

Collaboration, Conflict and Mobility: Local Responses to Climate Change in Somaliland

Mohamed Fadal and Louise Wiuff Moe

Introduction

This report shares and discusses the insights of a 2020-2021 qualitative baseline research study on how local people and institutions in Somaliland respond to climate change impacts.

There is a growing focus on climate change impacts in contexts affected by conflict and political fragility. Yet, while the risk of climate change acting as a ‘threat multiplier’ in these contexts is currently much debated (see for example Goxho 2021), insufficient attention has been paid to the various ways in which people, communities and institutions seek to cope with, respond to, and collaborate around tackling climate change related stresses. Exploring these processes in further detail will be crucial as a basis for thinking of contextually relevant assistance, beyond narrow security agendas.

In starting to address this lacuna, the report moves beyond a risk-based focus on climate change, and conveys a more complex picture involving a multitude of responses to climate change impacts in Somaliland, including conflict, collaboration and innovation. The sketch we offer does not provide a comprehensive overview of climate change adaptation in Somaliland, but starts to nuance the outlook on intersections between climate, conflict and collaboration in fragile settings. Our initial findings, moreover, indicate the need for more in-depth knowledge on existing local initiatives and adaptations in Somaliland, as a basis for informing constructive climate change-related international assistance and policies.

Causes of climate change are global, and mitigation thereby ultimately hinges upon global lead actors (including states, companies and organisations) assuming responsibility. Yet,

the direct impacts and consequences of climate change are often local. Those who are at the forefront of responding to everyday climate change tend to be people and communities most vulnerable to its impacts. Attention to these processes, therefore, can offer important clues toward contextually relevant assistance with a long-term perspective, reaching beyond emergency relief and security/stabilisation responses.

Somaliland is one of East Africa's under-researched 'climate hotspots'. Our baseline study complements recent research on Somalia focusing on climate change adaptation (DanChurch Aid et al. 2020) and the climate-security nexus (NUPI and SIPRI 2021; Eklöv and Krampe 2019). Somaliland has been impacted by regular cycles of droughts for at least two decades, with a significant intensification during the past five years. Droughts and extreme weather variability, intersecting with intensifying conflicts over land, resources, changing mobility patterns and limited governance outreach have severely affected Somaliland, in particular its borderland regions. It is also, however, a context that holds important lessons in how scarcity of resources does not automatically cause conflict but can involve various forms of collaboration, which may serve as building blocks for constructive long-term responses to climate change impacts.

Following from this, the baseline study report:

- Shares the insights coming from interviews with people in Somaliland, on their experiences of climate change, and on how they seek to respond to, tackle and live with these impacts.
- Calls attention to the complexities at stake in the intersections between climate change, conflict, collaboration and mobility, and encourages in-depth research agendas that explore these complexities as a basis for thinking of contextually relevant assistance, beyond narrow security agendas.
- Presents a set of indicative recommendations based on our initial findings.

Research and data-collection for the report has been carried out as part of the project group B3 *Conflict and Cooperation at the Climate-Security Nexus*, within the cluster of excellence "Climate, Climatic Change, and Society" (CLICCS)¹ at the University of Hamburg. Dr. Louise Wiuff Moe led the study and the analysis, in close collaboration with the Social Research and Development Institute (SORADI) as the local partner. During November-December 2020, the SORADI team, led by Dr. Mohamed Fadal, conducted 30 interviews² with: members from communities (including rural communities of the Eastern Somaliland regions), traditional leaders, Somaliland experts in the field of climate change, local and central government stakeholders—including three key Ministers from the Central Government—and Local/Regional Government officials including mayors, as well as security actors and development practitioners. The study pays special attention to rural regions, where livelihoods are particularly severely affected by climate change.

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² Some interviews were conducted in English, but most in Somali. The interviewers subsequently transcribed the interviews in a translated (English) version.

The report is organised as follows. The first section briefly introduces the context. The second section outlines some of the most significant patterns of climate change impacts in Somaliland. The third section presents the main interview insights, on the various ways in which local actors seek to respond to, tackle, and live with climate change impacts. The fourth section links these initial findings to an exploration of how different forms of response intersect with changing mobility patterns, and uses this as a vantage point for conveying some of the complexities at stake in the relationship between climate change, conflict and collaboration. The final section presents a set of recommendations for policy and further research.

1. The Context

Somaliland is a self-declared, albeit so far internationally unrecognised, state located in the north of what is internationally recognised as the territory of the Federal Republic of Somalia. Somaliland declared its independence from Somalia in 1991, referring to the territory of the State of Somaliland (formerly British Somaliland, administered as a British colonial protectorate), which enjoyed a few days of independence from 26 June to 1 July 1960, before being united with the Trust Territory of Somaliland (formerly under Italian colonial administration) to form the Somali Republic.

Climate change in Somaliland—as well as the related responses, including patterns of both conflict and collaboration—must be situated within the wider context of Somaliland’s recent history, shaped by the years of civil war, the disunion with Somalia as well as its (ongoing) socio-political and economic transitions.

The years of military dictatorship under Siad Barre (1969-1991)—variously supported by Cold War super-powers—came with a knack for clan-manipulation, brutal repression and then the civil war(s) of the 1980s-90s (between Somaliland and the Siad Barre military, and internally within Somaliland), all of which impacted not just political and security conditions, but also the natural environment. This included wide-ranging devastation of forests and wildlife, massive displacements, undermining of trade relationships established for centuries, closing of seaports, destruction of wells and disruption of the seasonal migration systems and relationships, causing adverse conditions for building up and maintaining sustainable livelihoods, especially in the rural sectors (Hussein, 2018; Sloan and Schmitz 2019).

The interaction between environmental degradation and barriers to socio-economic and political inclusion and progress remain pertinent, in particular in the regions of Sool and Sanaag located in the eastern side of Somaliland, adjacent to each other and sharing a long border with Puntland State in the east (See Figure 1). Historically, these regions were considered to be favourable territories for pastoralism, with households possessing large numbers of livestock, counting thousands of small ruminants on the open grassland plains and hundreds of camels in the forested rangelands. They had rich pastures³ in several major grassland plains (Saraar, Karamaan and Bancadde), lush mountain valleys, and salty wells

³ Land used for grazing.

and grazing plants good for livestock health and growth. Sanaag and Sool communities also depended on and were renowned as repositories of *Xeer*-based traditional governance⁴ to manage communities' conflicts, social relationships and their environments. Yet, the long-term combined impacts of the dynamics of armed conflict, political and economic marginality—given the distance from Somaliland's capital Hargeisa—and climate change stressors have significantly marked these regions, which today are among the poorest. As the Mayor of Las Anod⁵ reiterated: "A Somali proverb says – 'only somebody near the pot can grab a bone'. But somebody in the periphery cannot compete for resources with somebody near the capital."

