

Climate and conflict: Why do we need to better understand how combined climate risk and conflict situations exacerbate people's vulnerability?

A research agenda

Climate disruption affects – and will increasingly affect – populations across the globe. Increasing climate risks (trends and shocks) threaten lives, exacerbate existing vulnerabilities and inequalities, and accentuate societal fragility. Environmental degradation further worsens these impacts. Climate risks are even more acute in situations of armed conflict and violence as several conflict-affected countries are located in regions that are severely impacted, but also because people, systems and institutions tend to be less resilient to shocks in such settings.¹ This is especially true in situations of protracted conflicts – which have become the norm.² Long-lasting conflicts progressively weaken the resilience of all societal components, calling for urgent action to further understand and reduce the impacts of climate risks in conflict areas.

A large majority of countries considered most vulnerable to the impact of climate change by the ND-Gain Index are in Africa and include several conflict-affected countries, such as Somalia, Ethiopia, the Democratic Republic of Congo, Niger, Chad or Mali.³ Within those countries, vulnerable people are and will continue to be disproportionately affected by food insecurity, higher food prices, income losses, loss of livelihood opportunities, health impacts and displacement.⁴ People will keep trying to cope and adapt to a degraded environment, growing risks of floods, droughts, extreme heat and poverty through searching for new livelihood strategies, changing their lifestyle or moving away from their homes.

Climate, security and vulnerability

In recent years, there has been growing concern about climate change as a security risk with warnings that a changing climate could provoke a succession of wars.⁵ For now, scientists generally agree that climate change does not *directly* cause armed conflict, but can *indirectly* increase the risk of conflict by exacerbating factors that can, in a complex interplay, ultimately lead to conflict. Such factors include tensions over the management of resources, social exclusion, a history of conflict and grievances, economic and environmental risks and degradation.⁶

Climate change is also described as a vector or multiplier of vulnerability. People, communities and States affected by armed conflict are particularly vulnerable to climate disruption because conflict limits their capacity to cope with shocks and changes. This is in part because conflicts harm assets required to manage shocks and facilitate adaptation to climate change, such as infrastructure, markets, institutions, social capital, and livelihoods. In certain cases, it also undermines the capacity for collective action, which can be critical to adaptation (e.g. to manage resources in agreed ways).⁷

This calls for a refined understanding of the humanitarian impacts of climate change -- the combination of climate shocks and stresses within the extreme of conflict affected communities, as well as the challenges conflict poses to the approaches to help these communities adapt to a changing climate -- in contexts where States often struggle to build the resilience of communities and institutions. The following table highlights several research questions that we all consider of high priority, as furthering our understanding of climate impacts and how to factor in immediate and longer-term climate risk into humanitarian responses to ensure that they have a sustainable impact is urgent.

¹ IMF 2017. *Growth: Short-Term Recovery, Long-Term Challenges*. International Monetary Fund. Washington, DC: 119.

² For instance, ICRC's ten largest operations have been ongoing for an average of 37 years.

³ The [Notre Dame Global Adaptation Index](#) summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience.

⁴ IPCC 2018. *Global Warming of 1.5°C*. Intergovernmental Panel on Climate Change: 23; IMF 2017: 119

⁵ Brown, O. and A. Crawford. 2009. *Climate Change and Security in Africa*. Winnipeg: International Institute for Sustainable Development; Selby, J. Omar S. Dahi, Christiane Fröhlich, Mike Hulme. 2017. Climate change and the Syrian civil war revisited." *Political Geography*. 60: 232-244.

⁶ Adger, W.N., J.M. Pulhin, J. Barnett, G.D. Dabelko, G.K. Hovelsrud, M. Levy, Ú. Oswald Spring, and C.H. Vogel 2014: Human security. In: Field, C.B. et al. (eds.) *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press: 755-791; Peters, K., L. Mayhew, H. Slim, M. van Aalst and J. Arrighi. 2019. *Double vulnerability: The humanitarian implications of intersecting climate and conflict risk*. London: ODI, ICRC, Red Cross Red Crescent Climate Centre.

⁷ Adger et al. 2014: 758, 774.

