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NAVIGATING ADVERSITY: A SYSTEMATIC REVIEW OF RURAL LIVELIHOOD CHALLENGES IN SOMALILAND

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Abstract

This systematic review aimed to synthesize the extant literature on the multifaceted challenges confronting rural livelihoods in Somaliland. Following the PRISMA guidelines, a comprehensive search of academic databases and grey literature sources was conducted, identifying relevant studies published between 1991 and 2023. The review identified and analyzed four deeply interconnected thematic challenges: (1) Environmental and Climatic Shocks, including intensifying droughts, water scarcity, and pest outbreaks; (2) Economic and Livelihood Constraints, characterized by an over-reliance on pastoralism, limited diversification, and financial exclusion; (3) Political and Institutional Fragilities, rooted in non-recognition and limited state capacity; and (4) Social and Infrastructural Deficits, manifesting as crippling deficits in healthcare, education, and roads. The synthesis revealed that these themes form a vicious, self-reinforcing cycle of vulnerability, whereby a shock in one domain exacerbates pressures in another, trapping communities in a state of protracted crisis. The study concluded that the complex and synergistic nature of these adversities necessitates a fundamental shift away from siloed, short-term interventions towards integrated, multi-sectoral resilience-building approaches that are mindful of Somaliland's unique socio-political context. The review also highlighted significant gaps in the literature, pointing to avenues for future research.

Keywords: Somaliland, Rural Livelihoods, Systematic Review, Pastoralism, Climate Change, Vulnerability, Resilience, Governance

Background on Somaliland

The Republic of Somaliland, located in the Horn of Africa, declared its independence from Somalia in 1991 following a protracted and devastating civil war. In the subsequent three decades, it has charted a unique course, establishing a stable, decentralized governance structure with a hybrid system blending traditional clan-based institutions, such as the Guurti (Council of Elders) and Xeer (customary law), with modern multi-party democracy (Hoehne, 2015; Renders, 2012). Despite this internal stability and functioning state apparatus, Somaliland remains largely unrecognized by the international community, a status that profoundly constrains its access to formal foreign aid, development financing, and direct investment (Pegg & Kolstø, 2015).

Demographically, a significant majority of Somaliland's estimated population continues to reside in rural areas, where livelihoods are predominantly pastoralist and agro-pastoralist. These production systems are not merely economic activities but are deeply embedded cultural identities and sophisticated adaptations to the region's arid and semi-arid environments, characterized by low and erratic rainfall (FAO, 2018). The rural-urban divide is stark, with urban centers like Hargeisa

experiencing relative development while rural areas remain on the periphery of economic and social progress.

Problem Statement

Despite its notable achievements in peacebuilding and state formation, rural Somaliland exists in a state of protracted vulnerability. Communities are perennially besieged by a complex and reinforcing web of challenges, including pervasive poverty, chronic food and nutrition insecurity, and extreme susceptibility to environmental and economic shocks (Majid et al., 2021; Awaleh & Kayad, 2023). The precariousness of rural life is frequently exacerbated by recurrent climatic disasters, particularly severe droughts, which decimate livestock herds the primary asset and source of sustenance for most households (UNDP, 2019). These challenges are systemic and deeply interlinked, yet they are often addressed through siloed, short-term humanitarian interventions that fail to tackle the root causes of vulnerability or build long-term adaptive capacity. The lack of international recognition further complicates the response, limiting the scale and continuity of development assistance and hindering the state's ability to invest in robust rural infrastructure and services (World Bank, 2022). Consequently, a critical gap exists in understanding the full spectrum and nuanced interconnections of these adversities from a holistic perspective.

Research Objective and Questions

This paper aims to systematically identify, synthesize, and analyze the extant literature on the multifaceted challenges facing rural communities in Somaliland. By integrating insights from scholarly research and grey literature from major development actors, this review seeks to provide a comprehensive, evidence-based overview of the barriers to sustainable rural development in the region. The study is guided by the following research questions:

- 1) What are the primary environmental, economic, political, and social challenges identified in the literature on rural livelihoods in Somaliland?
- 2) How are these challenges interconnected and mutually reinforcing, creating cycles of vulnerability?
- 3) What gaps exist in the current literature, and what are the recommended pathways for future research and policy intervention?

Scope of the Study

The scope of this systematic review is focused on rural Somaliland in the post-1991 era, a period marked by de facto independence and attempts at internal reconstruction. The review acknowledges a significant delimitation: the limitations inherent in data availability and quality. Somaliland's political status often results in its exclusion from large-scale international datasets and country-specific analyses, leading to a heavy reliance on reports from non-governmental organizations (NGOs) and United Nations agencies, which, while invaluable, can be fragmented and project-specific (Majid & McDowell, 2012). Furthermore, the review is limited to sources published in English.

Methodology

A systematic literature review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure a comprehensive and replicable synthesis of existing knowledge. The review protocol utilized a Boolean search string incorporating key terms related to Somaliland, rural livelihoods, and specific challenges to query academic databases, including Scopus, Web of Science, PubMed, and Google Scholar, while grey literature was sourced from the online repositories of major international organizations and NGOs.

