Modelling climate change impacts on livestock aid
York, L. and Heffernan, C., University of Reading, School of Agriculture, Policy and Development, United Kingdom; luke_york@live.com.au

Poor livestock keepers are faced with a future of uncertainty. Across the literature, there is broad consensus that current constraints to livestock production are likely to be exaggerated under climate change and the associated Extreme Weather Events (EWEs). This will have important implications for those poor households who rely on livestock for income generation, food security, and as source of investment. Traditionally, restocking programs have been instigated after EWEs to support poor households in the short-term and help break the poverty cycle over the longer-term through the provision of livestock. Other forms of aid such as supplementary feeding, destocking and more recently, cash transfers have also been tried as tools to support the rehabilitation of livestock-dependent populations post-emergency. However, while climate change is likely to change the duration and frequency of EWEs, little is known regarding the robustness of particular forms of livestock aid in meeting these new challenges. Therefore, in the following article, the authors create a simple deterministic model to explore the potential impacts of different forms of livestock aid on a range of livestock keepers across both subsistence and pastoralist production systems. The impact of critical global climate parameters such as the predicted 2 °C temperature rise are explored within the expected production shifts across the systems under review. The model demonstrates the importance of understanding the factors underpinning livestock aid at the household and production system levels and the potential limitations and benefits of a wide range of livestock-related interventions.