Climate Change, Conflict and Crises:
Lessons from Lake Chad

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Abstract

This policy brief draws on an analysis of the interlinkages of climate change and conflict in Lake Chad to make recommendations for the implementation of responses to this crisis and in other climate-affected fragile contexts beyond the Lake Chad region. The assessment of Lake Chad shows that increasing variability and decreasing predictability in rainfall create significant risks for livelihoods and renewed competition over natural resources. These impacts are decreasing social cohesion, leaving communities less able to cope with conflict. Conflict, meanwhile, erodes people's resilience to climate change, as violence has displaced millions and as military responses further restrict livelihood activities. These two dynamics lock Lake Chad into a conflict trap. Responses to such crises, where climate change and security interlink, need to take the interactions of climate change and conflict into account and be climate- and conflict-sensitive. Building on climate-risk assessments and inter-sectoral cooperation, actors should consider the climatic and conflict context, and importantly, their interactions, and integrate this analysis into all interventions. Such climate and conflict informed programming is vital to ensure responses remain effective and sustainable, and do no harm in the face of a changing climate.

1. Introduction

The crisis around Lake Chad (which borders Cameroon, Chad, Niger and Nigeria) illustrates how climate change is a threat to peace and security and provides some valuable insights into assessing and addressing these risks to promote peace and sustainable development.

Climate-related security and development risks stem from the broad societal impacts of climate-related environmental change on socio-ecological systems, and expose and compound inherent societal vulnerabilities that may undermine development and raise the probability of individual, community, state, and international insecurity.[1] In already fragile situations and ongoing conflicts such as the Lake Chad region, climatic pressures can increase and add to existing risks and tensions facing states and communities. Where state and societal coping capacities are already at the limit, this additional pressure can increase the risk of violence.[2]

As with any other conflict dynamic, climate-related security risks are not deterministic or uniform. Rather, the interaction of climate change impacts, such as changes in rainfall patterns or temperature rise, with societal stress factors such as population growth, resource demand, inequality, and political marginalisation depends on the specific context – its history, socio-cultural norms, conflict dynamics and political economy.[3]

In the case of Lake Chad, our G7-mandated climate-related security risk assessment of the region[4] identifies that the interaction between climate change impacts and ongoing conflict dynamics creates a feedback loop where climate impacts seed additional pressures while conflict undermines communities' coping capacity.[5] Specifically, the interaction of climate and conflict risks undermines livelihoods, increases food stress and contributes to decreased social cohesion and increased grievances against governments. These risks also highlight governance vacuums, which offer recruitment opportunities for armed opposition groups.

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[1] Lukas Rüttinger et al., *A New Climate for Peace* (adelphi, International Alert, Woodrow Wilson International Center for Scholars, European Union Institute for Security Studies, 2015).

[2] Rüttinger et al.

[3] Halvard Buhaug, "Climate-conflict research: some reflections on the way forward", *WIREs Climate Change* 6, issue 3 (February 2015): 269-275; Rüttinger et al., A New Climate for Peace.

[4] Janani Vivekananda et al., *Shoring Up Stability* (Berlin: adelphi, 2019) - the assessment upon which this brief builds was an 18-month study, involving local led, in-depth field research and analysis. A locally led research team conducted over 250 one-to-one interviews in Cameroon, Chad, Niger and Nigeria, with interviewees representing the whole variety of religious, occupational, and ethno-linguistic groups living around the lake. Engagement with traditional leaders and governments broadened and supplemented this data. In addition to local conflict analysis, the study drew on four different satellite datasets providing climate and hydrological data to assess the lake's water levels and rainfall patterns, which are a key part for the livelihoods around Lake Chad. The final analysis combining climate and conflict data was based on the sustainable livelihoods framework.

[5] Vivekananda et al. 2019.

Whilst the region around the lake is a priority for stabilisation efforts for many international and regional military actors, to date, these efforts have failed to de-escalate the violence.[6] Indeed, in some cases, military responses are making the situation worse.

