

Using Photovoice to investigate the challenges facing women dairy farmers in Likuni, Malawi

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Worldwide, vets have an essential role in ensuring the health of livestock, the consequent profitability and success of agricultural enterprises, and the stability of the livelihoods which livestock support. However, to improve the health of livestock the constraints and challenges faced by farmers must first be understood. I became interested in the One Health aspect of veterinary medicine towards the end of third year at vet school and was subsequently inspired to intercalate in the University of Bristol Global Health BSc course. Being a vet student among many medics, I chose to use the opportunity of an independent dissertation research project to explore an issue affecting both human health and animal health and welfare: the challenges faced by African smallholder dairy farmers. I undertook this project in Malawi because of existing links within Bristol University and also because it is a low-income country facing significant human health and nutrition problems.

The Malawian dairy industry consists of approximately 9,600 smallholder farmers comprising Milk Bulking Groups: communities of farmers who deposit their milk in a central bulk tank for chilling, storage, specific gravity and microbiological testing, and sale to milk processors. Milking is carried out by hand and with on-farm chilling impossible due to lack of electricity and equipment, the farmers depend on bulking groups for reliable sales to commercial milk processors. The national dairy herd of Malawi consists mostly of crossbred Holstein-Friesian, Malawian Zebu, and Jersey cattle.

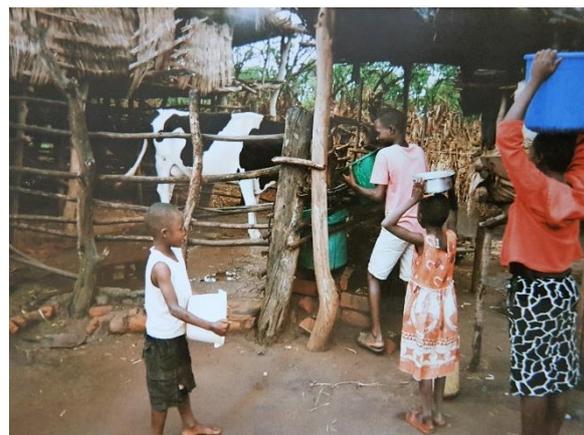
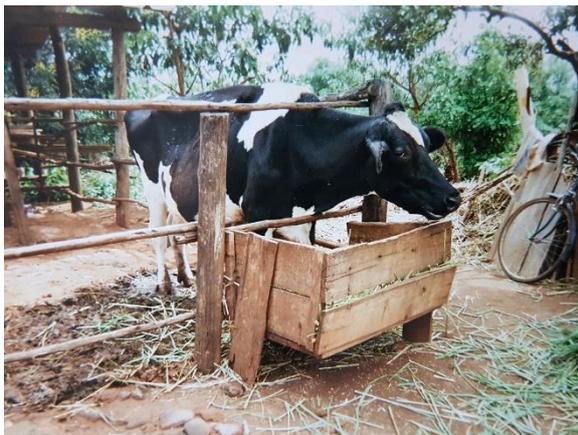
For this study, I used a social science research method called Photovoice: a Participatory Action Research method in which participants become actively involved in data collection through photo taking and storytelling. Their active involvement empowers them to voice individual and community concerns and elicit action for social and policy change. I worked alongside the Small Scale Livestock and Livelihoods Programme – a local agricultural development NGO based in Lilongwe. My study focussed entirely on female participants due to my personal interest in the field of women in agriculture in low-income countries and the study site was Likuni area - a peri-urban region of Lilongwe.

My study began with a group meeting with all participants in which they were trained to use disposable cameras. I then conducted an individual household questionnaire survey to gain insight into daily dairying activities, socioeconomic position, and family life. The women were then left with a camera each for eight days to take photographs of challenges they face in their day-to-day dairy farming. After developing the photos I was pleasantly surprised that every participant had fully engaged in the study aims and produced a fascinating collection of photographs depicting a range of issues. Looking through these images provided a 'fly-on-the-wall' view of a Malawian dairy farmers' daily life - something unachievable via more conventional, less visual interview techniques and methods of data collection. Upon returning the photographs to the participants, I conducted individual interviews about the content of 4 photographs which they selected to represent the most important issues they face. This allowed me to gather a selection of 48 'Photostories' – a rich qualitative data set for analysis.





The results of my study revealed nine key challenges faced by this community of women dairy farmers: Feeding (notably the challenge of affording supplementary concentrates, especially during the dry season when grass growth is low); the inability to afford quality utensils, materials and equipment; cattle housing cleanliness; cattle housing maintenance; labour delegation and time constraints; water (notably travelling long distances to water sources, especially in the dry season); ticks (notably affording acaricides); diseases, injury and medication in cattle; and, at the centre of all of these issues: low income. Many of these challenges relate to cattle health and welfare as well as the day-to-day experience of the farmers, therefore heightening their need to be addressed.



These results have revealed the insights of a small community of women dairy farmers and this study has given them an opportunity to raise their voices and directly show, through their creativity in photo-taking and story-telling, where the gaps in their resources are and where interventions are needed to enhance the success of their dairy farming. I believe that this is an essential first-step for any veterinary intervention in agriculture, especially in a culture where local customs and constraints need to be better understood to achieve full awareness of the problems which they represent. In this way, photovoice research such as this represents a collaboration of social anthropology and veterinary medicine which has the potential to eventually lead to improved livelihoods of livestock farmers in low income countries in a way that is appropriate, specific and beneficial for them.

These data also proved invaluable to help me better understand the lives of my participants and it was humbling to see the resourcefulness of these women and their families in action and to be invited into their homes, which usually consisted of a small brick or clay house, perhaps a small plot of land for crops, and a compound for their cattle. Having carried out dairy EMS and learnt about the various production and biosecurity measures in place on large UK dairy farms, it was fascinating to experience

this in a smallholder, semi-subsistence context. I saw similarities in the way cattle housing is constructed and compartmentalised but also great differences with various features such as sloping, easy to clean, concrete floors desired by all farmers but financially inaccessible to most. I admired the resilience and determination of these farmers to continue with their dairy farming despite the tiresome, labour intensive tasks of husbandry and hand milking with extremely limited resources.

Personally for me, the experience of directly conversing with women who lead entirely different lives to my own was fascinating. It gave me an in-depth understanding of their dairy farming challenges, and an appreciation of the potentially severe consequences of these - something which I feel is important to appreciate in the privileged position in which I live. To see how dependent the lives of these women and their families are on the health of their cattle has further inspired me to pursue a career working with livestock farmers in low income countries where veterinary services are limited. I have been afforded an insight into subsistence farming in the Malawian context far beyond what any amount of reading can offer and I will always be grateful to the women who participated in this study, to the SLLP, to Professor Mark Eisler at the University of Bristol Veterinary School, and to the BVA for making this opportunity possible through a student travel grant.

