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Climate, Peace and Security Research Paper

Insights on Climate, Peace and Security

NUPI

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Climate change is transforming and redefining the global security and development landscape. United Nations member states are increasingly acknowledging that the impacts of climate change have implications for international peace and security. The growing recognition of this link has been reflected by the UN Security Council adopting over 70 related resolutions and presidential statements since 2017.[1]

Since 2021 the Norwegian Institute of International Affairs (NUPI) and the Stockholm International Peace Research Institute (SIPRI) have analysed the links between climate, peace and security in countries and regions on the agenda of the UN Security Council.[2] With support from Norway during its elected membership of the UN Security Council in 2021–22, NUPI and SIPRI jointly published 11 Climate, Peace and Security Fact Sheets covering Afghanistan, the Central African Republic (CAR), Colombia, Ethiopia, Iraq, Mali, the Sahel region, Somalia, South Sudan and Sudan.[3] These fact sheets build on an analysis of four pathways from climate change to conflict that were identified in the context of East Africa; and supplement research on South and South East Asia, West Africa, and the Middle East and North Africa.[4] The relationships between climate change and conflict have been studied in numerous other empirical studies and literature reviews with complementary findings.[5]

This paper outlines how climate change can affect peace and security (section I) and how climate change interacts with social, economic and political vulnerabilities in the countries covered by the Climate, Peace and Security Fact Sheets (section II). The paper then synthesizes (section III) four key findings from the fact sheet series: (a) livelihood security is important, if not crucial, to the ways in which climate change influences conflict risk; (b) the impacts of climate change in one location can increase security risks in other locations; (c) the impacts of climate change interact with local vulnerabilities in ways that can create new security risks and exacerbate existing risks, such as conflict; and (d) conflict is not an inevitable consequence of climate change, but can be a response to its effects.[6] This paper concludes with recommendations for how the UN Security Council shapes policies to address the complex challenges arising from climate change (section IV).

SUMMARY

▶ Climate change is having alarming effects on societies and ecosystems. There is also growing evidence of its impacts on peace and conflict, which is reflected in discussions in the United Nations Security Council. The Norwegian Institute of International Affairs (NUPI) and the Stockholm International Peace Research Institute (SIPRI) have analysed the links between climate, peace and security in countries and regions on the agenda of the UN Security Council in a series of Climate, Peace and Security Fact Sheets. This paper synthesizes four key findings from the fact sheet series: (a) the centrality of livelihood to climate-related security risks; (b) the way in which climate change in one location can lead to insecurity risks in another; (c) how climate change interacts with new and existing conflict risks; and (d) conflict as a societal response to climate change. The paper concludes with recommendations for how the UN Security Council shapes policies for addressing the complex challenges arising from climate change.

RECOMMENDED ACTIONS:

▶ **Replicate the specialized advisor role in more countries**

To support information-sharing, mainstreaming and coordination across the United Nations system, the UN Security Council should replicate and adequately resource positions for specialized advisors on climate, environment and security in UN missions that are vulnerable to climate change.

▶ **Develop regional climate security hubs**

The UN Security Council should enable better information-sharing on climate-related security risks, and coordination of policies and programmes in transboundary areas, through the development of regional climate security hubs.

▶ **Ensure policies are coherent**

To ensure longer-term sustainability, UN special political missions can play a key role in connecting UN policy and programming to national political processes. National adaptation plans should be used to advance national-level analyses and responses to climate change, peace and security.

▶ **Support just climate action**

UN responses to climate-related security risks should be designed to support just climate change and conflict transitions, in connection with the development of national policies for equitable and climate-resilient management of the environment, agriculture, land and water.

[1] Security Council Report, 'The UN Security Council and climate change: Tracking the agenda after the 2021 veto', Research Report no. 4, 30 Dec. 2022.

[2] NUPI, 'Climate-related peace and security risks (CPSR)', [n.d.]; and SIPRI, 'Climate-related peace and security risks', [n.d.].

[3] See: Afghanistan Climate, Peace and Security Fact Sheet; Central African Republic Climate, Peace and Security Fact Sheet; Colombia Climate, Peace and Security Fact Sheet; Ethiopia Climate, Peace and Security Fact Sheet; Iraq Climate, Peace and Security Fact Sheet; Mali Climate, Peace and Security Fact Sheet; Sahel Climate, Peace and Security Fact Sheet; Somalia Climate, Peace and Security Fact Sheet; South Sudan Climate, Peace and Security Fact Sheet; and Sudan Climate, Peace and Security Fact Sheet.

[4] 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); Krampe, F. and Nordqvist, P., 'Climate change and violence conflict: Sparse evidence from South Asia and South East Asia', SIPRI Insights on Peace and Security no. 2018/4, Sep. 2018; Tarif, K., 'Climate change and violent conflict in West Africa: Assessing the evidence', SIPRI Insights on Peace and Security no. 2022/3, Feb. 2022; and Kim, K. and Garcia, T. F., 'Climate change and violent conflict in the Middle East and North Africa', *International Studies Review*, vol. 25, no. 4 (Dec. 2023).

