

Series F – Foundations : Ending Drought Emergencies

Drought Risks Livelihoods in Laikipia County

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Key Messages

Sustainable drought adaptation strategies such as planting of drought-resistant seeds, timely planting, and planting early maturing varieties should be adopted to increase crop production.

Structured livestock off-take and feed storage could sustain animal production during drought.

Rainwater harvesting and drilling of new boreholes can improve water availability and access for the agro-pastoralists in Laikipia County.

Context

In the last 30 years, frequent droughts have occurred in Kenya resulting in food insecurity, scarce pastures, and loss of livelihoods and human lives. Drought sets a vicious cycle of socioeconomic impacts beginning with crop failure, unemployment, erosion of assets, decrease in income and poor nutrition (UNISDR, 2012). In Kenya, drought adversely affects rain-fed agriculture, water resources, hydropower generation, and ecosystems. The average drought cycle in Laikipia County has reduced from 5 to 3 years affecting both crop and livestock production. In the county between 1984 to 2014, 53 per cent of the period received below normal rainfall while 40 per cent of the period received above-normal rainfall. More years, therefore, recorded below normal rainfall increasing the frequency of drought. For example, the 2009 drought impacted over 75 per cent of the crops, while 77.7 per cent of the households lost their livestock. Pastoral and agro-pastoral livelihoods are more vulnerable to the effects of drought in arid and semi-arid parts of the county due to over-reliance on rain-fed agriculture and natural pasture. Occurrences of drought leave households devastated and unable to cope without external support.

There are county and national level efforts to mitigate the effects of drought including the National Agriculture and Livestock Extension Program, food relief, generation and dissemination of climate forecasts, as well as ministerial and institutional intervention programmes

such as Njaa Marufuku, ASAL based and rural livelihoods support programme, Laikipia community development assistance, among others. Despite efforts, effects of droughts on household livelihoods in the county remain unclear. Identification of livelihoods at risk during drought informs the relevant stakeholders on the priority areas in resource allocation and decision making to minimize drought effects among vulnerable households. Knowledge of the major livelihoods affected by drought in the county is important to various stakeholders in minimizing its effects. Against this background, this study sought to quantify and assess the effects of drought on livelihoods in Laikipia County.

Livelihoods Losses in Laikipia County

The effects of drought are as a result of the interplay between natural events and response by society (Wilhite et al., 2007). Laikipia County experiences food shortages, lack of pasture, and high prices of goods during drought. Food shortages result from reduced crop yields (57 per cent) or total crop failure (26 per cent). Also, drought reduces forage production and water supplies putting serious pressure on the livestock industry (UNDP, 2000), and making animals more susceptible to diseases (World Bank, 2013). Unavailability of fodder coupled with competition for pasture and water between domestic animals and wildlife make livestock more vulnerable to drought than crops. For example, 75 per cent and 13 per cent of the households in the county reported experiencing few and total livestock losses,

Plate 1: People and Livestock Sharing a water point in Laikipia County
(Photo: Author)



respectively, during droughts resulting in reduced household income.

Further, droughts present long-lasting environmental challenges in the county. Drying of rivers (78.9 per cent), lack of wood fuel (11.6 per cent) and increased fire incidences (8.8 per cent) were reported as main the aftermaths of droughts. Drying of rivers leads to increased distances for people and animals to water points, creating the potential for human-human and human-wild-life conflict. (Plate 1). Increased fire incidence results in loss of biodiversity and potentially altering the ecosystem.

How to Cope with Droughts in Laikipia: An Agropastoralists' Perspective.

There are various drought coping mechanisms adopted by households in the county (see Figure 1). These include seasonal migration with animals and engaging in business, reduction of the herd, buying of fodder, and planting of drought-tolerant crops. The low adoption of drought-tolerant crops in this arid and semi-arid part of Kenya may be indicative of the missing link on the dissemination of information on sustainable drought coping mechanisms by extension officers working in the area. Drought adaptation is critical in protecting livelihoods and food security in many developing countries (FAO, 2008).

Though seasonal migration with the animals is the most preferred drought coping strategy among pastoralists, it is unsustainable in an area known to have deep-rooted land conflicts, especially with ranchers, farmers, horticulturalists, conservation area wardens, and government authorities. This leaves pastoralists with the reduction of their herd as a sustainable coping mechanism, before the onset of drought. For example, the weekly live-stock markets in Rumuruti town (Plate 2) offer an opportunity for the pastoralists to reduce their herds before the onset of drought hence minimizing losses.

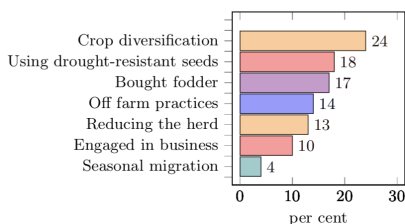


Figure 1: Preferred Drought Coping Mechanisms

The same survey found that financial health (the ability to cope with unexpected financial demands) was worsening. Much of the access to credit is fuelled by a proliferation of lenders using mobile phone technology to give quick small loans with terms that are otherwise unfair to the wellbeing of the borrower. This amounts to predatory lending, a lending practice with unfair or abusive loan terms on a borrower. It also amounts to a coercive practice that convinces a borrower to take a loan that they can do without. In this research, we focus on lending systems targeting the poor, to give policy recommendations for a healthy and resilient credit system in Kenya.

Policy Recommendations

Short-Term

- Increased awareness on drought-resistant crop varieties such as millet, sorghum and dolichos in Laikipia to minimize crop losses during drought. Credit should be extended all households to enhance businesses opportunities as a coping mechanism during drought
- Structured livestock off-take when droughts are predicted to minimize livestock losses among pastoralist

Medium-Term

- Rainwater harvesting and drilling of new boreholes can improve water

availability and access for the agropastoralists of Laikipia County.

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Plate 2: Weekly Livestock Market in Rumuruti Town
(Photo: Authors)

