



# Zambia Dairy Transformation Programme

FEBRUARY 2020 NEWSLETTER

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



*Above: Members of the ZDTP Programme Technical Committee (PTC) visiting a demonstration plot on Mr. Goodfell Mwiinga's Focus Farm in Chibombo in February 2020.*

## ZDTP governance group visits Chibombo and Liteta

Members of the Programme Technical Committee (PTC) recently commended the ZDTP on its practical approach and the changes that have occurred through the programme, given the difficulty in changing farmers' engrained practices and behaviour. This feedback was received in February 2020 during a field visit to Central Province. A delegation of four staff from the Ministry of Fisheries and Livestock (MFL), led by Mr. Cosmore Mwaanga (Director of Policy, Planning and Information at MFL and the PTC's Chairperson), visited Milk Collection Centres at Liteta and Chibombo on 26 February, where they had an opportunity to chat with farmers and Board members. Discussions covered various topics, including the success some farmers have had in reducing their cost of production by firstly viewing 'farming as a business' and secondly putting in place measures such as producing silage or concentrates on farm to decrease feed costs – one of the major input costs for dairy farmers. The delegation also had an opportunity to meet Ms. Beatrice Mwilima, the ZDTP Extension Officer for Chibombo and Liteta, and Mr. Marvellous Chansa, the ZDTP Cooperative Business Support Officer for Central Province, and hear about some of the work they've been doing to promote behaviour change amongst farmers. Ms. Mwilima told the group she was convinced some of the positive changes she's seen are due to changes in individual farmer's attitudes. The group's visit ended with a trip to a ZDTP demonstration plot being hosted by Chibombo farmer Mr. Goodfell Mwiinga, who proudly showed the delegation sorghum that he had planted on his farm for use in silage production.

ZDTP Country Manager  
Tania Thomson



*"At the start of the ZDTP, our staff were dubious of the intended approach – that is, providing knowledge to support dairy farmers' transformation rather than giving them inputs such as seed or fertiliser; they were sceptical that farmers would work with us. It has taken time and a lot of patience to get to this point; however, it's incredibly pleasing to see staff now promoting the merits of extension advice within farming circles, as well as the message that dairy can be a profitable business provided farmers put in the work themselves – and make the most of services that are available to help them."*

## Zambians visit New Zealand on a Study Tour

*During November 2019, twelve members of the Zambian dairy industry were selected to take part in a 10-day Study Tour visit to New Zealand. The Tour will begin on 6 March 2020. All participants have been actively engaged with ZDTP and needed to convince us on the merits of their participation. It was a rigorous application process and we're pleased to share with you the profiles of the participants (below). We look forward to providing an update on the Study Tour in the next issue of the newsletter.*



Dr. Benson Mwenya has a comprehensive background in Animal Science with a Masters from Malawi and a PhD from Japan. He's had an interest in the dairy sector since starting his studies in Zambia when he completed a project focused on milk recording. Dr. Mwenya started his civil service career as Senior Agricultural Research Officer in 1999 and has since risen through the ranks of the Livestock Development Department at MFL. He was promoted to Permanent Secretary in October 2019. Dr. Mwenya is also Chairperson of the Livestock Sub-Committee of the Agricultural Society of Zambia, ensuring strong participation of the sector in the annual National Agricultural Show.



Mrs. Mirriam Mbazima has been the Chairperson at the Dairy Association of Zambia (DAZ) since 2015. She and her husband entered farming as a way of being self-sufficient, initially through horticulture, before diversifying into cattle. They have been able to develop their dairy business through the support of a knowledgeable worker who was able to convince them to feed dairy cattle with respect to their production cycle. Although the initial goal was self-sufficiency, good management of the herd has led to a successful business. Mrs. Mbazima is certain that if she can run a successful farm, others can and is passionate about ensuring strong participation of Zambians in the dairy industry and DAZ.



Mr. Mwape Mweni was raised in a rural set up in Northern Zambia. His upbringing influenced his decision to study Agricultural Science with a major in Animal Science. Following graduation, Mr. Mweni joined the Ministry of Education for two years as a teacher before being transferred to the precursor of MFL in 2014. He was heavily involved in the provision of extension services to livestock producers before being transferred to Lusaka to join an IFAD-funded project as a Livestock Stocking and Re-Stocking Specialist. Mr. Mweni has a keen interest in climate resilience and is currently pursuing a Masters in Climate Change and Sustainable Development.