After Somaliland declared itself an independent nation in 1991, it embarked on an impressive process of reconciliation and reconstruction. The achievements of the latter include the preservation of relative peace and stability as well as the advancement of a democratic political system. This, in turn, has opened up opportunities for progress on a number of reforms and development agendas and innovations, driven by a mix of public and private sector actors, also of importance for climate change related matters (from local governance, poverty alleviation, infrastructure, assistance to the rural sectors, emerging new markets etc.). In sum, Somaliland is currently a fast-changing context, within which significant economic, political and environmental challenges and constraints, combined with a number of opportunities and innovations, deserve further attention.



Figure 1: The regions making up Somaliland /2000 Somaliland Mission.

⁴ Unwritten Somali customary jurisprudence system.

⁵ Administrative capital of the Sool region.

2. Overall Trends in Climate Change Impacts

Harsh environmental conditions, with periods of drought, are nothing new in Somaliland and the wider Horn of Africa. However, the changes from climate-related impacts, specifically growing frequency and intensity,⁶ have hit increasingly hard, adding up to consecutive humanitarian emergency situations over the past decade. Climate changes in Somaliland have different if overlapping manifestations, and a compound set of related consequences. Key trends include:

Droughts: The higher frequency and prolongation of droughts is one of the most critical climate change related stressors in Somaliland. Such droughts are part of Somaliland's history, yet there used to be a (predictable) period which allowed for the possibility of recovery between them. In recent years, the intervals between have become shorter, decimating livestock and squeezing the recovery period, which results in famine situations. In the last drought (2017), no less than 50% of the nomadic and semi-nomadic population of Sool, Sanaag and Togdheer ended up in Internally Displaced Persons (IDP) camps, which in turn exacerbated the urban poverty situation and conflicts over land in major cities of Somaliland.⁷

Weather variability: The increased frequency of droughts takes place against the wider backdrop of significantly higher weather variability. The expected quantity of rainfall has decreased and its spatial distribution is significantly shrinking; the major rainfall *gu* season (April-June) and the smaller *deyr* rains (September -November) are no longer as plentiful and reliable as they used to be. The duration of the season with green rangelands and the nutritive value of the vegetation have declined, which has led to weak and unproductive livestock and agricultural assets. The predictability of rainy and dry seasons' timelines has changed, which undermines the effectiveness of livestock husbandry systems through which land uses have been regulated and livestock assets sustained (Adano et al 2012: 66). These systems have been aligned with seasonal abundance of products in the rainy season, the seasonal market sales of the livestock offspring of a certain age, and preparations for the predictable dry season stresses. Such predictability is no longer the rule.

The climatic change effects of El Niño and La Niña have triggered weather systems which complicate the life patterns of pastoralists, adding to the increasing impacts of the Indian Ocean cyclones that cause destruction in the Sanaag coastal regions and floods from the main water ways (dry rivers) on the main land. Freak extra rainfalls, while having some benefits, bring diseases to humans, such as widespread malaria at epidemic proportions, and diseases not previously known to livestock (see also Eklöw and Krampe 2019:14).

Desertification: Droughts and weather variability, along with unregulated land use—including overgrazing and charcoal burning—have contributed to a significant reduction of rangelands, which is either devoid of vegetation, or has a scant cover that after rainfall is

⁶ The IPCC predicts that the temperature will rise between 3.2 C and 4.3 C by the end of the century and the variability in rain pattern will increase (see also DanChurchAid et al. 2020).

⁷ In a recent report, the World Bank Group shows how in Somali nomads are now among the most deprived population segment, in various dimensions (poverty, education, sanitation, electricity, water) (World Bank Group 2019: 34).

consumed immediately without being allowed to seed and regenerate. It is worth noting that unregulated and environmentally harmful practices in some cases constitute ‘last resort’ measures of people struggling to survive the effects of climate change (droughts, in particular) in the first place, thereby illustrating negative self-reinforcing trends. For example, when asked why the practice of cutting down trees for charcoal burning would continue despite devastating environmental effects, an interviewee from the Togdheer region replied “My children are hungry and you want me to save a tree? I will die for saving my children”.

The quality of vegetation has changed, and opportunistic plants have taken over in many rangelands, replacing the more traditionally favoured grass, shrubs and trees. Soil is removed in silt or dust forms. Dust storms are common in Sool, Sanaag and adjacent Togdheer regions, especially in the June-August windy season. Therefore, rural communities are competing for progressively depleted rangelands with livestock numbers shrinking, their quality degrading, causing increasing poverty.

Compound climate change impacts in the COVID-19 crisis: The Covid-19 pandemic intersects with climate change stressors, by not only severely affecting the health, health care systems and the daily lives of Somalis but also with devastating effects on their immediate livelihood and the overall economy in the longer term. The limited government capacity in Somaliland compromises both the public health responses and the prospects for recovery from the effects of the pandemic. There is a need to bolster the roles of government and international agencies in overcoming such challenges, including their intersection with current stressors on basic livelihoods.

3. Local Responses to Climate Change

As indicated by the outline of key trends in climate change-related impacts, people and livelihoods in Somaliland are severely affected. Somaliland’s government institutions face considerable political and economic constraints in their capacity to respond to these impacts. The lack of international recognition puts constraints on options for priority setting regarding external assistance, as Somaliland does not have its own National Adaptation Program of Action (NAPA)—which is a condition of eligibility for funding within the UN Framework Convention on Climate Change (UNFCCC)—but falls under Somalia’s NAPA. Alternative instruments, however, allow for coordinating and prioritising international assistance and collaboration. In particular, the Somaliland Development Fund⁸ (SDF), established in 2012, provides an important vehicle for coordination of development assistance and partnerships. Several of these are directly relevant to climate change adaptation, including projects on, for example, water conservation and supply, capacity-building for rangeland and forest management, and strengthening fisheries.

⁸ The SDF was established in order to provide a joint vehicle through which international development partners can support and fund projects that help Somaliland and its government toward meeting its central development goals. For further information <https://www.somalilanddevelopmentfund.org/about-the-sdf/objectives>

In addition to national and ministerial efforts to make progress on development—and climate change policies—, local actors and communities exposed to climate change impacts are themselves responding in a myriad of ways. This section discusses (some of) these local responses, and intersections with government initiatives.

Warranted concerns have been raised that approaches centred on local ‘resilience’ may inadvertently serve to shift the responsibility—and the burden of adaptation—onto those most vulnerable. On the flipside, however, it is also the case that attention to the responses of local actors and their specific social, spatial, economic and political realities can inform the kinds of assistance that will be most locally relevant and inclusive. It is the aim of this baseline study to indicate the potential of further advancing such a ‘local lens’. The following provides an outline of some of the different types of responses discussed in our interviews, covering a spectrum from long-standing customary strategies, responses aimed at diversification (in various forms), to uses of technology and transportation as means for reducing climate change related vulnerabilities of geographically isolated communities.