The situation in the basin, while unique, should not be mistaken for an exception. Similar dynamics can be expected across the Sahel, and in other predominantly agrarian, conflict affected and climate affected contexts[7], pointing to a large number of situations where climate change and conflict will come together in the future.

These risks warrant timely, integrated action by governments and international organisations alike. However, while the recognition of climate-related security risks has gained momentum, action on these risks remains patchy and limited. The United Nations Security Council has not taken concrete steps to address them and practical UN efforts are nascent.[8] The commitments of regional organisations (for example the EU, AU, or ECOWAS) and member state governments (e.g. Germany, The Netherlands, or Dominican Republic) have helped raise understanding and awareness of the linked risks posed by climate change and security, but are yet to be matched with sufficient implementation on the ground.[9]

Interventions and policies need to be formulated and implemented in view of the interlinkages of the multiple pressures put on individuals and communities. The analysis of Lake Chad shows that single-sectored approaches which fail to consider other linked risks such as climate change could affect the sustainability of such interventions, or worse, actively do harm. Stabilisation, peacebuilding, development, and humanitarian efforts must be responsive to the climatic impacts on conflict dynamics and individuals, while climate change adaptation—which also severely lags behind in funding in fragile contexts[10]—needs to take account of conflict. Such climate- and conflict-sensitivity in programming and policy needs to build on climate-security risk assessments that provide an accurate picture of conflict dynamics, climate impacts, and their interaction.

This policy brief sets out the key climate and conflict dynamics affecting the Lake Chad region, identifies the climate-fragility risks emanating from these dynamics and, based on this analysis, proposes five principles for action upon which future international and national responses to climate-fragility risks in and beyond Lake Chad can build. Anchored in a multi-method analysis of the effects climate change is already having on a protracted

[6] UN OCHA, "Lake Chad Basin: Crisis Update", June 2019, https://reliefweb.int/sites/reliefweb.int/files/resources/LCB-SitRep-201906_June.pdf.

[7] Jürgen Scheffran, Peter Michael Link and Janpeter Schilling, "Climate and Conflict in Africa", *Oxford Research Encyclopedia of Climate Science*, (2019): https://doi.org/10.1093/acrefore/9780190228620.013.557.

[8] Camilla Born, Karolina Eklöw and Malin Mobjörk, "Advancing United Nations Responses to Climate-Related Security Risks", *SIPRI Policy Brief*, September 2019, https://www.sipri.org/sites/default/files/2019-09/pb_1909_advancing_un_climate.pdf.

[9] See for example Florian Krampe and Malin Mobjörk, "Responding to Climate-Related Security Risks: Reviewing Regional Organizations in Asia and Africa", *Current Climate Change Reports* 4, (2018): 330-337.
Vivekananda et al., *Action on Climate and Security Risks: Review of Progress 2017* (Netherlands Institute of International Relations 'Clingendael', adelphi, SIPRI, Center for Climate and Security, 2017).

[10] Climate Funds Update, "Data Dashboard", 2019, https://climatefundsupdate.org/data-dashboard/.
The Fund For Peace, "Fragile States Index", 2019, https://fragilestatesindex.org/.

and long-standing conflict, it offers an empirically grounded rationale for policy proposals, applicable in neighbouring contexts in the Sahel and beyond.

2. Lake Chad Assessment: Caught in a Climate-Security Conflict Trap

Analysing the ways in which climate and conflict affect each other begins with a thorough and locally-informed understanding of conflict dynamics and climatic contexts, in order to draw out linked climate-security risks.

The impacts of climate change in the Lake Chad region, namely increased rainfall variability and less predictable weather patterns, are undermining livelihoods, making them less profitable or unviable. This is lowering the conflict resilience of communities. In turn, conflict and the resulting heavy-handed military responses further reduce livelihood opportunities and reduce the ability to deal with climate change. This has put the people in Lake Chad into a conflict trap.