Dr. Chibwe Kaoma's background is in Animal Production. He has both a Masters and PhD from the Czech University of Agriculture and a keen interest in research. Dr. Kaoma started his civil service career as an Agricultural Research Officer at the Ministry of Agriculture and Cooperatives (Zambia) in 1996 in Choma, Southern Province. During his career at the Ministry he has been involved in a number of donor-funded programmes and was promoted to Director of Livestock Development at MFL in 2019.



Mr. Kelvin Mulusa, Field Extension Manager for the ZDTP, has always had an interest in farming. This led him to enrol in a horticulture course at the Natural Resources Development College (NRDC) in Lusaka where he graduated with a diploma. His first job was as a farm manager on a tobacco farm on the eastern side of Lusaka, which also grew other crops such as wheat, potatoes, soya and maize. This, plus his involvement in out-grower schemes with small-scale farmers, helped him realise the potential that lies in small-scale farming. Mr. Mulusa is currently pursuing a Bachelor Degree in Project Planning and Management and hopes to continue contributing to the growth of the livestock industry in Zambia.



Mrs. Caroline Lubinga is a dairy farmer who took early retirement from the banking sector in 2013, after 23 years of service. She moved into farming chickens, ducks and crops with no intention of venturing into dairy. However, she and other local female farmers were encouraged by an extension officer from Parmalat to form a dairy cooperative which is affiliated to Kwanshama Dairy Cooperative Union. Mrs. Lubinga has since built up her herd from one to 60 animals and is Chairperson of her local cooperative (Kwanshamakwenu). On average, she milks 15 animals per day which produce 200 litres between them.



Mr. Cosmore Mwaanga joined the Ministry of Agriculture and Water Development on 15 August 1984 and spent much of his early career supporting the provision of extension services in Northern Zambia. In 2001, he joined the Department of Policy and Planning at the Ministry of Agriculture and Cooperatives and moved to the Southern part of Zambia. In 2008, Mr. Mwaanga relocated to Lusaka in the position of Chief Policy Analyst, before being promoted to Director of Policy, Planning and Information at MFL in 2018. He holds a Masters in Agricultural Economics.



Ms. Helen Mubanga spent 20 years in Botswana before returning to Zambia in 2006. Before relocating, she'd developed an interest in farming and when she settled near Kitwe in the Copperbelt she was introduced to the Kwanshama Dairy Cooperative Union. Ms. Mubanga attended a few trainings before being asked by a local Veterinary Officer to care for four dairy cattle which had failed to reproduce and were being disposed of by a local organisation. Through her care, two of the animals conceived and Ms. Mubanga became a dairy farmer. She is now a Board member of Kwanshama Dairy Cooperative Union and has a herd of 20 animals.



Mr. Clifford Chisenga is a former teacher who started dairy farming in 2006 when he received training and a cow from the United States-funded Land O Lakes programme. He has been a member of the Liteta Small Scale Dairy Cooperative Union since 2006 and is currently the Board Secretary. Mr. Chisenga manages a herd of nine animals on his 3.5-hectare farm. Dairy farming has helped him support his family and ensure that all his eight children have received a good education. Mr. Chisenga is one of the 87 farmers enrolled on the ZDTP's Real Time Monitoring Scheme.



Ms. Jedrine Mushili joined MFL in 2015 and holds the position of Veterinary Assistant. She is based in Luanshya in the Copperbelt and provides Veterinary Services to farmers in Fisenge. Ms. Mushili has a particular interest in animal breeding and the genetics which are suitable for tropical regions, such as Zambia. She feels that extension workers are an important mechanism to bring in "new ideas and any developments which can take Zambia to the next level in terms of dairy farming".



Ms. Beatrice Mwilima grew up on a mixed farm which influenced her decision to pursue a Diploma in General Agriculture. She has been an Extension Officer with the ZDTP since its inception in 2017, providing services to farmers in Chibombo and Liteta in Central Province. Ms. Mwilima was motivated to join the ZDTP due to her interest in working to develop the agriculture sector and to learn more about dairy. One of her areas of interest is how attitude influences behaviour change.



