## **ABSTRACT**

The livestock sector is a major contributor to food security. Points along the value chain consist of inputs, production, trading, processing and domestic market. Inputs to the extensive pastoral production beef and shoats value chain consist of water, pasture, feed, veterinary services, livestock breeds and labor. While there are many natural occurrences impacting the average global temperature and hence livestock production, human activities continue to be a main contributing factor to climate change as they continue to lead to increased emission of greenhouse gases. Evaluating knowledge, attitude and practices of Livestock value chain actors will be important in the integration of MSMEs and development of climate resilient value chains, offering an opportunity to combine economic, social and environmental equity objectives. Linking CSA to MSMEs within the livestock sector value chains will allow farmers to improve their engagements within the livestock value chain, reducing climate risks and increasing farmers' resilience. This study reveals that the concept of Climate Smart Livestock Production is not well understood; a general knowledge of Climate Smart Agriculture albeit with low understanding on its relationship with livestock and the concern among the value chain actors on the impacts of climate change on productivity and the willingness to take part in actions aimed at protecting the environment and mitigating climate change so as to achieve food security and better incomes. There is need to enhance awareness on the Climate Smart Agriculture (CSA) through empowering extension officers and trainings aimed at equipping value chain actors with knowledge and skills to maximize production.

**Key Words:** Climate Smart Agriculture (CSA); TIMPs (Technology, Innovations, and Management Practices;) Climate Smart Livestock Value Chains; Climate Change; Knowledge; Practices; Attitude