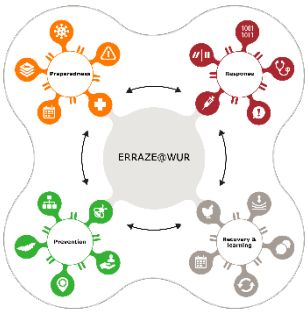
Paradigm Shifts for Global One Health

Greater resilience requires transformation and integration

Book of Abstracts

International symposium
23-25 April 2024
Wageningen, The Netherlands



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Editors: Joukje Siebenga, Erika van Gennip, Roosmarie Vriens, Wageningen University & Research

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2024, Wageningen, Stichting Wageningen Research, P.O. 338, 6700 AH Wageningen, The Netherlands
T +31 (0)317 48 07 00 www.wur.eu

Integration of farmers' and experts' knowledge in livestock disease management in Kisumu County, Kenya.

Jackline Owili

1) Wageningen University & Research, the Netherlands.

Problem statement: The interactions between humans and animals present a major global health risk disrupting agrifood and healthcare systems and carrying implications for food security and animal health. These health risks include newly emerging zoonotic diseases, highlighting theoretical need for resilient livestock management and effective biosecurity measures. International health agencies, governments, and scientific communities are working to improve disease management systems, recognizing the critical role of land use in shaping disease dynamics and transmission pathways. Efforts are underway to identify potential breeding spots for new zoonotic pathogens and implement biosecurity measures to mitigate spillover events, underscoring the importance of sustainable land management practices. Rural communities have substantial local knowledge rooted in experience with a variety of common diseases, including zoonoses, and play a crucial role in addressing these health threats. Using Kenya as an empirical context, this study aims to investigate the challenges and opportunities for integration of local (farmers') and expert knowledge in disease management.
Methods: This study investigates the potential opportunities for integrating local with expert knowledge in livestock disease management using the social practices approach, which focuses on the everyday practices of groups of farmers. Rooted in practice theory, the study employs a qualitative case study design and participatory methods to examine the socio-technical, agroecological, and biomedical connections within farmers' disease management practices. This includes fodder and grazing management practices that influence animal health and resilient livestock systems. Fieldwork was conducted from August 2023 to November 2023. The methodology involved semi-structed interviews with livestock farmers to gain insights into their local coping mechanisms for managing diseases on their farms. Additionally, interviews were conducted with experts such as County animal health workers, community-based organisation workers, veterinary workers, and animal health researchers who are involved in livestock health. Non-participant observations were also conducted with farmers, extension workers, and veterinary workers to better understand their knowledge and perceptions about disease management.
Preliminary findings: Farmers heavily rely on local coping methods due to challenges in accessing adequate animal healthcare support, including limited veterinary services, lack of awareness of disease transmission, high treatment costs, and insufficient resources. Agricultural extension workers and animal health service providers play crucial roles in disseminating disease management practices, offering training, and conducting awareness campaigns. However, they face obstacles like transportation issues and understaffing, hindering their ability to reach rural communities efficiently.
Conclusion: Livestock disease management is a complex issue that necessitates collaboration among farmers, veterinary professionals, and agricultural extension agents. Study findings offer valuable insights for developing new ways to ensure timely disease diagnostics and implementation of context-specific biosecurity measures. These efforts are important for enhancing food security and promoting sustainable livestock management practices. Therefore, collaborative initiatives such as community awareness campaigns on disease identification, knowledge exchange and trainings, and investing on more qualified animal health care service providers will considerably improve the resilience of Kisumu County's livestock farming communities to disease outbreaks. This, in turn, contributes to resilient agrifood systems and enhances overall food security situation.

Keywords: Agrifood-system, Zoonoses, Spillover, Resilient livestock system, Food security.