Nomadic, seminomadic and mixed livestock-crop strategies

Long-standing fine-tuned regimes for managing rangelands and natural resources, based on logics of interdependence and cooperation, and codified in (unwritten) customary law, *Xeer*, have historically served as a key means by which Somali pastoralists cope with a harsh natural environment. These customary practices of rangeland management have centred on the use of the waterless ecological zone, the *Hawd*, during the rainy season, and the use of the *Nugal* zone, with networks of seasonal water sources, during the dry season. Such seasonal migration of livestock has been driven by the necessity to adapt to the variability of rain (see also Samantar 1995: 10) and to cooperate on the collective use of scarce resources. The *Xeer* constitutes a broader system of social contracts rooted in the lineage system, and also specifically spells out rules on the collective usage of pasture, water and other natural resources. Moreover, it serves as a form of insurance, through prescribing norms of charity and collective support, such as, for example, donations of livestock or other assets to poor families.

Customary institutions and related mobile land-use practices remain centrally important in allowing adjustment to environmental and climate change related stresses, yet they are undergoing rapid transformations and are under substantial pressure. The collapse of the Somalia central state and the years of civil war compound impacts of climate change as well as wider socio-economic and demographic changes,⁹ all of which profoundly challenge the effectiveness of customary land-management, laws (the *Xeer*) and nomadic pastoralism.

In the context of increasing weather variability and droughts, many households have over time responded by combining livestock rearing with farming, either resorting to a semi-nomadic livelihood, or quitting seasonal migrations altogether and instead settling down in rural villages. Settlements involve dependency on more permanent water sources, which

⁹ The elders used to be the repository of Somali tradition, based on oral culture with no language script before 1972. Yet, since the civil war from 1980s, the demographic profile of Somalis has drastically changed towards a substantially larger proportion of youth. By 2012 the proportion of the population under the age of 30 was estimated to have reached 73% (See UNDP 2012: 48).

has led to the development of several methods of harvesting rainwater, i.e., collection in *Berkad*, a cemented underground water tank; *Balli*, open and uncemented but sometimes furnished with durable plastic matting to hold water; and *Bac*, smaller open pits fitted with cheap plastic matting.¹⁰ Furthermore, the increase of dual production systems and settlement has led to the institution of a proliferation of clan/village committees (sometimes government supported, sometime bricolage-like), usually elders with no traditional titles, considered to be grassroots based.¹¹ These committees liaise with aid agencies and distribute humanitarian and rehabilitation goods intended for IDPs and other vulnerable people in the rural communities. They also liaise with the local government actors on rural community issues including: regulation of new water reservoirs and/or boreholes and the use of the rangelands in some areas. In addition, they monitor community stressors for the government such as the incidence of droughts, floods, security matters and health.

Motorised nomads

Motor transport, including the use of trucks, is transforming lives of rural communities and reducing the vulnerabilities that come with rural isolation, by providing means for greater access to markets for their products and improving emergency migrations, especially in droughts times when the family herds are weakest and have to be transported to places much farther than their transhumant 'locality migrations'. Improved transportation options can also enhance access to security and social services, including health and education. It follows that improvement of rural roads, especially in mountainous areas, is increasingly understood to be critical for resilience to climate hazards. The Golis mountain range, which runs through Somaliland from West to East, is a serious impediment to rural development initiatives. Meanwhile, our research indicates the need to consider and explore possible trade-offs of migration through motorised transport (in place of pack-camels). One risk is that the speed of migration in response to drought can lead to further overcrowding of available rainfall locations, resulting in undue pressure on localised areas, environmental degradation and potential conflict. It will be key, therefore, to examine how such increased mobility intersects with the regulation of land, and, further, work toward inclusive approaches to regulation (see below).

Telecommunication and social media support systems

Telephone use has also become a means for pastoral and rural communities to mitigate their physical isolation and is a lifeline in emergency situations. It enables easy communication with relatives in all corners of the world for emergency financial support. The Somaliland mobile money transfer has much improved the lives of rural populations, as they can easily receive airtime credits from friends and relatives or transferred money

¹⁰ Governments invest in huge *war* (a large *balli*) construction for pastoralists to last up to four months after rains; and aid agencies invest in *berkad* and smaller *balli* constructions for individual families and community institutions, such as schools. There is not much coordination in construction of these water points, which entails the risk that they contribute to not only conflict, but also degradation of the environment through over use, and related breeding of disease vectors such as mosquitoes.

¹¹ Traditional rural leadership are titled individuals (Aqil and Sultan) who are registered with the Ministry of Interior and are primarily responsible for settlement of inter-and -intra clan conflicts. The new committees, in turn, are formed as settlement-based institutions and have no customary or official titles, but fulfil the above community needs, related to increased settlement (which, in turn, is shaped by climate change stressors).

on the spot. Somaliland has wide telecommunication coverage and one of the cheapest telephone services in the world. Furthermore, the potential value of the telephone for nomadic and semi-nomadic communities in building resilience to climate change deserves further exploration, in terms of educational purposes, awareness raising, and relief assistance in health and emergency situations such as natural and humanitarian disasters related to climate change. Response to such situations from the government and international agencies is often slow and comes late for many people struggling to survive in the pastoral sector. That prompted a new phenomenon of community emergency cooperation, organised by the kinsmen and women, at a *diya*-paying group level;¹² it brings together communities, including nomadic segments of the population and the diaspora internationally, in the region and in Somaliland cities. They establish their own social network group (often a WhatsApp Group) for use during serious emergencies such as severe droughts, floods and conflicts; to mobilise relief support to those most affected and vulnerable; and to mitigate related effects of displacement and destitution. This action usually sustains the situation for the first few months until support from the Government and International Agencies system kicks in. Different sub-clan groupings operate parallel to each other and rarely cooperate by combining or even coordinating their efforts to share logistics costs for communities in the same area, and the Government or Aid Agencies are not involved in these efforts. These social network groups also serve as platforms for members to fundraise to support roads, health posts, water and education projects. This phenomenon is evolving as a form of community resilience building, and deserves further attention and support.

Diversification and commercialisation

Another type of response revolves around diversification and commercialisation, allowing alternatives to subsistence based on livestock rearing and farming (which are livelihoods that are particularly vulnerable to climate change). Some diversification strategies are devised as measures of coping with immediate-onset climate change hazards. For example, in the wake of successive recent droughts, some families relying on livestock have embarked on de-stocking strategies as an emergency stopgap measure. Destocking implies selling some of the livestock in drought times, to exchange it for food, or to use funds from de-stocking to invest in real estate in cities, build cash reserves in the bank or enter into business partnership with some of their clan members. After experiencing recent successive droughts which decimated their livestock herds, more communities started to adopt destocking schemes.¹³ Another rising and increasingly systematised adaptation strategy—beyond immediate coping—is for a collection of families to combine their milking camels in a location near the city in order to sell milk to urban centres, as a form of extra earning. Commercial camel milk farming is a flourishing business, in and around major cities. The livestock economy is also integrated into the market economy regionally, in the Middle East and Horn of Africa. Livestock is a successful export commodity for Somaliland, and more

¹² *Diya* is compensation for a man or woman's life or injury. The *diya*-paying group is a Somali political organisation of one or more clan unit(s) (a few hundreds to a few thousands), under customary leadership, having an (unwritten) contract on collective *diya*-payment.

