

## Climate, Peace and Security Fact Sheet

## Abyei

The Abyei Administrative Area, a disputed territory that lies between Sudan and South Sudan, faces complex interconnected challenges. Communities in Abyei largely depend on climate-sensitive livelihoods such as cattle herding, farming and seasonal migration. Increased flooding and prolonged dry spells in recent years have reduced crop yields, affected livestock rearing and displaced households, which has deepened existing livelihood and security challenges. Limited basic services and poor infrastructure, combined with weak governance, constrain the coping capacities of local communities and increase their need for humanitarian assistance. Yet funding cuts and insecurity have led some humanitarian organizations to scale back operations, while the civil war in Sudan continues to increase humanitarian needs in Abyei. The territory's disputed status further impedes long-term development planning to address interconnected challenges, including climate-related security risks.

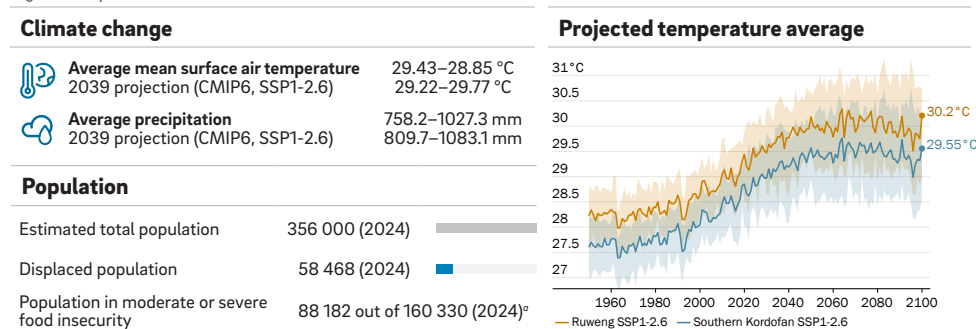
- Increasing climate variability undermines food security and livelihood activities, particularly agriculture, livestock and seasonal pastoralism. The lack of alternative livelihood options has pushed some groups into illicit and criminal activities, which have contributed to the precarity of Abyei's security situation.
- Intensifying seasonal hazards, such as floods, drive displacement and worsen the humanitarian crisis in Abyei. Intercommunal tensions between the Ngok Dinka and the Misseriya rise during seasonal migration, although the number of violent clashes has decreased due to dialogues on seasonal migration.
- Competition over land and water intensifies during the dry season and has become more violent over the years due to the presence of militia groups and the proliferation of small arms in Abyei. Flooding during the rainy season limits the capacity of the United Nations Interim Security Force for Abyei (UNISFA) to conduct patrols and protect civilians.
- Abyei's contested status, its weak governance and elite-driven politics continue to fuel insecurity. Meanwhile, efforts to address the impacts of climate change and related security risks remain limited.

In the absence of a political resolution on Abyei's final status, UNISFA remains the main provider of security for the people of Abyei. The mission's most recent mandates underscore how climate and environmental stressors shape security dynamics in Abyei. UNISFA, however, requires support and enhanced capacity to address the climate-related security risks facing Abyei.

## RECOMMENDED ACTIONS:

- United Nations agencies and the international development community should increase support for climate-resilient livelihood initiatives and environmental peacebuilding. This could help strengthen coping mechanisms and reduce the risk of intercommunal tensions. Such efforts could be coordinated through the UN Joint Programme for Abyei. Interventions designed with local actors through existing community-based committees can help ensure inclusive and equitable programming.
- Regional collaboration—including through the African Union (AU), the Intergovernmental Authority on Development (IGAD) and the special envoy of the UN secretary-general for the Horn of Africa—should more comprehensively address transboundary climate, peace and security issues, including risks emanating from migration and displacement. In addition, strengthening existing efforts (e.g. the pre- and post-migration conferences) of the UN Interim Security Force for Abyei (UNISFA) by explicitly incorporating climate-related information could enable UNISFA to take integrated, mission-wide approaches to climate-sensitive peace and the protection of civilians.
- The UN Security Council should ensure that UNISFA is adequately supported with capabilities to effectively and safely fulfil core mandated tasks, such as the protection of civilians, in a more variable and extreme operating environment. The mission's capabilities for mobility during both the rainy and the dry seasons and for analysis are especially important.
- UNISFA's capacity to analyse, anticipate and mitigate climate-related security risks could be strengthened through training and support from external climate, peace and security advisors. Enhanced cooperation with the UN Climate Security Mechanism, the UN Mission in South Sudan (UNMISS), the Office of the Special Envoy for the Horn of Africa (OSE-HOA) and other relevant UN bodies can support capacity-building and joint programming.