[5] Koubi, V., 'Climate change and conflict', *Annual Review of Political Science*, vol. 22, no. 1 (2019); von Uexkull, N. and Buhaug, H., 'Security implications of climate change: A decade of scientific progress', *Journal of Peace Research*, vol 58, no. 1 (2021); Gleditsch, N. P., 'Whither the weather? Climate change and conflict', *Journal of Peace Research*, vol. 49, no. 1 (Jan. 2012); and Hsiang, S. M., Meng, K. C. and Cane, M. A., 'Civil conflicts are associated with the global climate', *Nature*, vol. 476 (2011).

[6] The Climate, Peace and Security Fact Sheets are based on a review of academic and grey literature and consultations with government ministries, UN missions and agencies, and with country and regional experts. Complete sources can be found in the relevant fact sheet.
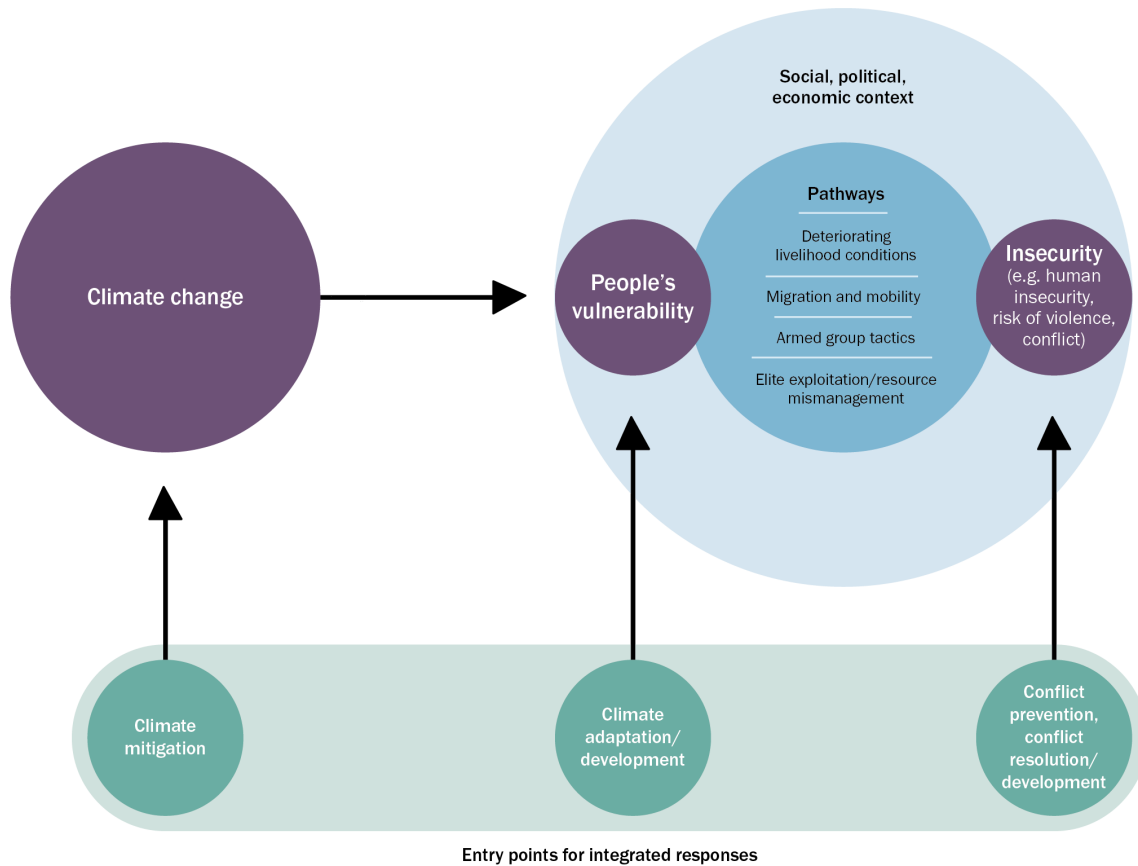
Figure 1. Analytical framework for climate-related security risks

Entry points for integrated responses

Source: SIPRI Climate Change and Risk Programme.

I. Climate, peace and security

Data on the adverse impacts of climate change on societies and ecosystems is growing and is increasingly alarming. The direct effects of climate change range from health risks due to higher temperatures, biodiversity loss, changing seasonal rainfall and disruptions to food and freshwater to proliferating extreme weather events that destroy lives, homes, habitats and infrastructure.[7]

There is also growing evidence of the indirect effects of climate change on peace and conflict. To map these relationships, NUPI and SIPRI use an analytical framework that examines how exposure to the effects of climate change interacts with existing vulnerabilities to increase the risk of insecurity, including conflict (see figure 1). The framework shows that, in situations where no resilient livelihood alternatives are available and where social systems and governance mechanisms are weak, the effects of climate change can exacerbate vulnerabilities, like poverty and inequality, and fuel grievances. In this way, the effects of climate change can indirectly increase the risk of insecurity, including protests and riots, and local- and national-level violent conflicts.[8] In turn, this insecurity further increases people's vulnerability to the effects of climate change

and undermines their adaptive capacities. Climate change can thus also limit the scope for keeping, making and building peace.

