

Scientific Evidence Supports UN Security Council Engagement with Climate Change

Sixteen years after the first United Nations Security Council debate on climate change and security, there is still no agreement on how the Council should engage with the issue. A major reason for the stalemate is enduring claims by a minority of Council members that there is little scientific foundation for connecting climate change with security concerns. Countering this view, we show that the scientific literature offers ample evidence that climate change can constitute a real threat to international peace and security. Establishing a shared understanding of the state of science would be an important step in facilitating an explicit climate security agenda in the Security Council.

Brief Points

- The Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) offers an unparalleled synthesis of scientific evidence on climate-conflict connections.
- AR6 concludes that climate hazards contribute to conflict risk, and conflict contributes to climate change vulnerability.
- Although the average climate effect on conflict is judged to be modest at present, climate change is expected to become a more prominent driver of conflict in the future.
- Concerted actions to mitigate and adapt to climate change can be beneficial for peace and security.
- Poorly managed responses to climate change can accentuate security risks.

Halvard Buhaug
Cedric de Coning
Nina von Uexkull

Peace Research Institute Oslo (PRIO)
NUPI & ACCORD
Uppsala University & PRIO

Introduction

Climate change is a controversial topic at the United Nations Security Council (UNSC). The Council has adopted over 40 resolutions and presidential statements on the topic, each one addressing various facets of the peace and security implications of climate change. However, a few Council members strongly oppose adding climate change to the Security Council agenda. Russia went so far as to veto a thematic resolution on the security implications of climate change in December 2021. India also voted against, while China abstained. But 12 Council members voted in favor and 113 non-members co-sponsored the resolution—the second highest number of co-sponsors in Security Council history (130 countries supported the 2014 UNSC resolution on the Ebola crisis).

Although motives for opposing the establishment of an explicit ‘climate security agenda’ in the Council vary, one important argument rests on a perception that the scientific evidence for a connection between climate and conflict is limited. For example, letters to Council members circulated by Russia, India, and China ahead of the December 2021 vote claimed that there is “no clear scientific background for equating climate change with security concerns.”¹ Similarly, in an open debate preceding the vote, India stated that “The report of the Intergovernmental Panel on Climate Change clearly states that the effect of climate variability on violence is contested.”² Claims about the lack of evidence are also now being made in the UN Peacebuilding Commission.

Contrary to this perception, we argue that there is compelling scientific evidence that climate change constitutes a risk to peace and security—evidence that clearly speaks to the need for climate-related peace and security risks to be taken into consideration by the UNSC and in the Peacebuilding Commission. To substantiate our position, we highlight five key insights from the recently published Working Group II (WGII) part of the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC). The AR6 offers unparalleled assessments of observed climate change impacts and future risks and is especially relevant in this context, as it is subject to governmental review and approval by 195 UN member states.

Box I. The Climate–Conflict Nexus, 2000–2022

Figure 1 shows the annual number of climate-conflict publications recorded in *Web of Science* (bars) and the timing of nine high-level Security Council debates on climate security (orange lines), 2000–2022. As the figure shows, research on connections between climate and conflict gained considerable momentum during this period. Similarly, most UNSC debates on climate change and security have taken place during the last few years.

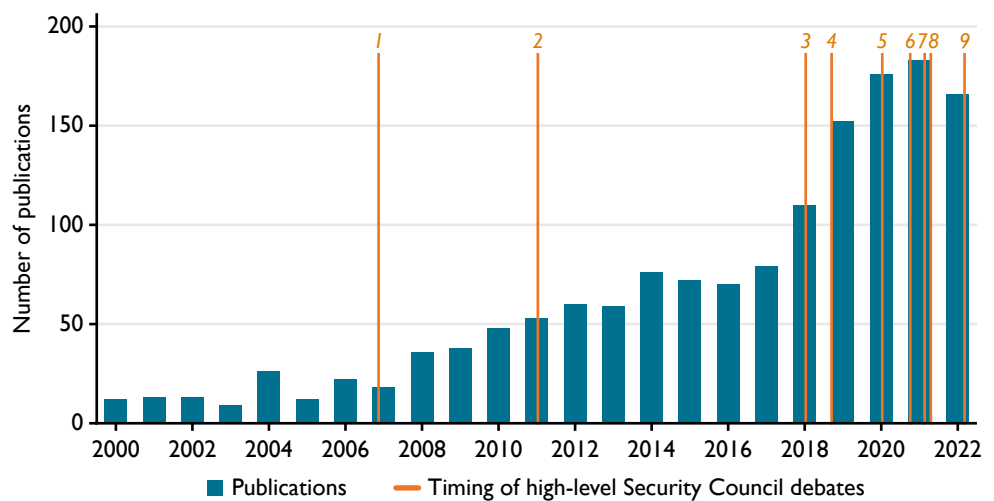


Figure 1: Number of climate-conflict publications and timing of UNSC debates, 2000–2022