Figure 1. Key statistics



Note: Climate change projections are based on the Sixth Phase of the Coupled Model Intercomparison Project (CMIP6) and a set of Shared Socio-economic Pathways (SSPs).

\*160 330 is the number of people analysed in Abyei of whom 88 182 are in Integrated Food Security Phase Classification (IPC) Phase 3+.

Sources: World Bank Climate Change Knowledge Portal, Future climate, mean projections (CIMP 6), Projected Timeseries of Precipitation, Southern Kordofan, Sudan, and Ruweng Administrative Area, South Sudan, 1950–2100, Multi-Model Ensemble; extrapolated from United Nations, Security Council, 'Situation in Abyei', Report of the secretary-general, S/2025/269, 1 May 2025, para. 45; UN Office for the Coordination of Humanitarian Affairs (OCHA), South Sudan Humanitarian Needs and Response Plan, Humanitarian Programme Cycle 2025 (OCHA: New York, Dec. 2024), p. 34; United Nations, S/2025/269, para. 40; Integrated Food Security Phase Classification (IPC), 'South Sudan: IPC Acute food insecurity and malnutrition analysis September 2025–July 2026', 4 Nov. 2025, annex 3.

## Climate exposure: Trends and projections

Abyei is characterized by a semi-arid climate.<sup>1</sup> It has two main seasons: a rainy season typically from May to October, which brings cooler temperatures; and a dry season from November to April, characterized by hotter conditions. In recent years, weather patterns have shifted, with rains starting later and dry spells beginning as early as September, as observed in 2025.<sup>2</sup>

Data for Abyei's climate trends and projections is limited. Trends and projections are therefore drawn from neighbouring areas with comparable climatic conditions—Ruweng in South Sudan and southern Kordofan in Sudan—which share the same 'semi-arid' classification.<sup>3</sup> Mean annual temperatures increased markedly in these areas between 1960 and 2023: by 2.63°C in southern Kordofan and by 3.12°C in Ruweng.<sup>4</sup> Between 1991 and 2020, their mean annual temperatures generally ranged from 27°C to 29°C, while annual precipitation declined over the same period from 805 millimetres to 533 mm in southern Kordofan and from 1144 mm to 670 mm in Ruweng.<sup>5</sup> While projections for 2020–39 suggest a slight increase in precipitation, the mean annual temperature is expected to exceed 29°C.<sup>6</sup> For Abyei, these projections point to increasingly hotter and more water-stressed conditions, as well as heightened risks of frequent flooding.

Abyei already experiences extremely high temperatures, often exceeding 40°C during the dry season. There were fewer rainy days in 2025 as well as a longer dry spell, while there were more extreme weather events in preceding years, such as severe floods.<sup>7</sup> Prolonged dry spells reduce the amount of water available for farming and livestock, which leads to intensified competition over water points and grazing land, while flooding contributes to displacement of people and worsens an already fragile humanitarian and security situation.

## Socioecological vulnerabilities

Dynamics such as population pressures, lack of basic services and climate-related stressors are worsening the vulnerability of Abyei's population. Intercommunal tensions, including the proliferation of armed groups, continue to heighten Abyei's security challenges and, consequently, to compound people's vulnerability.<sup>8</sup>

Despite its oil resources and fertile land, the population in Abyei remains poor, partly due to prolonged instability, conflict, and limited infrastructure and basic services. The situation has deteriorated further since the outbreak of war in Sudan in April 2023 and as political instability and insecurity in South Sudan have heightened. The consequent influx into Abyei of displaced populations, refugees and returnees has added to existing humanitarian pressures. Limited basic services such as education, health, food and access to clean water have been overwhelmed by the recent population increase.<sup>9</sup>

Cholera risks have risen as the population has increased, coupled with limited access to clean water and sanitation.<sup>10</sup> These risks intensify during the rainy season; for example, in August 2025 UNISFA reported rising cholera cases, underscoring the need to scale up water and sanitation programmes.<sup>11</sup>

