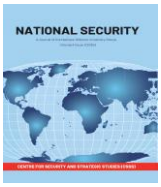

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The Impact of Climate Shocks on Conflicts in Laikipia County, Kenya

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Abstract

This research interrogates how climate shocks (droughts, floods, and heatwaves, among others) affect the level of conflict in Laikipia County. The Environmental Scarcity Theory (EST) served as the theoretical foundation of this study. The research employed a mixed-methods approach, combining qualitative and quantitative research methods to achieve its aims. The study was conducted in Laikipia County, using purposive and stratified sampling techniques to obtain a sample of 150 respondents from a target population comprising the Laikipia County Climate Change Committee, the Ministry of Interior and National Administration, the State Department of ASALs and Regional Development officials, residents, academic personnel, local police officers, area chiefs, and traditional leaders. One hundred thirty-eight respondents completed the survey, yielding a response rate of 92%. Consequently, primary data were collected through 21 key informant interviews (KIIs) and 117 questionnaires. The quantitative data was analysed by computing descriptive statistics, which were presented in tables and graphs. Conversely, qualitative data was analysed using thematic analysis and presented in narrative form. Additionally, secondary data came from various relevant sources, including books, academic journals, government reports, and online materials. The study established that Laikipia County experiences increased conflicts due to climate shocks that create a scarcity of resources (land, pasture, and water), as well as disruptions to livelihoods and forced population movements. This study concludes that climate shocks have increased the frequency and intensity of conflicts experienced in Laikipia County. To address this scenario, a multi-pronged trajectory is recommended as the solution to climate-induced disputes in the area of study.

Keywords: *Climate shocks, environmental scarcity, conflict, Arid and Semi-Arid Lands (ASALs), Laikipia County*

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Introduction

Climate change has emerged as one of the most pressing global challenges of the 21st century. Climate shocks—defined as extreme, unexpected climate events that overwhelm a society's coping capacity and disrupt ecological and socioeconomic systems (De la Fuente, 2007)— include phenomena such as droughts, floods, heatwaves, and erratic rainfall patterns. The increasing frequency and severity of climate shocks have destabilised ecosystems and livelihoods worldwide. As these events intensify, their ripple effects are being felt beyond environmental degradation. Instead, they exacerbate existing vulnerabilities and contribute to the emergence and escalation of conflicts. Consequently, climate security has emerged as a key policy priority area in global forums during the past two decades. However, it is still unclear what the actual connection between climate shock and conflict (CSC) is. The Intergovernmental Panel on Climate Change (2014) noted that, despite the lack of a clear-cut causal relationship between climate change and conflict, several variables increase the likelihood of disputes in general that are sensitive to climate change. Emergent research demonstrates how environmental shocks can initiate or exacerbate disputes that occur in various parts of the world. Climate-related conflicts have been experienced in several parts of the world, including in India and Syria (Gangopadhyay & Nilakantan, 2018; Linke & Ruether, 2021). However, scholars like Buhaug (2015) and Scheffran (2020) caution that the existence of the CSC nexus remains debatable and depends on the research design, underlying assumptions, and interpretations of causal pathways. Therefore, further research is needed to develop a more comprehensive understanding of the conditional and indirect relationships between security and climate change.

In the African context, the CSC relationship has garnered substantial attention. CSCs have been experienced in several countries in Africa; increased domestic conflicts (Diallo & Tapsoba, 2022); between herders and farmers (Eberle et al., 2025); due to drought (Vesco, 2021); due to water scarcity (Patrick, 2021); due to high temperature (Helman & Zaitchik, 2020); amplify existing social, economic, and political tensions (Von Uexkull et al., 2016). Africa is particularly susceptible to these conflicts due to the continent's high dependence on rain-fed agriculture, limited adaptive capacity, and socio-political fragilities. The Sahel region and various parts of the Horn of Africa (HoA) have witnessed spikes in violent conflict closely tied to environmental stressors. Climate shocks have been occurring more frequently in Kenya, particularly in pastoralist societies, where severe resource constraints often lead to violence. These conflicts are most prevalent in Kenya's arid and semi-arid areas (ASALs), which make up more than 80% of the nation. Whereas the ASAL communities' ability to utilise natural resources is crucial to their survival in these areas, climate shocks, according to Scheffran (2020), are "threat multipliers" to the already simmering conflicts in these regions. In other words, pre-existing socioeconomic vulnerabilities and shortcomings in the governing system are made worse by climate shocks. In HoA, the most severe impacts are felt by populations that depend on resources and fragile ecosystems (Krampe et al., 2020).

Kenya's ASAL regions experience worsening conflicts due to the combined influence of climate shocks, scarce resources, and socio-political factors. Gupta et al. (2023) report that these violent confrontations often arise from disputes over declining water resources, grazing areas, and arable land, while ancient ethnic tensions exacerbate the situation. As climate change continues to alter the frequency and intensity of extreme weather events, the vulnerabilities of communities in Kenya's ASALs are further compounded. Within Kenya's ASALs, Laikipia County has emerged as a critical case study in understanding how climate shocks can precipitate or intensify conflict. Laikipia County illustrates the climate-security issues that affect both the ASALs and the HoA region in general. The distinctive ecological and socio-economic environment of Laikipia County creates conditions that make the area prone to climate-induced conflicts. Multiple stakeholders, including pastoralists, commercial ranchers, smallholder farmers, and conservationists, reside in the region, where they compete for control of land access and the primary use of resources. Their interests create ongoing conflict situations, which intensify most strongly when climate stress affects the region (Moshiri & Delaunay, 2022).