¹³ Empirical research has indicated the potential of destocking schemes designed in consultation with pastoralists themselves, to significantly help alleviate poverty/enhance purchasing power (Morton and Barton 2002); trade-offs in regard to effects on local markets need consideration (Eklöv and Krampe 2019).

widely for Somalis in the Horn of Africa. The close proximity of Somaliland to Saudi Arabia and sharing of Islamic culture allows for a business model centred on the delivery of blackhead sheep for the lucrative Hajj sacrifice requirements.

An additional new area of commercialisation is the rise of the livestock fodder business. Traditional commercial fodder production used to be supplied only to the export livestock, in the export market chain. However, the new trend is to encourage commercial fodder farming. There is new multi-scalar—local, national and international—collaboration underway, supported through the Somaliland Development Fund, which experiments with fodder cultivation support schemes in Togdheer, Sool and Sanaag. Beyond Somaliland, recent research suggests that agroecology, which links and adapts farm level food production to broader social-ecological systems in support of resilience to climate change, may “contribute towards more systemic solutions” (Weigelt et al. 2020). These potentials deserve further exploration and analysis in the specific context of Somaliland.

Untapped options for diversification

In addition to investments into improving conditions for agricultural production and livestock-rearing, including reforestation, soil conservation and restoration of grazing, our research also indicates the importance of exploring the alternative natural resources of three eastern regions in particular (Sool, Sanaag, Togdheer), which could expand the capacities and opportunities for the pastoralists and agro-pastoralists to respond to climate change. These resources could be integrated into livestock and farming livelihood systems, or could be used as a safety valve in situations of climate-related pressures and emergencies. For example, Sanaag has rich fishing resources, gums and resins and other diverse forest products and, recently, mineral prospecting opportunities. Small-scale diversification strategies may make a notable difference. For example, members of families in IDP camps could be assisted to acquire a new occupation from the alternative resources that their region offers, as a supplementary source of income for the community and a way of building resilience to the stressors triggered by climate and environmental changes. Such strategies were in fact pursued to assist IDPs from Togdheer, Sool, Sanaag, Bari and Mudbug in the aftermath of the long-tailed drought of 1974-75, as they started up new livelihoods based on fishing and farmland resources.¹⁴ Thinking of ways to support and enable such diversification could present important alternatives for overcoming the dependencies currently created through regular monthly cash handouts to IDPs.

According to interviews with experts, the key to supporting expansions and diversification of local capacities and resource potential, would be to conduct baseline research to quantify potential benefits that would supplement existing resources (primarily the livestock economy, with its vulnerability to droughts) and to devise consultative, inclusive and conflict-sensitive capacity-building designs.

¹⁴ These diversification schemes, as well as the establishment of large pastoral cooperatives in Sanaag in the 1980s, after ‘the long-tailed drought’, represent significant examples of adaptation toward preventing deepening poverty and loss of livelihoods (notwithstanding the fact that the wider political context of Siad Barre’s rule all but favoured the protection of people and livelihoods).

Rural-urban migration and IDP settlements

Yet another type of response centred on diversifying rural livelihoods affected by climate change is rural-urban migration, whereby the sons and daughters of rural families go to cities to work to supplement family income. These strategies are shaped not just by climate change but are part of a long-standing global trend toward urbanisation, whereby youth in particular are drawn to urban centres by socio-economic factors related to prospects for education and job opportunities. On the one hand, rural-urban migration poses challenges to rural livelihoods by draining the labour force from rural sectors, and also asserts new pressures on cities. On the other hand, the support from resettled family members has emerged as a critical lifesaving income source for many rural families, especially in the harsh seasons and environmental crisis periods.¹⁵

Crucially, however, different patterns of rural-urban migration mirror the different socio-economic status of different segments of the population. In recent years, the development of deepening poverty, especially in Sool and Sanaag, corresponds to patterns of rural-urban migration which rather than being a matter of choice, represent a means of basic survival. Recent examples relate to repercussions of the successive 2011, 2015, and 2017 droughts which decimated nomadic livestock assets and forced masses of pastoralists to migrate to the major cities of Somaliland, forming IDP slum quarters on their margins. The “Displacement Tracking Matrix” (a data gathering and analysis tool of the International Organization for Migration) tracked the impact of drought on a 2017 map, estimating the number of Somaliland IDPs to be 1,004,400 and the number of IDP sites as 595 (DTM 2017).

4. Mobility, Conflict and Collaboration

One central aspect recurring across different responses and strategies is their intersection with various mobility patterns. Mobility, and in particular migration, is a central theme in wider prevailing debates on the climate-security nexus, in particular in contexts affected by conflicts and institutional fragility. Within these debates, mobility is commonly understood as a risk-related phenomenon, which manifests as migration or displacement, triggered or intensified by climate change. The basic rationale is that climate change and degradation of the environment cause migration and displacement which feed into intensifying violent conflicts, produce grievances that can be exploited by extremist groups seeking recruits (see for example Eklöv and Krampe 2019: 21), and lead to new pressures exerted by a rise in ‘climate refugees’ (Bettini 2013). Our baseline interviews include examples of how climate change and environmental degradation play into dynamics of displacement and conflict (see below). Yet, taken together, the interviews reveal a very multifaceted picture and convey a range of interactions, which are all but mono-causal, between climate change, mobility and conflict as well as collaboration. Thereby our study aligns with recent calls for a more grounded research agenda on ‘climate mobilities’ which “better accounts for the nonlinear complexity of mobility in the context of climate and social change” (Boas et al.

¹⁵ Historically this practice intensified in serious drought times, and also involved longer-distance migration, with a landmark example being the 1974 “Long-tailed” drought during which the Somalia Government opened floodgates for pastoralists to Saudi Arabia as guest workers, helping the regeneration of the pastoralist economy in the years following the drought.

2019). This is important, since an acknowledgement of such complexity and the intersections with rapid socio-economic transitions is bound to yield very different policy responses compared to a framing which casts climate change as an inevitable security threat.

As noted above, in Somaliland, mobility has long constituted a key resource for Somalis, in particular within the livestock sector as it copes with a harsh environment and climate stresses, such as periods of drought. Migration is thereby not primarily a recent negative side effect of a harsh climate, but a long-standing means of living with it, based on collectively organised use of scarce resources. Meanwhile, as illustrated by the growth of IDP slums and villages, resulting from communities losing their livestock, settlement is not per definition a preferred choice or a basis for improved livelihood. Therefore, beyond the risk-based outlook on migration and often assumed benefits of sedentary choices, it is central to acquire more nuanced understandings of the different inequalities, resources and vulnerabilities connected to different (im)mobility patterns. This may also enable more nuanced insights into the variety of interactions between (im)mobility, conflict and cooperation.

