

Zambia Dairy Transformation Programme

APRIL 2020 NEWSLETTER



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

Left: A dairy farm worker from Luanshya.

Practical advice for the modern-day dairy farmer

How to effectively manage farm workers

Farm workers are an essential part of any dairy business. They can affect the health and milk production of your animals and ultimately the potential profitability of a farm. Empathy and kindness are two of the most important traits of a good dairy worker. Workers who take an interest in animals and how they are feeling support good animal health and welfare – making sure cows always have access to clean water; promoting good milk ‘let down’ by being calm when milking and identifying those animals that are feeling sick and ensuring they are treated quickly. Buying feed and hiring labour are two major costs for dairy farms, so it is important that your farm workers are well managed and supported to carry out their duties effectively, thus giving farmers more time to concentrate on other things, including other income generating activities. Changing workers often can be upsetting for animals. It can also be time consuming for farm owners because new workers almost always need training. So how do you find and keep a good farm worker?

- Before hiring a worker, write down a list of tasks you would like them to do
- Look at the list and write down the skills and any experience they need to carry out these tasks
- Try to find a person who meets your requirements
- When you find someone, ask for references from previous employers
- If you find someone suitable, put them on a trial period of three months on a fair wage
- Monitor their performance and if they do a good job, agree on a fair package for them going forward

Remember, farm workers need enough money to live and deserve to be treated kindly and fairly. For more information about how to effectively manage farm workers, please check out B03: Managing Farm Workers at <https://www.zambiadairy.com/fact-sheets>.

Seeking reader feedback

Each month, through this newsletter, we engage with over 650 people in Zambia and beyond. This month, we want to hear what people think about it. Looking forward to the next 18 months, we’d like to fill these pages with practical information. What would you like to read about? Do you have any suggestions? Drop us a line at zdtpnewsletter@gmail.com or via WhatsApp (+260 96 456 4206) and let us know!

Farmer spotlight: Bernard Sichamba

Right: Mr. Sichamba with some of the workers he has hired to help him on his dairy farm.

Mr. Bernard Sichamba, of the Liteta Dairy Union Co-operative, supports a household of four with the income generated by milking four Holstein-Friesian x Jersey cows on his farm in Mwamfumba. He has been receiving farm visits and training from ZDTP Extension Officer Mrs. Beatrice Mwilima since 2017. Mr. Sichamba says the ZDTP has changed the way he and his family consider their dairy farming enterprise. They have seen the benefits of improving the health and productivity of their animals and “now take our business seriously”. Feeding silage, for example, resulted in an increase in average herd milk yield from 7 to 22 litres a day. Mr. Sichamba says the extra income from his animals’ improved productivity has meant he has been able to buy medicines for his animals, when necessary, and pay workers to help him on the farm. He was also able to buy 20 bags of cement for extending his house and spare parts for his truck.



Meet the team: Paul Kakana

Mr. Paul Kakana, right (in blue), has been a Logistics Assistant with the ZDTP since January 2020. His main job revolves around the management and maintenance of the ZDTP’s vehicle fleet and ensuring minimal interruption to our field work. In addition, he is one of the ZDTP’s two drivers, which means he has now mastered operation of the programme’s motorised fodder-choppers and now fully understands the nutritional benefits of silage for dairy animals.



As drivers for the ZDTP, Mr. Kakana and Mr. Jacob Nkhoma are in charge of delivering and managing the use of the programme’s two fodder choppers during on-farm silage making demonstrations, as well as recording their usage. They also ensure that the programme’s field extension team members are supplied with any other equipment they need to do their work. Mr. Kakana says he chose a role with the ZDTP because he wanted to gain more practical knowledge in his various fields of study. His passion for learning has so far resulted in 11 certificates from the University of Zambia – from contract management and financial auditing to ICT, project management and business and entrepreneurship. He also has a Certificate in Diplomatic Practice, Protocol and Public Relations from the Zambia Institute of Diplomacy and International Studies. Mr. Kakana says he likes how the ZDTP encourages staff to develop skills beyond their job description, “work smarter and contribute positively to the programme”. He is looking forward to shadowing the programme’s Business Support Officers in future to learn more about how they support local dairy cooperative unions to better manage their resources.

Adapt and thrive

Like people in many organisations around the globe, we at the ZDTP are adapting to new ways of working so that we can keep ourselves and the communities we work with safe from Covid-19. One thing we have always been good at is being flexible and adaptive and that is holding us in good stead in the current environment as we continue with our business support and extension activities, while also carrying out our Annual Benchmarking Survey (ABS). We are focused on working with programme participants such as farmers and cooperative members in ways they are comfortable with. This means making the most of any time ‘on farm’ by carrying out as many activities as possible, i.e. carrying out ABS survey interviews whilst supporting farmers to make silage. We are also meeting some farmers at their local MCC for a ‘facemask to facemask’ consultation and providing phone consultations to others. In addition, we are engaging with farmers through WhatsApp groups and developing new fact sheet titles on subjects such as feed planning and growing Napier grass so that farmers have reference documents on hand.