Although the security situation is relatively calm, it remains volatile due to intercommunal tensions (most recently between the Twic Dinka

and Ngok Dinka tribal groups), the influx of armed actors and the proliferation of arms. UNISFA reported 91 incidents with 22 fatalities between October 2024 and April 2025, including arms-related crimes, carjackings and armed clashes.<sup>12</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, amplify existing tensions and disrupt fragile peace processes. Violent conflict and political instability can also 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: (a) livelihood impacts, (b) migration and mobility, (c) armed actors and security, and (d) political and economic grievances.<sup>13</sup>

### Livelihood impacts

Livelihoods in Abyei depend primarily on rain-fed agriculture, livestock herding, fishing and the gathering of wild foods. These activities are closely tied to seasonal rainfall and water availability, making communities highly vulnerable to increasing climate variability.<sup>14</sup> Prolonged dry spells reduce water availability for livestock and crops, while intense rainfall and recurrent flooding destroy farmlands and livestock and displace households. Such shocks not only reduce income but also deepen poverty and food insecurity across the area and erode traditional coping mechanisms.<sup>15</sup>

These climatic pressures on already strained livelihoods intersect with existing conflict dynamics. When floods destroy grazing land and extreme temperatures dry up water sources, competition over grazing areas and water intensifies. This fuels tensions between the pastoral Misseriya tribal group and the agropastoral Ngok Dinka. Territorial claims by the Twic Dinka over lands around Amiet and south of the River Kiir, including Agok, have also triggered a series of clashes with the Ngok Dinka.<sup>16</sup> Cattle raiding and retaliatory violence often rise during the dry season, when scarcity is most acute.<sup>17</sup>

While agricultural potential is highest in the south of Abyei, insecurity and the presence of armed actors—including the South Sudan People's Defence Forces (SSPDF) and National Police Service (NPS), as well as militias from the Nuer ethnic group—often discourage farmers from cultivating their fields in the area.<sup>18</sup> The war in Sudan has also disrupted supply routes to and from the north; this has left Abyei largely dependent on supplies from Juba, South Sudan, which are mostly transported by road. During the rainy season this supply route becomes impassable. Young people face few livelihood options and are increasingly being drawn into local conflicts and illicit activities, including the uncontrolled oil trade at Amiet market.<sup>19</sup>

Competition over where humanitarian aid is distributed has also been a source of friction among communities. Given the widespread needs in Abyei, there have been grievances and disputes over which villages or communities receive assistance.<sup>20</sup>

To address these interlinked livelihood and security challenges, strengthening climate-resilient livelihoods can be a critical step towards reducing vulnerability and lowering livelihood-related

<sup>1</sup> World Bank Climate Change Knowledge Portal, Köppen–Geiger climate classification, Southern Kordofan, Sudan, and Ruweng Administrative Area, South Sudan.

<sup>2</sup> This factsheet draws on field research conducted by SIPRI and NUPI in Abyei on 15–18 Sep. 2025, including interviews at UNISFA Headquarters and sector headquarters, as well as discussions with community groups and representatives of the Ngok Dinka and Misseriya.

<sup>3</sup> World Bank Climate Change Knowledge Portal (note 1).

<sup>4</sup> World Bank Climate Change Knowledge Portal (note 1).

<sup>5</sup> World Bank Climate Change Knowledge Portal (note 1).

<sup>6</sup> These projections are based on the 6th phase of the Coupled Model Intercomparison Project (CMIP6) and Shared Socio-economic Pathway (SSP)1-2.6. See World Bank Climate Change Knowledge Portal (note 1), Projected climatology of average mean surface air temperature SSP1-2.6 2020–39, and Projected timeseries of precipitation 1950–2100, Southern Kordofan, Sudan, and Ruweng Administrative Area, South Sudan.

<sup>7</sup> UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 16 Sep. 2025.

<sup>8</sup> Craze, J., 'Attacked from both sides: Abyei's existential dilemma', Situation update, Human Security Baseline Assessment for Sudan and South Sudan (HSBA) and Small Arms Survey, July 2023.

<sup>9</sup> UN Development Programme (UNDP) Sudan, 'Higher yields and incomes in Abyei show how development is possible in even the most challenging circumstances', Jan. 2025.

