

# Somalia\*



Somalia is experiencing its worst drought in over four decades. More frequent and intense floods and droughts fuel competition over natural resources, exacerbating community tensions and vulnerabilities. In combination with decades of conflict and instability, climate change poses a serious challenge to peace and security.

- Somalia's two-year long drought has exacerbated livelihood and food insecurity, with increased risk of famine by the end of 2022 in the Bay region. A fifth consecutive failed rainy season may prolong the drought into 2023.
- Some one million Somalis have been displaced by drought since January 2022. Many have moved into crowded urban areas with limited access to crucial services, plagued by risks to health, livelihood and food security, and safety.
- Al Shabaab has leveraged the current drought and risk of famine to advance its operations: levying taxes on drought-affected communities, attacking relief efforts, and destroying critical infrastructure.
- Tensions among political factions weaken the government's capacity to respond to climate change, while climate-related disasters continue to have a disproportionate effect on marginalised minority clans.

The UN Security Council (UNSC) has stressed the need for strategies to assess and manage the risks of climate change, ecological change, and natural disasters in Somalia. The UNSC has requested the UN Assistance Mission in Somalia (UNSOM) to include climate-related security risks in its reporting, and UNSOM and the UN system have stepped up their capacities to support the Federal Government of Somalia (FGS) and Federal Member States (FMS). Efforts by the newly elected Federal Government to appoint a special envoy for drought response and a new Minister of Environment and Climate Change can support this aim by enhancing analysis and coordination mechanisms. Future political and security transitions, including the planned transfer of security responsibilities by the African Union Transition Mission in Somalia (ATMIS), should preserve national, federal and local capacities to analyse and respond to climate-related security risks, and reinforce the UN system's capacity to implement climate adaptation and human security mandates in Somalia.

## RECOMMENDED ACTIONS:

- ▶ The UN system, with international and regional partners, should support the FGS in adopting climate-sensitive risk assessment and management strategies, working across the Humanitarian–Development–Peacebuilding (HDP) nexus. Responses to climate-related security risks should leverage climate adaptation funding to address shorter-term humanitarian and longer-term development needs, incorporating ecosystem thinking, and strengthening local adaptive capacity in gender-sensitive ways.
- ▶ The Intergovernmental Authority on Development (IGAD), the African Union (AU), and the UN system can support the FGS with access to early warning systems and analysis for preventive measures to reduce the risks of climate-related displacement or migration triggering violent conflict. This should include capacity-building for the Government to manage early warning systems and reach communities through preventive actions.
- ▶ Climate-related security risks should be integrated and mainstreamed in the Somali Security Forces (SSF) (military, police and maritime forces) to enhance preventive responses. In preparation for the transfer of security responsibilities, ATMIS and UNSOM should support and develop the capacity of the SSF to analyse and prevent climate-related security risks and to counter armed group tactics linked to climate change and disasters.
- ▶ The UN should institutionalise and sustainably finance the position of UNSOM Climate Security Advisor to support capacity-building across the FGS, FMS and the broader UN system in Somalia; enhance coordination with the Government and across the HDP nexus; and boost community participation in addressing climate-related security risks. The UNSOM Climate Security Advisor should continue to support national efforts that ensure that climate-related security risks are integrated into national, federal and local governance.

\* This is an updated version of the fact sheet on Somalia released in February 2021.