Tensions between mobility and sedentary responses

Conflicts gravitating around tensions between mobility-driven adaptation and 'territorial'/sedentary strategies do occur at different scales and with different intensity in Somaliland. Such tensions include, but are not reducible to, often discussed rural 'farmer-herder conflicts' (for a critique, see IIED 2020). They also involve inter-herder conflicts, and sometimes complex conflict constellations cutting across rural and peri-urban communities, as well as intersections with (economic and political) marginalisation patterns and wider trends toward more rigid and exclusive forms of territorialisation prompted by long-standing processes of civil war, insecurity and securitised interventions (see Hoehne 2016). The border regions, Sool and Sanaag, have been key sites of such intricate dynamics compounding conflicts over land and water use. These regions have been shaped by self-reinforcing negative trends, keeping people under vulnerable conditions: increasing levels of poverty (over 37%, NDP 2017-2021: 34) compounded by poor governance, lack of social services, social tensions as well as armed conflict, which in turn lead to further withdrawal of assistance (including from international agencies), contributing to further marginalisation. The proliferation of land enclosures since the 1990s, especially in Sanaag and in Western Somaliland, is one of the conflict-prone trends, as enclosures disrupt seasonal and transhumant migration and tend to undercut related collective land and resource uses. Our interviews indicate a wide variety of forms of enclosures and motivations behind their creation. It also follows that a range of different types of actors are involved in enclosing land: from poor communities who have lost their livestock and are seeking to settle so as to better access state and international services, to business-orientated actors aiming to advance commercial farming or fodder production, to international oil production companies seeking to fend off dissenting communities (for the latter see Moe 2018).

Assessing and unpacking these different dynamics, motivations and actors as well as their impact on mobile land-use strategies will be key for devising constructive approaches to conflict resolution and long-term assistance in Somaliland. Conflicts over rangeland

enclosures bring up the contested and uncertain status of land and property rights, within a wider context of rapid change, including the transformation of long-standing livelihood systems themselves. The lack of protection for communal land use rights makes pastoralists deeply vulnerable to land privatisation and enclosures. Meanwhile, blueprint governance frameworks or community management approaches are often too inflexible to work constructively with, and for, practices and livelihoods that rely on “dispersed and overlapping social networks over large landscapes, rather than closely knit communities associated with small and clearly bounded territories” (Reid et al. 2014: 230). International assistance tends to work exactly in accordance with the definition of ‘communities’ as territorially bounded, which can inadvertently exclude nomadic or semi-nomadic communities from the benefits of assistance. The provision of wells provides one example of support that can be conflict-producing, since stationary water sources go hand in hand with settlement and tend to benefit those claiming the land, while excluding others. As explained by an interviewee from Sanaag: “Water points such as *berkad* easily lead to settled village formation, which then is a basis for claims to ownership of the rangeland in the area and then incites typical pastoral conflicts”. International development agencies have on a few occasions withdrawn from Sool and Sanaag as the unintended effects of their approaches (the provision of wells being a key example) have contributed to destabilisation of local relations/power balances and played into patterns of exclusion, thereby contributed to conflicts.

More widely, the establishment of a new waterpoint, an enclosure or a clan boundary, in common use rangelands, has been construed as a way of claiming land or private property (sometimes pursued by communities/actors who themselves in the first place have lost their access to common land etc.). Therefore, other users of the area will often challenge such practices, and demand the abandonment of the attempted land claims or destruction of already built structures. This can cause serious conflict between the different sides, as recently illustrated by clashes in Dhummay and Bacda (in Sool) where many¹⁶ people died and several others were displaced.

Other responses include demanding the collective use/sharing of a newly constructed waterpoint or settlement, or the contending community digging their own waterpoints and habitats. The refusal to share a newly created waterpoint was what set off the years-long conflict in El Afwein in Sanaag. As this conflict escalated, the Somaliland government and army became involved and eventually helped settle the conflict. In this process, high-level government actors and traditional leaders flexibly worked together to reach the settlement. Nonetheless, according to our interviews, this recent conflict exposes some of the limitations of security and conflict management approaches—even those locally devised which are historically a trademark of Somaliland’s stability—in devising solutions to current climate change related conflicts, which come about as different survival strategies clash with one another in the face of recurrent droughts. While the spiral of revenge killings

¹⁶ Precise casualty numbers are often difficult to verify; however, an NGO Joint needs assessment report provides the following casualty figures for the Dhumay conflict, where two Dhulbahante sub-clans, co-habiting Dhumay, Dharkayn and Dabatag in the Hawd zone of southern Sool, had ongoing clashes over control of pasture, grazing land and ownership of water sources. According to the report, in the last wave of clashes in September and October 2018, a total of 93 persons died, 120 were injured and 1446 households were displaced (Sool Multi-Cluster Initial Rapid Assessment, 2018).

eventually was put to a halt in El Afwein, and compensation paid, the underlying vulnerabilities remain; in fact, they worsened as the physical environment degraded further, socio-economic infrastructure bonds and interactions were undermined, and the most vulnerable segments of the society in Sanaag were pushed to IDP camps. According to a local observer, more than half of the local population—those who could—fled, and “all public facilities are closed, schools, health facilities (...). The city main street where most businesses were located is now a ghost-street”. Meanwhile, the resources channelled to security forces and lengthy negotiations, according to ministerial interviews, diverted time and resources from development needs.

These developments in El Afwein, and similar dynamics in other regions, highlight how climate sensitive conflict resolution approaches need to be complemented by long-term efforts toward creating inclusive rural development and land management approaches, identifying and advancing cooperative action, and working adaptively with processes of socio-economic and political transition. In this regard, it is worth emphasising that while our data convey patterns of conflicts compounded by resource scarcity and contending climate change responses, the study does not suggest any causal link between mobility and conflict, nor any given ‘innate’ contradiction between mobility-focused responses and territorial/sedentary strategies. It is also worth recalling that even nomadic livelihood strategies are not based on ‘pure’ forms of mobility, but depend on connection to specific locations as well as interdependencies and collaboration across communities. As such, rather than any intrinsic oppositional difference between mobility and sedentism, different adaptation strategies and related regimes of land and resource management overlap and entangle, in uneasy as well as innovative and collaborative ways. Security-focused framings tend to reduce such complexity to risk factors, thereby miss existing entry points for supporting sustainable and inclusive approaches to climate change responses, as well as constructively facilitating current socio-economic and political transformations.

Innovation and collaboration

Across Somaliland’s regions, a variety of initiatives have evolved (see Figure 2), focusing on collaborative environmental regeneration which seeks to devise land-use schemes adapted to specific localities, often shaped by a mix of sedentary and transhumant livestock rearing practices. In some locations, communities and local governance institutions are driving such initiatives; in other locations the Somaliland government—through the Ministry of Environment and Rural Development (ME&RD) and Ministry of Livestock and Fisheries Development (ML&FD)—is involved and engages communities, including pastoralist groups, to establish seasonal grazing reserves. According to Ministerial interviews, the initiatives have two immediate objectives: a) to save plains and allow them to regenerate and b) to use them as cases “to demonstrate how fast rangeland regenerates when reserved”,¹⁷ and to prepare communities to do it themselves in the future. The first trials were on two key pasture locations, Bancawl¹⁸ and Aroori on the eastern and southern side of Burao (Togdheer). There are also similar activities directed towards establishing some

¹⁷ Interview with Somaliland Minister of Planning (previously Minister of Livestock and Fisheries).