<sup>10</sup> Médecins sans Frontières (MSF), 'Rising cholera cases in South Sudan require immediate action', 7 July 2025.

<sup>11</sup> UN Interim Security Force for Abyei (UNISFA), 'UNISFA efforts to respond to Abyei cholera outbreak', 19 Aug. 2025.

<sup>12</sup> United Nations, Security Council, 'Situation in Abyei', Report of the secretary-general, S/2025/269, 1 May 2025, para. 12.

<sup>13</sup> Möbjörk, M., Krampe, F. and Tarif, K., 'Pathways of climate insecurity: Guidance for policymakers', SIPRI Policy Brief, Nov. 2020.

<sup>14</sup> UN agencies, funds and programmes and UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 16 Sep. 2025; Ngok Dinka women's community group, Interview with authors, 16 Sep. 2025; and Misseriya community group, Interview with authors, 17 Sep. 2025.

<sup>15</sup> UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 16 Sep. 2025; and Food Security Cluster, 'State profile: Abyei Administrative Area (AAA)', [2024].

<sup>16</sup> United Nations, Security Council, Letter from the secretary-general addressed to the president of the Security Council, S/2025/518, 18 Aug. 2025; and Craze (note 8).

<sup>17</sup> UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 16–17 Sep. 2025.

<sup>18</sup> Ngok Dinka women's community group, Interview with authors, 16 Sep. 2025; Food Security Cluster (note 15); and United Nations, S/2025/518 (note 16).


<sup>19</sup> UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 17 Sep. 2025; and Food Security Cluster (note 15).

### Migration and mobility

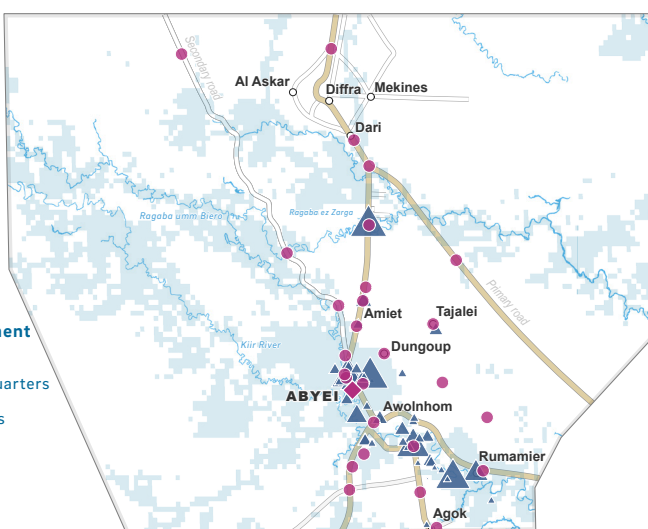
During the dry season, Misseriya pastoralists move south into Abyei in search of water and pasture, returning north to Sudan with the onset of the rainy season. The Misseriya's seasonal migration is traditionally guided by agreements with Ngok Dinka leaders. However, shifting weather patterns disrupt timing, alter migration routes, and affect the availability of water and grazing land—these sometimes create pressure and heighten tensions.<sup>22</sup> Violent incidents between the Ngok Dinka and the Misseriya have decreased, partly due to UNISFA's facilitation of pre- and post-migration conferences between the two communities, which include representation from women and youth.<sup>23</sup> However, the escalating conflict in Sudan poses challenges to pastoral livelihoods, for example by limiting the ability of the Misseriya to return north. This can create risks of intercommunal tensions between host communities and pastoralists in Abyei.

The demand for humanitarian aid in Abyei has surged in view of increased migration, return and displacement. There is need for more regional collaboration—including through the African Union (AU), the Intergovernmental Authority on Development (IGAD) and the special envoy of the UN secretary-general for the Horn of Africa—to comprehensively address transboundary climate, peace and security issues, incorporating risks emanating from increased migration and displacement. UNISFA could further strengthen the existing pre- and post-migration conferences between the Naq Dinka and Misseriya

**Water and floods**

 Water

 Flooding risk



NOTE: Operation areas include UNISFA operating bases and static combat deployment locations. The boundaries and names shown on this map do not imply official endorsement, as the final boundary between Sudan and South Sudan—including the final status of Abyei—has not yet been determined.