The growth in empirical evidence has contributed to gradual convergence of scientific understanding on how climate shapes conflict risk (see, e.g., Mach et al. (2019) and von Uexkull & Buhaug (2021)). In contrast, the increasing meeting frequency of the Security Council has not yet led to the adoption of a UNSC resolution dedicated to security implications of climate change.

Establishing a shared understanding of the state of the scientific evidence would be an important step in reducing tensions and furthering the debate as several newly elected member states have pledged to champion climate security in the Council.³

Five Key Insights from IPCC AR6 on Climate, Peace and Security

1. Climate change contributes to conflict risk.

IPCC AR6 clearly states that climate change-related hazards can have adverse impacts on conflict. For example, the executive summary of Chapter 7 states that “Climate hazards are a [...] contributing factor to violent conflict” and Chapter 9 warns that “There is increasing evidence linking increased temperatures and drought to conflict risk in Africa.” Chapter 18 offers additional details: “climate change undermines human livelihoods and security, because

it increases the populations vulnerabilities [sic], grievances and political tensions through an array of indirect—at times nonlinear—pathways, thereby increasing human insecurity and the risk of violent conflict.”

2. Conflict contributes to climate change risk.

A second key insight concerns how conflict is a major driver of vulnerability to climate change. According to the overarching AR6 Synthesis Report, “Vulnerability is higher in locations with poverty, governance challenges and limited access to basic services and resources, violent conflict and high levels of climate-sensitive livelihoods.” Several underlying chapters make similar observations, including Chapter 8: “Populations of concern, who are extremely vulnerable to climate change impacts with limited capacity to adapt, are those displaced and resettled in the course of conflict or disaster, either internally or across borders.”

3. Climate change will become a more influential conflict driver in the future.

Although the average climate effect on conflict is judged to be modest at present, more devastating extreme events and loss of habitability mean that climate-driven risks will rise in prominence with climate change. This is highlighted in the AR6 WGII Summary for Policymakers: “At higher global warming levels, impacts of weather and climate extremes [...] will increasingly affect violent intrastate conflict.” Likewise, Chapter 16 finds that “Literature concludes with medium confidence that risks to peace will increase with warming, with the largest impacts expected in weather-sensitive communities with low resilience to climate extremes and high prevalence of underlying risk factors.”

4. Climate-conflict interactions will produce increasingly complex risks in the future.

Climate change and associated extreme events are not only expected to produce greater challenges to peace, they will also worsen the humanitarian consequences of ongoing armed conflict. This is another important insight from AR6 elevated to the Synthesis Report: “In addition, multiple climatic and non-climatic risk drivers such as biodiversity loss or violent conflict will interact, resulting in compounding overall risk and risks cascading across sectors and regions.” Chapter 8 further states that “Even with moderate climate change people in vulnerable regions will experience a further erosion of livelihood security that can interact with humanitarian crises, such as [...] violent conflict, and lead to social tipping points.”

5. Climate change responses can be beneficial for peace.

Lastly, AR6 highlights how key international policy frameworks relevant for climate change, such as the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction, can have important favorable effects on peace and security. This is again mentioned in the Synthesis Report: “If achieved, these agreements would reduce climate change, and the impacts on health, wellbeing, migration, and conflict, among others.” Conversely, poorly planned or managed adaptation and mitigation interventions can further accentuate risk, as pointed to in Chapter 8: “Poor institutional responses [to climate change] can directly drive violence, and there is robust evidence

that inequitable responses further exacerbate marginalisation, exclusion or disenfranchisement of some populations, which are commonly recognised drivers of violent conflict.” In other words, actions to adapt to the effects of climate change may also contribute to sustaining peace; and vice versa, peacebuilding initiatives can also strengthen the capacity of communities to adapt to climate change.

Sources of Confusion

Considering the documented evidence connecting climate change, peace and security, what might explain the misinterpretation of the research findings on this topic in the UN Security Council? We believe this may be partly ascribed to the manner in which climate-conflict research is communicated in AR6 and the larger body of scientific literature.