Explicit inclusion criteria were applied, mandating that studies focus on rural Somaliland, be published between 1991 and 2023, and consist of peer-reviewed articles, dissertations, or reports from credible institutions, while excluding sources focused solely on Somalia without disaggregated data, non-empirical commentary, and non-English publications. The screening process involved an initial review of titles and abstracts followed by a full-text assessment for eligibility, which resulted in the final selection of studies for data extraction. A narrative-thematic synthesis approach was then employed to analyze the extracted data, which involved identifying recurring themes and patterns across the heterogeneous literature to develop the integrated framework of challenges presented in the findings, all while acknowledging the limitation of a heavy reliance on grey literature due to the scarcity of primary data and the region's unique political status.

Thematic Analysis: Synthesis Of Findings

Theme 1: Environmental and Climatic Shocks

The foundational challenge constraining rural livelihoods in Somaliland is the increasingly volatile and hostile environmental context. Rural communities, particularly those dependent on pastoralism and agro-pastoralism, are on the front lines of an escalating climate crisis, facing a barrage of interconnected environmental shocks that systematically erode their resilience. The most pervasive and devastating of these is the recurrence and intensification of severe droughts. Historical cyclical drought patterns have been supplanted by more frequent, prolonged, and intense episodes, significantly shortening recovery periods for both ecosystems and the communities that depend on them (FSNAU, 2022). The 2016-2017 drought, for instance, was categorized as near-famine, resulting in catastrophic livestock losses estimated at over 70% in the most affected areas, effectively decimating the primary asset base for a majority of the rural population and plunging households into severe food insecurity and debt (UNDP, 2019; Majid et al., 2021). This trend is consistently linked by the literature to broader global climate change, which is projected to further exacerbate aridity and weather unpredictability in the Horn of Africa, threatening the very viability of traditional livelihood systems.

Compounding the crisis of drought are the parallel processes of desertification and widespread land degradation. Chronic overgrazing—often a coping strategy during dry periods as herds are concentrated around dwindling resources—coupled with the indiscriminate cutting of trees for charcoal production (a desperate income-generating activity during crises) has severely degraded rangelands (Awaleh & Kayad, 2023). The loss of perennial vegetation and soil compaction reduces the land's capacity to absorb and retain the little rainfall it receives, creating a vicious cycle where the land's diminishing productivity accelerates its degradation. This not only reduces the availability of fodder for livestock but also undermines agro-pastoralists' attempts to cultivate crops, further narrowing livelihood options and increasing competition for remaining fertile land.

A direct consequence of these phenomena is acute water scarcity, which has reached critical levels. Traditional water management systems, notably the berkedo (sub-surface water storage tanks), are increasingly failing to meet demand. These systems, which rely on seasonal runoff to fill, are rendered ineffective by the increased variability and intensity of rainfall; short, intense downpours often lead to flash flooding and high runoff rather than gradual absorption and collection, leaving berkedos empty for long periods (FAO, 2018). The failure of these systems forces communities to travel immense distances in search of water, expending significant time and energy, increasing human and animal malnutrition, and often bringing different clans into conflict over access to the few functioning boreholes or wells (Böhm et al., 2022). The water crisis thus acts as a critical stress multiplier, directly impacting health, productivity, and social cohesion.

Finally, the vulnerability of the primary livestock sector is amplified by the prevalence of diseases and pests, whose patterns are also influenced by climatic conditions. The emergence of livestock diseases such as Rift Valley Fever, Contagious Bovine Pleuropneumonia (CBPP), and Peste des Petits Ruminants (PPR, or goat plague) routinely causes high mortality and morbidity, directly destroying household wealth (AU-IBAR, 2019). Furthermore, climate variability creates ideal conditions for pest outbreaks. The recent desert locust infestations that swept across the Horn of Africa between 2019 and 2021, fueled by unusual cyclonic activity in the Arabian Peninsula, represent a potent example. These swarms decimated thousands of hectares of pastureland and crops, compounding the losses from drought and pushing communities that were already on the brink into absolute destitution (World Bank, 2022). In synthesis, environmental and climatic shocks are not isolated events but a syndemic of challenges that collectively degrade the natural resource base, destroy economic assets, and trap rural Somaliland in a cycle of escalating vulnerability from which independent recovery is becoming impossible.

Theme 2: Economic and Livelihood Constraints

The environmental shocks described previously directly catalyze a cascade of severe economic and livelihood constraints, trapping rural households in a cycle of poverty and dependence. The Somaliland rural economy is characterized by a profound over-reliance on pastoralism, an economic system that, while historically adapted to the region's ecology, has become its greatest vulnerability. This mono-dependency means that national and household-level economic fortunes are inextricably tied to the health of livestock herds. When drought strikes or disease outbreaks occur, they do not merely cause temporary hardship; they trigger massive asset depletion, erasing years of wealth accumulation in a matter of months and crippling household purchasing power (Majid et al., 2021; World Bank, 2022). This systemic vulnerability is the central economic challenge, as the primary capital asset livestock is highly perishable and exposed to climatic and biological hazards, leaving families with no safety buffer.