Conflict Context

Following decades of stalled development and political marginalisation, conflict in the Lake Chad basin escalated in 2009 when violence spread from Nigeria's northeastern Borno province.[11] Attacks by armed opposition groups, including Boko Haram and Islamic State West Africa, have taken place in Cameroon since March 2014 and western Chad since early 2015.[12] Harnessing frustration with governments against a background of poverty and livelihood and food insecurity, armed opposition groups can draw on support from parts of the population. While originally much violence was direct against state security forces, civilians continue to fall victim to attacks, weakening the public support for armed opposition groups in other areas. Fighters of various groups largely move freely across borders and have conducted bomb attacks, kidnapping and forced recruitment, as well as violence against women and girls, including forced marriage and sexual violence.[13] State security responses as well as vigilante groups such as the Civilian Joint Taskforce, in trying to counter armed opposition groups, have created further tensions and have been a significant force of violence. All conflict actors have committed civilian harm including extrajudicial killings, torture, and

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[11] International Crisis Group, "Curbing Violence in Nigeria (II): The Boko Haram Insurgency", *Africa Report No 216*, 3 April, 2014, https://d2071andvip0wj.cloudfront.net/curbing-violence-in-nigeria-II-the-boko-haram-insurgency.pdf.

[12] International Crisis Group, "Cameroon: Confronting Boko Haram", *Africa Report No 241*, 16 November, 2016, https://d2071andvip0wj.cloudfront.net/241-cameroon-confronting-boko-haram_1.pdf.
International Crisis Group, "Fighting Boko Haram in Chad: Beyond Military Measures", *Africa Report No 246*, 8 March, 2017, https://d2071andvip0wj.cloudfront.net/246-fighting-boko-haram-in-chad-beyond-military-measures.pdf.

[13] For the above, also see notes 9-10.

rape.[14] The conflict has by now displaced millions, as people flee to other parts of their country or countries in the region.[15]

Understanding Climate: Building Peace

Lake Chad is not shrinking due to climate change.[16] Analysis of satellite data has shown categorically that Lake Chad is not currently shrinking. Whilst it did contract dramatically in size due to drought in the 1970s and 1980s, since 1990, its size has been stable and total water storage (including soils and groundwater) has been increasing.[17] This is not to underplay the serious and compounding role of climate change on the context. Rather, it is not an oft-cited but inaccurate alleged disappearance of the lake, but the increase in volatile and unpredictable rainfall patterns as a result of climate change that are having a seriously detrimental impact on the livelihoods and resilience of communities around the lake.[18]

Today, climate change is significantly altering rainfall patterns across the Sahel and the lake's variability is getting less and less predictable.[19] Given an average depth of three metres, variations in rainfall translate into considerable seasonal and inter-annual variability, which does not follow previous seasonal patterns – leaving those whose livelihoods depend on seasonal rains having to fall back on guesswork to plan their lives and livelihoods. Adding further pressures, temperatures in the region are predicted to rise much faster than global averages.[20]

Considering these findings, it is crucial to emphasise the importance of accurate climate data. The implications of building responses on outdated or inaccurate climate data could potentially do more harm than good. The theory that conflict in Lake Chad is linked to a shrinking lake could lead to development policies whose primary purpose is to increase water availability. Indeed, governments in the region have proposed to build a pipeline to refill the lake from the Congo basin.[21] However, not only does this misdiagnose the problem,