First, studies usually report that a climate effect on conflict is indirect and context-dependent (Figure 2). This does not mean that climate generally is unrelated to conflict risk, but it means that findings cannot always be generalized to other settings. In other words, while climate change does not automatically lead to higher conflict risk, climate change can have a detrimental effect on countries and areas already suffering from other drivers of conflict. Such nuanced messaging may be seen as a barrier to effective decision making. However, this form of indirect and context-specific effect is

not unique to climate-related risks but is a challenge that the Security Council faces every time it considers threats to international peace and security. Indeed, we are unaware of any conflict factor that retains equal relevance and potency across all contexts. Hence, it should not prevent the Security Council from establishing an explicit climate security agenda.

Second, research (including AR6) often concludes that the climate effect on conflict is weak when compared to other major socioeconomic and political drivers. This is an important insight that merits policy attention. However, it should not lead to a conclusion that climate always plays a peripheral role, thereby dismissing it from analysis of security risks. Precisely because of the contextual nature of the climate-conflict relationship, the relative importance of climatic factors in shaping conflict can vary widely, even if the average effect across a large number of conflicts is found to be modest. Climate change is thus not the only factor to consider, but excluding any consideration of climate-related effects on peace and security risks omitting potentially important information in reporting to the Council and from the Council’s subsequent analysis and decisions.

A third potential source of confusion relates to the focus and framing of findings in the AR6 high-level documents compared to the underlying chapters of the report. Only the most important findings are elevated to the Summary for

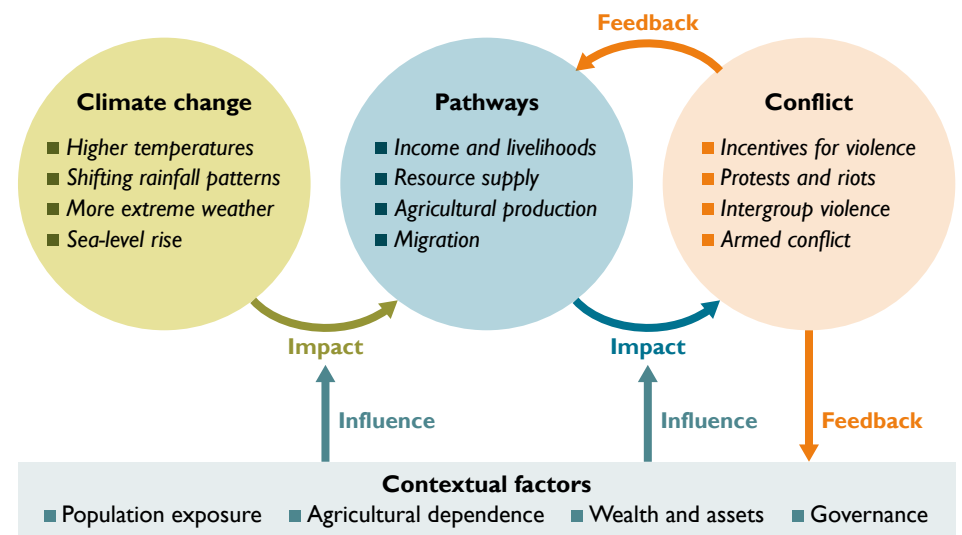


Figure 2: Indirect and context-dependent links between climate change and conflict

Policy Makers and the Synthesis Report, typically those associated with significant climate-related risk for which there is high scientific agreement. Although all five climate-conflict insights discussed above are supported by the Summary for Policy Makers, high-level statements contain a lot of condensed information, often at the expense of clarity. Moreover, both the Synthesis Report and the Summary for Policymakers undergo governmental review and approval, unlike the underlying chapters. This process results in modifications of wording through repeated rounds of negotiations between governments and scientists. Politically salient issues may receive limited coverage if a consensus between stakeholders proves elusive. Accordingly, the clearest and most relevant statements on evidence for climate-conflict links are often found in chapters and not in the condensed, policy-oriented summaries, which receive the most attention by policy and the press.