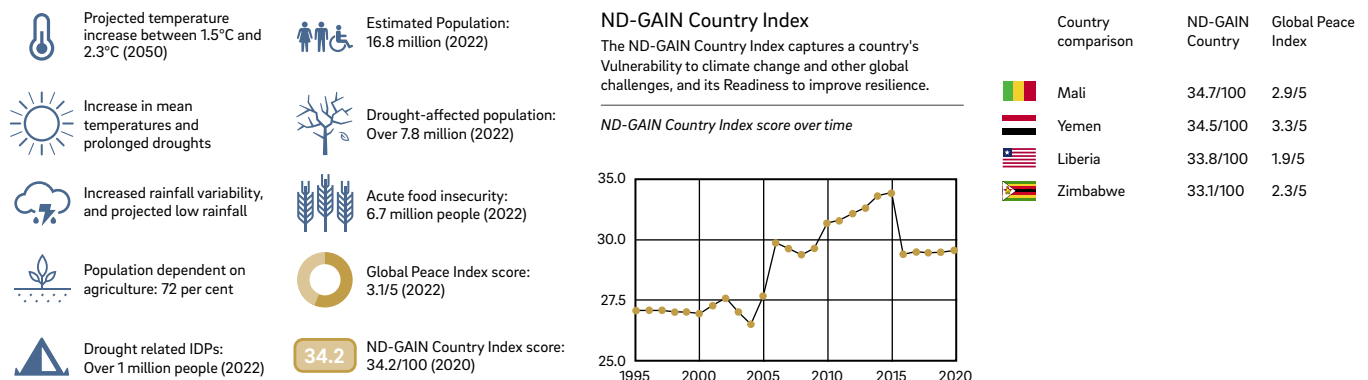


Figure 1. Data sources: World Bank. (2022). [Climate change knowledge portal Somalia](#). Blinder, L. et al. (2022). [Climate risk profile Somalia](#). FAO & Federal Government of Somalia. (2022). [Somalia drought update \(May-September 2022\)](#); World Meteorological Organization. (2022). [Greater Horn of Africa faces 5th failed rainy season](#). Federal Republic of Somalia. (2021). [Updated nationally determined contribution \(NDC\)](#); UN Somalia (2020). [Common country analysis: Somalia 2020](#). UNOCHA. (2022). [Somalia: Drought response and famine prevention \(1-24 October 2022\)](#); UNHCR & NRC. (2022). [One million people displaced by drought in Somalia](#). UNFPA. (2022). [World population dashboard: Somalia](#). Vision of Humanity. (2022). [Global peace index: Somalia](#). Notre Dame Global Adaptation Initiative. (2022). [ND-GAIN rankings](#).

## Climate Exposure: Trends and Projections

Somalia has an arid and semi-arid climate with significant seasonal variability influenced by monsoons, tropical cyclones and the Indian Ocean and Red Sea coastlines. The El Niño Southern Oscillation also contributes to climate variability: rainfall increases in El Niño years and decreases in La Niña years.<sup>1</sup>

Somalia has two rainy seasons: Gu (March–June) and Deyr (October–December). Extreme weather and disasters have occurred more frequently over the past 25 years.<sup>2</sup> An early end to the 2022 Gu season led to a fourth failed rainy season and the worst drought in more than four decades.<sup>3</sup> La Niña conditions and below-average rainfall are expected for the 2022 Deyr season, which could lead to a fifth consecutive failed rainy season and prolong drought conditions into 2023.<sup>4</sup>

**Temperature:** Annual mean temperature is close to 30°C across Somalia, with the warmest periods occurring between April and June.<sup>5</sup> The country has experienced a gradual increase in mean temperature since 1991. By 2050, temperatures are projected to increase by 1.5–2.3°C compared to pre-industrial times (1850–1900).<sup>6</sup>

**Precipitation:** Rainfall in Somalia is erratic, with inter-annual and seasonal variability. Conditions are hot and arid in the north (up to 50 mm rainfall) and wetter in the south (ca. 400 mm) and south-west (ca. 600 mm).<sup>7</sup> Annual precipitation trends show a decline from 2019 (ca. 392.4 mm) to 2020 (ca. 309.62 mm).<sup>8</sup> Precipitation is projected to increase by about 3 per cent by 2050, especially during the rainy season, with increasing seasonal variability.

## Socio-ecological Vulnerabilities

As of October 2022, more than 7.8 million Somalis were affected by drought conditions, and over 1 million people have been displaced since January 2022.<sup>9</sup> This has affected agriculture (the country's largest economic sector, employing around 72 per cent of the population) and exacerbated food insecurity.<sup>10</sup> Almost half of the population suffer from food insecurity, and ca. 1.5 million children under the age of five are expected to be severely malnourished by the end of 2022.<sup>11</sup> The integrated food security phase classification (IPC) projects famine between October and December 2022 in Somalia's south-central Bay area.<sup>12</sup> When combined with increasing attacks by Al Shabaab, the polarised political landscape, and the declining economy, the capacities for FGS, FMS and local governments to respond to the climate crisis are severely weakened.<sup>13</sup>