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[14] Amnesty International, "Our Job is to Shoot, Slaughter and Kill: Boko Haram's Reign of Terror in North-East Nigeria", April 2015, https://www.amnesty.org/download/Documents/AFR4430602015ENGLISH.PDF.
Center for Civilians in Conflict, "Civilian Perceptions of the Yan Gora (CJTF) in Borno State, Nigeria", 2018, https://civiliansinconflict.org/wp-content/uploads/2018/06/2018.06.CJTF-Report.Africa-Program.Web_..pdf.
Nigeria Stability and Reconciliation Programme, "Sixth Report on Violence in Nigeria", *Nigeria Watch*, 2016, http://www.nigeriawatch.org/media/html/NGA-Watch-Report16V7.pdf.
[15] UN OCHA, "Crisis Update".
[16] Binh Pham-Duc et al., "The Lake Chad hydrology under current climate change", *Scientific Reports* 10, (2020): 5498.
[17] Pham-Duc et al.
[18] Pham-Duc et al.
[19] Pham-Duc et al.
[20] Isabelle Niang et al. "Africa", in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, eds. V.R. Barros et al. (Cambridge, UK and New York, NY, USA: Cambridge University Press, 2014), 1199-1265.
[21] Adegboyega Adeniran and Katherine Daniell, "The attempt to replenish lake Chad's water may fail again. Here's why", *The Conversation*, 5 October, 2017, https://theconversation.com/the-attempt-to-replenish-lake-chads-water-may-fail-again-heres-why-84653; Will Ross, "Lake Chad: Can the vanishing lake be saved?", *BBC News*, 31 March, 2018, https://www.bbc.com/news/world-africa-43500314.

experiences in the Sahel suggest that sudden changes in resource availability can also provoke an increase in tensions and sometimes violent conflict.[22]

Based on analysis of accurate climate data and conflict dynamics, we found that rainfall variability, combined with existing conflict dynamics, resource scarcity, livelihood insecurity and extreme poverty have exacerbated existing social tensions through four risk pathways.

Four Climate-Security Risks in Lake Chad

1.   *Climate and ecological changes increasing livelihood insecurity and social tensions*
Climate change, by increasing the variability in rainfall patterns and Lake Chad's water levels, affects the majority of livelihoods of those living around the lake. Many people around the lake rely on a combination of fishing, agriculture, livestock farming, and trade, adapting the timing of activities to changing and varying weather conditions. For generations, flooding times have influenced changes away from recession cropping and led to regional migration. Yet today, the increasing climatic uncertainty changes planting times, cropping patterns, and grazing routes and is making planning for and relying on traditional adaptations much harder.

This is reducing the viability and diversity of livelihoods, and decreasing resilience, leading to adverse livelihood strategies.[23] Many people, particularly women and girls, who are missing income or food, have been forced to adopt coping strategies such as survival sex.".[24] These dynamics are eroding social cohesion and increasing tensions and conflicts at all levels of society, from within families to between different ethno-linguistic groups. Within families, diminished incomes reflect negatively on men and younger generations, leading to intergenerational conflict and ruptured social roles. Conflict and distress from work has been carried into families, where domestic violence has increased. Finally, in a region historically underserved by governments, the climatic pressures have come to further highlight governance issues and lacking service provision, undermining the relationship between individuals and the state.

Overall, these developments also significantly reduce the ability of communities living around Lake Chad to cope with conflict. Reduced social cohesion can facilitate new grievances and conflicts, while the economic impacts of climate change increase relative losses for individuals and families, and reduce their opportunities to prepare for and respond to conflict.

2.   *Recruitment into armed opposition groups*
A rise in recruitment and retention rates into armed opposition groups is linked to increased livelihood insecurity and decreasing social cohesion – due to conflict, the lack of

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[22] Jürgen Scheffran, Peter Michael Link and Janpeter Schilling, "Climate and Conflict in Africa".
ICG, "The Central Sahel: Scene of New Climate Wars?", *Crisis Group Africa Briefing No 154*, April 2020,
https://d2071andvip0wj.cloudfront.net/b154-sahel-new-climate-wars.pdf.
[23] Adverse livelihood strategies are activities that, while ensuring income or sustenance, are potentially harmful to individuals and/or communities, leaving them exposed to risk of violence, persecution and other threats. This included illicit activities, for example the farming of illegal crops.
[24] Survival sex refers to sex (work) to receive necessary food, income or other basic provisions.

equitable service provision in camps for internally displaced persons (IDPs), climate change, and ecological damage (namely deforestation and land degradation). Mistrust has been sown within families, communities and between ethnic and religious groups, as people suspect others to be part of armed opposition groups. Many are in a situation where cooperation and mutual assistance is extremely difficult. The resulting lack of resilience not only leaves people extremely vulnerable, it can also entrench the conflict itself, as new disputes break out and the incentives grow for joining armed opposition groups. To clarify, climate change does not create terrorists, nor does it turn law-abiding citizens into criminals. However, conflict and a warming world worsen existing risks and make it harder to work on solutions, making the financial incentives offered by armed opposition groups more attractive.