Climate-related security risks are therefore context-specific and are mediated by social, economic and political conditions. This also means that the risks are not inevitable but are significantly shaped by human actions. This offers institutions opportunities for managing climate-related security risks.[9]

One of the challenges for policymakers and practitioners in the UN system has been to identify entry points for managing the adverse effects of climate change on peace and security.[10] Another has been to prepare for and respond to the humanitarian consequences of increasingly severe extreme weather events.[11] At the same time, the UN must look for ways to enhance cooperation and build social cohesion and resilience within fragile, conflict-affected and post-conflict contexts.[12] Actions to address the effects of climate change can produce unintended side effects, but cooperation around climate action can also contribute to peacebuilding, and peacebuilding initiatives can strengthen the capacity of communities to adapt to climate change.[13]

[7] Pörtner, H.-O. et al. (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the 6th Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge University Press: Cambridge, 2022).

[8] Mobjörk, M., Krampe, F. and Tarif, K., 'Pathways of climate insecurity: Guidance for policymakers', SIPRI Policy Brief, Nov. 2020.

[9] Mobjörk, M. et al., *Climate-related Security Risks: Towards an Integrated Approach* (SIPRI: Stockholm, Oct. 2016).
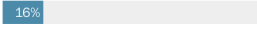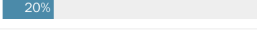
[10] See Gaston, E. et al., 'Climate-security and peacebuilding thematic review', United Nations University, Centre for Policy Research, Apr. 2023; and UN Development Programme (UNDP), 'The climate security nexus and the prevention of violent extremism: Working at the intersection of major development challenges', UNDP Policy Brief, Oct. 2020.

[11] See UN Office for the Coordination of Humanitarian Affairs (OCHA), *Global Humanitarian Overview 2022* (UN OCHA: Geneva, 2022).

[12] See Kron, A. et al, 'Addressing climate-related security risks: Conflict sensitivity for climate change adaptation and sustainable livelihoods—Guidance note', UN Environment Programme (UNEP), 2022; Reda, D. et al., 'Climate finance for sustaining peace: Making climate finance work for conflict-affected and fragile contexts', UNDP, 2021; and Halle, S. et al., 'Gender, climate and secur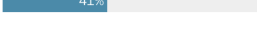ity: Sustaining inclusive peace on the frontlines of climate change', UNEP, UN Women, UNDP and UN Department of Political and Peacebuilding Affairs/Peacebuilding Support Office, June 2020.

[13] Dabelko, G. D. et al., *Navigating a Just and Peaceful Transition: Environment of Peace* (Part 3) (SIPRI: Stockholm, 2022); Hegazi, F. and Seyuba, K., 'The social side of climate change adaptation: Reducing conflict risk', SIPRI Policy Brief, Sep. 2022; Tänzler, D., Rüttinger, L. and Scherer, N., 'Building resilience by linking climate change adaptation, peacebuilding and conflict prevention', Planetary Security Initiative Policy Brief, 2018; and van Schaik, L. et al., 'Making peace with climate adaptation', Background paper, Global Commission on Adaptation and Clingendael, 2019.

Table 1. Comparison of selected human security indicators

Country	ND-GAIN Country Index, 2021 [a]	Global Peace Index, 2021 [b]	Human Development Index, 2021 [c]	Employment in agriculture, 2021 (%) [d]
Afghanistan	32.8/100	3.6/5	0.478	46%
Central African Republic	27.7/100	3.1/5	0.404	69%
Colombia	47.8/100	2.7/5	0.752	16%
Ethiopia	37.5/100	2.6/5	0.498	64%
Iraq	43.0/100	3.3/5	0.528	20%
Mali	34.6/100	2.8/5	0.428	68%
Somalia	33.8/100	3.2/5	–	26%
South Sudan	–	3.4/5	0.385	62%
Sudan	32.8/100	3.0/5	0.508	41%

[a] The Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index captures a country's vulnerability to climate change and other global challenges, and its readiness to improve resilience. The higher the score, the lower the vulnerability and the greater the capacity to improve resilience. Notre Dame Global Adaptation Initiative, 'ND-GAIN Country Index', 2021.

[b] The Global Peace Index measures a country's level of peacefulness. The lower the score, the more peaceful a country is. Institute for Economics and Peace (IEP), *Global Peace Index 2022: Measuring Peace in a Complex World* (IEP: Sydney, June 2022).

[c] The Human Development Index indicates a country's level of human development: the closer the score is to 1, the higher the level of human development. Conceição, P. et al., *Human Development Report 2021/2022: Uncertain Times, Unsettled Lives: Shaping our Future in a Transforming World* (UN Development Programme: New York, 2022).

[d] Percentages are based on a modelled estimate derived from national and inputed data for countries with missing data. There is a high degree of uncertainty in estimates for countries with very limited labour force data. World Bank Data, 'Employment in agriculture (% of total employment)', [n.d.].