Livelihoods have been upended by drought, declining crop and livestock production, high food prices, and disrupted supply chains. Russia's war in Ukraine has halted critical food imports – Somalia imports almost half

of all its food supplies – and increased the prices of food staples like rice and sorghum, fuel and fertilizers.<sup>14</sup> This threatens poor urban households and internally displaced persons (IDPs) in particular, who often spend 60 to 80 per cent of their earnings on food.<sup>15</sup> The drought has exacerbated water shortages, with up to 80 per cent of fresh water sources drying up.<sup>16</sup>

Urgent relief is required. The 2022 Somalia Humanitarian Response Plan called for US\$1.5 billion, which was later revised to raise funding requirements up to \$2.27 billion, but only \$1.07 billion (47 per cent of total funding) has been committed at the time of writing.<sup>17</sup>

## Climate-related Peace and Security Risks

Climate change is rarely the main driver of conflict – but it can undermine development gains, exacerbate the dynamics of ongoing violence and disrupt fragile peace processes. In turn, violent conflict and political instability can weaken community resilience to the effects of climate change. This Fact Sheet uses four interrelated pathways to navigate the relationship between climate change, peace and security: (1) livelihood deterioration, (2) migration and mobility, (3) military and armed actors, and (4) political and economic exploitation and mismanagement.<sup>18</sup>

### Livelihood Deterioration

Climate change and extreme weather events affect livelihoods and coping capacities, and increase the risk of violent conflict in Somalia.<sup>19</sup> Loss of income from agriculture and pastoralism can heighten the risk of violent conflict or joining armed groups when people find their livelihood security threatened.<sup>20</sup>

Highly variable seasonal rainfall and increasingly frequent rapid-onset disasters threaten the resources and grazing routes essential to farmers and herders in Somalia.<sup>21</sup> Locust outbreaks in 2019 and 2020 – the worst in almost 25 years – heavily impacted food security and crop production in Somalia, leading to a loss of ca. 20 per cent of national crop yields.<sup>22</sup> The current drought has made it harder for communities to meet their dietary needs, and rising food prices have led to critical food shortages and increased risk of famine.<sup>23</sup> Marine fisheries could provide important livelihood and food alternatives, but are increasingly threatened by ocean acidification, de-oxygenation, and rising sea surface temperatures, impacting the health and distribution of marine species.<sup>24</sup> Illegal fishing, mainly by international fleets, limits the full benefits of the sector for Somalia.<sup>25</sup>

Maladaptation (adaptation with negative effects) may result from the absence of livelihood alternatives and longer-term planning in Somalia. Strategies tend to focus on shorter-term gains, pursuing inadequate or

<sup>1</sup> World Bank. (2022a). [Climate change knowledge portal Somalia. Climate change overview: Country summary.](#)

<sup>2</sup> State Minister for Environment, Office of the Prime Minister and Line Ministries and Ministry of Planning. (2015). [Somalia's intended nationally determined contributions \(INDCs\).](#)

<sup>3</sup> FAO & Federal Government of Somalia. (2022). [Somalia drought update \(May–September 2022\).](#)

<sup>4</sup> FAO & Federal Government of Somalia, 2022; World Meteorological Organization. (2022). [Greater Horn of Africa faces 5th failed rainy season.](#)

<sup>5</sup> World Bank. (2022b). [Climate change knowledge portal Somalia. Current climate: Climatology.](#)

<sup>6</sup> Binder, L. et al. (2022). [Climate risk profile Somalia.](#) Weathering Risk.

<sup>7</sup> World Bank, 2022b.

<sup>8</sup> World Bank, 2022b.