Consequently, this study examined the impacts of climate shocks on conflict dynamics in Laikipia County.

The link between climatic shocks and conflict is becoming more widely acknowledged. However, current research ignores climate change as a structural driver of instability in favour of concentrating on the direct causes of conflicts, like land disputes. By evaluating how climate shocks affect conflict dynamics in Laikipia County, the current study closes this gap. Three facets of the CSC nexus—forced migration, livelihood disruption, and resource scarcity—are the proposed focus of this study.

Theoretical Framework

The research employs the Environmental Scarcity Theory (EST) to investigate the relationship between climate shocks and conflicts in Laikipia County. Homer-Dixon (2010) explains that essential natural resource shortages resulting from environmental collapse, combined with population growth or unequal resource allocation, lead to increased social conflict, which may escalate into violent strife. According to the theory, scarcity emerges from demand-induced conditions where resource use increases, or supply-induced events that reduce accessible resources, or structural scarcity that relates to discriminatory resource allocation through political and economic means. The conflicts in Laikipia County provide a practical application of EST models. Laikipia County has experienced increased supply-induced scarcity due to droughts and irregular rainfall, which have diminished pasture and water resources. Competitive conflicts have emerged between pastoralists, farmers, and commercial ranchers due to this situation, resulting in numerous violent encounters (Moshiri & Delaunay, 2022). Historical exclusion, together with disputed land tenure rights, serves as the primary structural source that heightens community grievances and intensifies conflicts when natural resources become scarce due to climate change. This study employed the EST to explain how climate disturbances trigger conflicts within resource-based communities. The approach sustains an understanding of the effects of environmental stressors on violence and proposes sustainable methods to mitigate clashes between groups.

Methodology

The study used a mixed-methods approach. This design used both quantitative and qualitative methods to collect and analyse data. This approach improves internal and construct validity by combining data trends with rich, narrative insights into the climate-conflict nexus. This study was carried out in Laikipia County.

Figure 1: Map of Laikipia County in Kenya. Source: Author (2025)

Figure 1 illustrates the location of Laikipia County, which is bordered by Samburu County to the north, Isiolo County to the northeast, Meru County to the east, Nyeri County to the south, Nyandarua County to the southwest, and Baringo County to the west. The County is made up of five sub-counties: Laikipia Central, Laikipia East, Laikipia North, Nyahururu, and Laikipia West. The 9,532.2 km² surface area of the county comprises arable land (1,998.7 km²), non- arable land (7,511.3 km²), water mass (22.2 km²), and urban areas (234.3 km²) (Kenya National Bureau of Statistics, KNBS, 2020).

The target population of this study comprised representatives from the Laikipia County Climate Change Committee, the Ministry of Interior and National Administration, the State Department of ASALs and Regional Development, residents, academic personnel, local police officers, area chiefs, and traditional leaders. In determining the appropriate sample size for this study, Cochran's formula for calculating sample size for an infinite population was employed due to the unavailability of a known and fixed population size of all relevant stakeholders. The formula is expressed as $n = z2\times p(1-p)$; where n is the desired sample size, Z is the Z-score consistent $d2$ with the 95% confidence level, p is the level of variability, and d is the estimated margin of error. At a 5% margin of error and a 95% confidence level, the formula yields a sample of approximately 385 participants. However, the margin of error was adjusted to 8% to align with logistical and resource constraints while maintaining statistical rigour. This yielded a sample size of 150 respondents.

The study relied on purposive and stratified random sampling methods to select the 150 respondents. This sample was stratified across relevant stakeholder categories to facilitate balanced and representative data collection. Purposive sampling was utilised to handpick qualified individuals who met both subject-based requirements and professional expertise regarding the study's purposes. 138 out of the 150 respondents completed the survey. This was a 92% response rate. The study's primary data was gathered using 21 key informant interviews (KIIs) and 117 semi-structured questionnaires. Additionally, secondary information was sourced from relevant publications, including academic documents, government reports, and internet resources. The gathered data (both primary and secondary) were analysed using descriptive statistics for quantitative aspects and thematic analysis for qualitative aspects. Graphs and tables were used to present quantitative data. On the other hand, qualitative data was presented in narrative form.

Results and Discussion

Resource-Scarcity

This study identified three main themes in the nexus between climate shocks and conflicts in Laikipia County. It found that climate shocks impact conflicts in Laikipia County through resource scarcity, livelihood loss, and forced migration. Model 1 provides an integrated multi- causal framework for the climate-conflict nexus in Laikipia County.

