

Drying Lands, Rising Conflicts: Climate Change and Pastoral Insecurity in the Horn of Africa

Pastoralism remains one of the most important livelihood systems in the Horn of Africa, supporting millions of people through livestock keeping and small-scale agriculture. Across countries such as Kenya, Ethiopia, Somalia, South Sudan, and Uganda, pastoral communities have historically survived harsh climatic conditions through mobility, communal grazing systems, and indigenous coping mechanisms. However, climate change is increasingly overwhelming these traditional systems and worsening insecurity across the region.

The Horn of Africa has experienced severe and recurring climate shocks over the past decade. Between 2020 and 2023, prolonged droughts caused acute food insecurity for more than 23 million people and resulted in the loss of millions of livestock. Since livestock represent the primary source of food, wealth, and social identity for pastoral households, these losses devastated entire communities. Climate change has therefore evolved beyond an environmental concern into a major security issue that is intensifying pastoral conflicts and threatening regional stability. Rising temperatures, erratic rainfall, droughts, floods, and environmental degradation have reduced access to water and pasture, increasing competition among pastoral communities and between pastoralists and farmers. Climate change now acts as a *conflict multiplier* by worsening existing political, economic, and social vulnerabilities in the Horn of Africa.

Intensifying Climate Stress and Livelihood Collapse

Climate patterns in the Horn of Africa have changed significantly. Rainfall seasons have become increasingly unpredictable, while droughts occur more frequently and last longer than before. The 2021–2022 drought affecting parts of Kenya, Ethiopia, and Somalia was among the worst in the region’s history and was intensified by human-induced climate change. Pastoral livelihoods depend heavily on seasonal migration patterns that allow communities to move livestock in search of water and pasture. However, repeated failed rains between 2019 and 2024 disrupted these systems and severely reduced grazing lands and water availability. Many pastoralists could no longer rely on traditional ecological knowledge to predict weather conditions or determine safe migration routes.

The worsening water crisis has become a central source of insecurity. During the 2022 drought in northern Kenya, many pastoral households viewed migration as their only survival option due to severe water shortages. Environmental degradation, shrinking pasturelands, and declining vegetation cover have intensified livelihood insecurity across pastoral regions. Climate change has caused devastating economic losses for pastoral communities. Livestock deaths resulting from droughts, floods, disease outbreaks, and feed shortages have destroyed the economic foundation of many households. In South Sudan, floods between 2019 and 2024 affected more than one million people and killed hundreds of thousands of cattle, goats, and sheep. For pastoral societies, livestock are not merely economic assets. They symbolize wealth, social status, cultural

identity, and family security. Consequently, the loss of livestock represents both economic collapse and social disintegration.

Research across pastoral regions shows that livestock loss is the most severe impact experienced by affected households, followed by food shortages, declining incomes, water scarcity, and crop failures. As climate shocks become more frequent, many communities lose their ability to recover, trapping them in cycles of chronic poverty and vulnerability.

Climate Change as a Driver of Pastoral Conflicts

The worsening scarcity of water and grazing land is one of the primary ways climate change fuels pastoral conflicts in the Horn of Africa. During drought periods, pastoral communities migrate into new territories in search of survival resources. These movements frequently create competition among different ethnic and livelihood groups over shrinking resources. Conflicts often emerge around rivers, boreholes, grazing corridors, and fertile lands that remain productive during droughts. Communities increasingly defend these areas aggressively because survival depends on access to them. Traditional conflict resolution systems that once managed disputes effectively are now overwhelmed by the scale and intensity of climate-related pressures.

Climate change therefore aggravates tensions that already exist due to ethnic divisions, political marginalization, weak governance, and competition over land. Localized disputes over water and pasture can quickly escalate into broader communal violence involving armed groups and cross-border insecurity. Climate change, therefore, intensifies conflicts by worsening livelihoods, forced migration, changing pastoral mobility patterns, manipulation by political actors, and exploitation of local grievances by armed groups. Climate stress alone may not directly cause violence, but it significantly increases the likelihood of conflict in areas where governance systems are weak.

Rising Tensions Between Pastoralists and Farmers

Climate change has also intensified conflicts between pastoralists and farming communities. As drought and environmental degradation reduce grazing areas, pastoralists increasingly move livestock into agricultural zones searching for pasture and water. This often results in crop destruction, land disputes, and violent confrontations. At the same time, repeated livestock losses are forcing some pastoralists to diversify into farming and other economic activities. However, this transition creates additional pressure on already scarce agricultural land and resources.

Food insecurity worsens these tensions further. Reduced livestock productivity and declining household incomes increase frustration among communities struggling to survive. In this way, climate-induced livelihood collapse transforms environmental stress into a broader security crisis with regional implications.