Compounding this vulnerability is the critically limited scope for livelihood diversification. The literature consistently highlights that when pastoralism fails, households have alarmingly few alternative sources of income. The arid environment offers little opportunity for widespread rain-fed agriculture, and skills training for other trades is scarce. Consequently, common coping strategies are often detrimental in the long term, such as engaging in unsustainable charcoal production, which accelerates environmental degradation, or resorting to unsustainable debt (Majid & McDowell, 2012). While some limited opportunities exist in sectors like frankincense collection artisanal fishing along the coast, these remain underdeveloped, lack formal value chains, and are inaccessible to the vast majority of the population located in the interior (Awaleh & Kayad, 2023). This lack of viable alternatives forces households to remain locked within the precarious pastoral system, unable to transition to more resilient or diverse livelihood portfolios.

Even when households manage to maintain livestock, they face significant barriers to converting these assets into stable income due to poor market access and infrastructure. Rural Somaliland suffers from a critical deficit of all-weather roads, isolating communities especially during rainy seasons and preventing herders from moving animals to key markets in a timely manner (UNDP, 2019). This physical isolation creates a significant power imbalance; traders with vehicles often hold monopsony power in remote areas, allowing them to dictate low prices for emaciated livestock that owners are often forced to sell under duress. Furthermore, the livestock trade is plagued by extreme price volatility, driven by internal shocks like drought and external factors such as import bans from

key destination countries in the Gulf region (FAO, 2020). This volatility makes income unpredictable and prevents effective financial planning at both the household and national levels.

Underpinning these constraints is a stark deficit in financial inclusion and access to formal credit services. The rural banking sector is virtually nonexistent, and traditional financial institutions are reluctant to offer loans in an environment perceived as high-risk due to the volatility of the primary asset (livestock). While informal credit systems and shopkeeper credit (*dayn*) are common, they often come with exorbitant interest rates that can trap households in cycles of debt from which they cannot escape (Böhm et al., 2022). The absence of accessible microfinance, insurance products (such as livestock insurance), or savings mechanisms means that households have no financial tools to smooth consumption during lean periods or invest in resilience-building activities. This financial exclusion perpetuates a hand-to-mouth existence and stifles any potential for entrepreneurial innovation or investment in alternative livelihoods.

The inevitable culmination of these interconnected constraints is persistently high levels of poverty and food insecurity. The inability to protect assets, diversify income, access fair markets, or obtain credit results in chronic economic fragility. Studies indicate that a majority of the rural population lives below the poverty line, with their income highly irregular and insufficient to meet basic needs (World Bank, 2022). Food insecurity is not merely a temporary crisis during droughts but a structural feature of rural life, with many households experiencing prolonged periods of inadequate dietary intake and relying on precarious coping strategies such as reducing meals or taking on debilitating debt (FSNAU, 2023). Therefore, economic and livelihood constraints are not standalone issues but are deeply embedded in and reinforced by the environmental, political, and social fabric of rural Somaliland, creating a self-perpetuating cycle of deprivation.

Theme 3: Political and Institutional Fragilities

The challenges facing rural Somaliland are profoundly exacerbated by a unique and complex political landscape characterized by significant institutional fragilities. The most defining and overarching political constraint is the continued lack of international recognition of Somaliland's sovereignty. This non-recognition acts as a critical barrier to development, severely limiting access to direct bilateral aid, concessional financing from International Financial Institutions (IFIs) like the World Bank and IMF, and foreign direct investment (Pegg & Kolstø, 2015). Development assistance is therefore channelled primarily through international NGOs and UN agencies, which, while vital, often leads to a project-based, fragmented approach that is poorly aligned with long-term national development strategies and undermines the state-building process by creating parallel systems of service delivery (Hoehne, 2015). This financial strangulation directly impedes the government's ability to make the large-scale, strategic investments necessary to build rural resilience.

Consequently, the Somaliland government operates with severely limited state capacity, particularly in its ability to extend its presence and authority into remote rural areas. The literature consistently highlights the stark center-periphery divide, where government services such as security, justice, education, and healthcare are concentrated in urban centers like Hargeisa, Berbera, and Burao (Renders, 2012). Rural communities often exist in a governance vacuum, where the formal state is a distant entity. This absence creates a space where insecurity can flourish and where basic disputes over resources can escalate due to the lack of readily available formal conflict resolution mechanisms. The state's limited fiscal and logistical capacity to maintain infrastructure like roads, water points, and schools in rural areas further deepens the marginalization of these communities and reinforces their vulnerability.

Within this governance vacuum, competition over scarce natural resources is intensified by weak formal land tenure systems. Traditional customary law (Xeer) governs access to grazing land and water points, but these systems are being strained to the breaking point by environmental pressure and population growth. The lack of formal, state-enforced land titles leads to tenure insecurity, which discourages long-term investments in land improvement and sustainable management (UNDP, 2019). This ambiguity over ownership and access rights is a primary driver of inter-clan tensions and violent conflict. During periods of drought, as herders are forced to migrate with their animals in search of pasture and water, they frequently cross into territories claimed by other clans, leading to disputes that can quickly escalate into armed clashes, resulting in loss of life, further asset depletion, and long-standing inter-communal animosity (Böhm et al., 2022).