Mrs. Evelyn Chona worked as a teacher with the Ministry of Education for 32 years. Before retiring, she joined Chinchu Wababili, a local women's dairy cooperative which is affiliated to the Fisenge Dairy Business Cooperative Union (FDBCU) – the largest female dairy cooperative in Zambia. In 2008, Mrs. Chona received an in-calf heifer from another cooperative member as part of a 'Pass on the Gift' programme. She started milking in 2009 and has not looked back since. Despite facing many challenges, she's been able to build up her herd through breeding, buying in and receiving some animals as part of a loan package from Zanaco, a local bank. Mrs. Chona is currently the DAZ representative for the Northern Region and one of the 87 farmers enrolled on the ZDTP's Real Time Monitoring Scheme.



*Above: Filling the silage pit at Mrs. Kasengele's farm - just two days' work using a motorised forage chopper.*

## Motorised chopper a real time saver

Ms. Gloria Kasengele, of Fisenge, has proven that prior preparation and planning can really help address the challenge of feeding cattle during the dry season. Following good rainfall in the Copperbelt this year, Ms. Kasengele decided to ensile her 3 lima maize crop as soon as it was ready. She hired a motorised forage chopper from a local group in Tigwilizane (a primary cooperative affiliated to the Fisenge Cooperative Dairy Union), at a cost of ZMW 35 per hour. Over two days, she and her family had chopped enough maize stover to fill a pit measuring 5 x 3 x 1.5 metres (22.5 m<sup>2</sup>), which will help to feed her eight cattle during the dry season. The primary cooperative's Youth Group had sourced the chopper through a grant facility from DAZ, as both an income generating activity and as a way to support farmers to have access to affordable choppers to make silage. We look forward to catching up with Ms. Kasengele later in the year to see how the silage produced is helped her reduce the cost of doing business.

### Mr. Greg Braggins Milk Quality Expert



*"Small-scale farmers appear to be adopting [milk quality] recommendations; however, teat spraying is being hindered by cost."*

## Milk quality visit by Mr. Greg Braggins

Visits to more than 40 farming household within ZDTP's six target cooperatives were made by our Milk Quality Expert, Mr. Greg Braggins, during his trip to Zambia in January/February 2020. During each visit Mr. Braggins accompanied ZDTP field officers as part of his role of supporting skills improvement within the ZDTP team. It was also an opportunity for Mr. Braggins "to determine if they [ZDTP field officers] are all on the same page". During these visits he observed good practices being carried out by farmers and ZDTP field staff and suggested possible improvements in relation to milk quality, animal welfare and nutrition.

Mr. Braggins also visited the six Milk Collection Centres (MCCs) being run by the target cooperatives, for an update on the adoption of good handling and cleaning practices. Adoption was "mostly good"; however, finances are holding most back from basic repairs and maintenance.

Mr. Braggins says overall, small-scale farmers appear to be adopting recommendations and "appear very grateful for any advice". However, adoption of one key milking practice, teat spraying, "is being hindered by cost", so MCCs are encouraged to have "smaller, more economical stocks available".

During his visit, Mr. Braggins held a training workshop for the ZDTP field team, covering biosecurity, the use of teat dip, the Rapid Mastitis Test (RMT), milk storage at night and the importance of keeping antibiotic residues out of milk for sale or consumption.

He and the field team also visited the Zammilk processing facility and a commercial farm (Filmwell Farm) near Chisamba, which has 360 milking animals and delivers more than 2,000 litres per day to Zammilk.

Mr. Braggins says the visit was appreciated by the ZDTP team as well as the staff at Filmwell, who were provided with advice on improvements they could make to their milking machine (i.e. changing worn out rubbers and methods of vat tank cleaning). It gave everyone an insight into the risks associated with milking machines, such as issues with plant hygiene and potential mastitis.

Mr. Braggins says at the farm or MCC level, cooling milk quickly would greatly help with milk quality. However, access to cooling technology remains an issue. Ideally, satellite cooling stations could be introduced.

Mating is another important issue that needs to be a focus going forward as "the lack of availability of bulls and semen is affecting milk quality" through farmers extending lactation lengths if they are unable to get their animals pregnant.

**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.**