3.   *Natural resource conflicts*
Climate change is exacerbating conflicts over natural resources. Before the conflict with Boko Haram, there was a trend of increasing conflicts around natural resources, in particular over land and water, often between different occupational groups, such as pastoralists and farmers. However, these conflicts have decreased in the context of the ongoing conflict with armed opposition groups, but are seeing a recent resurgence. Necessary shifts in grazing routes and land use have produced renewed disputes, which are now often left unresolved by traditional conflict resolution mechanisms, as they have been losing importance and trust as a result of the conflict. After the Boko Haram crisis is stabilised, it is likely that resource conflicts will gain in salience and, as of yet, it is uncertain how they will play out in the new context of decreased resilience. Different occupational and ethnic groups within communities are also at odds, a tension often compounded by conflict with IDPs, who are blamed for stretched resources by host communities.

4.   *Conflict and fragility are increasing vulnerability to climate risks*
 The responses to conflict by militaries, vigilante groups, and others have also actively added to and compounded these challenges. Against a background of already low trust in governments, certain stabilisation strategies aimed at containing or neutralising armed opposition groups have placed heavy restrictions on populations, very often with negative effects. Scorched earth tactics and other strategies have led to crops and assets vital to livelihoods being destroyed.[25] The prohibition of certain livelihoods such as fishing or growing particular crops, restrictions of movement across borders, and the closing of markets have caused major disruptions to people's traditional strategies to cope with climate change. Alleged abuse and torture by military personnel has created new grievances and led to human suffering on a wide scale.[26] The lack of climate sensitivity of such military interventions increases people's climate risk by making it even harder to attain income, adapt and sustain livelihoods, or move to a safer area.

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[25] Scorched earth tactics refer to strategies that include the destruction of anything enemies might find useful or beneficial within a certain area. This can include equipment, livelihood assets, infrastructure and more.
[26] See for example Amnesty International, *Cameroon's Secret Torture Chambers: Human Rights Violations and War Crimes in the Fight Against Boko Haram*, 2017, https://www.amnesty.org/download/Documents/AFR1765362017ENGLISH.PDF. am

3. Responding to Climate-Security Linkages: Breaking the Conflict Trap

Lake Chad is caught in a conflict trap. Climate change acts as a risk multiplier, reducing the capacity of people to deal with conflict, while the years of violence, human rights abuses and poverty have created a situation reproducing many of the conditions that have led to violence in the first place. Additionally, as conflict keeps reducing the resilience and coping capacity of people, the impacts of climate change will be felt more and more, further affecting livelihoods and entrenching food insecurity, poverty and the lack of social cohesion which facilitates conflict.

It is against this background that climatic impacts on security need to be considered and understood. Where climate change creates new pressures to change livelihoods, cropping patterns and movements, it happens in a context where livelihoods have already been lost or reduced in viability and where displacement has become a reality for many. Conflict has and continues to decrease the resilience of communities against climate shocks and slow-onset changes.

Together, these risks create a self-enforcing feedback loop between increasing livelihood insecurity, climate change vulnerability, and conflict and fragility. If not broken, this vicious circle threatens to perpetuate the current crisis and take the region further down the path of conflict and fragility.

The case of Lake Chad illustrates how, when it comes to existing conflict situations, climate change might prolong violent conflict, inhibit peacebuilding and increase the human costs of war. Climate-related changes compound social, political, economic and environmental challenges, which can escalate into violent conflicts and undermine communities' and societies' resilience.