Sources: International Organization for Migration (IOM), South Sudan Mobility Tracking: Baseline Location Assessment, Abeyi AA, Round 2, Displacement Tracking Matrix (DTM) United Nations Internal Security Force for Abyei (UNISFA), Operation Area Map, UNISFA Cartographic Products, World Resources Institute (WRI), Aqueduct Floods, cited in Climate & Environment: Risk of Flooding data sheet

### Armed actors and security

UNISFA's ability to conduct patrols, resupply battalions and provide emergency medical assistance is significantly diminished during the rainy season, when, as noted above, flooding renders the main supply road impassable.<sup>31</sup> To adapt, UNISFA's battalions have increasingly resorted to foot patrols, albeit on a smaller scale due to the difficult terrain.<sup>32</sup> Consequently, frequent extreme weather conditions may further undermine the protection of civilians, leaving populations more vulnerable to attacks from armed groups.

Historically, the Twic Dinka and the Ngok Dinka coexisted peacefully, but tensions escalated from 2017 after Twic Dinka elites claimed parts of Abyei, including Agok town and the Amiet market.<sup>34</sup> From February 2022, there was a surge in deadly raids and cattle rustling by Twic Dinka militias, with an eventual decrease in violence observed after the

<sup>34</sup> Francis O., 'We don't have protection: The worsening crisis in disputed Abveji', New



signing of an agreement by youth leaders from the two communities in April 2025.<sup>35</sup> The arrival in early 2025 of displaced Nuer from Unity sparked intercommunal tensions with the Misseriya, culminating in a violent clash in Leu, southern Abyei, in March 2025, which resulted in eight fatalities.<sup>36</sup> In some cases, these dynamics have prompted cooperation between the Ngok Dinka and the Misseriya against external militia groups. Furthermore, UNISFA has facilitated dialogues between the Ngok and the Twic Dinka, involving youth leaders and women, which resulted in the signing of an agreement on peaceful coexistence.<sup>37</sup>

The presence in Abyei of the Sudanese paramilitary Rapid Support Forces (RSF)—one side in the Sudanese civil war—and South Sudanese security forces is also of growing concern.<sup>38</sup> For example, the continued presence of the RSF in northern Abyei, along with reported links to the Misseriya, may heighten intercommunal tensions with the Ngok Dinka over pastureland. Meanwhile, the increased presence of South Sudan's SSPDF and NPS has contributed to heightened tensions and violent clashes with the Twic Dinka.<sup>39</sup> Arms proliferation has also enabled individuals and households to acquire and carry weapons for self-protection.<sup>40</sup>

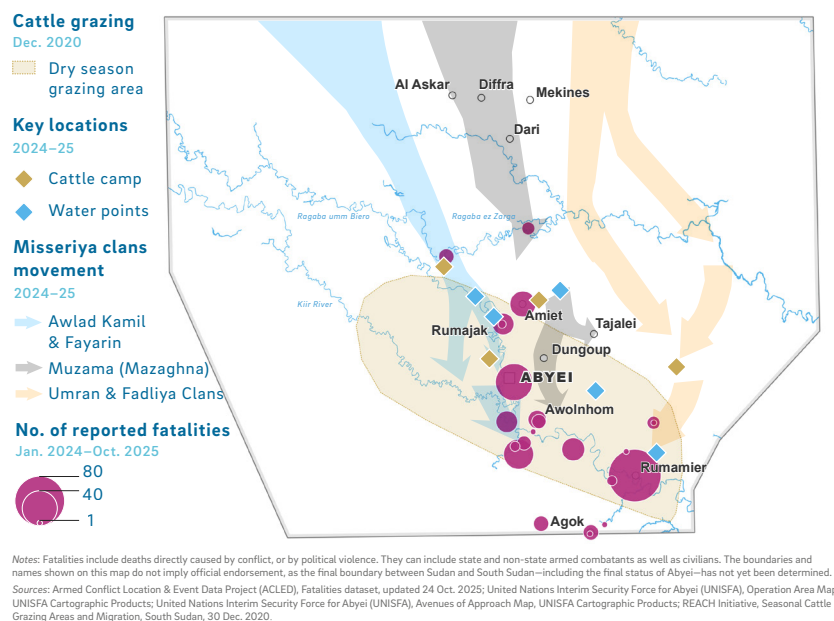
The UN Security Council should ensure that UNISFA is adequately supported with capabilities, especially in the areas of analysis of climate-related security risks and mobility during both rainy and dry seasons. This is necessary to allow it to effectively and safely fulfil its core mandated tasks, such as the protection of civilians, in a more variable and extreme operating environment.