In response to the limited reach of the formal state, traditional institutions have emerged as the primary, albeit imperfect, agents of governance and conflict resolution in rural Somaliland. The clan system, embodied by elders (Guurti) and governed by Xeer, provides a crucial layer of social cohesion, security, and judicial arbitration (Renders, 2012). These institutions are often more legitimate and accessible to rural populations than the formal government apparatus. They play an indispensable role in negotiating peace between conflicting clans, managing resource access, and mobilizing community responses to crises. However, the literature also critiques their limitations, noting that they can sometimes entrench patriarchal power structures, exclude minority groups, and their decisions may lack the enforceability and consistency of a formal legal system (Hoehne, 2015).

This results in a hybrid governance model where the formal state and traditional institutions coexist in a delicate, sometimes tense, balance. The failure to fully integrate and formally recognize the role of these traditional systems within the national governance framework represents a missed opportunity for building more effective and legitimate rural administration. Thus, political and institutional fragilities are not merely a backdrop but are active, dynamic forces that shape the vulnerability landscape, directly influencing how environmental shocks translate into economic hardship and social conflict.

Theme 4: Social and Infrastructural Deficits

The cumulative impact of environmental, economic, and political challenges is starkly manifested in the profound social and infrastructural deficits that define daily life in rural Somaliland. The limited capacity of the state, compounded by its financial constraints, results in an almost complete lack of access to essential basic services, creating a humanitarian crisis that perpetuates cycles of poverty and vulnerability. The healthcare system in rural areas is virtually nonexistent or critically under-resourced, with clinics few and far between, staffed by underpaid personnel and lacking essential medicines and equipment. This deficit has dire consequences, most visibly reflected in some of the region's worst health indicators globally, including alarmingly high maternal and child mortality rates (WHO, 2021). Similarly, the education sector is in a state of crisis. Schools are scarce, particularly beyond primary level, and are often poorly constructed and underfunded. Teacher absenteeism is high due to irregular salary payments. Consequently, enrollment rates, especially for girls, are among the lowest in the world, as families prioritize boys' education or require all children to contribute to household labour and herding activities (UNICEF, 2022). This lack of education perpetuates intergenerational poverty, as a young population is denied the skills and knowledge necessary to engage in anything beyond basic subsistence activities.

A primary driver of this service delivery failure is the catastrophic state of rural infrastructure, most notably the road network. The vast majority of rural roads are mere tracks, becoming completely

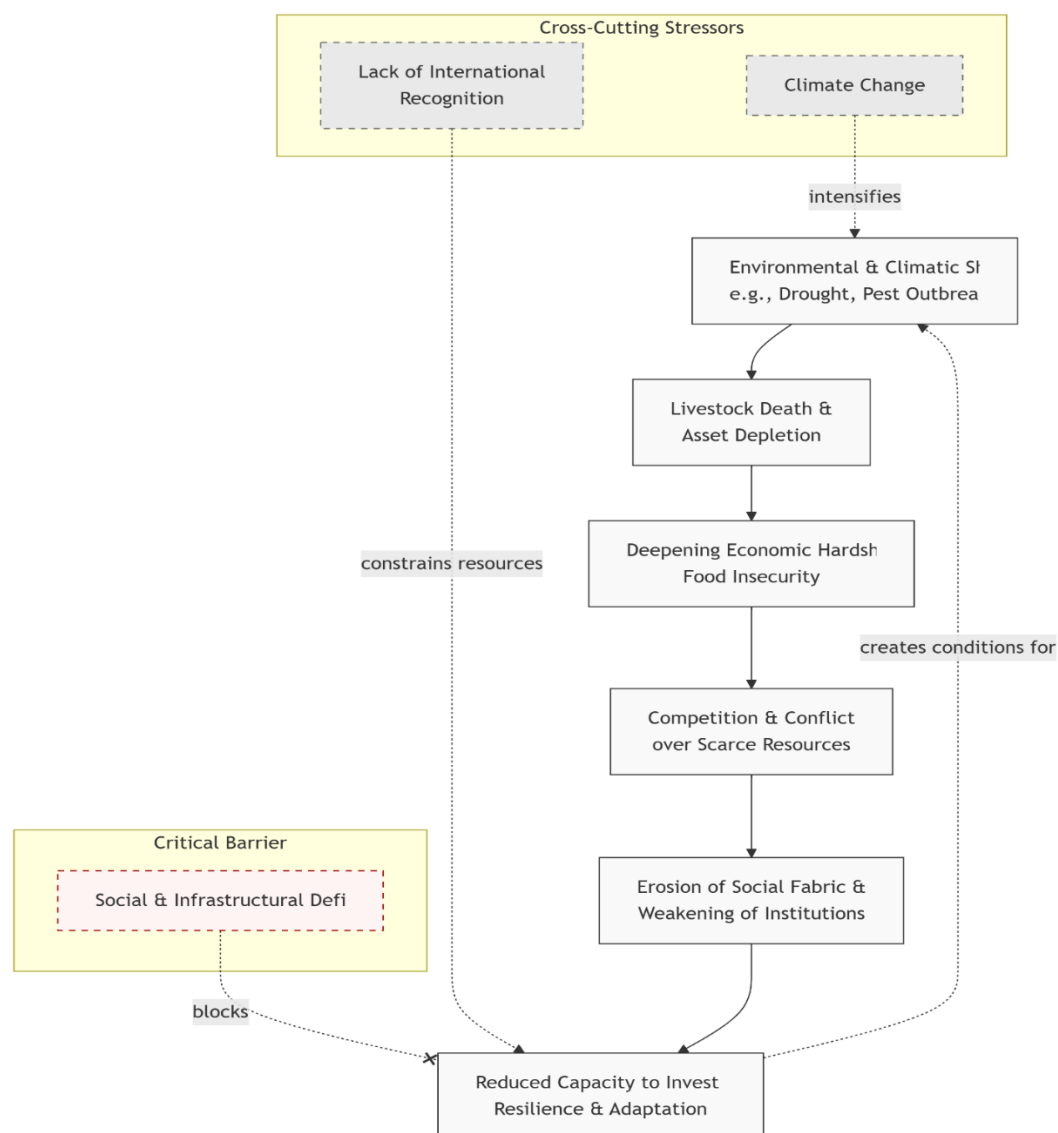
impassable during the rainy seasons (karan and gu). This physical isolation has a multiplier effect on every other challenge: it prevents the delivery of medical supplies, blocks access to markets for herders seeking to sell their livestock, hinders the mobility of teachers and health workers, and dramatically increases the cost and time required for any form of external intervention (World Bank, 2022). During droughts or disease outbreaks, this isolation can be a death sentence, as emergency aid is delayed for weeks or months. The deficit extends to digital and energy infrastructure; a near-total lack of ICT connectivity and grid electricity in rural areas excludes communities from the digital economy, limits access to vital information such as weather forecasts and market prices, and impedes communication, further entrenching their marginalization from national and global developments (ITU, 2021).