From Figure 2, the arrows indicate the directional flow (how each factor influences another). It shows that climate shocks serve as the primary trigger that leads to livelihood loss, forced migration, and resource scarcity. The three drivers contribute to environmental stress and social tensions, which result in conflicts if left unabated (due to weak governance and institutional fragility). These numerous pathways in the CSC nexus reiterate Von Uexkull and Buhaug's argument that CSC dynamics are complex and involve a multiplicity of causative agents or factors (Von Uexkull & Buhaug, 2021).

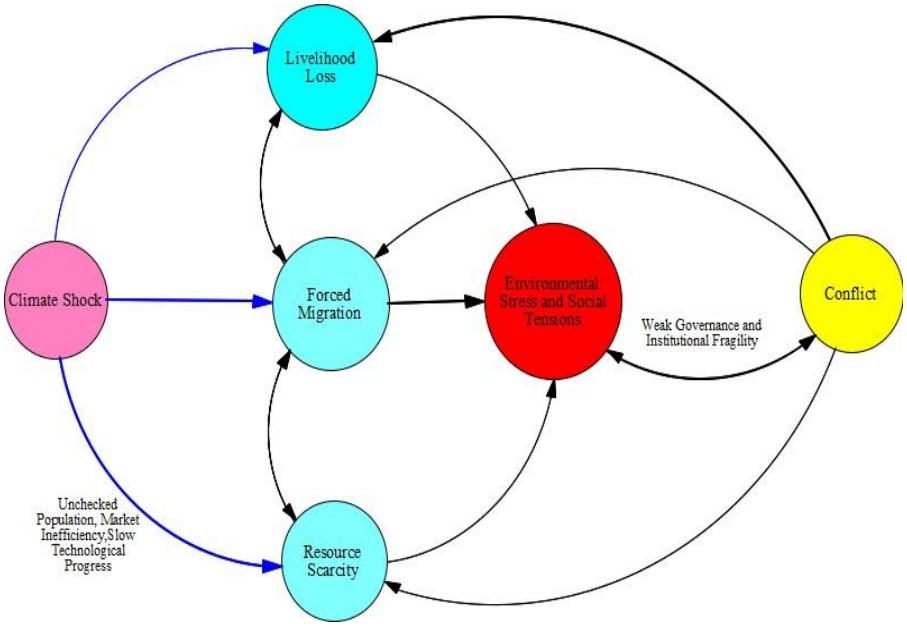

Figure 2: Integrated Multi-Causal Framework for Climate-Conflict Nexus in Laikipia County. Source**:** Author (2025)

Resource scarcity was the first theme in the Community Scorecard (CSC) dynamics within Laikipia County. 93% of the study's respondents acknowledged that resource scarcity due to climate shocks results in conflicts in Laikipia County. Figure 3 depicts the distribution of respondents' perceptions on this matter.

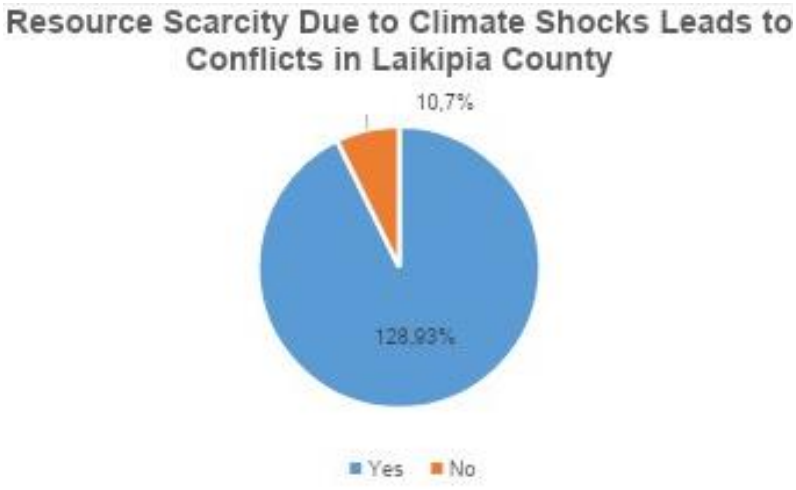

Figure 3: Perception of Resource Scarcity due to Climate Shocks as a Conflict Driver in Laikipia County. Source**:** Author (2025)

According to Figure 3, the overwhelming acknowledgement (93%) of resource scarcity as a conflict driver in Laikipia County highlights the severity of climate-induced tensions. Only 7% of the study's respondents were of a contrary opinion. The 7% of respondents' failure to link resource scarcity to conflicts suggests that while climate shocks exacerbate tensions, other socio-political and economic dynamics also play a role in driving conflicts in Laikipia County. The overwhelming consensus aligns with Von Uexkull and Buhaug's (2021) identification of "resource scarcity" as one of three core pathways in the climate-conflict nexus, alongside agricultural decline and migration.

In analysing the first theme, three main concepts emerged from the study's primary data linking climate shocks to resource scarcity conflicts. These included supply-induced, demand-induced, and structural resource scarcity, as shown in Figure 4, where the majority of respondents (45% of the 128 respondents, or 58 respondents) attributed the conflicts to supply-induced scarcity. This was followed closely by 40% of the respondents (51 respondents) who attributed the conflicts to structural scarcity. Lastly, only 15% of the respondents (19 out of 128) attributed the conflicts to demand-induced scarcity. The findings suggest that most respondents (45%) perceive supply-induced scarcity, caused by environmental degradation and climate shocks, as the primary driver of conflicts in Laikipia County. The significant proportion (40%) attributing conflicts to structural scarcity highlights the role of unequal resource distribution and governance failures. The lower percentage (15%) linking conflicts to demand-induced scarcity suggests that population growth and increased livestock numbers are considered less critical factors in the conflict.