The situation in the basin, while unique, should not be mistaken for an exception. According to the Intergovernmental Panel on Climate Change's August 2019 Report, which focused on climate change and land, Africa is disproportionately affected. In few other regions, so many people are at risk of desertification, and few other places will face as many highly severe droughts.[27] African countries are economically dependent on natural resource based-sectors, which are a basis for food security, employment and development. As these sectors, most notably rain-fed agriculture, are likely to be acutely affected by climate fluctuations, populations that depend on them are highly vulnerable to climate change impacts.[28]

Furthermore, there is significant overlap between highly fragile countries and those most vulnerable to climate change, with 70% of the countries listed in the most fragile quartile of

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[27] IPCC, *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems,* eds. P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (in press, 2019).
[28] Niang et al., "Africa".

the Fragile States Index also being among the most vulnerable quartile of the ND-GAIN Vulnerability ranking.[29] Climate change and conflict will come together in a large number of situations worldwide in the future and already overlap today.

Responding to conflicts of such nature requires interventions and policies that are formulated and implemented in view of the interlinkages of multiple pressures put on individuals and communities. Very often, priority in crisis contexts such as Lake Chad is placed on stabilisation and humanitarian efforts. This may well be correct, but the analysis of Lake Chad shows that single-sectored approaches which fail to consider other linked risks such as climate change could affect the sustainability of such interventions, or worse, actively do harm.

Stabilisation, peacebuilding, development, and humanitarian efforts must be responsive to the climatic impacts on conflict dynamics and individuals, while climate change adaptation —which also severely lags behind in funding in fragile contexts[30]—needs to take account of conflict. Peacebuilding and climate change adaptation alike profit when social cohesion is strengthened, attitudes towards governments improve and when governance becomes responsive to the challenges on the ground. Meanwhile, adaptation programming can facilitate the cooperation of different groups, while increases in climate-resilient livelihoods will also contribute to societies that are more stable and can better cope with conflict.[31]

Yet when one stream of programming does not take account of the other, or does not consider the conflict/climate context in which it is situated, the blowback can be significant. Without considering the different interest groups present and their various needs, competition for resources might be renewed, possibly worsening conflicts between people already at odds. New agricultural practices and other livelihood activities that might be suitable to changing climatic conditions may not be able to function under the restrictions and social dynamics that conflict has produced, becoming unviable at best, while potentially even putting new people at risk of violence. Mediation, humanitarian assistance, reconstruction and development that fails to consider present and future climatic changes can become unviable and potentially counter-productive, as conflicts between occupational groups, over resources, and between communities are also rooted in environmental conditions.

It is evident that ensuring climate- and conflict-sensitivity in responses requires adequate knowledge of conflict dynamics and climate impacts as well as their interaction. Climate-security risk assessments can provide such an evidence base and the dissemination of outcomes to all relevant stakeholders can inform practitioners and policy makers of various fields.

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29 Lukas Rüttinger, "Climate Change in the United Nations Peacebuilding Commission and Fund", *Climate Security Expert Network,* 2020, https://climate-security-expert-network.org/sites/climate-security-expert-network.com/files/documents/csen_climate_fragility_policy_paper_-_climate_change_in_the_un_peacebuilding_commission_and_fund.pdf.

30 Climate Funds Update, "Data Dashboard". The Fund For Peace, "Fragile States Index".

31 See for example Alec Crawfod and Clare Church, "The NAP Process and Peacebuilding", *NAP Global Network*, 2020, http://napglobalnetwork.org/wp-content/uploads/2020/02/napgn-en-2020-nap-process-and-peacebuilding.pdf; Dennis Tänzler and Nikolas Scherer, *Guidelines for conflict-senstive adaptation to climate change*, (Dessau-Roßlau: Umweltbundesamt, 2019), https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/guidelines_for_conflict-sensitive_adaptation_190917.pdf.

Implementing these approaches and building on current evidence requires political, as well as organisational support and consideration. The experiences in the Lake Chad Basin and the Sahel show that multilateral cooperation at the sub-regional level, amplified, echoed and supported at the AU and UN levels, can contribute to preventing, mitigating and adapting to climate change and conflict, in order to minimise climate-related security and development risks.