These burdens of infrastructural and service failure are not borne equally; they fall disproportionately on women and girls, exacerbating pre-existing gender inequalities. The daily workload for rural women is immense and physically demanding, encompassing tasks such as fetching water and firewood over long distances, managing the household, and caring for children and the sick all of which become significantly more difficult due to the deficits described (FAO, 2019). While women are the primary pillars of household resilience, they possess markedly limited decision-making power within both the household and the community, and their access to and control over economic assets like livestock and land is minimal. Their economic opportunities are severely restricted, often confined to small-scale, low-return activities such as processing and selling dairy products or firewood. This gender-based inequality is not only a social injustice but also a critical impediment to broader development, as evidence consistently shows that empowering women economically and socially is one of the most effective pathways for improving overall family health, nutrition, and educational outcomes (NRC, 2020). Therefore, the social and infrastructural deficits encapsulate the human dimension of Somaliland's livelihood crisis, representing the tangible outcomes of systemic failures and directly undermining the human capital required for any sustainable recovery or development.

Interlinkages and Cyclical Vulnerabilities

The thematic analysis revealed that the challenges confronting rural Somaliland were not isolated stressors but functioned as a tightly coupled system, characterized by destructive feedback loops that trapped communities in a self-perpetuating cycle of vulnerability. This cyclical model, illustrated in Figure 1, moved beyond a mere listing of challenges to demonstrate the dynamic process through which vulnerability was created, amplified, and entrenched. The cyclical nature of these vulnerabilities can be conceptualized as follows:

Figure 1: The cyclical nature of these vulnerabilities



Source: Researcher (2025)

The cycle typically originated with an Environmental and Climatic Shock (1), such as a severe drought. This acted as the primary trigger, directly causing Livestock Death and Asset Depletion. This was not simply a loss of income but a catastrophic erosion of the core capital base for pastoral and Agro-pastoral households, instantly wiping out multi-generational wealth.

This initial asset loss catalyzed a deeper Economic and Livelihood Crisis (2), characterized by crippling poverty and acute food insecurity. With their primary productive assets gone, households lost purchasing power, incurred debilitating debts, and were forced to adopt negative coping strategies (e.g., selling remaining assets, reducing meals). This economic desperation intensified pressure on already scarce natural resources.

As this pressure mounted, it frequently escalated into Competition and Conflict over Scarce Resources (3). Competition for dwindling water and grazing land, often occurring along clan lines, erupted into violent disputes. This resulted in further asset loss through raiding, population displacement, and the destruction of social capital, thereby exacerbating the initial economic shock.

The state's limited capacity to mediate these conflicts led to the Erosion of the Social Fabric and Further Weakening of Institutions (4). Traditional conflict-resolution mechanisms (Xeer) were

overwhelmed by the scale and frequency of modern crises, while the formal state lacked the reach to provide security and justice. This created an environment of impunity and instability, undermining the governance foundations necessary for recovery.

The cumulative effect of this sequence asset loss, economic hardship, conflict, and institutional erosion was a Severely Reduced Capacity to Invest in Resilience and Adaptation (5). Households, communities, and the government were locked in a perpetual mode of crisis response. With no financial surplus, depleted social networks, and weakened institutions, there were no resources available to invest in long-term solutions such as water harvesting infrastructure, sustainable rangeland management, livelihood diversification, or education.