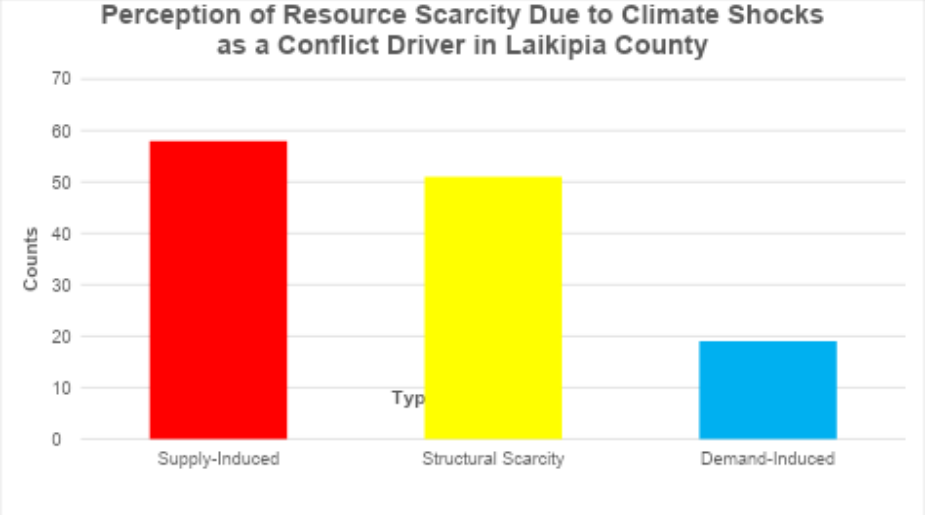

Figure 4: Perception of Resource Scarcity as a Conflict Driver in Laikipia County. Source: Author (2025)

Supply-Induced Scarcity

The majority of the study's respondents (45%) acknowledged that supply-induced scarcity is a driver of conflict in Laikipia County. One key informant noted that Laikipia's arid and semi-arid zones have seen significant declines in rainfall over the past decade. The recurring droughts in Laikipia County have reduced water availability and caused pasture depletion. This reduction in natural resources has intensified competition among pastoralists, farmers, and commercial ranchers. Pasture and water scarcity often trigger violent confrontations as different groups struggle to access and control these critical yet limited resources. (KII5, 2025)

Supply-induced scarcity is primarily driven by climate shocks such as prolonged droughts, erratic rainfall, and environmental degradation. According to Homer-Dixon (2010), supply- induced scarcity occurs when a natural resource becomes physically limited due to environmental degradation, depletion, or external pressures. Supply-induced scarcity has led to disputes between indigenous pastoralists and private landowners in Laikipia County, as herders encroach upon private lands in search of sustenance for their livestock. The resulting tensions have escalated into violent confrontations that exacerbate longstanding grievances over land ownership and usage rights, as noted by Gravesen (2020).

Demand-Induced Scarcity

According to the study, 15% of respondents acknowledged that demand-induced scarcity leads to conflicts in Laikipia County. Koubi et al. (2018) describe such demographic pressures as conflict

multipliers, whereby rising demand for land and water intensifies competition under already stressed environmental conditions. In Laikipia, rapid population growth has led to land subdivision and encroachment on communal grazing corridors. This further reduces pastoral mobility and escalates farmer-herder clashes. One respondent noted that "Growing demand for agricultural land has led to land subdivision. These fragmented lands reduce communal grazing areas and intensify competition over shrinking resources, thus sparking violent confrontations between farmers and pastoralists." (KII7, 2023)

Demand-induced scarcity arises from the increasing demand for limited resources due to population growth and economic activities. Homer-Dixon (2010) avers that population growth outpaces resource availability, leading to scarcity, competition, and eventual conflict. This perspective is consistent with the situation in Laikipia County. Laikipia had a population of 316,791 according to the 1999 census, a figure that has since then increased by 63.68% to 518,532 in the 2019 census (KNBS, 2019). This rapid growth in population increases the pressure on already limited natural resources and exacerbates dwindling agricultural production due to climate shocks in the region.

As soil degradation and unpredictable rainfall render farmland less productive, farmers extend their agricultural activities into areas traditionally reserved for grazing to cater to the needs of the growing population. This agricultural expansion reduces the available grazing corridors, thus limiting access for pastoralists who once relied on communal lands for their livestock. In response to these restrictions, pastoralists often move their livestock into farmlands in search of pasture, leading to the destruction of crops. These dynamics fuel recurring conflicts between farmers and herders, with farmers seeking to protect their crops from livestock damage, while herders contend for access to land to sustain their livestock.

