

ORIGINAL ARTICLE



Rangeland Pasture Management Strategies during Drought among Pastoralists in Kajiado County, Kenya.

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Abstract: Pastoral communities have all along developed local mechanisms for managing forage resources to cope with recurrent severe droughts. Unfortunately, these practices have been suppressed and communities are struggling from losses due to the effects of drought on livestock feeds and water. The study adopted a cross-sectional survey design and used an interview schedule for data collection from 384 randomly selected farming households. The study targeted pastoralists in Kajiado East sub-county. Data were analyzed using descriptive and inferential statistics in Statistical Packages for Social Sciences. Descriptive statistics such as frequencies and means were used to summarize data. One-way ANOVA was then used to analyze data where Turkey's honestly significant difference test was used for means comparison. However, the study found out pastoralists have inadequate knowledge and sufficient training in pasture management contributing to low levels of pasture conservation during periods of excess pasture. The frequently practiced methods were traditional herd tethering and migration. A small fraction of pastoralists adopted and practiced modern systems such as paddocking, zero grazing, haymaking and the use of other supplementary feeds. Additionally, water harvesting technologies to reduce the possibility of rivalry and conflict between and within communities arising from limited water supply during drought should be promoted. There is an urgent call for all stakeholders in the pastoral areas of Kajiado East to establish sustainable strategies to accelerate capacity building in pasture resource management.

Keywords; Drylands, Livestock management, Focus group discussion, Pastoralism

1. Introduction

The world's dryland areas are estimated to cover 41% of the earth's surface (Huang et al., 2017; Stewart & Peterson, 2014). The regions receive an annual rainfall of between 25 mm to 600 mm, which is poorly distributed and highly variable (Recha et al., 2011; Oduor et al., 2020). Due to changing global climate and expected increase in evapotranspiration because of high temperatures, the dry lands are exposed to recurrent climatic extremes such as aridity, water stress and low yields from rain-fed agriculture coupled with severe food insecurity including malnutrition

(Thornton and Lipper 2014). The harsh conditions make the region unfit for any crop production, even the drought-tolerant varieties (Oduor et al., 2020). Pastoralism is considered the most viable production system, which supports over 100 million people globally (Zeng et al., 2021). In the drylands of Kenya, the pastoral economy constitutes 95% of family income and 90% of all employment opportunities (Kenya ASAL Policy 2012). With similar patterns in sub-Saharan Africa (SSA) (Stewart & Peterson, 2014).

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