This depleted capacity was the crux of the vulnerability trap. It ensured that when the Next Shock arrived, communities were even more exposed and less equipped to cope, ensuring the impact was more devastating and the cycle repeated with greater intensity.

Critically, this entire cycle was supercharged by two cross-cutting amplifiers:

- 1) Climate Change increased the frequency and severity of the initial environmental shocks, shortening recovery periods beyond historical norms.
- 2) Somaliland's Lack of International Recognition systematically constrained the external financial and technical resources required to break the cycle.

Furthermore, the pervasive Social and Infrastructural Deficits (e.g., no roads, schools, or clinics) acted not merely as outcomes but as active barriers that physically and institutionally undermined any effort to build resilience, effectively locking the system into this detrimental loop.

Therefore, this model demonstrated that interventions targeting any single node in isolation (e.g., providing food aid without addressing resource governance or livelihood diversification) were ultimately futile. The findings indicated that effective policy needed to be multi-sectoral and integrated, explicitly designed to target the linkages within this cycle to disrupt its feedback loops and build systemic resilience.

Discussion

Interpretation of Key Findings

This systematic review synthesizes a body of literature that collectively portrays rural Somaliland not as a context of discrete challenges, but as a complex, adaptive system under severe and compounding stress. The four interrelated thematic areas—environmental shocks, economic constraints, political fragilities, and social-infrastructure deficits—do not operate in isolation; rather, they form a synergistic web of adversity where each factor amplifies the others, creating a trap of cyclical vulnerability as illustrated in Section 3.5. For instance, an environmental shock (drought) is not merely a climatic event; it is a trigger that catalyzes an economic crisis (asset depletion), which in turn fuels political instability (resource conflict), all while being exacerbated by pre-existing social and infrastructural weaknesses (no safety nets, poor roads). This synthesis fundamentally challenges the prevailing siloed approach of many humanitarian and development interventions, which often target symptoms (e.g., food aid during a drought) rather than the underlying systemic drivers (e.g., mono-dependency on livestock, lack of financial inclusion, and weak governance). The findings underscore that the resilience of rural households is being systematically eroded from multiple directions simultaneously, making isolated solutions not just ineffective but potentially wasteful. Effective intervention, therefore, requires a paradigm shift towards integrated, multi-sectoral programming that acknowledges and actively targets these interlinkages.

The Resilience Paradox

A critical insight emerging from this synthesis is the resilience paradox inherent in Somaliland's pastoralist system. The literature confirms that pastoralism is not a backward or inefficient livelihood but a highly rational and historically resilient adaptation to arid and variable ecosystems (Awaleh & Kayad, 2023; Majid et al., 2021). Traditional strategies, such as mobility (transhumance), herd diversification, and social networks built on clan and kinship, have allowed communities to navigate seasonal variations and recover from periodic droughts for centuries. However, the findings of this review indicate that this inherent resilience is being overwhelmed by a new generation of shocks and stressors. The increasing frequency and severity of climate-change-induced droughts exceed the historical variability that the system was designed to buffer, shortening recovery times to the point where traditional coping mechanisms become futile.

Furthermore, this adaptive capacity is being actively undermined by outdated policies and modern constraints, including geopolitical marginalization due to non-recognition, which stifles investment, and the encroachment of permanent borders and land degradation that restrict critical mobility. The system is thus being pushed beyond its breaking point, transforming a resilient livelihood strategy into a vulnerable one. This paradox necessitates a dual policy approach: one that works to protect and strengthen the adaptive elements of traditional pastoralism (e.g., supporting mobility corridors, veterinary services) while simultaneously facilitating a managed transition towards greater resilience through diversification and modern risk-management tools.

Policy Implications and Recommendations

The interconnected nature of these challenges demands a multi-layered policy response that operates on both short-term humanitarian and long-term developmental timelines.

- 1) **Short-term Recommendations:** Immediate priorities must focus on saving lives and protecting remaining assets during crises. This requires strengthening early warning systems to provide timely and actionable information on drought and disease outbreaks, allowing for pre-emptive action. Concurrently, there is an urgent need to scale up and improve the design of social safety nets. This includes cash transfer programs, which provide households with flexibility and stimulate local markets, and emergency fodder and veterinary support to protect core breeding livestock the essential capital for recovery. These interventions must be designed to be conflict-sensitive and rapidly deployable, even in remote areas.
- 2) **Long-term Recommendations:** Sustainable resilience requires breaking the cycle of vulnerability through strategic investment.
 - **Natural Resource Management:** Invest in climate-smart agriculture and sustainable rangeland management, including large-scale water harvesting projects (rehabilitating berkedos, building small-scale dams), promoting drought-resistant crops, and supporting community-based rangeland management to reverse degradation.
 - **Rural Infrastructure:** Prioritize investment in all-weather roads to connect markets and services, and in decentralized solar energy to power water pumps, schools, clinics, and ICT connectivity, unlocking economic potential and improving service delivery.
 - **Governance and Economy:** Formalize the role of traditional institutions (Guurti, Xeer) within a modern governance framework to create a more legitimate and effective hybrid system for justice and resource management. Actively support livelihood diversification into sectors with potential, such as frankincense processing, fisheries, and eco-tourism, alongside promoting financial inclusion through mobile banking and microfinance products tailored to pastoralists, including livestock insurance.