¹⁸ *Ban* is Somali for plain. These are wide open grasslands, which are critical for the wellbeing of the livestock livelihood systems but have degraded over the last three decades due to unregulated use and increasing environmental pressures.

forest reserves for seasonal use such as in Daalo (in Sanaag) and Gacan Libax (in Saaxil). There are early lessons learnt in these first trials: the first lesson is that the Ministries succeeded in persuading communities to collaborate on reserving Ban-Awl through serious negotiations and inclusive consultation and by way of the demonstrative effect of quick regeneration of the reserved area. The second lesson is that the reopening of the area was followed by overgrazing and undue pressure, as all communities who could reach it brought their livestock there, which led to erosion within a few weeks (instead of providing grazing to sustain local communities for at least four months as planned, during the long dry (*Jiilaal*) season). The experience initially discouraged the local community from repeating the exercise, as they felt pressured by other communities who had not contributed to the effort. According to interviews, there is however substantial interest in further replicating the initiative – and if more plains in different parts of the eastern regions are reserved in a coordinated and planned manner, the pressure from grazing would spread over a larger number of plains, thereby avoiding overgrazing. This could allow the scheme to succeed, which in turn would increase the chances for local communities becoming more supportive and readier to adopt the practice. However, for now, a constraining factor is the limited government capacity. Some of the key plains which can mitigate environmental stress in eastern Somaliland, if properly rehabilitated and managed, include: Saraar, Ban-cadde and Karamaan in Sanaag; Nugaal plains and Casuura in Sool and Bancawl, Aroori and Dulcad in Togdheer. These could have a significantly positive cumulative effect on environmental restoration.

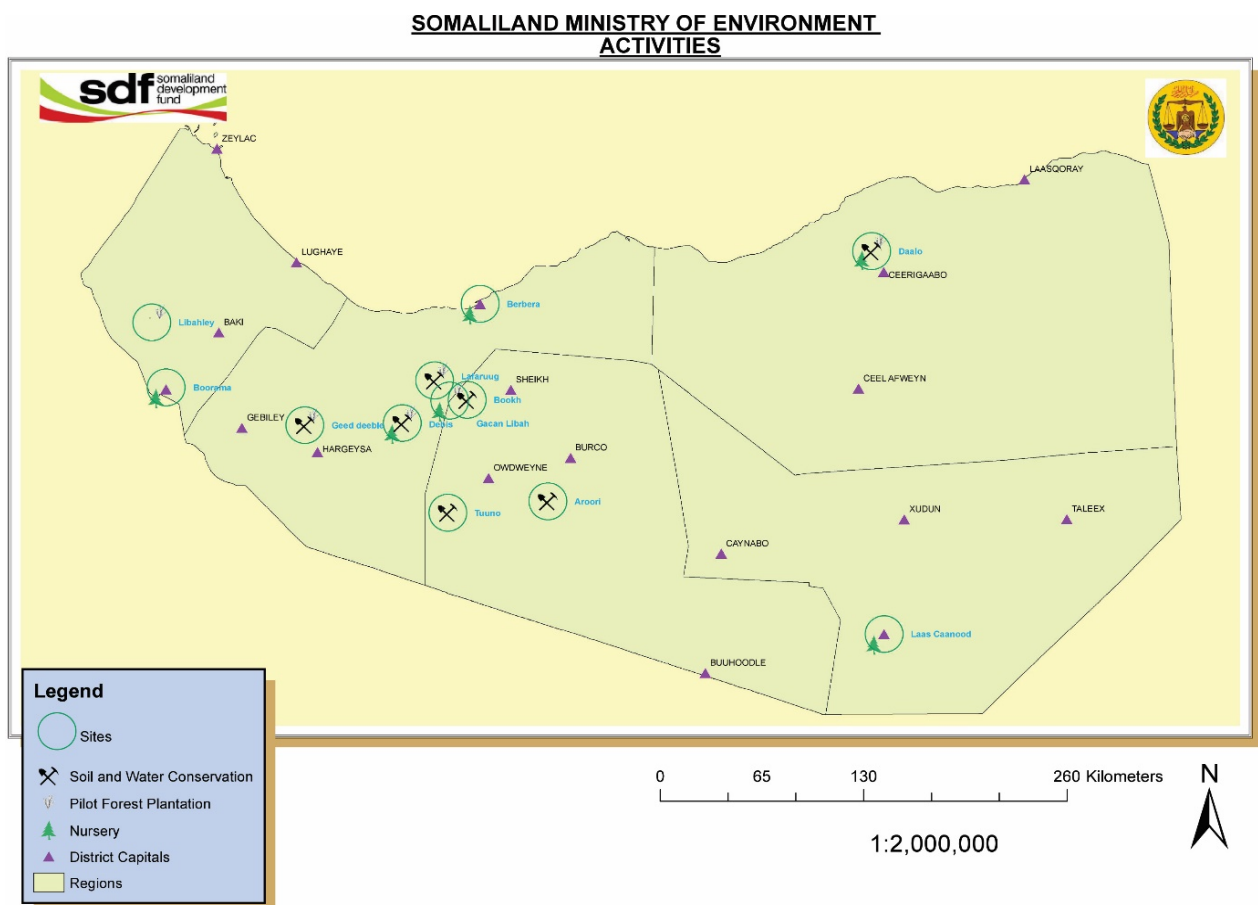


Figure 2: Ministry of Environment activities (Somaliland ME&RD 2014)/Somaliland Development Fund.

These processes indicate the relevance of exploring in more depth the potential of approaches that interlink governance and institutions (state, community, customary) and different levels of social organisation. They also work with the interdependencies and positive co-articulation between ‘territory’ and ‘mobility’ with a view to inclusive development, land tenure and climate resilience. Innovation, in this regard, may be less about grand management schemes and ‘good governance’ templates, and more about support for gradual transformation and adaptation of existing networks and institutions (state and community) in response to shifting pressures and opportunity structures (see also Nunow et. al 2011; HPG 2009).

Historically, Somaliland’s reconciliation and reconstruction processes during the 1990s and 2000s included significant aspects of ‘environmental peacebuilding’ – i.e., collaboration toward responding collectively to environmental degradation. In fact, Sool and Sanaag regions were key sites of such initiatives. Communities, represented by customary authorities, gathered in a series of local negotiations across the regions, which included key aspects of solving conflicts over land and enclosures on or seizure of grazing lands. For example, the reconciliation conferences in Erigavo (Sanaag) in the early 1990s were critical in contributing to settlements of such disputes (APD 2006). Other initiatives included collaborative efforts toward addressing the significant environmental damage caused by charcoal production (the latter increased partly as a result of Saudi Arabia’s ban on the importing of Somali livestock in 1998 – charcoal burning expanded as a diversification strategy), including local NGOs promoting alternatives, such the development of an energy-saving charcoal stove (ibid.: 22). International NGO involvement further allowed for expansion of other micro-business activities toward “reduc(ing) the pressure on the cutting of trees, and the selling of charcoal and firewood, and in meeting family consumption and income generation needs” (PENHA 2005: 5, see also APD 2006). In sum, Somaliland’s reconstruction and reconciliation after the civil war and its declaration of independence in 1991, combined efforts toward political sustainability and peace with initiatives focused on responding to environmental degradation (with the latter having substantially worsened due to the effects of the civil war). Furthermore, these processes were shaped by very low levels of external support and resources—given Somaliland’s unrecognised status—which in fact has been recognised as a contributing factor to strengthening collaboration. In this context, reconstruction involved the balancing of, on the one hand, territorial logics—building up the institutional framework for a new state—and, on the other, network logics underpinning pastoralism and agro-pastoralism (Hoehne 2016) and related practices of mobility, collective resource management and *Xeer*.