II. Climate change and vulnerabilities

Exposure to the effects of climate change is a common trend across the countries studied in the Climate, Peace and Security Fact Sheets. This is manifested in rising temperatures, changing precipitation patterns, and more frequent and intense extreme weather events, such as floods and droughts. Yet, since their climatic zones are diverse, the climate change trends and projections, and their impacts, differ within and between these countries. These variations are compounded by the differing ways in which the effects of climate change interact with existing vulnerabilities and different social, economic and political dynamics, which have consequences for peace and security.

The fact sheets use indicators from the Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index, the Global Peace Index, the Human Development Index and others to provide a snapshot of human security in each country (see table 1). These indicators show that there is significant overlap between vulnerability to the effects of climate change and the presence of conflict and low levels of development. The countries most vulnerable to climate change are fragile and conflict-affected and their ability to adapt to climate change is hampered by insecurity. Furthermore, climate change also compounds existing vulnerabilities, increasing the challenges to addressing these as part of climate change adaptation and peacebuilding efforts.

Research in many of the fact sheets highlights three vulnerabilities that exacerbate the effects of climate change. These include the predominance of primary sector economies and high levels of employment in agriculture; marginalization and inequalities; and volatile political and security contexts.[14] These are explored in more detail in the following subsections.

Primary sector economies

In many of the countries analysed in the fact sheets, vulnerability to climate change is influenced by high levels of employment in agriculture and limited livelihood alternatives, as well as the predominance of primary sector economies. Agro-pastoralism is a critical economic sector in CAR, Ethiopia, Mali, Somalia and South Sudan. In Colombia, Iraq and Sudan, dependence on the extraction of natural resources (e.g. fossil fuels, minerals and water-intensive cash crops) can also be a source of vulnerability in the context of climate change and the green energy transition.[15]

The studied countries also rely heavily on imported commodities and are therefore sensitive to fluctuations in global prices, which increases the risk of economic hardship and food insecurity. Economic diversification and climate-resilient national and local economies are key to the global transition away from fossil fuel reliance, but these challenging processes are significantly hampered by weak state institutions, political instability and conflict.

Marginalization and inequalities

Social, political and economic inequalities in the studied countries also shape different climate vulnerabilities in individuals and groups. Minority groups face discrimination and can be excluded from political decision making, rural–urban divides accentuate poverty, and legislation on access to and use of natural resources, particularly land, sometimes leads to the exclusion of some groups and is a source of tension between resource users.[16] Tension and exclusion may also arise from lack of or partial implementation of legislation around access to and use of natural resources, as well as lack of access to justice.[17]

The fact sheets find that religious, ethnic and clan minorities can be more vulnerable to the effects of climate change, as can certain livelihood groups, such as migratory pastoralists in the Sahel. Excluding minorities from decision making around climate change mitigation and adaptation increases the risk that these processes do harm to already vulnerable groups.[18] Furthermore, the effects of climate change can accentuate this marginalization.

Across all of the countries studied in the fact sheets, gender is found to play a significant role in climate vulnerability. Gender inequality and discrimination result in restricted access to education and job markets and in limited mobility and rights to own property and land. Climate change also affects the sustainability and productivity of traditionally female-led activities and increases domestic workloads for women and girls (e.g. in the extra time taken collecting water and firewood).[19]

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[14] Moran, A. et al., *The Intersection of Global Fragility and Climate Risks* (US Agency for International Development: Washington, DC, Sep. 2018).

[15] Dabelko et al. (note 13).

[16] See e.g. the Climate, Peace and Security Fact Sheet on Mali (note 3).

[17] See e.g. the Climate, Peace and Security Fact Sheet on Ethiopia (note 3).

[18] Dabelko et al. (note 13).

[19] McOmber, C., *Women and Climate Change in the Sahel*, West African Papers no. 27 (Organisation for Economic Co-operation and Development: Paris, Mar. 2020).