At the international level, the UN Security Council has the ability to officially recognise the impacts of climate change on conflict. Such recognition would provide a significant mandate to integrate climate-related security risks into the work of actors in international organisations and member states. However, this is not likely to be sufficient. Rather, it is necessary to ensure that all interventions, including climate change adaptation, stabilisation, humanitarian work, peacebuilding, reconstruction, and development, are planned and conducted in a way that recognises and responds to the interlinkages of climate change and fragility. For UN mandated missions and peacebuilding, the Security Council once more has a central role to play. But it is a concerted effort of the entire UN-system, as well as of other international and regional organisations and member states that is required to ensure adequate responses to climate-security risks.

Beyond political recognition and will, this requires shared and common frameworks for analysis, used to conduct regular risk assessments and to expand and improve early warning systems. Furthermore, the integration of climate analysis across programming as well as monitoring and evaluation needs to be normalised and should include already active programmes and activities. Finally, improved coordination of actors across the environmental and security spectrum can ensure that responses do not overlap or hinder each other, serve to counteract remaining differences in assessment and further improve the quality and effectiveness of responses, even in a changing climate.

4. Conclusion and Policy Recommendations

In Lake Chad, conflict and climate change already interact, locking millions of people into conflict. Increasing climatic variability is eroding the security and sustainability of existing livelihoods, lowering social cohesion, increasing economic hardship and creating new competition over natural resources. At the same time, conflict has left people displaced, eroded trust in governments and created disputes and mistrust at all levels of society. Responses to violence further affect the livelihoods of people, as markets are closed and agricultural production is hindered. Conflict and climate change both reduce the ability of communities to adequately deal with shocks and pressures and entrench a long-running conflict.

Based on the climate-security risks assessment of the Lake Chad basin, there is a clear need for a serious and critical rethinking of current approaches to crisis response and peacebuilding in climate-affected contexts. In Lake Chad, the Sahel and other international security 'hotspots', the narrow focus on fighting groups defined as terrorist solely through military means is not working. To better prepare for and adequately respond to what are increasingly complex security and development contexts, peacebuilding, security and

development agencies ultimately must become more climate-sensitive. There is a need to move towards a more comprehensive human security agenda that includes addressing climate change effects amongst the range of other risk factors affecting communities in these contexts.

It is necessary that the UN as well as member states recognise the role of climate change as a risk multiplier and take account of its impact on security and conflict. Without assessment and integration of climate fragility risks into interventions in fragile contexts like Lake Chad, be they stabilisation, humanitarian, climate change adaptation or development, these programmes will not be sustainable in a changing climate. Worse still, they can actively do harm to the fragile context. Putting such integration into practice needs to build on climate-security risk assessments, knowledge of conflict and climate dynamics and a cross-sectoral effort that ensures responses are complimentary and effective.

Using Lake Chad as a case study, this policy brief has drawn out five principles for responses to conflicts in times of an ever-changing climate.

1. Strengthen assessment, reporting and early warning on climate-security risks

Responses to the intersection of climate change and security require an evidence base that considers the impacts of climate change and conflict, as well as their intersection. There is thus a need for investment and institutional capacity for developing context-specific knowledge on climate-related security and development risks as experienced by different demographics. Adequate assessments would need to consider local context, political economy and regional dimensions of a particular conflict system, but also factor in the climate-related security and development risks. These assessments should be locally grounded in their conflict analysis, regionally specific, and draw on current climate data, while being widely disseminated to ensure that all relevant stakeholders have access to the information.

Such work should feed into early warning systems. These systems should incorporate risk assessment findings, as well as methodology as far as possible, in order to better foresee emerging risks as climate change and conflict dynamics intersect. It is important to ensure that early warning capabilities also facilitate early action. Sometimes, the link between these two domains is weak[32] and could be strengthened by linking the organisations and people responsible for early warning systems to practitioners in a more direct and systematic fashion. Early warning systems might also be set up in the same units or organisations responsible for the eventual response.

