

Climate Smart Research on Drought Response in Turkana County: A Snapshot of Key Learnings



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Background and Introduction

This brief summarizes key takeaways from a recent study “Climate Smart Research on Drought Response in Turkana County, Kenya”, carried out under the Resilience Learning Activity (RLA), a USAID/Kenya and East Africa-funded Activity under the Feed the Future Kenya Livestock Market Systems Leader with Associates (LWA), led by ACDI/VOCA.

Climate change has made marginalized areas more vulnerable to droughts, which has led to an increase in poverty due to loss of livelihoods in arid and semi-arid areas like Turkana County. To mitigate these effects, it is important to improve preparedness, response and communities’ adaptive capacity to cope with the changing climatic patterns. Since devolution, the Turkana County Government has worked with the national government, local communities, non-governmental organizations and private sector entities to implement measures and mechanisms that promote resilience to the ever increasing drought shocks. These efforts have helped to save lives, protect livelihoods, social systems, and the environment.

This research aimed to study the trends and impacts of drought in Turkana County over recent years to understand how drought affects the livelihoods of the Turkana people, document the adaptation and coping mechanisms employed by communities to address the effects of drought, document the impact of drought on the peaceful coexistence of cross-border communities, highlight the policy and legislative frameworks instituted to sustain pastoral and agro-pastoral livelihoods, and highlight integration of traditional and modern drought early warning systems.

The study employed a mixed methods approach to collect and analyze both qualitative and quantitative data across all seven sub-counties in Turkana County: Turkana West, Turkana Central, Turkana South, Turkana East, Turkana North, Loima, and Kibish. This included desktop and literature review of existing data and documentation from the NDMA, County Government of Turkana, KNBS, PREG partners, and other development agencies, analysis of time series earth observation and precipitation data to detect change and identify drought trends, focus group discussions (FGDs) and key informant interviews (KIIs) targeting technical working groups, community groups and local leaders.

Key Findings

Drought Occurrence

A combined method drought analysis employed in this study shows that there has been an increase in drought occurrence over the last 10 years in Turkana County, with drought occurring every 1-3 years between 2013 and 2022, a marked increase in frequency compared to 3-5 years frequency over the preceding decade, with Kibish, Turkana West, Turkana North, and Turkana South sub-counties experiencing higher severity. Currently (2022), Turkana County is being devastated by one of the worst droughts as a result of four back-to-back seasons of poor rainfall since late 2020.

Effect of Drought on Livelihoods

Analysis of KII and FGDs responses shows that drought causes increased conflicts and disputes due to increased migration in search of water and pastureland, increase in animal diseases and deteriorated animal health, water scarcity, death of livestock, shortage and increase in food prices. Other impacts include increased malnutrition and poor human health, low animal produce and reliance on aid for survival. Interventions undertaken through the programs initiated by the County government of Turkana, USAID and other development partners have been observed to have increased over the years and could have led to improvement of communities coping mechanisms.

Adaptation and Coping Mechanisms

Some of the coping mechanisms applied by communities in Turkana County include sale of livestock, migration, venturing into small businesses and trade, food rationing, purchase of pasture, charcoal burning, weaving for communities living around Lake Turkana, and reliance on aid from donor and government agencies. Notable successes identified include early action and intervention by National and County government departments and partners and coordinated response through forums such as the Partnership for Resilience and Economic Growth (PREG) and the County steering group (CSG).

Impact on Peaceful Coexistence of Cross border Communities

The study shows that drought has had an adverse effect on peaceful coexistence of cross border communities by increasing conflict and insecurities due to increased migration in search of pasture and water, as well as increased episodes of banditry, theft and crime. Turkana County has made successful strides in mitigating conflict along its 3 international borders (Uganda, Ethiopia, and South Sudan) due to international treaties supported by the National government and partly by the Turkana County government including the historic signing of the Memorandum of Understanding by Kenya and Uganda for Cross border peace and development in the Turkana-Pokot-Karimoja region along the border of the two countries, and the formation of a Kenya – South Sudan joint border commission to resolve ethnic conflict between the Toposa and Turkana communities living in the disputed Elemi Triangle. The biggest challenge remains the four internal borders with the Counties of Baringo, West Pokot, Marsabit and Samburu, with most conflicts being experienced between Baringo and West Pokot borders as neighboring pastoral communities compete for water and pastureland, leading to more complex cross-border conflict dynamics with clan groupings existing on both sides of the inter-county

borders. Political interference is largely viewed as a key challenge to finding amicable solutions to these conflicts.

Policy and Legislative Frameworks

Key policies and legislative frameworks have been enacted both at national and at county government level to guide adaptation and mitigation against climate change impacts. Some of the recently enacted policies include the Turkana County Disaster Risk Management Policy, 2019, Turkana County Peace Building and Conflict Management Bill, Turkana County Climate Change Bill, 2020 and the Turkana County Water Act, 2019. The Turkana County Integrated Development Plan (CIDP II) for 2018-2022 also serves as a comprehensive guide to support the operationalization of the Turkana County Vision. Beyond legislation, there is need for particular attention on operationalization of the legislative and institutional framework to improve drought response and mitigation and to build the local communities coping strategies and resilience.

Integration of Traditional and Modern Early Warning Systems

Local communities reported receiving modern drought early warning information through meteorological alerts, local radio stations, county government information and NGO awareness programmes. Indigenous knowledge is still intact amongst the Turkana Community, with most of the respondents reporting relying on traditional drought early warning methods in addition to the modern methods, with the most common ones being examining of animal intestines of by local experts known as “El Murons”, migration of birds and wild animals, wind direction, observation of stars and moon. There is need for research to corroborate these methods and preserve the indigenous knowledge deeply rooted in the customs and beliefs of the people.

