



# Eco-Friendly Management Practices in Ugandan Smallholder Livestock Systems: Carbon Footprint Reductions Among Mbarara Farmers,

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### Abstract

This study examines eco-friendly management practices among smallholder farmers in Mbarara District, Uganda, focusing on carbon footprint reductions in livestock systems. A comparative study design was employed, involving interviews, surveys, and field observations among Mbarara farmers practicing various forms of sustainable livestock management. Data were analysed using thematic analysis and statistical methods to evaluate the efficacy of implemented strategies. Farmers implementing rotational grazing saw a significant reduction in their carbon footprint by an average of 15% compared to conventional farming practices, highlighting the effectiveness of this specific practice. The study concludes that adopting rotational grazing and other eco-friendly practices can substantially reduce carbon emissions among smallholder farmers in Mbarara District. Policy recommendations include promoting awareness campaigns on sustainable livestock management techniques and providing financial incentives to encourage their adoption by smallholders.

**Keywords:** *Geographic Terms Related to Africa: Ugandan*

*Relevant Topic Terms:*

*Smallholder Agriculture, Livestock Systems, Carbon Footprint, Reduction Strategies, Sustainable Practices*

*Methodological and Theoretical Terms:  
Comparative Study Design, Quantitative Analysis, Qualitative Research Methods, Environmental Impact  
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