Figure 2. Transhumance, mobility and migration patterns in the Sahel and Central Africa
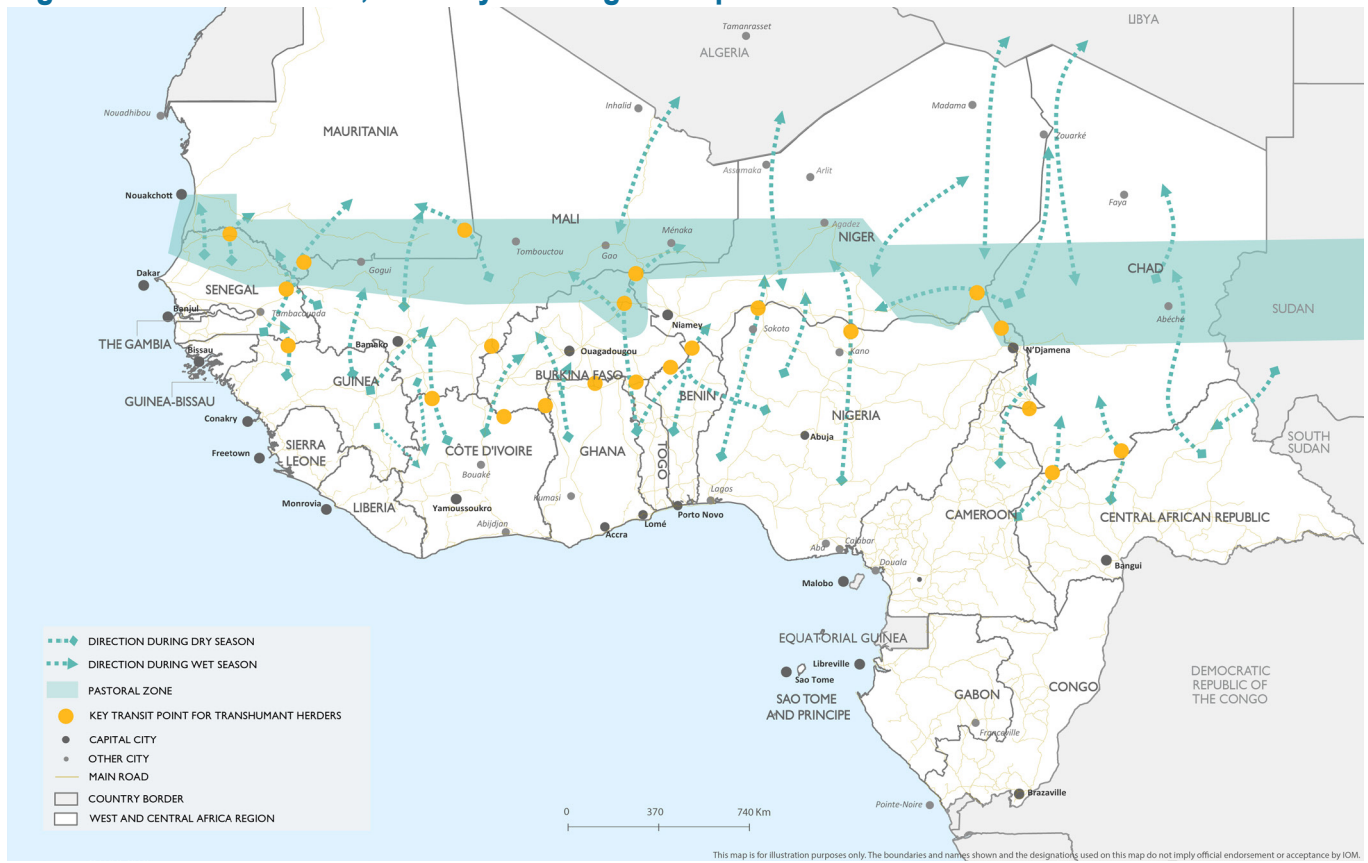
Source: 'West and Central Africa—Regional mobility mapping (June 2023)', International Organization for Migration, DTM and RDH, Aug. 2023.

Political tensions and armed conflict

Vulnerability to climate change is also exacerbated by volatile politics and armed conflict, which weaken national and local institutions and undermine capacities to assess, plan and adapt to climate change. Protracted conflict leads to greater displacement, which undermines individual and household coping capacities and increases the flow of small arms and the potential for tensions to become violent.

All of the countries studied in the fact sheets are in the midst of or have recently experienced significant armed conflicts that have placed them on the agenda of the UN Security Council. Their contexts are diverse and dynamic. Ethiopia, Mali and Somalia continue to experience violent national conflicts and high levels of community violence; inter-communal violence also affects other Sahel countries. In CAR, Colombia and South Sudan, national peace agreements have been reached between some conflict parties, but levels of violence continue to be high. Sudan's fragile peace has disintegrated into a deep political crisis and conflict between state actors. The military defeat of the Islamic State group has brought a tenuous peace to Iraq, but political tensions remain high and often manifest in nationwide protest movements. In Afghanistan, the Taliban's 2021 victory drastically reduced conflict incidents but led to major setbacks in women's rights, and the resulting diplomatic standoff between the new government and the international community has increased vulnerabilities.

III. Four findings on climate, peace and security

While the above shows that climate change vulnerability plays an important role in the relationships between the effects of climate change and peace and security, the impacts on peace and security are context-specific and mediated by social, economic and political conditions on the ground. This also means that the risks are not inevitable but are shaped by human actions. This offers opportunities for preventing the worst outcomes and potentially contributing to peace. The analytical framework that examines climate change exposure, vulnerability and risks (figure 1) can support the identification of entry points to intervene

in this chain of events, to build resilience to the effects of climate change and to prevent conflict.[20] However, the context-specific nature of the relationship between climate change and peace and security can make it challenging to provide overarching lessons across countries and regions that are on the agenda of the UN Security Council.

To contribute to addressing this need for global perspectives, the following subsections synthesize four key findings from across the Climate, Peace and Security Fact Sheet countries. These relate to the centrality of livelihoods to climate-related security risks; the way in which climate change in one location can lead to insecurity risks in another; how climate change interacts with new and existing conflict risks; and conflict as a societal response to climate change.

