

# Global Warming and Livestock Husbandry in Kenya: Impacts and Adaptation

## **Abstract:**

This paper examines the economic impact of climate change on livestock production in Kenya. We estimate a Ricardian model of net livestock incomes and further estimate the marginal impacts of climate change. We also simulate the impact of different climate scenarios on livestock incomes. The Ricardian results show that livestock production in Kenya is highly sensitive to climate change and that there is a non-linear relationship between climate change and livestock productivity. The estimated marginal impacts suggest modest gains from rising temperatures and losses from increased precipitation. The predictions from atmospheric ocean general circulation models suggest that livestock farmers in Kenya are likely to incur heavy losses from global warming. The highest and lowest losses are predicted from the Hadley Centre Coupled model (HADCM) and Parallel Climate Model (PCM) respectively, based on the Intergovernmental Panel on Climate Change A2 Special Report on Emissions Scenarios. The paper concludes that in the long term, climate change is likely to lead to increased poverty, vulnerability and loss of livelihoods. Several policy interventions are recommended to counter this impact.