Book Reviews

Cow Talk: Understanding Dairy Cow Behaviour to Improve their Welfare on Asian Farms

J Moran and R Doyle (2015). Published by CSIRO Publishing, Locked Bag 10, Clayton South VIC 3169, Australia. 256 pages Paperback (ISBN 9781486301614). Price £36.50, €49.00. Free to download from: http://www.publish.csiro.au/.

How could anyone possibly resist reading a book called *Cow Talk*? This book is very specifically intended to be an educational information resource aimed at improving the welfare of cattle on small-holder dairy (and beef) farms in Asia. It is particularly focused on the shift towards increasing herd sizes and the drive towards the introduction of cows from temperate climates. Having read it through I can see many messages that are relevant to the African farming context and it also provides a great deal of information that is relevant to cows wherever they are in the world.

The book comprises chapters that explain cattle behaviour and how cows view the world through their senses which, incidentally, is not the same way humans do — something we (humans) regularly forget, and the implications of this for how to handle and manage cattle. It also covers the concept of cow signals which promotes observing the animals' behaviour and trying to understand the messages these behaviours are giving us about how they are coping within their environment and what needs changing. In addition, it gives a lot of pointers about approaches to housing, feeding and managing the cow to try to maintain good welfare. While recognising the drivers that lead to cows in Asia being continuously housed or 'shedded', the book repeatedly emphasises the behavioural inappropriateness of continuous tie-stall housing.

The authors clearly have a passion for cows and cow welfare and possess a great wealth of knowledge about cow behaviour and management. The book, printed in black and white, is densely packed with information and written using accessible and fairly straightforward language alongside some useful photographic illustrations of specific behaviours and housing systems. Intended to promote animal welfare and stimulate changes in cattle management practices, and targeted at a very broad range of readers, from farmers and stockpeople right through to Universitylevel educators who train trainers, it is great to note that the book is free to download by chapter from the internet.

In the Global South, milk production is increasingly becoming recognised by subsistence and small-holder farmers as a way of converting low-value forages and crop residues into a valuable marketable commodity. This is why we are seeing a growth in dairy cow numbers, government policies directed towards increasing milk production and lots of interest from business entrepreneurs who sense an opportunity. The danger of a 'perfect — cattle welfare — storm' developing as a result of these pressures, compounded by strategic worries about global food security, is perhaps more acute now than ever before. Expansion of cow numbers by traditional, land poor, smallholder farmers, the ongoing introduction of more and more temperate cow genetics and the management challenges of supporting these high-producing animals and the loss of endemic disease resistance are all coming at once.

Promoting concern for cattle welfare in these circumstances is extremely challenging. As with our UK farmers, the most direct influence over the lives of cows in Asia and Africa are, of course, the farmers who have responsibility for their daily management. However, as is also the case with our UK farmers, the number of influencers and external drivers that affect what farmers can, cannot and are expected to do are enormous. Milk buyers, co-operatives, farm gate purchasers, the farmers' local community, vets (if available), veterinary pharmacies, extension workers and farm advisors, community animal health workers, charity workers, educational institutions, researchers, local government representatives, politicians locally and globally, to name just a few, contribute to what is expected of dairy farmers and what they, in turn, expect from their cows. How, then, do we make and keep the welfare of the cow central to these agendas and work with farmers in a realistic and positive way to promote the welfare of cattle?

It seems unlikely that there is a single perfect answer to this question. Indeed, the more creative we can be in communicating about the welfare needs of cattle the more likely we are to filter these messages through to the multitude of different groups that influence the lives of dairy cattle. Books, such as the one reviewed here, will be one, valuable, component of this and, of course, the educational institutions which train farmers directly or train farm advisors or educate future policy-makers are vitally important. However, there is also an opportunity to embrace other technologies, such as mobile phone apps and social media which can interactively communicate simple, colourful, visual materials. We can also draw on the wealth of communication experience gained in the International Development sector, including the use of participatory practices and advocacy strategies to reach policy-makers. All initiatives should be welcomed and encouraged, not all will work but we will learn something from the process and the speed with which this happens is now more pressing than ever.

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