Key Learnings

Provision of legal and institutional framework is crucial in guiding drought preparedness and response: The county government of Turkana has been at the forefront of adoption and implementation of Key climate change and related policies. Through enactment and implementation of these policies, the county has been able to provide framework that is clear in identifying and guiding drought related programmes and interventions across the county. Enactment of key policies in the county has enabled access to funds from national government, international partners and governments and other developmental partners.

Strong stakeholders coordination mechanisms and integrated approach to interventions escalates impact: A strong public private programming in relation to interventions is one of the key contributors to improved drought resilience. Some of the coordination mechanisms supported by the County government include the County Steering Group (CSG), the Partnership for Resilience and Economic Growth (PREG) comprised of development partners implementing USAID funded programs and the Kenya Food Security Steering Group (KFFSG). These forums have enabled avoidance of duplication of interventions through joint work planning and dissemination of information on interventions by various stakeholders. Additionally, different developmental and public actors have been able to pool resources together in driving key projects that would otherwise be ineffective in case they were implemented in solitary.

Community involvement and participation maximizes impact: According communities affected by drought maximum opportunity to participate in response and recovery programmes leads to ownership of interventions and increases the impact since communities are able to prioritize needs in their contexts, and they are able to work collectively towards transforming their

societies by sharing knowledge and limited economic resources, while ensuring that the rights of the most vulnerable and marginalized groups such as women, children, orphans, the elderly and people living with disabilities (PLWDs) are assured through their integration into political, social, and economic systems at community levels. Local communities in Turkana reported being aware of, and involved in decisions about County government and development partners funding, implementation and monitoring of community projects.

Political goodwill provides the right environment for tackling drought related

challenges: The county government of Turkana with support from the National government have been at the forefront in providing the political leadership required to mitigate drought emergencies, including recognising the role of developmental partners in drought response across the county. The political and administrative leadership from the top to the lowest levels of the county administration work closely with developmental partners and the community for buy in in relation to interventions. This is at the core of success of most of the interventions across the county.

Awareness and education of the larger population increases uptake and support

of interventions : The literacy levels in the County have improved over the last decades, creating a populace that is far much informed in relation to drought impacts, effects and coping mechanism. Through the vigorous awareness campaigns and initiatives and improvement of formal education, the community has been able to embrace interventions in the county brought in by developmental partners. By creating this enabling environment, the community is able to embrace, understand and access the benefits from interventions. Additionally, through awareness the community has implemented local solutions and even resourced their own initiatives which is key in ensuring effective change.

Early Warning Early Action (EWEA) systems improve communities' and stakeholders' capacity to monitor, forecast, plan for, and cope with the impacts

of drought: Provision and utilisation of EWEA systems has increased across the county over recent years, with more people appreciating weather and climate forecast bulletins on drought information from different stakeholders. By embracing EWEA systems in a much more aggressive manner, communities are able to put in place measures to mitigate drought events before impacts become severe. In the case of Turkana County, these systems are not limited to modern methods as respondents reported utilizing traditional drought forecasting methods in addition to meteorological alerts disseminated through local radio stations, county government information and NGO awareness programmes.

Challenges

Increased frequency and severity of drought events: This study shows that there has been an increase in drought occurrence over the last 10years in Turkana County, with drought occurring every 1-2 years between 2013 and 2022. Long recovery periods leave pastoralists and agro-pastoral communities more vulnerable to effects of the recurrent droughts. The increased frequencies and severities hinder recovery, as the herd growth is disrupted by 'new' droughts before the recovery phase is completed. Predictive models show that this will only increase in coming years. The key challenge in relation to this is that interventions are still low paced and more resources will need to be pooled to keep up with the pace, a challenge further exacerbated by limited financial and human resources, and inadequate relevant expertise.

Uncoordinated documentation of interventions: Despite numerous drought related interventions in Turkana over the last decade by various stakeholders, and despite existence of various forums for stakeholder coordination and information sharing, the County lacks a central data repository for archiving interventions undertaken and documenting key learnings by various partners. The implication is that crucial data that would inform further research and contextualized intervention is only available sometimes, leading to replication of research and response.

Conclusion and Recommendations

In conclusion, this research establishes that drought in Turkana has become a common occurrence in recent decades and has been accepted by most Turkana pastoralists and agro-pastoral communities as “a normal part of life”. Predictive weather and climate models show that there is likely to be a marked increase in drought risk over coming years. While the study identifies a lot of progress in relation to interventions, there is need to double on response so that communities can continually cope with the cyclic drought shocks. Currently (2022), Turkana County is experiencing one of the most severe droughts occasioned by four failed rain seasons since late 2020. With an unprecedented fifth failed rain season in late 2022, things could get even worse in the coming months, with thousands of people already in need of emergency food assistance. To continue building communities’ resilience, we recommend the following:

- ❖ Scaling up of short-term coping mechanisms to protect lives of populations at risk through emergency food and animal feeds distribution, water trucking, cash transfers, and livestock offtake programmes.
- ❖ Formulation of a post recovery strategy to provide the basis for transitioning into long-term adaptations.
- ❖ Development and adaptation of localized tools that can be quickly launched in relation to detecting the frequency and magnitude of drought events.
- ❖ Formulation of a strategy for development of a centralized database through the County to document all interventions that are directly and indirectly involved in drought response ex-ante and ex-poste to inform longitudinal studies.
- ❖ Mapping of PREG and other development partners interventions, as well as County government, National government and community led interventions by sector to inform targeted response and post-recovery interventions.