Structural Scarcity

According to the study, 40% of respondents acknowledged that structural scarcity had led to conflicts in Laikipia County. This finding aligns with Ash and Obradovich (2015), who emphasise that climate shocks become conflictual only in settings characterised by institutional fragility and unequal resource control. In Laikipia, colonial-era land policies and modern conservation zoning have concentrated fertile land in the hands of a few. At the same time, marginalised pastoralist groups face regulatory and physical barriers to accessing pasture. One key informant noted that, "Colonial-era land policies and post-independence land allocations have left many pastoralist communities landless or confined to marginal areas. Structural scarcity manifests through unequal access to fertile land and water resources." (KII2, 2025).

Another key informant pointed out that Land ownership disparities are a major driver of conflict. Large tracts of land are owned by private ranchers and conservation organisations, leaving limited agricultural land for local communities. These historical grievances, coupled with weak enforcement of land rights, contribute to recurrent conflicts. These conflicts are widespread during periods of environmental stress. (KII9, 2024)

Supply-induced structural scarcity in Laikipia County occurs when access to critical resources such as land, water, and pasture is unequally distributed and controlled. This disparity often leads to conflicts between resource-rich elites and marginalised pastoralist communities. The issue is not always about an absolute shortage of resources but rather stems from unequal access controlled by political, economic, and institutional frameworks. Gravesen (2020) noted that large tracts of fertile land in Laikipia are owned by a small elite, including politicians, conservationists, and commercial ranchers. On the contrary, pastoralists face significant challenges in accessing grazing land and water. According to Homer-Dixon's EST, such inequitable distribution is a key driver of conflicts.

Gravesen (2020) also noted that extensive private ranches, used for commercial livestock farming, ecotourism, and wildlife conservation, restrict pastoralist access to traditional grazing lands in Laikipia

County. Historical grievances from colonial-era land allocations that converted communal lands into private holdings further fuel these conflicts. Pastoralist communities, such as the Samburu and Pokot, who traditionally relied on communal grazing, now face displacement and limited access to grazing lands. Conservation policies often exacerbate tensions by prioritising wildlife protection and other private uses over pastoralist needs (Gravesen, 2020). One respondent noted that despite the availability of pasture within conservation areas and private ranches, herders are often denied access. This leads to violent confrontations between pastoralists, ranch owners, and conservancies. These conflicts highlight the tension between traditional resource use and modern land management policies. (KII1, 2025).

The excerpt above demonstrates that while conservationists and farmers seek structured land control, pastoralists emphasise flexibility and mobility. Resource use conflicts in Laikipia County will persist if policies that balance these competing interests are not implemented. Moshiri and Delaunay (2022) noted that politicians also exploit these resource scarcities for political gain. Therefore, pastoralists with support from politicians encroach on private lands during election periods, thereby intensifying conflicts. In brief, poor governance and unclear land tenure systems exacerbate resource-based conflicts in Laikipia County.

Figure 4 substantiates the quantitative link between resource scarcity and conflict patterns in Laikipia County. At the same time, key informant narratives illustrate how physical scarcity (supply), socio-institutional exclusion (structural), and demographic pressures (demand) combine to produce localised conflict hotspots. These dynamics underscore the EST's emphasis on the interplay of environmental stress with social and political vulnerabilities.

Livelihood Disruptions

Livelihood disruption was the second theme in the climate shocks-conflict dynamics in Laikipia County. Laikipia County's economy is heavily dependent on pastoralism, ranching, crop farming, trade, and tourism. According to KNBS (2019), there are 149,271 households in Laikipia County; the primary sources of livelihood for these households include farming (90,729 households), crop production (74,338 households); livestock production (68,281 households); aquaculture (374 households); fishing (483 households); and irrigation (9,170 households). All these sources of livelihood are sensitive to climate shocks. Koubi et al. (2018) argue that households with a broader portfolio of income sources are better buffered against climate shocks. However, KNBS (2019) data show that only a minority of Laikipia's 149,271 households (for example, 9,170 engaged in irrigation or 374 in aquaculture) have such alternatives. The scarcity of viable diversification pathways forces many into illicit coping strategies (cattle rustling, land encroachment), triggering farmer-herder clashes.

Droughts, erratic rainfall, rising temperatures, and floods have devastating effects on agricultural productivity. The negative impacts include crop failures and livestock deaths (KMD, 2024). This finding aligns with Gangopadhyay and Nilakantan's (2019) evidence from India, which suggests that temperature spikes lead to both short-term and persistent income losses, ultimately increasing aggression and social unrest. In regions like Laikipia County, which are heavily dependent on agriculture and pastoralism, these extreme weather events severely undermine food security and economic stability. With diminished yields and loss of livestock, households face significant financial strain, often plunging them into poverty. The cumulative effect of climate shocks on pastoralism and agriculture has led to widespread socioeconomic strain. Many households, unable to sustain their traditional livelihoods, are forced to resort to alternative survival mechanisms, such as cattle rustling and the expansion of grazing or cropland into contested areas. Such survival mechanisms are conflict drivers.

According to the study, 101 respondents (73% of respondents) acknowledged that the disruption of livelihoods due to climate shocks had created a cycle of vulnerability and conflict in Laikipia County. The pie chart below depicts the findings above.