Livelihoods are central to climate-related security risks

In all of the countries and regions studied in the fact sheets, livelihood deterioration stands out as an important pathway in which the impacts of climate change contribute to the risk of conflict. The impacts of climate change negatively affect livelihoods by diminishing agricultural and pastoral outputs and distorting access to natural resources, such as water and land. In concert with other socio-economic and political factors, the fact sheets show in many cases trends of increasing human insecurity and food insecurity coincide with livelihood deterioration. While existing vulnerabilities vary across the countries studied, the importance of protracted conflict, which compounds the impacts of climate change and environmental degradation, and the importance of water and land policies are frequently cited.

Research from Ethiopia, Somalia, Sudan and the Sahel provides evidence of the links between, on the one hand, the negative impacts of climate change on livelihoods and, on the other, increased conflict risk.[21] In addition, the fact sheet on Iraq links deteriorating livelihoods to increasing tensions between communities and a source of grievances leading to protest, while the fact sheet on Afghanistan links it to increased competition over resources.[22] The most common type of conflict risk linked to increased livelihood insecurity is among farmers and herders over

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[20] Mobjörk et al. (note 9).
[21] See the Climate, Peace and Security Fact Sheets on Ethiopia, Mali, Somalia, Sudan and the Sahel (note 3).
[22] See the Climate, Peace and Security Fact Sheets on Iraq and Afghanistan (note 3).

access to resources, chiefly grazing and/or agricultural lands and water.[23] In the Sahel, climate change disproportionately affects 50 million people who depend on agriculture and livestock, while livelihood deterioration has increased the risk of farmer–herder conflicts over diminishing resources in the region.[24] In Sudan, water points are hotspots for disputes that can escalate into violent clashes. As increasingly frequent droughts and floods compound livelihood insecurity, farmers and herders may be more likely to use violence to protect their existing resources or to secure new resources. Factors such as capacities to manage disputes, legitimacy of rule of law institutions and availability of small arms all play a role in the scale of related violence.[25]

The fact sheets also show that livelihood deterioration is closely intertwined with other climate-related security risks. In all the countries studied, there are cases in which people adapt to and cope with the effects of climate change on their livelihoods through migration and by changing mobility patterns.[26] In CAR, Ethiopia, South Sudan, Sudan and the Sahel, pastoralists alter their mobility patterns to secure their livelihoods in the face of changing seasonal patterns. Such changes in mobility patterns are closely linked to farmer–herder conflicts around access to grazing land and water.

Climate change in one location can lead to security risks in another

Findings from the fact sheets also show that some climate-related security risks are not geographically constrained. Security risks may occur in locations other than where the impacts of climate change are first, or most acutely, felt. Climate-related security risks can have implications beyond national borders because increasing migration and changing pastoral mobility patterns can translate climate impacts in one area into security risks in neighbouring zones.[27] For example, as climate change contributes to changing patterns of transhumance (i.e. the seasonal migration of livestock between pastures) across the Sahel and Central Africa, transhumance into CAR from neighbouring countries and regions is increasing in terms of both the number of animals and the area affected (see figure 2). These altered mobility patterns are contributing to farmer–herder conflicts over land and water in CAR. Thus, although the physical effects of climate change are less severe in CAR than in other parts of the region, the country is still experiencing climate-related security risks because of the impacts of climate change outside its territory.

Climate zones, ecosystems and communities traverse national boundaries. Communities and national authorities need to cooperate to ensure the peaceful and sustainable management of shared resources because of the effects of climate change on natural resources and patterns of cross-border migration. In the countries studied in the fact sheets, weak governance of transboundary regions—such as the Liptako–Gourma region, shared by Burkina Faso, Mali and Niger in the Sahel—is a source of climate vulnerability and a factor contributing to climate-related security risks.[28] Climate impacts on shared water resources and related development and adaptation efforts (such as building of dams in upstream countries) also have the potential to increase tensions within and between countries.[29]

Climate change interacts with new and existing conflict risks

Taken together, the fact sheets indicate that the effects of climate change can interact with context-specific vulnerabilities to create new security risks and to exacerbate existing security risks such as conflict. This reflects findings from earlier research: a deterioration of livelihood conditions and increasing and changing migration can trigger conflicts, but armed actors can also act on the opportunities created by the effects of climate change.[30]

There is evidence from the countries covered by the fact sheets that climate change can play a role in exacerbating conflicts. However as

conflict dynamics are complex and mutable, it is hard to draw a clear distinction between a new conflict and escalation of an existing conflict. Existing conflict dynamics also shape vulnerability to climate change because they influence the capacities of countries, communities and individuals to cope and adapt. For example, in the Sahel and South Sudan, protracted conflicts have increased militarization in society, and local militias and armed pastoralists have proliferated. In South Sudan, a long-standing practice of livestock raiding in times of livelihood or economic stress has become more deadly and more likely to escalate into inter-communal conflict as a result of a proliferation of heavily armed community militias, linked to the ongoing armed conflict.[31]

The relationship between the effects of climate change and the exacerbation of existing conflict is particularly evident in findings related to the role and behaviours of armed actors. The fact sheets highlight how armed groups use the deterioration of livelihoods connected to climate change to recruit new members.[32] In rural Colombia, recruitment into armed groups can offer a financial lifeline when viable alternative livelihoods are not available. Findings from the fact sheets on Iraq and Somalia suggest that displaced people are especially vulnerable to exploitation and recruitment by armed groups because of social and economic marginalization and inadequate access to services and income sources.[33]