Main question	Sub-questions
<p>Impacts on People: How are people impacted by climate shocks in places in conflict?</p>	<ul style="list-style-type: none"> ● What are the specific ways people affected by conflict are impacted by climate shocks? ● What are existing coping strategies to withstand these combined shocks? ● How do these coping strategies, in turn, affect underlying conflict and climate vulnerability? ● How is vulnerability to climate shocks differentiated across people? ● How do people in conflict-affected areas perceive climate risks, and how does this compare to modeled climate risk? ● Are the impacts of climate shocks different for: refugees, internally displaced persons and people living in conflict area? What does this mean for humanitarian programming? <p>Note: we are particularly interested in expanding understanding in under-researched places and contexts.</p>
<p>Resilience and Adaptation in conflict settings: economic security, infrastructure and systems: In places where insecurity is high, infrastructure and systems are often weak or non-existent and institutions may have limited presence on the territory, what are key avenues to build the resilience of people, communities and systems to climate risk?</p>	<ul style="list-style-type: none"> ● What are viable livelihood options in places where people mostly rely on rainfed agriculture or pastoralism and where conflict impedes building or rehabilitating water systems or electricity grids that, among other things, could facilitate livelihood diversification? ● How can we characterize limits to adaptation in specific places also affected by conflict, and when does mobility become the only viable adaptation option? ● What are the specific risks facing people adopting such adaptation options (which may be especially challenging in conflict contexts)? How do we assess and manage the implications for other areas where people are moving towards? ● How can we better understand the interplay between climate risk, environmental degradation and conflict in driving movements towards cities? ● How are climate risks affecting livelihoods in urban areas affected by conflict and how can we work to address them? ● What are effective systems to better cope with increased uncertainty and increasingly volatile weather and climate conditions (e.g. water storage during intense rainfall to prepare for drought)? Are there trade-offs (e.g. when reservoirs act both as buffer and storage)? How should these be understood and managed in contexts of conflict with more fragile governance capacity? ● What are the limits of climate action in the absence of functioning institutions? And, what are the alternatives?
<p>Climate change and intercommunal tensions: How are the consequences of climate change exacerbating intercommunal tensions in States affected by climate change and conflict?</p>	<ul style="list-style-type: none"> ● What contributes to exacerbating or alleviating tensions? How can these tensions be mediated? ● Which traditional stakeholders and structures can play a critical role in addressing tensions between pastoralists, farmers and fishermen or within these groups? ● What are the humanitarian consequences of such tensions? ● To which extent are transhumance routes changing across Africa and how is this having an impact on human security? ● To what extent can community-based Disaster Risk Reduction and/or Climate Change Adaptation interventions be a driver for mediating inter-communal tensions?
<p>Health impacts: How can humanitarian health programming improve service delivery in the context of climate change?</p>	<ul style="list-style-type: none"> ● How does climate change exacerbate existing challenges in the provision of health services in conflict settings? ● How does conflict impede health early warning systems? (e.g. prevent access to monitoring)

	<ul style="list-style-type: none"> • How does climate change exacerbate health challenges through its effect on water resources and infrastructure in fragile and conflict affected States (FCAS)? What preventive measures can be taken?
<p>Gaps in Climate Finance: How can the architecture of climate finance be revised to ensure that fragile and conflict or violence affected settings are able to access adaptation funding?</p>	<ul style="list-style-type: none"> • Who would be relevant recipients when States are weak or do not have access to certain portions of their territory? • What current incentives promote or prevent climate finance from reaching places in conflict? How can these incentives systems be adjusted to increase finance flows to help the most vulnerable people in places in conflict adapt to changing climate risks? • What mechanisms can be established to ‘hyper-localize’ climate finance in conflict affected contexts? • How can private sector finance be leveraged for adaptation to climate risks in conflict areas? What role should the public sector play in risk mitigation? What comprehensive, layered risk management strategies can be developed and tailored for adaptation investments in conflict settings? • What lessons can be drawn from existing or past climate investments in conflict contexts?
<p>Data: In places where meteorological data is poor or non-existent, what information can be used for climate modeling and to analyze short and long-term climate risks?</p>	<ul style="list-style-type: none"> • How can seasonal farming calendars be developed in the absence of such information? • How can climate, vulnerability and exposure data sets be enhanced? What is the role of Earth Observations? Predictive analytics? Crowd-sourcing? Or, other innovative data management initiatives? • What can we learn or leverage from past/existing risk information management systems in climate action planning?
<p>Anticipatory Action: How can anticipatory action be fostered in conflict settings to reduce climate impacts?</p>	<ul style="list-style-type: none"> • Are there examples of successful early warning early action (EWEA) for climate related hazards in contexts of conflict, fragility and violence? What data is used for these early warning systems? What are the timescales of early warnings? • What barriers exist for actors to decide to take early action? How are early action decisions affected by the amount of risk data available? • To what extent can the current humanitarian coordination system in conflict settings enable EWEA for hydro-met hazards? Which type of coordination approach is best suited to enable EWEA? • Could disaster risk financing instruments offer opportunities for EWEA in a context of conflict and violence?
<p>Humanitarian Systems: How can humanitarian organizations that are traditionally focused on response in conflict settings, adapt to a changing climate?</p>	<ul style="list-style-type: none"> • What are the costs to the humanitarian system to respond to climate shocks in places in conflict? • How can humanitarian systems adapt to changing climate risks? • What is the role of the triple nexus approach (humanitarian, development and peace) in managing climate risks in a context of conflict? • To what extent, and how, can humanitarian actors include climates-smart programming in their operations in conflict contexts?
<p>State of Research: What is the current state of climate and conflict research?</p>	<ul style="list-style-type: none"> • What is our breadth and depth of understanding on climate impacts across places in conflict? • Where is there an over or under concentration of research, geographically, thematically, by discipline or by methodology? • How can we ensure that research agendas are driven by scholars in conflict affected places? • How can conflict-affected populations be involved in the design, data-collection and analyses processes of research on the climate and the climate-conflict nexus?