### Political and economic grievances

Despite South Sudan gaining independence in 2011, the referendum on Abyei's status, which was originally scheduled to take place at that time, has not been held due to disputes over voter eligibility and the competing interests of Sudan and South Sudan.<sup>41</sup> Political uncertainty in South Sudan and ongoing war in Sudan continue to hamper the political process.<sup>42</sup> The stalling political process has exacerbated weaknesses of state authority, rule of law and dispute-resolution mechanisms. Many of the root problems in Abyei are essentially political, linked to land claims and ownership and the lack of a credible political process. Such a process—in place of a primary emphasis on military means—is needed to address the political drivers of conflict.<sup>43</sup>

Contestation over territorial boundaries has limited development assistance, which has left humanitarian aid as a primary lifeline for much of the population of Abyei.<sup>44</sup> However, while humanitarian needs are growing, donors are cutting funding. Intercommunal violence and political uncertainty have, in turn, made aid organizations reluctant to

**Figure 3. Cattle grazing, movement corridors and reported fatalities in Abyei**



invest in or move staff into an area characterized by increasing risks and insecurity.<sup>45</sup>

In many contexts, powerful elites exploit climate- and weather-related crises to consolidate their interests and fuel conflict, often deepening the vulnerabilities of marginalized groups.<sup>46</sup> In the case of Abyei, inadequate adaptation interventions risk further undermining the local economy and livelihoods, potentially aggravating grievances that could be leveraged in similar ways. Although the Ngok Dinka and the Twic Dinka share strong historical ties, tensions between them have been fuelled by rising economic disparities, particularly between resource-rich Abyei and the declining fortunes of Twic County, South Sudan.<sup>47</sup> Political elites from both groups have reportedly mobilized disenfranchised youth around these grievances, mirroring broader patterns in which elite competition and exploitation fuel communal violence.<sup>48</sup>

Given the limited state authority in Abyei and the increasing impact of climate-related shocks on livelihoods, mobility and local tensions, it is essential to strengthen UNISFA's capacity and ability to analyse and anticipate climate-related security risks. This capacity can be enhanced through support from climate, peace and security advisors and cooperation with the UN Climate Security Mechanism, the UN Mission in South Sudan (UNMISS), the Office of the Special Envoy for the Horn of Africa (OSE-HOA) and other relevant UN bodies to enable regular analysis, early warning and joint programming.

Humanitarian, 3 Mar. 2025.

<sup>35</sup> United Nations, S/2025/518 (note 16).

<sup>36</sup> United Nations, S/2025/269 (note 12), para. 13.

<sup>37</sup> United Nations, S/2025/269 (note 12), para. 27.

<sup>38</sup> United Nations, S/2025/269 (note 12); and UN Interim Security Force for Abyei (UNISFA), Interviews with authors, 17 Sep. 2025.

<sup>39</sup> United Nations, S/2025/269 (note 12), paras 16–17.

<sup>40</sup> Juba-appointed authority in Abyei, Interview with authors, 16 Sep. 2025.

<sup>41</sup> United Nations, S/2025/518 (note 16); Francis (note 34); and Craze (note 8).

<sup>42</sup> United Nations, S/2025/269 (note 12).

<sup>43</sup> Yaw Tchie and Edu-Affdul (note 33).

<sup>44</sup> Francis (note 34).

<sup>45</sup> UN Development Programme Sudan (note 9).

<sup>46</sup> Tarif, K. et al., 'Insights on climate, peace and security', Climate, Peace and Security Research Paper, NUPI and SIPRI, Dec. 2023; and van Baalen, S. and Mobjörk, M., 'Climate change and violent conflict in East Africa: Integrating qualitative and quantitative research to probe the mechanisms', *International Studies Review*, vol. 20, no. 4 (Dec. 2018).

<sup>47</sup> Francis (note 34).

<sup>48</sup> Francis (note 34).