The effects of climate change on local ecosystems, economies and livelihoods can also provide armed actors with opportunities to build legitimacy in communities by providing services that the state fails to provide. The fact sheets cite numerous examples where armed groups have provided mediation and dispute resolution in natural resource conflicts. For example, in parts of Mali where government presence is weak, armed groups act as governance intermediaries, offer protection and assistance to farmers and herders, and establish guidelines for seasonal livestock migration. Comparable examples were found in Afghanistan and in CAR and parts of the Sahel, where local governments are unwilling or unable to act on natural resource disputes, or where government policies have contributed to the marginalization of some groups from access to land and water, for example.[34] Findings from across the fact sheet series highlight the critical role weak justice provision played in the exacerbation of land and water conflict. In the absence of effective judicial authorities, communities turn to tribunals established by non-state armed groups—a phenomenon known as 'forum shopping'. The fact sheets reveal how, in this way, local natural resource disputes can become enmeshed with and exacerbated by broader conflicts.

Conflict is a societal response to climate change

Findings from the fact sheets also emphasize the power of human agency in climate-related security risks. They show that conflict is not an inevitable consequence of climate change but rather a product of societal responses to its impacts. Where the above findings highlight the role of livelihood security, changing mobility and conflicts in the countries studied, the focus here is on the role of governance in addressing climate-related security risks and building resilience and peace at local, national and regional levels.

Research from the fact sheets shows that political mismanagement and weak governance play a key role in creating conditions in which the impacts of climate change can have a detrimental impact on livelihoods and increase the risk of local conflict around natural resources. Local and national institutions, both formal and informal, have all been weakened by protracted conflict in the studied countries and regions. In many cases, unsustainable policies on water and agriculture have led to environmental degradation that increases people's climate vulnerability.[35] In others, conflict has led to the weakening of infrastructure and of traditional institutions that support communities' access to renewable natural resources such as water.[36]

[23] See the Climate, Peace and Security Fact Sheets on Ethiopia, Mali, Somalia, Sudan and the Sahel (note 3).
[24] See the Climate, Peace and Security Fact Sheet on the Sahel (note 3).
[25] See the Climate, Peace and Security Fact Sheet on Sudan (note 3).
[26] McLeman, R., 'International migration and climate adaptation in an era of hardening borders', *Nature Climate Change*, vol. 9, no. 12 (Dec. 2019).
[27] See the Climate, Peace and Security Fact Sheet on CAR (note 3).
[28] See the Climate, Peace and Security Fact Sheet on the Sahel (note 3).
[29] See the Climate, Peace and Security Fact Sheets on Iraq (note 3).
[30] van Baalen and Mobjörk (note 4).

[31] See e.g. the Climate, Peace and Security Fact Sheet on South Sudan (note 3).
[32] See the Climate, Peace and Security Fact Sheets on Afghanistan, Colombia, Ethiopia, Mali, Iraq and the Sahel (note 3).
[33] See the Climate, Peace and Security Fact Sheets on Iraq and Somalia (note 3).
[34] See the Climate, Peace and Security Fact Sheets on Afghanistan, Mali, South Sudan and Sudan (note 3).
[35] See e.g. the Climate, Peace and Security Fact Sheet on Sudan (note 3).
[36] See e.g. the Climate, Peace and Security Fact Sheets on Afghanistan and Somalia (note 3).

Rent-seeking behaviour can also create grievances about illegitimate and corrupt governance structures. Findings from the fact sheets highlight the important role played in creating the conditions for conflicts by policies on agriculture, land and water that are perceived to entrench inequalities and enrich selective elites.[37] Government policies and the protection of local authorities in the Sahel are perceived to benefit sedentary farmers more than mobile herders, which leads to grievances towards farmers and the state. At the same time agriculture policies that incentivize large-scale mechanized farming and irrigation can also contribute to environmental degradation and limit herders' access to natural resources.[38] In Iraq, corruption and divided government institutions have hampered investment in critical water infrastructure to address vulnerabilities to the effects of climate change.[39] Weak and/or divisive governance can therefore contribute to heightening inter-communal tensions and the risk of conflict.

IV. Recommendations for the United Nations

The Climate, Peace and Security Fact Sheets have generated knowledge and analysis on selected countries and regions on the agenda of the UN Security Council. The fact sheets have systematically examined how exposure to climate change interacts with existing vulnerabilities to increase the risk of insecurity, including conflict. Four key research findings emerge from these fact sheets that relate to the centrality of livelihoods to climate-related security risks; the way in which climate change in one location can lead to insecurity risks in another; how climate change interacts with new and existing conflict risks; and conflict as a societal response to climate change.

The findings show that the interplay of climate change and peace and security transcends borders and permeates the diverse contexts on the UN Security Council's agenda. The findings also underscore that climate-related security risks are dynamic and influence peace and security landscapes in multifaceted ways. The context-specific nature of the relationship between climate change and peace and security can make it challenging to provide overarching lessons across the countries and regions that are on the agenda of the UN Security Council. However, the fact sheet findings point to four recommendations for how the UN Security Council shapes policies that address the complex challenges arising from climate change. The four recommendations that emerge from this analysis are laid out here.