<sup>9</sup> UN OCHA. (2022). [Somalia: Drought response and famine prevention \(1–24 October 2022\)](#); UNHCR & NRC. (2022). [One million people displaced by drought in Somalia.](#)

<sup>10</sup> Federal Republic of Somalia. (2021). [Updated nationally determined contribution \(NDC\)](#); UN Somalia. (2020). [Common country analysis: Somalia 2020.](#)

<sup>11</sup> UN OCHA. (2022). [Somalia: Drought response and famine prevention-situation report no. 9 \(as of 31 July 2022\)](#); UNICEF. (2022). [Somalia humanitarian situation report no. 6](#); UN. (2022). [Somalia receiving unprecedented levels of food aid, with 'famine at the door'.](#)

<sup>12</sup> Integrated Food Security Phase Classification. (2022). [Somalia: Acute malnutrition situation July – September 2022 and projection for October – December 2022.](#)

<sup>13</sup> Stigant, S. (2022). [Somalia's critical transition comes amid al-Shabab and hunger challenges.](#) USAID; Dahir, A. L. (2022, 3 September). [Militants attack trucks carrying food relief in Somalia.](#) New York Times.

<sup>14</sup> Dahir, A. L. (2022, 12 June). ['We buried him and kept walking': Children die as Somalis flee hunger.](#) New York Times.

<sup>15</sup> Food Security and Nutrition Analysis Unit. (2022). [Somalia faces risk of famine \(IPC Phase 5\) as multi-season drought and soaring food prices lead to worsening acute food insecurity and malnutrition.](#)

<sup>16</sup> UN OCHA. (2022). [Somalia: 2022 drought impact snapshot \(as of 5 April 2022\).](#)

<sup>17</sup> UN OCHA. (2021). [Humanitarian responses plan: Somalia](#); UN OCHA. (2022).

[Somalia: Drought response and famine prevention \(1–24 October 2022\).](#)

<sup>18</sup> Mobjörk, M. et al. (2020). [Pathways of climate insecurity: Guidance for policymakers.](#) SIPRI.

<sup>19</sup> Ministry of National Resources. (2013). [National adaptation programme of action on climate change.](#)

<sup>20</sup> Ember, C. R. et al. (2012). [Livestock raiding and rainfall variability in north-western Kenya.](#) Civil Wars 14(2); Maystadt, J. F. & Ecker, O. (2014). [Extreme weather and civil war: Does drought fuel conflict in Somalia through livestock price shocks?](#) American Journal of Agricultural Economics, 96(4).

<sup>21</sup> Eklöv, K. & Krampe, F. (2019). [Climate-related security risks and peacebuilding in Somalia.](#) SIPRI.

<sup>22</sup> FAO. (2021). [Somalia: Agricultural livelihoods and food security in the context of COVID-19.](#)

<sup>23</sup> Buchholz, K. (2022). [This is how wheat shortages are creating a food security risk.](#) World Economic Forum.

<sup>24</sup> Jacobs, Z. L. et al. (2021). [Key climate change stressors of marine ecosystems along the path of the East African coastal current.](#) Ocean & Coastal Management, 28.

<sup>25</sup> Bahadur, J. (2021). [Fishy business: Illegal fishing in Somalia and the capture of state institutions.](#) Global Initiative Against Transnational Organized Crime.

financially unsustainable climate solutions.<sup>26</sup> Maladaptation can increase exposure and vulnerability to climate change, instead of reversing them. For example, sharp spikes in oil prices and drought conditions have led many Somalis to illegal charcoal production, which accelerates environmental degradation and the destruction of acacia forests, for alternative energy and income.<sup>27</sup> Emergency responses to the current drought, including drilling boreholes to access groundwater and trucking water to drought-affected communities, may provide immediate water relief, but focus should also be placed on long term planning for sustainable climate adaptation.<sup>28</sup>

Climate-related shocks to livelihood impact women and men differently in Somalia. Women, often the main providers for their households, experience an increase in domestic workload and responsibility when the men migrate to cities for employment.<sup>29</sup> During periods of drought, women must also walk longer distances to collect firewood and water, which exposes them to risks of gender-based violence at livestock grazing and firewood-collection zones, especially when there is a lack of lighting or shelter.<sup>30</sup> Climate change can also increase the risk of revenge killings and armed clashes when clans compete over dwindling land and resources; Somali men are most often the victims here.<sup>31</sup>

With support from international and local partners, the FGS and FMS should improve their capacities to track and analyse the effects of climate change on livelihoods in Somalia. Responses should move towards area-based, cross-sectoral approaches to cover humanitarian and longer-term development needs.<sup>32</sup> Adaptation and resilience-building should be gender-sensitive, with specific attention to the leadership roles of many women in coping with, and adapting to, the effects of climate change. Somali women are often at the frontline of rapid-onset disasters: they also have crucial leadership skills when it comes to responding to these crises.