Figure 5: Perception of Livelihood Disruption as a Conflict Driver in Laikipia County. Source**:** Author (2025)

From Figure 5, most respondents (73%) recognised that livelihood disruption induced by climate shocks leads to conflicts in Laikipia County. Only 27% of the respondents had a contrary opinion. This finding underscores the significant link between climate shocks and conflicts in Laikipia County. The overwhelming recognition (73%) suggests that most respondents experience or perceive climate-induced livelihood disruptions as a major driver of tensions.

Agricultural activities in Laikipia have been severely affected by climate shocks. KMD (2024) noted that erratic rainfall and prolonged dry spells have led to crop failures, resulting in reduced agricultural productivity and income for many households. A key informant also noted that as agricultural livelihoods become unsustainable, many farmers are compelled to expand their farmlands into grazing areas (KII4, 2025). This expansion often results in land disputes, particularly in areas where land tenure systems are unclear or contested. Agricultural expansion into communal grazing lands has been a significant source of conflict, exacerbated by the absence of clear land demarcation and legal enforcement.

Pastoralism is a primary source of livelihood for many communities in Laikipia County. Climate shocks, particularly recurrent droughts, have led to severe pasture and water shortages, resulting in the loss of livestock. The loss of livestock has a direct impact on household income and food security. One respondent noted that Livestock is not just a source of food but also a form of wealth and social status among pastoralists. Therefore, when climate shocks wipe out herds, some individuals resort to cattle raiding as a means of restoring their lost wealth and status. (KII10, 2025).

From the excerpt above, climate shocks such as droughts and erratic rainfall in Laikipia County have significantly impacted pastoralist communities, causing widespread livestock deaths and loss of livelihoods. With grazing lands shrinking and water sources drying up, pastoralists struggle to sustain their herds. As droughts intensify, livestock mortality rates increase. The UN Office for the Coordination of Humanitarian Affairs estimated that the two-year dry spell, or failed rains, over four consecutive rainy seasons, had resulted in the deaths of 1.5 million cattle in Kenya and 7 million animals in the Horn of Africa (Moshiri & Delaunay, 2022). A key informant noted that such livestock deaths result in economic devastation for many households that rely on cattle as their primary source of income and sustenance (KII12, 2025). The loss of livestock directly translates into food insecurity and economic hardship. These vulnerabilities compel affected communities to adopt alternative survival strategies.

A key informant noted that in many cases, cattle rustling emerges as a response to these harsh conditions (KII15, 2025). Some pastoralist groups, faced with dwindling livestock, engage in raiding to restock their herds and recover lost wealth. These findings are also consistent with those of Moshiri and Delaunay (2022), who found that some individuals with limited economic opportunities in Laikipia County turn to armed banditry, cattle rustling, and militia activities as alternative means of survival to compensate for their losses.

Moshiri and Delaunay (2022) noted that violence had intensified in the western parts of Laikipia due to cattle rustling involving the main rival communities, such as the Samburu, Pokot, and Turkana. These clashes have led to the deaths of 35 people since 2021. Moshiri and Delaunay (2022) also pointed out that these conflicts had intensified partly due to two factors: failed rains for four consecutive seasons (resulting in two-year dry spells) and the hotly contested 2022 elections. It is worth noting, therefore, that climate shocks act as threat multipliers, as depicted by the influence of politics in conflict escalation and cattle rustling in Laikipia County. Politicians play a role in exacerbating conflicts related to cattle rustling in Laikipia County. During election periods, political actors exploit existing grievances, such as resource scarcity caused by failed rains, to mobilise support along ethnic lines. Such actions deepen divisions within the county. In some cases, leaders may incite violence or fail to address escalating tensions to serve their political interests (Moshiri & Delaunay, 2022).

Marigat and Cheruiyotomo (2022) aver that cattle rustling has evolved from being a cultural tradition into a more violent and desperate act. Laikipia County finds itself in a similar situation given the rising sophistication of armed cattle rustlers. A key informant also noted that the presence of armed groups and the proliferation of illegal firearms in the region pose significant security challenges for local authorities (KII13, 2025). As cattle rustling becomes more frequent, conflicts between pastoralist communities escalate. This often leads to cycles of revenge attacks and heightened insecurity. Studies by Wanjiku et al. (2023) also show that the availability of small arms has further intensified the violence by making cattle raiding more lethal and organised. According to Wanjiku et al. (2023), the Pokot have access to guns from Uganda through the porous border with Kenya, in addition to homemade guns, a skill they have acquired over the years. Access to such weapons makes cattle rustling a deadly endeavour not just in Laikipia County but also in the region, including counties such as Samburu, Baringo, Turkana, Isiolo, and West Pokot.

Forced Migration

The third theme in the CSC nexus in Laikipia County was forced migration. Climate shocks, such as prolonged droughts, erratic rainfall, and floods, have increasingly compelled communities to forcibly migrate in search of water, food, grazing land, and alternative livelihoods. In Laikipia County, such forced migrations have significantly intensified conflicts, as 82% of the study's respondents acknowledged. The Pie chart in Figure 6 below depicts respondents' perception of the forced migration-conflict nexus. In other contexts, several studies by scholars like Von Uexkull and Buhuag (2021), Abel et al. (2019), Koubi et al. (2018), Ash and Obradovich (2020), and Cattaneo and Foreman (2023) have also demonstrated that migration due to climate shocks intensifies conflicts in destination areas between the hosts and the migrants.

