African Digitization and Preservation Studies (LIS focus)

ICT-Based Livestock Monitoring Systems Adoption among Somali Herders in Kenya: A Comparative Study

Olivier Mutuku[1], **Geraldine Ngugi**[2,3], **Moses Wanyonyi**[4,5]

[1] Department of Advanced Studies, Kenya Agricultural and Livestock Research Organization (KALRO)

[2] Department of Advanced Studies, Kenya Medical Research Institute (KEMRI)

[3] Maseno University

[4] Kenya Medical Research Institute (KEMRI)

[5] Kenya Agricultural and Livestock Research Organization (KALRO)

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Correspondence: omutuku@aol.com

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Author notes

Olivier Mutuku is affiliated with Department of Advanced Studies, Kenya Agricultural and Livestock Research Organization (KALRO) and focuses on African Studies research in Africa.

Geraldine Ngugi is affiliated with Department of Advanced Studies, Kenya Medical Research Institute (KEMRI) and focuses on African Studies research in Africa.

Moses Wanyonyi is affiliated with Kenya Medical Research Institute (KEMRI) and focuses on African Studies research in Africa.

Abstract

ICT-based livestock monitoring systems have become increasingly popular in various contexts worldwide, offering herders better management of their animals and resources. In a specific context such as Somali herders in Kenya, these technologies can significantly enhance productivity and sustainability. The research employs a mixed-methods approach combining structured interviews with quantitative data analysis on system usage patterns. The sample includes both traditional pastoralists and semi-urbanized herders across multiple regions of Kenya. A notable proportion, approximately 45%, of Somali herders in the study region have adopted ICT-based monitoring systems for their livestock management, with younger generations showing higher adoption rates compared to older ones. Factors such as access to technology and perceived benefits play crucial roles in system uptake. While there is significant potential for improved livestock management through the use of ICT-based systems among Somali herders in Kenya, challenges related to cost, technical literacy, and infrastructure need to be addressed. Policy makers should consider subsidizing or providing access to these technologies, while also investing in capacity-building programmes to enhance user skills. Additionally, fostering regional collaboration can help overcome geographical disparities. ICT-based monitoring systems, Somali herders, Kenya, livestock management, adoption levels

Keywords: *Somali, pastoralism, GIS, RFID, participatory, sustainability, ICT, technology adoption*

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