### Migration and Mobility

Climate change can influence migratory movements and displacement. Migration can be an adaptation strategy for groups whose livelihoods or survival are jeopardised by the impacts of climate change. There is some evidence that climate-related migration in Somalia has fuelled local tensions and even impacted national conflict dynamics. Major displacement can change the clan composition of host communities, threatening the control of dominant groups and leading to violent tensions.<sup>33</sup> IDPs may suffer from inadequate clan protection, weakened social cohesion and security, with some evidence that IDP sites have been the locus of inter-group conflict as well as targets for recruitment to armed groups like Al Shabaab.<sup>34</sup> In 2021, 90 per cent of IDP sites in Somalia were in urban centres where the lack of urban planning policies for coping with such influxes often leave people without access to basic services.<sup>35</sup> The current drought has displaced over 1 million people, who join the 2.9 million Somalis already living in IDP camps.<sup>36</sup>

The FGS and FMS should take preventive measures to reduce the risk that climate-related migration contributes to violent conflict. Regional and international partners – IGAD, AU and UN – can support the FGS and FMS with access to early warning systems, to increase response

## Food Insecurity and Internal Displacement

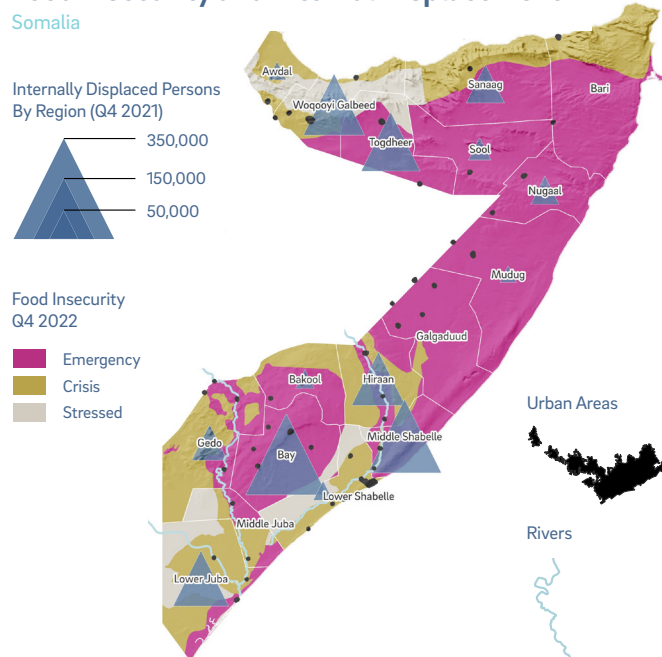


Figure 2. Data sources: FEWS, IOM-DTM & Natural Earth

capacities. Nature-based solutions that use ecosystem services to strengthen resilience can also preventatively address environmental degradation and reduce the risk of displacement.<sup>37</sup>

### Military and Armed Actors

When climate change affects the availability of natural, human and other resources, armed groups adapt their strategies and tactics accordingly. Al Shabaab has capitalised on the climate-related insecurities resulting from the current drought, imposing heavy taxes on food supplies produced in rural areas under its control.<sup>38</sup> It has also benefited from climate impacts to boost recruitment. Studies show that livelihood deterioration caused by climate change can trigger economic decline, which increases the risk of livestock raiding or people joining armed groups to sustain themselves.<sup>39</sup>

Al Shabaab has also used extreme weather events to position itself as an alternative service and relief provider. In response to the current drought, it has distributed cooking oil, rice and sugar to impacted communities.<sup>40</sup> It has also challenged government relief efforts, including by setting fire to trucks carrying food supplies and passengers in central Somalia, destroying water wells and communication and electricity infrastructure.<sup>41</sup>

The Juba and Shabelle rivers in southern Somalia are important year-round water sources for people and livestock during periods of serious drought, but water levels have been historically low this year.<sup>42</sup>

<sup>26</sup> IPCC. (2022). [Summary for policymakers](#). In H.-O. Pörtner et al. (eds.) *Climate Change 2022: Impacts, adaptation and vulnerability*. Contribution of working group II to the sixth assessment report of the Intergovernmental Panel on Climate Change. Cambridge University Press.