Figure 6: Perception of Forced Migration as a Conflict Driver in Laikipia County. Source**:** Author (2025)

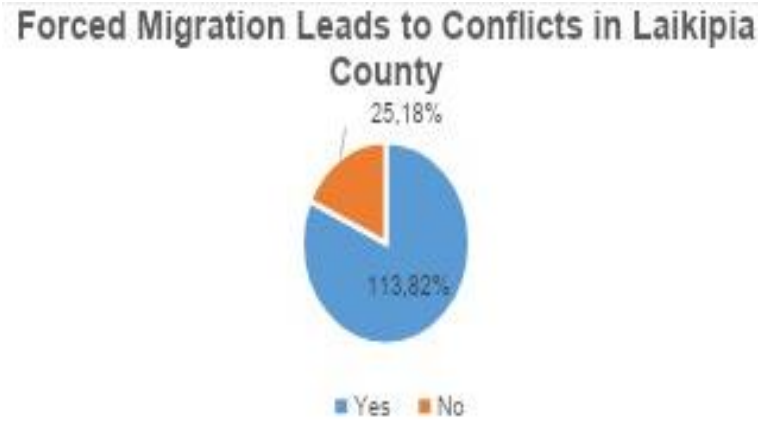

Figure 6 indicates that most respondents (82%) acknowledged that forced migration due to climate shocks contributes to conflicts in Laikipia County. Only 18% of the respondents had a contrary opinion. The finding highlights the strong perception that migration due to climate shocks is a key driver of conflicts in Laikipia County. As pastoralists move in search of scarce resources, competition over grazing land and water intensifies, often leading to disputes with local communities. The study identified two main outstanding concepts in the theme of forced migration: resource competition and territorial disputes amid ethnic and political rivalries.

Resource Competition

68% of the surveyed respondents acknowledged that the influx of migrants into Laikipia County has intensified competition for scarce resources, including water, pasture, and arable land. A key informant noted that the growing arrival of pastoralists from other neighbouring counties during dry seasons has considerably intensified the struggle for essential resources in our county. Our water sources and grazing lands are already limited due to the impacts of climate change. However, these critical resources are now subject to increased pressure from outsiders. This results in diminished access for long-established community members. This development has led to conflicts, friction, and uncertainty about the future of our traditional livelihoods. The escalating competition calls for a comprehensive review of resource management policies to ensure fair access for all stakeholders. (KII10, 2025).

From the excerpt above, migration due to climate shocks puts pressure on existing and already dwindling resources within Laikipia County. The County is home to pastoralists, agricultural communities, and wildlife conservancies. The region's semi-arid climate makes it highly vulnerable to climate shocks, which have become more frequent and severe due to climate change (KMD, 2024). Prolonged droughts have depleted water sources, reduced pasture availability, and decimated livestock populations. Pastoral communities from neighbouring counties, such as Samburu, Baringo, and Isiolo, resort to migrating into Laikipia in search of pasture and water as an adaptation mechanism. These pastoralist communities often find themselves in direct competition with local farmers and ranchers for grazing land and water sources (KII5, 2025). This competition has led to frequent clashes between farmers and herders, as farmers accuse pastoralists of allowing their livestock to graze on farmlands, resulting in crop destruction and economic losses (KII9, 2025).

A study by Wanjiku et al. (2023) noted that when the Pokot migrate from the neighbouring Baringo County into Laikipia County in search of water and pasture for their livestock, they use guns to ward off resistance from the residents whose farms they encroach on. The use of guns in farmer-herder conflicts transforms resource-based disputes into deadly confrontations. Firearms intensify and escalate the scale of conflicts. Other scholars, such as George et al. (2021), note that such armed conflicts not only make peaceful resolution difficult but also lead to loss of life, displacement, and destruction of property.

Gravesen (2020) contends that the presence of large-scale commercial farms and privately owned wildlife conservancies in Laikipia further complicates the competition for resources. A key informant noted that migrant pastoralists often perceive these large landholdings as underutilised, while

landowners strive to protect their properties from encroachment (KII8, 2025). Consequently, disputes over land use have become increasingly violent. These incidents include property destruction, livestock theft, and even loss of lives.

Territorial Disputes Amid Ethnic and Political Rivalries

Seventy-five per cent of the study's respondents acknowledged that migration driven by climate shocks has also heightened territorial disputes in Laikipia County. Underlying ethnic and political rivalries exacerbate these territorial disputes. Laikipia is home to a diverse array of ethnic groups, including the Maasai, Samburu, Turkana, Kikuyu, and Pokot. According to Gravesen (2020), these ethnic groups have distinct cultural practices and historical claims to land in Laikipia County. As migrant communities move into new areas, they often clash with resident communities over territorial boundaries and land ownership. Ethnic rivalries, historically rooted in land disputes and competition for resources, are further inflamed by political dynamics. A key informant corroborated this finding, noting that, "Political leaders often exploit these rivalries to gain support. These politicians promise land access and resource allocation to their ethnic constituencies." (KII13, 2025).