2. Increase preventive action

Sustainably managing conflict-related risks requires proactive investments. Accordingly, sustainable development, if conducted in a climate-sensitive manner, can prevent the increasing impact of climate change on fragility. One of the biggest challenges for local

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[32] International Federation of Red Cross and Red Crescent Societies, "Early Warning > Early Action", 2008, https://media.ifrc.org/wp-content/uploads/sites/5/2017/11/Early-warning-early-action.pdf.

communities facing the consequences of climate change is uncertainty. Technological innovation can therefore be of high value in helping local communities make better decisions when facing climate change, but only if the technology is sensitive to climate-security risks. Ensuring that livelihoods are stable in the future and that people can attain income, health, and education also increases resilience to climatic shocks and conflict alike. Improving service provision and access, as well as ensuring political accountability, will serve to reduce grievances with governments and can stabilise political systems. Finally, mitigating climate change remains the most urgent course of action to ensure that conflicts will not be worsened by a changing climate. Of course, the ultimate act of prevention, and thus a priority for action, is the implementation of the Paris Agreement and heavy emissions reductions, as well as meeting internationally agreed goals for climate finance, especially in the Global North.

3. Build climate- and conflict sensitivity across programming

Effective responses to conflict and climate change alike need to be conducted in a manner that takes the impact of the other into account. Only such conflict- and climate-sensitivity can ensure that responses do no harm and have their desired effect. This means not only considering how the context of an intervention depends on climatic factors or conflict dynamic; it should ideally aim to use programming to achieve co-benefits. Climate change adaptation can be used to facilitate social cohesion and connect people in communities and, in creating climate-proof livelihoods, it has the potential to reduce the risk of conflict. Meanwhile, peacebuilding should account for climatic changes to resources and livelihoods to ensure that solutions are sustainable and effective in the long run and do not create new grievances and differences. Taken together, peacebuilding, development, and climate change adaptation can reduce the vulnerability of communities to conflict and climate change alike and increase their adaptive capacities. It is important that conflict and climate interventions are integrated at all programming stages, including financing, implementation, and monitoring.

4. Invest in conflict- and climate resilient livelihoods – cognisant of differential needs of youth, gender and different identity groups

Sustainable livelihoods are a foundation for both peace and climate resilience. Beyond simple job creation, enabling context and climate sensitive livelihoods, based on consultations with all groups within society—including youth, women, men, disabled and the elderly—can also bolster social relations. Possible ways to build social cohesion within and between communities include equitably securing land rights and providing access to justice – taking account of the specific barriers faced by women. Institutionalising mechanisms to promote dialogue and collaboration between different groups could support trust-building and improve social cohesion in the long run. By combining knowledge of peacebuilding, agriculture and climate science, innovative programmes undertaken to employ youth and bolster agricultural activity could benefit entire societies and increase inter-group cooperation.

5. Strengthen multilateral and multisectoral cooperation

Different agreements and frameworks concerning conflict, development, and climate change exist at the international, regional, and national level. Programming and action on these different activities could inform and improve each other, yet the possible overlap is rarely realised. Barriers to sharing information and ideas reduce the effectiveness of programmes, whilst increasing the risks of duplicated or contradictory actions. Greater institutionalised efforts are required to promote multilateral and multisectoral cooperation and to ensure complimentary activities. Taking the case of Africa as an example, cooperation between the UN, African Union and Regional Economic Communities relating to climate-related security risks needs to be reinforced. There is a need to strengthen existing projects and establish inter-departmental and cross-agency initiatives to collect and analyse data disaggregated by sex, age, disability, and location. These initiatives need to have flexible and long-term financing to be able to learn and adapt to the changing situation on the ground.

Shared and integrated risk assessments are an opportunity to ensure cooperation and can be a first step towards better, more inclusive interventions. Furthermore, different stakeholders and organisations need to improve their partnerships to address climate-security risks. International actors should focus on moving away from service-providing roles and rather facilitate and promote local expertise and leadership. Local responses offer the best chance to adequately address the interlinkages of environmental changes and conflict, and country authorities at all levels are key actors. The focus should be on enabling bottom-up approaches. This must be combined with high-level international focus and attention to the issue, including from the UN Security Council.

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