<sup>27</sup> Gabobe, M. & Kimeu, C. (2022, 8 August). [Inside Somalia's vicious cycle of deforestation for charcoal](#). The Guardian.

<sup>28</sup> Hall, S. (2021). [Identifying climate adaptive solutions to displacement in Somalia: Assessment report](#). IOM and UNEP

<sup>29</sup> Croome, A. & Hussein, M. (2020). [Climate crisis, gender inequalities and local response in Somalia/Somaliland](#). *Forced Migration Review*, 64.

<sup>30</sup> Thulstrup, A. W. et al. (2018). [Uncovering the challenges of domestic energy access in the context of weather and climate extremes in Somalia](#). *Weather and Climate Extremes*, 27; Croome & Hussein, 2020.

<sup>31</sup> Croome & Hussein, 2020.

<sup>32</sup> Broek, E., & Hodder, C.M. (2022). [Towards an integrated approach to climate security and peacebuilding in Somalia](#). SIPRI.

<sup>33</sup> Middleton, R. et al. (2018). [Somalia climate security risk assessment](#). Expert Working Group on Climate-related Security Risks.

<sup>34</sup> Eklöv & Krampé, 2019; Mohamoud, O. M. et al. (2017). [Protecting internally displaced communities in Somalia: Experience from the Benadir region](#). IIED, Urban

Crises & SDRI; UNICEF Somalia. (2016). [Situation analysis of children in Somalia, 2016](#); Ferrandez, P.C. (2020). [No land, no water, no pasture. The urbanisation of drought displacement in Somalia](#). IDMC.

<sup>35</sup> IOM & UNHCR. (2022). [CCCM cluster Somalia strategy, January 2022](#).

<sup>36</sup> UNHCR Regional Bureau for East, Horn of Africa and the Great Lakes. (2022, 31 October). [Refugees and asylum-seekers in the East and Horn of Africa and the Great Lakes region](#).

<sup>37</sup> Broek & Hodder, 2022.

<sup>38</sup> Raghavan, S. (2022, 30 June). [Africa's desperate hunger: Ukraine war pushes Somalia toward famine](#). The Washington Post.

<sup>39</sup> Maystadt & Ecker, 2014; Ember et al., 2014.

<sup>40</sup> Sguazzin, A. (2022, 29 April). [Next Africa: Drought, Russia's war open a window for al-Shabaab](#). Bloomberg.

<sup>41</sup> Dahir, 2022, 3 September.

<sup>42</sup> FAO & Federal Government of Somalia. (2022). [Somalia drought update—Issued 12 August 2022](#).



The absence of dependable institutions for water management due to the ongoing conflict has also led to severe degradation of water resources.<sup>43</sup> In some cases, Al Shabaab has exercised control over water resources, blocking access to rivers, poisoning wells or destroying water infrastructure, to advance its own strategic operations.<sup>44</sup>

Efforts to curb the influence of armed groups like Al Shabaab include the FGS's national strategy and action plan on preventing and countering violent extremism. The Somalia Transition Plan also outlines a drawdown and handover from ATMIS to the SSF.<sup>45</sup> The UN system, and national and international partners, can support the SSF by strengthening the Somali defence and security architecture, and improving the provision of services to local communities to build a buffer against armed group tactics. Understanding of climate-related security risks and the root causes of armed recruitments must be fully mainstreamed into the training and capacity building of the Somali military, police and maritime forces.