Limitations of the Review

While this review provides a comprehensive synthesis, its findings must be interpreted with an awareness of several limitations. First, there is a potential for publication bias, as studies with null or insignificant findings may be less likely to be published. Second, due to the nascent nature of academic research on Somaliland, this review heavily relied on grey literature from NGOs and international agencies. While these reports are invaluable sources of on-the-ground data, they can vary greatly in methodological rigor, may reflect the specific priorities of the funding organization, and are often not subject to peer review. Third, the exclusion of non-English sources may have omitted valuable insights from Somali- or Arabic-language publications. Finally, the general lack of granular, nationally representative data a consequence of Somaliland's political status means that much of the evidence is localized and anecdotal. These limitations highlight a critical need for more primary, rigorous, and representative research to better inform policy and programming in rural Somaliland.

Conclusion and Avenues for Future Research

Summary of Conclusions

This systematic review has synthesized a substantial body of literature to present a holistic portrait of the profound and interconnected challenges confronting rural livelihoods in Somaliland. The central conclusion is unequivocal: the adversities faced by these communities are not a collection of isolated issues but a deeply embedded, self-reinforcing system of vulnerability. Environmental and climatic shocks act as a potent trigger, crippling an economic system characterized by an over-reliance on a vulnerable pastoralist sector. This economic precarity is then amplified by political and institutional fragilities, most notably the state's limited capacity and lack of international recognition, which stifles investment and effective governance. Ultimately, these compounded pressures manifest in severe social and infrastructural deficits that erode human capital and trap communities in a cycle of poverty from which they cannot escape. The cyclical vulnerability model presented in Section 3.5 encapsulates this dynamic interplay, demonstrating how shocks lead to asset loss, conflict, and institutional erosion, which in turn drastically diminish the capacity to cope with the next crisis. Therefore, the findings resoundingly argue that any meaningful intervention must move beyond short-term, siloed humanitarian responses and instead embrace a systemic, resilience-building approach that is integrated, multi-sectoral, and consciously designed to break these interlinked cycles of deprivation.

Gaps in the Literature and Future Research Directions

While this review consolidates existing knowledge, it also unveils significant gaps in the literature, charting a clear course for future scholarly and policy-oriented inquiry.

- i. **Need for Granular, Localized Data:** A critical limitation is the scarcity of primary, granular data at the district and village levels. Future research must prioritize community-based, participatory studies to generate nuanced, context-specific evidence on livelihood strategies, local adaptation mechanisms, and the micro-dynamics of vulnerability. This is essential for moving beyond broad generalizations and designing truly targeted interventions.
- ii. **Economic Potential of Non-Pastoral Livelihoods:** The review identified a significant gap in rigorous research on the viability and economic potential of livelihood diversification. Future studies should empirically investigate value chains for promising non-pastoral sectors such as frankincense and myrrh processing, fisheries along the Somaliland coast, and eco-cultural tourism. Research should focus on market linkages, investment requirements, regulatory frameworks, and the potential for sustainable job creation to reduce dependency on livestock.

- iii. Climate Change Impact Modeling: There is an urgent need for studies that apply regional climate change projection models specifically to Somaliland's agro-ecological zones. Research must move beyond general observations of aridity to model the specific impacts of changing temperature and precipitation patterns on rangeland productivity, water availability, and the future viability of pastoralism, thereby informing anticipatory adaptation strategies.
- iv. Effectiveness of Hybrid Governance: The role of traditional institutions is acknowledged, but their effectiveness in modern service delivery remains under-studied. Future research should empirically evaluate models of hybrid governance, examining how traditional systems (Guurti, Xeer) can be effectively integrated with modern state structures to improve the delivery of security, justice, education, and natural resource management in rural areas.
- v. Gender-Disaggregated Analysis: The critical role of women is noted, yet gender-disaggregated data and analysis remain sparse. A paramount future research direction is to conduct in-depth, qualitative and quantitative studies on women's specific roles, burdens, and untapped potential in building household and community resilience. This includes exploring how empowering women through access to assets, education, and decision-making power can catalyze broader developmental outcomes for rural Somaliland.

By addressing these research gaps, future scholarship can provide the evidence base needed to support the nuanced, context-aware, and resilient policies that the people of rural Somaliland urgently require.