In turn, as reviewed above, new types of mobilisations—which connect people in space- and location-spanning networks—are on the rise. In particular, the community cooperation mobilising emergency relief in the face of, for example, drought or flash flooding, through connecting local communities and urban as well as diaspora actors through social media groups, is an example of recent collaborative innovation. As has also been observed for Somalia (Hassan et al. 2021), such networks are often more flexible and immediately responsive in the domain of humanitarian assistance than “established international bodies” (ibid.:2). These efforts could be supported by exploring ‘best practices’, considering ways of building capacity for more cooperative arrangements across different fundraising groups to increase the impact of disaster responses and local project initiatives, and facilitating

thematic or regional support groups to pool their resources and enhance accountability mechanisms to attract matching support from government and international aid agencies.

5. Conclusion and Implications

This report has shared the insights generated from interviews with community members, experts and governance officials in Somaliland, on how local actors and institutions experience and respond to climate change impacts. Attention to these responses allowed the analysis to include a focus on local strengths, which is often left out in the prevailing security-focused outlook on climate change as a ‘threat multiplier’ or conflict trigger in the context of fragile states. While a comprehensive overview of adaptation to climate change in Somaliland is beyond the scope of this study, the patterns and examples described serve to point out the multifaceted nature of local responses to climate change impacts, involving conflict, collaboration and innovation. Flowing from these initial insights, the following proposes a set of overall implications and suggestions for policy and further research:

- **A need to prioritise support to local climate change initiatives**

Climate change has severe negative impacts on livelihoods, food security and human security. While living with and through a harsh environment has historically been central to sustaining livelihoods in Somaliland and Somalia, the current trends of extended droughts, extreme weather variability—including floods—and growing desertification, are exerting unprecedented pressures, and call for international donors to prioritise support for local resilience, especially for the most vulnerable (see also DCA 2020). As a recent study on Somalia and Mali concluded, “only a fraction” of international climate finance flows for adaptation “goes to conflict-affected contexts” (DCA 2020:8).

Taking a narrowly conflict/security-centred outlook on climate change in fragile settings is apt to miss the importance of identifying entry-points for local cooperation and innovation that could be supported toward strengthening contextually relevant climate change resilience. This baseline study identified a number of examples of strategies deserving further attention and support. These include a spectrum of responses, which could be researched and assessed in more depth, from long-standing customary collaboration arrangements (also of continuous importance for the resolution of resource conflicts), destocking practices, economic diversification and mix-livestock/crop adaptation and under-exploited options for integrating, for example, fishing/maritime resources with farming and livestock livelihoods, through to new technologies and transportation mechanisms toward reducing isolation.

As summed up by a Somaliland development worker: “The strategy must be to approach adaptation to climate change in a holistic manner and not only the short-term security or emergency-oriented approaches which do not address the impact of the recurrence and deepening trend of the stressors on the rural and pastoral communities”.

- **A need for investing in research on local climate change adaptation**

There is general global consensus on the need for action on climate change as well as an awareness—in particular within wider debates on the implementation of the sustainable development goals—of the need to adjust climate change assistance to specific contexts and existing initiatives. Yet, insights into existing forms of climate change action, collaboration and tensions among different local responses remains very limited, especially in contexts affected by institutional fragility and conflict. For international climate change support to be effective and constructive in the Somali context, there is a need to invest in research into local climate change adaptation, including further exploration of the specific mechanisms that connect climate change, collaboration and conflict (see also von Soest 2020). Along these lines, our baseline study highlights the need for understanding and identifying both trade-offs and synergies between different responses across different sectors in Somaliland. For example, de-stocking schemes may be an invaluable safety valve, yet must be planned so as not to overwhelm local markets. Strategies directed at expanding market options—i.e., the rise of commercial fodder production—can augment growing rural poverty, yet related practices of land-privatisation may disrupt livelihood options for communities relying on livestock mobility, and, in turn, increase their vulnerabilities. Conversely, land management schemes developed through inclusive decision-making processes could make the enclosure of pasture an advantage not only for farming but in fact also support mobility-driven livelihood strategies.

In-depth research, especially if conducted in cooperation with researchers from the region/country in question, into local climate change adaptation can help capture these complexities, including the cross-sectoral nature and interactive effects of both climate change vulnerabilities and responses. Furthering such insights will be crucial for introducing constructive policies in support of climate change resilience in Somaliland, and beyond.

Our study in particular highlights the importance of gaining more insights into the specific social, spatial, economic and political realities that shape climate change adaptation of those actors and population segments most vulnerable to climate change (often those also politically and economically marginalised). In Somaliland, and East Africa more broadly, one area deserving substantially more attention is the climate vulnerabilities as well as innovative adaptations of pastoralist communities who—despite being at the forefront of climate change adaptation, and despite the significant contributions of pastoralism to national and regional economies—remain marginalised politically as well as in research and policy and development approaches.

- **A need for governance – beyond blueprints**

Recent analyses have argued that while climate change impacts themselves do not have a direct causal link to conflict, the lack of governance—or ‘bad governance’ (weak state capacity and fragile institutions)—significantly increases the risk of climate change impacts intensifying conflicts. According to this outlook, policy responses should focus on improving governance (see for example Goxho 2021; Adano and Daudi 2012). Our findings broadly align with the important observation that governance matters. For example, the lack of regulation of land use and protection of communal pasture reserves is a key factor

aggravating growing climate change-related resource scarcity. However, attempts at introducing 'good governance' blueprints are unlikely to be able to adequately support and adapt to current socio-economic transitions as well as the dispersed networks that underpin current livelihoods and social organisation. Along these lines, support to strengthen institutions and representation in decision making processes of underrepresented rural population segments, would be an important step in devising constructive governance models. For governance approaches to be able to respond to the multiple entangled uncertainties of climate change, rapid socio-economic transformation and related changes to livelihoods (including nomadic and semi-nomadic), they need a fair degree of adaptability and inclusiveness (also of 'informal' institutions and knowledge). Supporting this may require researching and identifying approaches drawing on polycentric, flexible and networked forms of governance and institutions.