Scholars like Wanjiku et al. (2023) note that the conflicts in Laikipia County have transitioned into a Gema versus Kamatusa conflict, especially in Laikipia West Constituency. The transition of conflicts in Laikipia County from being purely resource-based to ethnic and political confrontations reflects deep-seated historical tensions. Initially, forced migration due to climate shocks led to competition over pasture and water. Such a competition primarily pits migrating pastoralist groups against resident farming communities. However, these conflicts are increasingly being perceived as a struggle between Gema (Gikuyu, Embu, and Meru Association) and Kamatusa (Kalenjin, Maasai, Turkana, and Samburu Association). The crop farmers are mainly from the Gema, while the pastoralists are mainly from the Kamatusa group.

Wanjiku et al. (2023) argue that politicians have exploited these ethnic divisions using narratives of land ownership and historical grievances to mobilise support. Elections exacerbate these tensions, as politicians manipulate ethnic identities to gain influence. The result is a deeply entrenched conflict where political competition, land disputes, and resource scarcity intersect. This politicisation of migration and resource competition has led to organised violence. In some cases, political actors have been accused of inciting violence to displace specific communities and gain control over their land and resources. One respondent noted that climate shocks in the region have caused outsiders to migrate into Laikipia County. This movement alters local governance dynamics in the county. As migrants settle in the area, they represent a growing segment of the electorate. This influx has sparked tensions between long-time residents and new arrivals, with each group vying for political influence during elections. Clashing interests have led to conflicts. This complicates social harmony and governance in the county. (KII13, 2025).

According to the excerpt above, migration into Laikipia County is driven by climate shocks in the region. This movement shifts the local voter demographics in the county. This respondent observed that the influx of new residents had disrupted traditional political alliances, intensifying rivalries during local elections. Established communities perceive a dilution of their political influence as migrant populations reshape voting patterns, thus sparking conflicts over resource allocation and power representation. These tensions reflect broader challenges at the intersection of environmental change and political competition in the region. This scenario demands immediate attention.

Recommendations

Despite growing recognition of climate-conflict linkages, policy responses in Kenya have focused mainly on reactive security measures rather than long-term adaptation strategies. The government has deployed security forces to quell violent outbreaks, but these measures have done little to address the

underlying causes of conflicts. There is a need for integrated approaches that combine climate adaptation, sustainable resource management, and conflict resolution mechanisms.

The Laikipia County Climate Change Committee should enhance Early Warning Systems (EWS). This entails developing and expanding climate early warning systems to provide timely information on impending climate shocks. The initiative could enable proactive measures to mitigate the three pathways to conflicts in Laikipia County: resource scarcity, livelihood disruptions, and forced migration.

The State Department of ASALs and Regional Development, in coordination with the Ministry of Lands and the County Government of Laikipia, should strengthen resource management systems. This could entail establishing clear land tenure policies and promoting equitable access to water and pasture.
Weapons make resource-based conflicts more deadly in Laikipia County. Therefore, the Ministry of Interior and National Administration should control the proliferation of illegal arms to curb the availability of illegal arms in Laikipia County and Kenya. This could be done by strengthening border security, enhancing law enforcement capacity, and implementing arms control programs.

The County Government of Laikipia should emphasise the implementation of climate-resilient livelihood programs. Such programs could include climate-smart agricultural practices, drought-resistant crops, crop and livestock insurance, and sustainable pastoral systems. In addition, the County Government of Laikipia should support economic diversification. This could be achieved by promoting alternative income-generating activities, such as ecotourism and value-added agricultural processing. These initiatives could reduce dependence on climate- sensitive livelihoods.

The County Government of Laikipia County should proactively plan for climate-driven movements to mitigate conflict driven by climate-induced forced migration. The County Government, in collaboration with national agencies and ministries like the State Department of ASALs) Local stakeholders should launch an Integrated Climate-Migration Management and Resilience Program. Such programs should include components like i) early warning and migration Planning, ii) livelihood diversification and support in host areas, and iii) conflict- sensitive integration.

Conclusion

This study examined the impact of climate shocks on conflict levels in Laikipia County. It was established that insufficient resources, combined with disrupted livelihoods and population movement, serve as fundamental factors leading to conflicts in the country. The occurrence of droughts and floods intensifies resource scarcity because these shocks diminish important supplies, such as pasture and water, which results in conflicts that arise between farmers, pastoralists, and conservationists. On the other hand, livelihood disruptions caused by climate shocks undermine economic stability. Such disruptions push vulnerable populations towards conflict-driven survival mechanisms such as cattle rustling and banditry.

Additionally, migration resulting from climate-induced livelihood losses heightens tensions. Displaced populations compete with host communities for limited resources and territories. These climate-conflict pathways align with EST's emphasis that conflicts often arise from the interplay of supply-induced, demand-induced, and structural scarcities. In Laikipia County, climate shocks intensify these scarcities. This creates a ripe environment for conflict. Therefore, this study concludes that climate shocks have increased the frequency and intensity of conflicts experienced in Laikipia County.

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