

## **Impact of Climate Variability on Pastoral Households and Adaptation Strategies in Garissa County, Northern Kenya**

**M. Okoti<sup>1</sup>, J. Kung'u<sup>2</sup> and J. Obando<sup>2</sup>**

*<sup>1</sup>Kenya Agricultural Research Institute, National Agricultural Research Laboratories (Waiyaki Way), P.O. Box 14733-00800, Nairobi, Kenya*

*<sup>2</sup>Kenyatta University, School of Environment, P.O Box 43844, Nairobi, Kenya*

**KEYWORDS** Climate Change. Livelihoods. Pastoralism. Diversification

**ABSTRACT** This study documented the impacts of climate change in the pastoralist communities of northern Kenya and their adaptation strategies. A sample of 350 households was used and data collected using household questionnaires, focused group discussions and key informant interviews. Other information was collected from grey literature. From the study the households understand the changes in climate and its impacts of their key livelihood source, that is, livestock. Chi square tests show a highly significant relationship between climate variability and impacts on livestock production and adaptation strategies. The impacts documented include weakened animals due to trekking long distances in search for pasture and water; loss of livestock due to lack of feed and water; limited/lack of suitable feed and water; increase of pests and diseases and increased livestock-wildlife conflicts. Under climatic variability impacts, the community has over the years been practicing various adaptation options. These include investments in livestock species resilient to drought (there was a general shift towards camels); migration in search of pastures and water; livelihood diversification; livestock off take before a major drought; restocking and increase in the watering interval for all livestock. Diversification of livelihoods included arable/crop agriculture; business; remittances; relief supplies; informal employment and selling wood fuel. This was undertaken according to household's adaptive capacity. This information on livelihood diversification is critical and informs the national policy and planning sectors on climate change adaptation strategies in pastoral areas in arid and semi-arid lands in Kenya.