References

- Academy for Peace and Development (APD) and Interpeace. 2006. "From Plunder to Prosperity. Resolving Resource-based Conflict in Somaliland". *APD-Interpeace report* (Dialogue for Peace. Somali Programme).
- Adano, W. R., Dietz, T., Witsenburg, K., and Zaal, F. (2012). "Climate change, violent conflict and local institutions in Kenya's drylands". *Journal of Peace Research*, 49(1), 65-80.
- Adano, W.R. and F. Daudi. (2012). "Links between climate change, conflict and governance in Africa". *Institute for Security Studies (ISS) Paper* no. 234 (May 2012)
- Bettini, G. (2013). "Climate barbarians at the gate? A critique of apocalyptic narratives on 'climate refugees'". *Geoforum*, 45, 63-72.
- Boas, Ingrid, et al. (2019). "Climate migration myths." *Nature Climate Change* 9.12, 901-903.
- DanChurchAid, Norwegian Church Aid and ACT Alliance. (2020). "Winning the Peace: Peacebuilding and Climate Change in Mali and Somalia", *ACT Alliance report*.
- Displacement Tracking Matrix/IOM. (2017). Displacement Situation Report (Awdal, Woqooyi galbeed, Sanaag, Sool and Togdheer regions), https://www.iom.int/sites/default/files/dtm/Somalia_DTM_201711.pdf (retrieved 22 April 2021).
- Eklöv, K., and Krampe, F. (2019). *Climate-related security risks and peacebuilding in Somalia*. Stockholm International Peace Research Institute (SIPRI), *Policy Paper* 53 (Oct 2019).
- Goxho, D. (2021). *No peace under the Shea tree. Climate change and conflicts in the Sahel: Debunking the myths*, report for Konrad Adenauer Stiftung.
- Hassan, M. A. et. al. (2021). "Recognizing Diaspora Humanitarianism. What we know and what we need to know more about". *DIIS Policy Brief*, February 2021.
- Hoehne, M. V. (2016). "The rupture of territoriality and the diminishing relevance of cross-cutting ties in Somalia after 1990". *Development and Change*, 47(6), 1379-1411.
- HPG – Humanitarian Policy Group - Synthesis Paper. (2009). Pastoralism and climate change: Enabling adaptive capacity. <https://www.alnap.org/system/files/content/resource/files/main/4317.pdf> (Retrieved on 25 December 2020).
- Hussein, M. R. (2018). 'Deforestation in Somalia: Historical Overview, Challenges and the Way Forward', retrieved on 31 October 2018 from <http://www.horndiplomat.com/2018/05/07/deforestation-in-somaliland-historical-overview-challenges-and-the-way-forward/>
- The International Institute for Environment and Development (IIED). (2020). "Farmer-herder conflict in Africa: re-thinking the phenomenon?", *IIED Briefing* (June 2020), <http://pubs.iied.org/17753IIED> (retrieved on 19 April 2021).
- Moe, L. (2018) "[Counterinsurgency in the Somali Territories: The 'Grey Zone' Between Peace and Pacification](#)", *International Affairs* 94 (2), 319–343.
- Morton, J. and D. Barton. (2002). "Destocking as a Drought-mitigation Strategy: Clarifying Rationales and Answering Critiques", in *Disasters* 26(3), 213-228.

Nunow, A., A. A. Hussein, J. Lind, B. Dida and A. H. Mahmoud. (2011). "Innovation works: pastoralists building secure livelihoods in the Horn of Africa", The Future Agricultures Consortium Policy Brief 038.

Norwegian Institute of International Affairs (NUPI) and Stockholm International Peace Research Institute (SIPRI). (2021). *Climate, Peace and Security Fact Sheet: Somalia*, https://www.nupi.no/nupi_eng/Publications/CRISin-Pub/Climate-Peace-and-Security-Fact-Sheet-Somalia (retrieved 26.04.2021).

Pastoral and Environmental Network in the Horn of Africa (PENHA). (2005). 'Tackling Somaliland Pastoralists Poverty and Environmental Degradation—End of Project Report', <https://www.penhanetwork.org/where-we-work/somalia/> (retrieved on 04 May 2021)

Reid, R.S., M.E. Fernandez-Gimenez and K.A. Galvin. (2014). "Dynamics and Resilience of Rangelands and Pastoral Peoples Around the Globe", *Annu. Rev. Environ. Resour.* 39, 217–42.

Republic of Somaliland – *National Development Plan (NDP) II. 2017-2021.*

Sloan, L. M. and C. L. Schmitz. (2019). "Environmental Degradation: Communities forging a path forward". *Journal of Transdisciplinary Peace Praxis*, 1(1), 13-38.

Samantar, M. S. (1995). Theoretical and Practical Frameworks of Analysis of Pastoral Common Property Regimes in Somalia. In a paper presented at the conference 'Reinventing the Commons' in Norway, May.

Sool Multi-Cluster Initial Rapid Assessment. (2018) Report on the Joint Rapid Needs Assessment on Inter - clan Conflict Displaced People in Sool Region. 1 – 4 November 2018, https://www.sheltercluster.org/sites/default/files/docs/joint_rapid_needs_assessment_report_on_dhummay_conflict_-_final_revised_12_nov.pdf (retrieved 22 April 2021).

UNDP. (2012). "Somalia Human Development Report 2012: Empowering Your for Peace and Development", http://hdr.undp.org/sites/default/files/reports/242/somalia_report_2012.pdf (retrieved 22 April 2021).

Von Soest, C. (2020). "A Heated Debate: Climate Change and Conflict in Africa", *GIGA FOCUS: AFRICA* No. 2 April 2020.

Weigelt, J. et. al. (2020). "Systemic Challenges, Systemic Responses: Innovating Adaptation to Climate Change through Agroecology", *TMG Working Paper*.

World Bank Group. (2019). *Somali Poverty and Vulnerability Assessment. Findings from Wave of the Somali High Frequency Survey*. Report no. AUS0000407.

The Authors

Dr. Mohamed Fadal is the current head of research—and was the founding director—of the *Social Research and Development Institute* (SORADI). He has worked as a senior researcher for the Academy for Peace and Development (APD), coordinator for the Independent Scholars Group, worked as UNDP Programme Manager in SUDAN and formerly served as minister of planning in Somaliland. He has extensive research experience in the fields of development, environment, governance, peace and democratisation. Dr. Fadal moreover has a varied portfolio of consultancy work, senior research management, capacity-building as well as facilitation of research-policy interchanges.

Dr. Louise Wiuff Moe is a research associate at the University of Hamburg, as part of the Cluster of Excellence “Climate, Climatic Change, and Society (CLICCS).” Her research combines theoretical and empirical perspectives on peace and security governance, with regional expertise on Sub-Saharan Africa, and a special focus on Somaliland for more than a decade. Her recent work explores interactions between climate change and dynamics of (in)security; changing norms and practices of military interventionism; the renaissance of counterinsurgency; inter-organisational conflict and collaboration in peace operations in Africa and; comparative perspectives on South-South security collaboration.

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Contact Us

Toda Peace Institute
Samon Eleven Bldg. 5th Floor
3-1 Samon-cho, Shinjuku-ku, Tokyo 160-0017, Japan
Email: contact@toda.org