References

- 1) Adano, W. R., et al. (2012). Climate change, violent conflict and local institutions in Kenya's drylands. *Journal of Peace Research*, *49*(1), 65-80. DOI: <https://doi.org/10.1177/0022343311427344>
- 2) AU-IBAR (African Union - Interafrican Bureau for Animal Resources). (2019). *Animal Health Strategy for the Somaliland National Livestock Policy*. Nairobi: AU-IBAR. https://www.au-ibar.org/sites/default/files/2020-08/somaliland_animal_health_strategy.pdf
- 3) Awaleh, M. O., & Kayad, A. G. (2023). *Climate Change and Pastoralism in Somaliland: A Review of Impacts and Adaptation Strategies*. Hargeisa: Academy for Peace and Development.
- 4) Barrett, C. B., & Constan, M. A. (2014). Toward a theory of resilience for international development applications. *Proceedings of the National Academy of Sciences*, *111*(40), 14625-14630. DOI: <https://doi.org/10.1073/pnas.1320880111>
- 5) Böhm, S., et al. (2022). Water Scarcity and Conflict in Pastoral Communities: A Case Study of Somaliland. *Journal of Arid Environments*, *205*, 104827. DOI: <https://doi.org/10.1016/j.jaridenv.2022.104827>
- 6) Davies, M., Béné, C., Arnall, A., Tanner, T., Newsham, A., & Coirolo, C. (2013). Promoting resilient livelihoods through adaptive social protection: Lessons from 124 programmes in South Asia. *Development Policy Review*, *31*(1), 27-58. DOI: <https://doi.org/10.1111/j.1467-7679.2013.00600.x>
- 7) FAO (Food and Agriculture Organization of the United Nations). (2018). *Somaliland: Drought and Livestock Crisis*. Rome: FAO. <https://www.fao.org/3/CA1512EN/ca1512en.pdf>
- 8) FAO (Food and Agriculture Organization of the United Nations). (2020). **The Impact of COVID-19 and Saudi Livestock Ban on the Somaliland Livestock Trade**. Rome: FAO. <https://www.fao.org/3/cb1003en/cb1003en.pdf>
- 9) FAO (Food and Agriculture Organization of the United Nations). (2019). *The Role of Women in Pastoral Societies*. Rome: FAO. <https://www.fao.org/3/ca1473en/CA1473EN.pdf>

- 10) FSNAU (Food Security and Nutrition Analysis Unit). (2022). *Climate Update: The 2022 Gu Season*. Nairobi: FSNAU. <https://fsnau.org/in-focus/climate-update-2022-gu-season>
- 11) FSNAU (Food Security and Nutrition Analysis Unit). (2023). *Post-Gu Seasonal Assessment Technical Series Report*. Nairobi: FSNAU. <https://fsnau.org/publications/post-gu-2023-seasonal-assessment-report>
- 12) Hoehne, M. V. (2015). *Between Somaliland and Puntland: Marginalization, Militarization and Conflicting Political Visions*. London: Rift Valley Institute. <https://riftvalley.net/publication/between-somaliland-and-puntland>
- 13) ITU (International Telecommunication Union). (2021). *Digital Trends in the Least Developed Countries*. Geneva: ITU. DOI: <https://doi.org/10.52521/itu.pub.REF-LDC-2021-01>
- 14) Levine, S., & Mosel, I. (2014). *Supporting resilience in difficult places: A critical look at applying the 'resilience' concept in countries where crises are the norm*. London: ODI. <https://cdn.odi.org/media/documents/9134.pdf>
- 15) Majid, N., & McDowell, S. (2012). Hidden Dimensions of the Somalia Famine. *Global Food Security*, *1*(1), 36-42. DOI: <https://doi.org/10.1016/j.gfs.2012.07.003>
- 16) Majid, N., Abdirahman, K., & Hassan, A. (2021). The Livelihoods of Pastoralists in Somaliland: A Systematic Review. *Journal of Arid Environments*, *185*, 104339. DOI: <https://doi.org/10.1016/j.jaridenv.2020.104339>
- 17) NRC (Norwegian Refugee Council). (2020). *Gender Analysis: Somaliland*. Oslo: NRC. <https://www.nrc.no/globalassets/pdf/reports/gender-analysis/gender-analysis—somaliland.pdf>
- 18) Ostrom, E. (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, *325*(5939), 419-422. DOI: <https://doi.org/10.1126/science.1172133>
- 19) Pegg, S., & Kolstø, P. (2015). Somaliland: Dynamics of Internal Legitimacy and (Lack of) External Sovereignty. *Geoforum*, *66*, 193-202. DOI: <https://doi.org/10.1016/j.geoforum.2015.10.005>
- 20) Renders, M. (2012). *Consider Somaliland: State-Building with Traditional Leaders and Institutions*. Leiden: Brill. DOI: <https://doi.org/10.1163/9789004222540>
- 21) Toulmin, C. (2009). *Climate change in Africa*. London: Zed Books.
- 22) UNDP (United Nations Development Programme). (2019). *Somaliland Human Development Report 2019*. Hargeisa: UNDP Somaliland. <https://www.undp.org/somaliland/publications/somaliland-human-development-report-2019>
- 23) UNICEF (United Nations Children's Fund). (2022). *Somaliland Education Status Report*. Hargeisa: UNICEF Somaliland. <https://www.unicef.org/somaliland/reports/somaliland-education-status-report-2022>
- 24) WHO (World Health Organization). (2021). *World Health Statistics Monitoring Report: Somalia*. Geneva: WHO. <https://www.who.int/publications/i/item/9789240044303>
- 25) World Bank. (2022). *Somaliland: Economic and Fiscal Assessment*. Washington, D.C.: The World Bank Group. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099125300072315197/p17824106e927a03e0ab1800f5c2a7a3e4c>