farmers are paid accordingly. "It's very good because we have surplus money. Farmers enjoy [receiving] 'Grade A' payments," Mrs Mwaba says.

Kwanshama Dairy Cooperative Union has now expanded its MCC operations to include an 'agro-shop', selling maize bran, wheat bran and the Dairy 19 supplement. "Instead of farmers [having] to go into town, they just get them here," Mrs Mwaba says. "They get them on credit and at the end of the month we deduct from their milk sales." The cooperative is hoping to add more items to the shop in future; for example, basic medicines for treating sick animals.

Kwanshama Dairy Cooperative Union Chairperson Venansio Banda says when ZDTP staff started working with the cooperative's farmers, "our animals were not

in a good state". But now, Mr Banda is proud to say the farmers' animals are healthy and milk production has gone up. They are happy to be earning regular incomes on a monthly basis and the cooperative's membership has almost doubled, he says. "They (the programme staff) are really encouraging us," Mr Banda says.

Mrs Mwaba says she herself has learnt a lot and experienced significant professional growth through the ZDTP. She recently travelled to Southern Province to educate farmers and cooperative managers involved in another dairy development programme. "When I started working for the [Kwanshama Dairy Cooperative Union], I didn't know much about milk handling practices, including testing, but now ... I am able to train and give advice to farmers and my fellow dairy managers on milk hygiene practices," she says.

"I am also getting to know more about the use of the computer and it is making my work easier since I can enter or put some of the information on the computer and generate reports – for example, farmers' milk payments – compared to doing it manually, which consumed most of my time." Mrs Mwaba has also learnt about how to prepare financial reports and profit and loss accounts, which Kwanshama Dairy Cooperative Union was not doing in the past. "When I am stuck and not sure of what to do, I always ask for assistance from ZDTP staff and [they] are available to help."

### Jørgen Henriksen Dairy Farm Management Specialist



"Change is always
difficult and things take
time, but farmers are
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### Reflecting on the development of our EOs

ZDTP Dairy Farm Management Specialist Jørgen Henriksen says he has observed significant professional development in the ZDTP's extension team. He reflects on this in the interview below.

#### How are the EOs tracking?

The EOs are all doing very well, getting much more confident in dealing with farmers, listening and trying to understand the real problem/s and identify solutions or mitigating actions. They're not only bringing messages to farmers – they are supporting them in identifying changes in management and feeding appropriate for each individual case.

## What appear to be some of the current or ongoing challenges for the EOs? And the farmers?

A current challenge for our EOs is to accept that some farmers are not able to / willing to change behaviour and management of their dairy cows. We have talked about the need for concentrating most efforts on farmers willing and motivated to change and improve their dairy herd management along the lines described in the practical farm advice guidelines / fact sheets that we are also providing. There are many such farmers and eventually they will, by their example, convince many or most of the less progressive farmers to change also.

## Have the EOs impressed you with what they have been able to achieve?

Yes, all the EOs have improved a lot. Before joining the ZDTP, only one or two had earlier been involved in dairy development. Now they all have an understanding of what it takes to get a more effective dairy herd with higher milk production. A good result of that is that many of our fact sheets are now under development by the EOs. All the initial fact sheets were produced by us consultants, whereas the coming ones are initiated by the EOs. That would simply not have been possible two years ago.

#### What about the farmers?

A number of farmers have been quick in adopting and adapting to the continuous flow of information from the ZDTP. For example, when we talked to farmers two years ago about growing maize for feeding their cows, they kind of smiled and you could see they thought we were from a different planet. But now? More than 50 farmers have made silage on their own farms in year three of the ZDTP and many are also producing maize, sunflower and soya for concentrates. I believe this change has come about because of the EOs' work, which is the best 'proof' of their professional development and motivation.

## Can you explain the improvements you observed in relation to animals' access to water and why you found this so pleasing?