### Political and Economic Exploitation and Mismanagement

Local and national elites can use disasters to strengthen their control over critical resources, at the expense of weaker or marginalised groups. There have been cases where powerful clan militia have looted and attacked livestock and food stores in minority communities during famines.<sup>46</sup> Moreover, minority clans are disproportionately affected by disasters, as evidenced in the 1992 and 2011 famines, as well as the current drought.<sup>47</sup>

Political and economic elites can exploit gaps in land governance systems and tenure rights to capture territory at the expense of local communities. Climate change has led to a significant reduction in cultivable land and an increase in competition around land rights in Somalia.<sup>48</sup> The problem is exacerbated by the absence of clear land management and legal systems to adjudicate territorial disputes. Clan relations and the position of marginalised groups and clans have remained linked to conflict dynamics among dominant groups on a national scale. Political and clan elites may also capitalise on grievances to gain support for their political agendas and divert attention away from the climate crisis.<sup>49</sup> This became apparent during the 2021–2022 presidential elections, which were delayed by a polarised political environment and attacks by Al Shabaab.

## Armed Violence

Somalia

Fatalities

Jan 2019 – Sep 2022



Urban Areas



Rivers

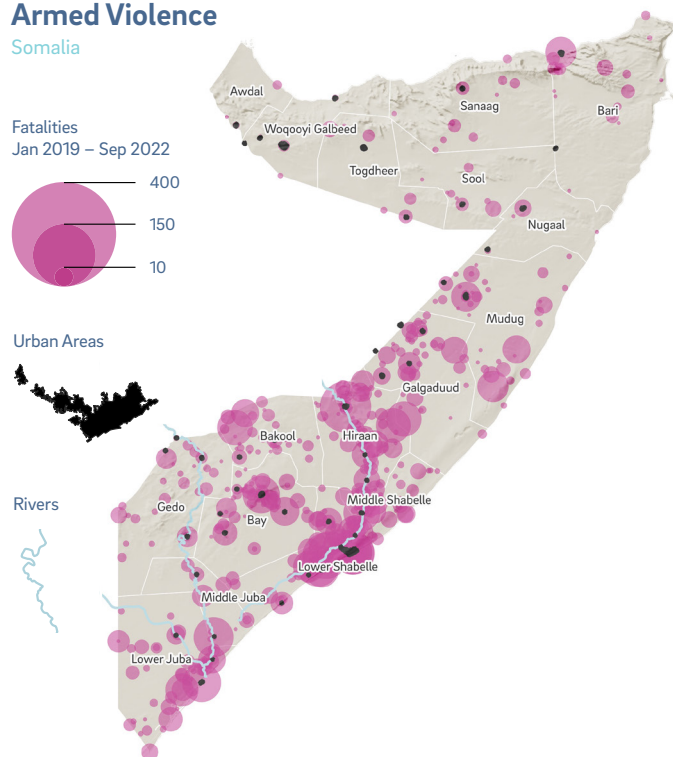


Figure 3. Data sources: ACLED, Africapolis & Natural Earth

The FGS and FMS, with support from regional and international partners, should strengthen their capacity to prevent and resolve clan and local disputes, including those linked and exacerbated by climate change. Early anticipatory preventive responses to emerging climate-related security risks can disrupt attempts by local and national elites to manipulate climate impacts. Stronger land tenure rights and management systems that integrate traditional mechanisms of land-dispute adjudication, such as xeer, must be supported.

<sup>43</sup> Houghton-Carr, H. A. et al. (2011). [An assessment of the surface water resources of the Juba-Shabelle basin in southern Somalia](#). *Hydrological Sciences Journal*, 56(5).

<sup>44</sup> Strategic Foresight Group. (2019). [Water and violence: Somalia](#).

<sup>45</sup> UNSOM. (2022). [Prevention and countering of violent extremism](#); ATMIS. (2022). [African Union Mission in Somalia \(AMISOM\) transitions to African Union Transition Mission in Somalia \(ATMIS\)](#).

<sup>46</sup> Majid, N. & McDowell, S. (2012). [Hidden dimensions of the Somalia famine](#). *Global Food Security*, 1(1).

<sup>47</sup> Majid, N. et al. (2022). [Another humanitarian \(and political\) crisis in Somalia in 2022](#). Feinstein International Centre, Tufts University.

<sup>48</sup> Eklöv & Krampe, 2019.

<sup>49</sup> Majid & McDowell, 2012.

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