Concluding Remarks

The ongoing controversy in the UN Security Council, and now increasingly also in the UN Peacebuilding Commission, over whether there is sufficient scientific evidence to link climate change with peace and security risks reflects a misreading of the state of science. The IPCC Sixth Assessment Report, which provides the most comprehensive and rigorous assessment of climate-conflict research to date, concludes that climate change is associated with increased conflict risk, and that conflict is a major driver of vulnerability to climate change. The Report also concludes that the influence of climatic events on conflict risk will increase with further warming, and more severe climate hazards in combination with ongoing conflict will increase the risk of complex emergencies and cascading impacts in the future.

These scientific findings and documented effects demonstrate the need for an explicit climate security agenda. Climate-related peace and security risks should be taken into consideration by those responsible for the maintenance of international peace and security, both when decisions are made by the UN Security Council and in the countries affected by those implementing the Council's resolutions.⁴ ■

Notes

1. Security Council Report (2022) The UN Security Council and Climate Change: Tracking the Agenda after the 2021 Veto, *Research Report*, 4. Available at: www.securitycouncilreport.org/research-reports/the-un-security-council-and-climate-change-tracking-the-agenda-after-the-2021-veto.php.
2. United Nations Meetings Coverage and Press Releases (2021) People, Countries Impacted by Climate Change Also Vulnerable to Terrorist Recruitment, Violence, Speakers Tell Security Council in Open Debate, SC/14728, 9 December. Available at: press.un.org/en/2021/scl4728.doc.htm.
3. United Nations Department of Global Communications (2023) UAE, Malta, Mozambique, and Switzerland make an announcement on Climate, Peace and Security – Security Council Media Stakeout, *UN Web TV*, 21 March. Available at: media.un.org/en/asset/klq/klq1gj5m9.
4. An earlier version of this policy brief was published at *Global Observatory*. See Halvard Buhaug; Cedric de Coning & Nina von Uexkull (2023) Should the Security Council Engage with Implications of Climate Change? Let's Look at the Scientific Evidence, *Global Observatory*, 8 June. Available at: theglobalobservatory.org/2023/06/security-council-climate-change-scientific-evidence.

Further Reading

Beaumont, Paul & Cedric de Coning (2022) Coping with complexity: Toward epistemological pluralism in climate-conflict scholarship. *International Studies Review* 24(4): viac055. DOI: [10.1093/isr/viac055](https://doi.org/10.1093/isr/viac055).

Buhaug, Halvard & Nina von Uexkull (2021) Vicious circles: Violence, vulnerability, and climate change. *Annual Review of Environment and Resources* 46: 545–568. DOI: [10.1146/annurev-environ-012220-014708](https://doi.org/10.1146/annurev-environ-012220-014708).

IPCC (2022) *Climate change 2022: Impacts, adaptation, and vulnerability*. Working Group II contribution to the Sixth Assessment Report. Available at: www.ipcc.ch/report/sixth-assessment-report-working-group-ii.

Mach, Katharine J.; Caroline M. Kraan, W. Neil Adger, Halvard Buhaug, Marshall Burke, James D. Fearon, Christopher B. Field, Cullen S. Hendrix, Jean-Francois Maystadt, John O'Loughlin, Philip Roessler, Jürgen Scheffran, Kenneth A. Schultz & Nina von Uexkull (2019) Climate as a risk factor for armed conflict. *Nature* 571: 193–197. DOI: [10.1038/s41586-019-1300-6](https://doi.org/10.1038/s41586-019-1300-6).

Von Uexkull, Nina & Halvard Buhaug (2021) Security implications of climate change: A decade of scientific progress. *Journal of Peace Research* 58(1): 3–17. DOI: [10.1177/0022343320984210](https://doi.org/10.1177/0022343320984210).

THE AUTHORS

Halvard Buhaug is Research Professor at PRIO and Lead Author in the IPCC AR6.

Cedric de Coning is Research Professor at NUPI and Senior Advisor at ACCORD.

Nina von Uexkull is Associate Professor at Uppsala University and Associate Senior Researcher at PRIO.

THE PROJECT

This policy brief is related to the PRIO-based POLIMPACT project, which analyzes observed and projected climate-related risks to societies. POLIMPACT is funded by the European Union through European Research Council grant no. 101055133 (2022–2027). Views and opinions expressed here are those of the authors only and do not necessarily reflect those of the EU or ERC.

PRIO

The Peace Research Institute Oslo (PRIO) is a non-profit peace research institute (established in 1959) whose overarching purpose is to conduct research on the conditions for peaceful relations between states, groups and people. The institute is independent, international and interdisciplinary, and explores issues related to all facets of peace and conflict.