Our first visits to farms (in 2017) as part of the ZDTP clearly indicated that farmers were treating their dairy animals as if they were all beef cows. That attitude is changing rapidly. Farmers are listening (when the same points are mentioned again and again) and have started to think more about their animals' needs in terms of water and feed. When we talk to farmers about the need for ¼ ha of maize for silage per cow (to have feed enough for the dry season), they soon realise how much they have been underestimating the feed they need. For example, if a farmer with eight cows claims it is impossible to grow 2ha maize to feed their animals, our answers is, 'You have too many cows'. It's very simple.

#### What is the next major focus for the ZDTP?

The next focus is on the economy of milk production – we have started on this, but we need to present more practical and implementable advice to farmers, including a collection of examples from the best of our farmers. We are also focusing on better use of concentrates through 'strategic feeding', i.e. feeding most concentrates during the first 100 days of lactation, getting rid of low yielding cows, shortening the calving interval and getting better cows. Some of our most motivated farmers unfortunately have cows of poor capacity for milk production.

#### Any other thoughts or comments?

Dairy development is a slow process with many stakeholders involved and many factors out of the control of farmers / development agencies (i.e. the ZDTP). It takes two growing seasons (i.e. years) to introduce new crops and preservation methods to farmers and you cannot expect big changes before years three and four. Then, if you want to improve the genes of a herd, we are talking about five years before you see any results. But we are seeing results. Prior to the ZDTP, extension officers were presenting farmers with a fixed message and leaving implementation – trial and error – to them. Our EOs follow a different approach as they do a lot of on-farm demonstrations and farmer field days, introducing improved management and feeding methods, which are then systematically followed up in subsequent farm visits. I believe they have benefitted from the many workshops we have had discussing the knowledge (and economics) behind the improved management methods and feeding approaches.

### Farmer Focus: Joshua and Bertha Mwape of Honeyvale Farm in Mufulira



Joshua and Bertha Mwape, pictured left, farm nearly 25 hectares in Mufulira and are members of Mutundu South Dairy Cooperative, which was given 20 dairy cows by Heifer International in 2015. The charity requires farmers to pass on the first heifer from each gifted cow to another person. Mr Mwape says their first heifer was passed on to somebody else. "Right now we have a second child of the animal that was given to us, which is a bull." He and Mrs Mwape are also looking after another bull that belongs to the cooperative and own some beef animals, which live on another property. ZDTP Extension Officer Chrispine Banda has been providing the Mwape family, and the cooperative, with advice on how to feed and take care of their animals, as well as what to plant on their farms. "The [dairy cooperative] has planted a number of grasses and trees that we, in the past, knew nothing of," Mr Mwape says. The demonstration plots on their farm include buffel grass, sun hemp, Napier grass, Rhodes grass, pigeon pea and white and yellow maize. "Members of the [dairy cooperative] can plant portions of these crops [on their farms], so when their animals have calved, they have good food for their animals. That gives them, in turn, good milk. We also have a nursery of leucaena – it's a tree that looks like the local tree we call Kapeta Nsofu. It's very nutritious, protein-wise, to the animals." Mr Mwape says members of the cooperative have also learnt how to make silage in pits or drums. He says this will help them with difficulties experienced feeding their animals during dry spells. "Machinery to do the [fodder] cutting is usually provided to us through the EO." Mrs Mwape says while milk production is quite

good amongst their cooperative members, the distance to the MCC discourages some farmers from delivering their milk. Many just use milk for home consumption or sell the excess to people living nearby, she says. "We are encouraging them [to deliver their milk], but ... it's very far and they have no bicycles. From our farm, it is 15 kilometres. We use a bicycle but it takes nearly two hours." Mr Mwape says he and his wife have come to see dairy farming "an income generating venture. In the past we used to have milk only for our own consumption, and that was on a very small scale – with no intentions to actually sell it". Now, they plan to buy more animals and their cooperative would like to expand the "pass-on" scheme introduced by Heifer International.

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 or +260 96 456 4206.