Replicate the specialized advisor role in more countries

First, livelihood security is one of the primary ways in which climate change interacts with peace and security. Climate change adaptation programmes can support economic diversification and the adoption of climate-smart livelihood strategies and technologies, but they also carry conflict risks; therefore, climate change adaptation is key to building resilience to tensions and conflict in countries where climate vulnerable livelihoods and economies predominate. For adaptation to take a conflict-sensitive approach, it must also take into account the ways in which programming can create new tensions or exacerbate existing ones.

Currently, the capacity of UN missions to address this link is hampered by its traditional, siloed approach, which addresses climate change on the one hand, and peace and security on the other. In countries where specialized advisors have been deployed to work on climate, environment and security—for example in the UN Mission in South Sudan (UNMISS) and the UN Assistance Mission in Somalia (UNSOM)—there is greater capacity for information-sharing, mainstreaming and coordination across the UN system. The UN Security Council should replicate and adequately resource similar positions in other UN missions in countries that are vulnerable to climate change.

Develop regional climate security hubs

Second, since the effects of climate change are not geographically constrained, they can impact peace and security in neighbouring areas, including areas that are ostensibly less vulnerable. UN programming in areas that are less vulnerable to climate change and less affected by insecurity does not always take into account the potential for adverse ripple effects. In countries, for example, with strong rural–urban divides or long-standing transhumance practices, there is a pressing need for policies and programmes that reflect the interconnectedness of climate-related security risks. This poses a significant challenge to UN missions with national mandates and points to an important role for missions with a regional mandate, such as the UN Office for West Africa and the Sahel (UNOWAS), in advancing regional and international approaches to addressing climate change and its effects on peace and security. The UN Security Council has acknowledged the importance of climate-related security risks in transboundary areas such as Lake Chad, but it could also enable better information-sharing and coordination of policies and programmes through the development of regional climate security hubs.[40] The core mandate for such hubs should be to divert the potential spillover effects of climate-related security risks in fragile and conflict-affect transboundary regions.

Ensure policies are coherent

Third, climate change interacts with local social, economic and political vulnerabilities and can lead to new and exacerbated security risks, including conflicts. This poses a challenge to the UN and its work across the humanitarian–development–peacebuilding nexus and requires policy coherence across programmes and specialized agencies to address the immediate consequences of climate change as well as underlying, context-specific, social, political and economic vulnerabilities. UN special political missions can play a key role in connecting these needs to political processes and government policies to ensure longer-term sustainability. National adaptation plans—in which countries identify priority activities to adapt to climate change—could be used by the UN to advance national-level analyses and responses to climate change, peace and security. In the fragile and conflict-affected contexts on the agenda of the UN Security Council, the UN can also support the identification of existing factors of resilience, which can be built upon to reduce climate-related security risks and contribute to longer-term peace.

Support just climate action

Fourth, conflict is not an inevitable consequence of climate change but rather a product of societal responses to its impacts. This finding means that political models and good governance are crucial for addressing climate, peace and security. Given the findings highlighted above, UN responses to climate-related security risks should be designed to support just climate change and conflict transitions, in connection with the development of national policies for managing the environment, agriculture, land and water in ways that seek to reduce inequalities and related conflict risks, and promote climate resilience and related peacebuilding opportunities. Human rights-based approaches can support the UN system to advance these goals at the national level, and the UN Security Council can mandate missions to more effectively address the challenges and opportunities of climate change adaptation in national political and peace processes. UN Security Council resolutions can also advance reporting on the distinct vulnerabilities of marginalized groups, including women and girls, in countries on its agenda, thereby facilitating responses that address differentiated climate change vulnerabilities and enhance inclusivity.[41]

Conclusions

The relationships between climate change, peace and security are multifaceted, and responding to the engendered risks requires comprehensive responses from the UN system. The insights garnered from the analysis of the Climate, Peace and Security Fact Sheets can contribute to crafting policy strategies that foster existing sources of resilience and adaptive capacities and that mitigate conflict risks and enhance opportunities to build peace. In addition to sustainable development, climate resilient development can be prioritized in fragile and highly vulnerable countries. The UN Security Council and UN member states should continue to collectively integrate these lessons into policies that navigate an evolving international landscape and seize on opportunities to forge more secure futures.

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[37] See e.g. the Climate, Peace and Security Fact Sheets on Afghanistan, Colombia and the Sahel (note 3).
[38] See the Climate, Peace and Security Fact Sheet on the Sahel (note 3).
[39] See e.g. the Climate, Peace and Security Fact Sheets on Iraq (note 3).

[40] United Nations Security Council Res 2349 (2017), UN Doc S/RES/2349, 31 Mar. 2017.
[41] See for example Article 3, paragraph b of the UNMISS mandate: United Nations Security Council Res 2677 (2023), UN Doc S/RES/2677, 15 Mar. 2023.

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