Institutional Weaknesses and Humanitarian Vulnerabilities

One of the major reasons why climate change is worsening pastoral conflicts in the Horn of Africa is the limited capacity of governments and institutions to respond effectively. Many countries in the region lack strong climate adaptation policies, early warning systems, and conflict management frameworks capable of handling large-scale environmental crises. Although droughts and floods are often predicted in advance, governments frequently fail to translate early warning information into timely action. Weak governance structures, corruption, inadequate infrastructure, and limited financial resources reduce the ability of states to support vulnerable pastoral populations. Local institutions traditionally responsible for mediating pastoral disputes are also under increasing pressure. Severe droughts and resource scarcity intensify competition to levels that exceed the capacity of customary conflict resolution mechanisms. In some cases, armed groups and political actors exploit institutional weaknesses to fuel further instability.

The reduction of international humanitarian and development assistance has further worsened the crisis in the Horn of Africa. Many countries depend heavily on external aid to address droughts, displacement, and food insecurity. However, declining global funding has weakened humanitarian responses and reduced support for long-term climate adaptation programs. As a result, millions of vulnerable people remain exposed to worsening environmental and economic conditions. The inability of governments and humanitarian agencies to provide adequate assistance increases desperation and heightens competition over scarce resources, thereby contributing to further conflict.

Consequences of Climate-Driven Conflicts

Women in pastoral communities experience disproportionate impacts during climate crises. Since women are mainly responsible for collecting water and managing household food supplies, prolonged droughts force them to travel longer distances under dangerous conditions. Resource scarcity also contributes to rising household tensions and gender-based violence. Studies from pastoral areas in Kenya show that drought-related water shortages frequently trigger domestic conflicts, emotional abuse, and exploitative relationships. Climate change therefore deepens gender inequalities while simultaneously worsening pastoral insecurity.

Repeated droughts and conflicts are forcing increasing numbers of pastoralists to migrate or settle in displacement camps. While migration has historically been a normal adaptation strategy for pastoral communities, climate-induced displacement is becoming more permanent and destabilizing. Displaced populations often face marginalization, limited services, and competition over humanitarian assistance. Ethnic tensions may also emerge in camps and urban settlements where multiple communities compete for scarce resources. Consequently, climate-driven displacement creates secondary conflicts that extend beyond the original environmental crisis.

Adaptation, Resilience, and Policy Responses

Despite worsening climate pressures, pastoral communities continue to employ various coping and adaptation strategies. These include livestock mobility, herd diversification, hay storage, income diversification, and reliance on social support networks. Many households are also investing in alternative livelihoods such as small businesses, wage labor, and farming to reduce dependence on livestock alone.

Education has become an increasingly important long-term adaptation strategy as families seek alternative economic opportunities for younger generations. However, these adaptation measures require stronger institutional support, access to markets, infrastructure development, and financial resources to become sustainable.

Strengthening early warning systems is essential for reducing climate vulnerability and preventing conflicts. Governments and regional institutions must improve their ability to predict climate shocks and respond proactively before crises escalate into humanitarian disasters and violence.

Water infrastructure development is equally important, though poorly managed interventions can create new inequalities and conflicts over resource control. Effective climate adaptation therefore requires conflict-sensitive planning that incorporates traditional pastoral mobility systems and communal resource management practices.

Sustainable solutions to pastoral conflicts require integrating scientific approaches with indigenous knowledge systems. Pastoral communities possess valuable expertise in climate forecasting, livestock management, and communal resource governance that should inform policy frameworks. Governments must also strengthen land governance systems, cross-border cooperation, and inclusive conflict resolution mechanisms. Since pastoral mobility frequently crosses national boundaries, regional collaboration is equally necessary for managing shared resources and reducing transboundary conflicts.

Climate adaptation policies should explicitly address conflict risks and prioritize equitable resource distribution. Without governance reform and stronger institutions, technical interventions alone will not resolve the worsening crisis.

Conclusion

The Horn of Africa is experiencing a dangerous convergence of climate change, environmental degradation, institutional weakness, and escalating pastoral conflicts. Repeated droughts, floods, and shrinking natural resources are destroying livelihoods, intensifying competition over water and pasture, and fueling violence across pastoral regions. Climate change has become one of the most significant drivers of insecurity in the region because it amplifies existing social, economic,

and political vulnerabilities. Millions of pastoralists now face worsening poverty, displacement, food insecurity, and instability as traditional coping systems become increasingly unsustainable.

Nevertheless, pastoral communities continue to demonstrate resilience through adaptation and innovation. Their long-term survival, however, depends on stronger institutional support, climate-sensitive peacebuilding, effective governance, and sustained investment in adaptation programs. The future stability of the Horn of Africa will largely depend on how governments, regional organizations, and international partners respond to the growing climate crisis. Without urgent intervention, climate change will continue to intensify pastoral conflicts and humanitarian suffering. Conversely, meaningful investment in climate resilience, equitable governance, conflict prevention, and pastoral adaptation can help transform the current crisis into an opportunity for sustainable peace and resilience in the region.