Feeding dairy animals throughout the year

As a result of three years of working with smallholder dairy farmers in the Central and Copperbelt, we've put together some advice on how to feed dairy animals in order to optimise milk production. Taking into account Zambia's rainfall pattern, and the need for dairy farmers to optimise their cost of production, we've developed a simple plan to support farmers to feed animals cost effectively. The emphasis is on feeding locally available ingredients and prioritising the highest quality feed to cows during the first 100 days post calving, which is the time when milk production is highest. This simple plan focuses on making best use of natural pasture during the rain season, green fodder in the early dry season and silage during the dry season. For further information, please see fact sheets F06 and F06A at www.zambiadairy.com.

| Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |
|-----------------|-----|--|-----|-----|-----|-----|---|-----|-----|-----|-----|
| Natural pasture | | Supplement natural pastures with green crops such as napier, maize or sorghum. Or silage if available. | | | | | Silage (or hay) produced during the wet season. | | | | |
| 60 days | | 150 days | | | | | 150 days | | | | |

Reflecting on milk quality changes with Mr. Friday Sampa

In last month's newsletter, our National Milk Quality Specialist, Mr. Friday Sampa, provided feedback on milk quality changes he had observed at farm level. This month, he reflects on changes observed at Milk Collection Centres.

Last year's drought and subsequent electricity power cuts created a major challenge for farmers and Milk Collection Centres (MCCs). ZDTP National Milk Quality Specialist Mr. Friday Sampa says that without proper refrigeration, it was difficult to cool fresh milk which led to spoiling. "The drought struck a heavy blow on the entire dairy value chain."

Fortunately, Mr. Sampa says, the situation has improved in terms of the country's hydropower and MCCs have been able to cool cooperative members' milk again – although cooling milk overnight remains a common problem for off-grid farmers, especially in Mukambo in Mufulira.

Mr. Sampa is also pleased to report positive changes at MCCs in relation to documentation and procedures. "Board members and staff now have Standard Operating Procedures (SOPs) for raw milk acceptance, storage, testing and cleaning. The outcome is that milk receptionists are now using SOPs as a guide to implement their milk quality programmes."

Monthly milk quality grades, bacteria count and milk volumes from the processor are now also being recorded in both hard copy and electronic form.

Mr. Sampa says he is pleased MCC staff are following correct "rinse, clean and sanitise" sequences, following training on cleaning procedures for milk equipment, and that milk testing has increased across the six MCCs the ZDTP is working with.

For example, Kwanshama MCC is now accurately testing milk for freshness, mastitis, temperature and added water. "Previously, they used to test only for added water with an inaccurate lactometer and alcohol. They are now using alizarol and a standard lactometer with temperature compensation to test milk accurately for freshness and added water."

ZDTP has copies of draft SOPs for raw milk acceptance, storage, testing and cleaning available and is happy to share them with people from other organisations, who may wish to modify them to suit their own needs. If you are interested, please contact our Programme Country Manager, Tania Thomson, via WhatsApp on +260 960456 4206.

Questions from the field

Question: ZDTP Extension Officer Chrispine Banda

Some of the farmers we work with have beef animals as well as dairy animals. What feeding and management practices should these farmers follow to get good average milk production from their beef animals?

Answer: ZDTP Dairy Farm Management Specialist Jørgen Henriksen



Chrispine Banda



Jørgen Henriksen

Beef cows have a low potential for milk production. Unlike dairy cows, they cannot produce up to 20 litres of milk per day. However, through proper feeding and management, you can help a beef cow to produce 4-6 litres of milk per day early in lactation.

The main priority should be to feed your beef cow well in the first 100 days after calving. If your cow has free access to good pasture or silage, there should be no need for any supplementation.

If dry maize stover is the only feed available, there is a need to supplement the animal's feed with concentrate - but only during the first 100 days after calving and no more than 1-2 kgs per day depending on the body score of the cow.

But buying supplements is expensive and not feasible for just 3-5 litres of milk per day (from a beef cow). Never buy commercial Dairy-19 for a beef cow. It is just too expensive. Instead, farmers should make sure to grow enough fodder in the rain season to feed all their animals in the dry season.

If there is no forage available, and a farmer must supplement feeds with concentrate, then they should use maize bran or another alternative - as cheap as possible.

Farmers who are wanting to get milk from beef cows should also be encouraged to use AI semen from a dairy breed to produce a heifer calf, which can produce at least double as much milk as a beef cow mother.

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.