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Stakeholder analysis and their roles in livestock disease reporting and response in pastoral areas in northern Kenya

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Abstract

Livestock plays an important role in the lives of pastoralists, whose entire livelihoods are structured around benefit from animals. One of the major constraints for pastoral production is livestock diseases, and the available disease surveillance systems are often difficult to implement under range conditions where pastoralists live. Furthermore, delays in disease outbreak reporting by pastoral communities to animal health workers is also a challenge that affects effective and timely response. This study aimed to investigate animal disease surveillance practices in pastoral areas of Northern Kenya. The study was carried out in Laisamis and Ngurunit Wards in Marsabit County. Data was collected on stakeholders within the pastoralists' production systems, their roles and animal health information flow between and amongst them; and methods used to transmit the information and their strengths and challenges. Findings revealed a network of 14 nodes (stakeholders) and 75 edges (links among the stakeholders), where the main stakeholders included: Animal Owners/Pastoralists (Degree = 22, Betweeness Centrality = 0.174, Page Rank = 0.173), Government Animal Health Workers (Degree = 22, Betweeness Centrality = 0.322, Page Rank = 0.145) and Non-Government Organisations (Degree = 10, Betweeness Centrality = 0.01, Page Rank = 0.087). There was an evolution from early methods used in disease outbreak reporting by communities from use of smoke, fire and walking on foot, to the present-day methods including riding on motor bikes, vehicles and use of mobile phones in passing the information on outbreaks. Furthermore, it describes evolution in livestock disease response pathways from solely relying on herbs to utilisation of animal health workers and modern synthetic drugs to respond to disease outbreaks in communities. The stakeholders involved in disease reporting and response have changed over time and new roles have been created with the expansion of the network. The major needs expressed by the pastoralists included: information on prevention, control and management of livestock diseases, bringing agrovets closer to communities and faster response to reports of disease outbreaks. In conclusion, an effective disease reporting and response system, requires utilisation of the roles and links among various stakeholders involved in this network.

Keywords: Disease, livestock, pastoralists, reporting, response

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