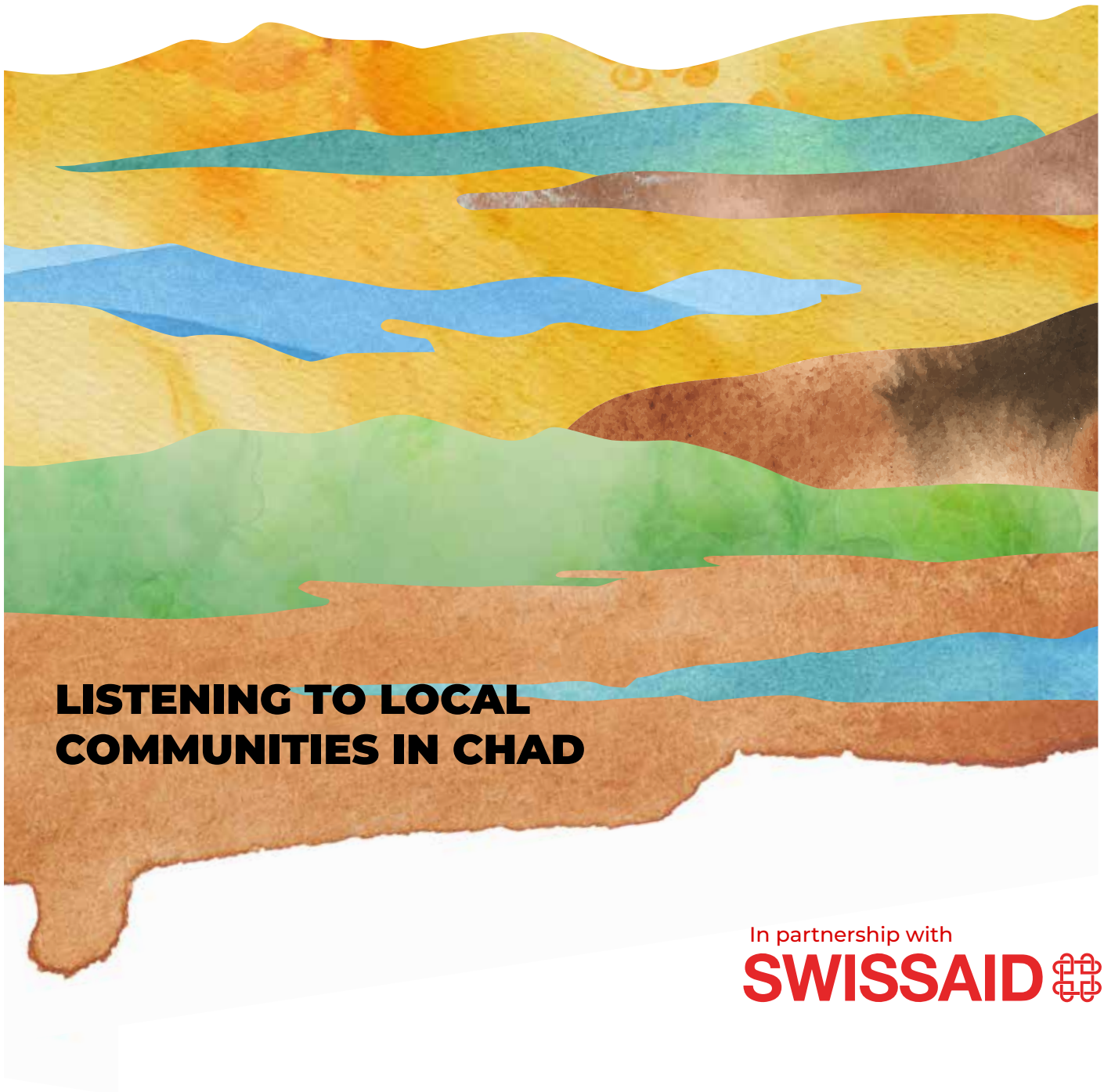




unieri
United Nations
Interregional Crime and Justice
Research Institute

Perceptions of climate change and violent extremism



**LISTENING TO LOCAL
COMMUNITIES IN CHAD**

In partnership with
SWISSAID 

Perceptions of climate change and violent extremism

LISTENING TO LOCAL COMMUNITIES IN CHAD

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Foreword

In the Sahel, an explosive crisis is brewing. Battered by increasing instability and violent extremism in recent years, the region is also among the areas most vulnerable to the effects of climate change, from both an ecological and human perspective. Though the role of climate change in violent extremism dynamics is still not yet fully understood, leaders, researchers, and policymakers worldwide have nevertheless come to recognize climate change as a critical “threat multiplier” that can cause simmering conflicts to grow and intensify. As climate change causes natural resources to become scarcer and more unpredictable, poverty and food insecurity can increase within communities. This is particularly acute in the Sahel, where over two-thirds of the population rely on increasingly fragile natural resources for their livelihoods. With strong adaptive mechanisms too often lacking, social cohesion can break down as fear and instability rise, creating fertile grounds for violent extremist groups to exploit.

The impact of climate change on security has also long been of increasing interest and concern within the United Nations. Discussing the matter of climate change and security at the 8864th meeting of the Security Council, in September 2021, Secretary-General António Guterres underscored the importance of this problem, stating, “It is clear that climate change and environmental mismanagement are risk multipliers. Where coping capacities are limited and there is high dependence on shrinking natural resources and ecosystem services, such as water and fertile land, grievances and tensions can explode, complicating efforts to prevent conflict and to sustain peace.” Violent extremist groups may capitalize on this, recruiting members with false promises of financial prosperity, fueling social and ethnic divisions, and manipulating communities’ fear and anxiety about the future into resentment and violence against the state.

Since 2015, the United Nations Interregional Crime and Justice Research Institute (UNICRI), has been working on preventing violent extremism in the Sahel region. Its 2020 report, [Many Hands on an Elephant. What Enhances Community Resilience to Radicalisation into Violent Extremism?](#), identified environmental degradation and limited access to dwindling natural resources as among the drivers of violent extremism in the region, particularly in Chad. Seeking to understand in more detail the connection between climate change and violent extremism in the country was therefore the logical next step in UNICRI’s efforts. The partnership with SWISSAID assured a better understanding of the socio-economics dynamics and the climatic-environmental context in the investigated regions. Since 1965 SWISSAID has worked closely with grassroots

organisations to improve the living conditions and resilience of small farming families by promoting agroecology as a holistic, systemic and dynamic farming approach as well as gender equality and the integration of young people in local development processes.

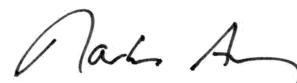
Drawing on more than 100 interviews with local community members, traditional leaders, and local authorities within four regions in southern and central Chad, this research represents an effort to listen to the often muffled but important voices of local communities. It captures the perceptions of those who are most affected and living with the consequences of the dual challenge of climate change and violent extremism. Although this is an initial step, this research illuminates some important insights into how climate change affects local communities and has been instrumentalized as a recruitment tool by violent extremist groups.

Yet, despite these learnings and insights, the challenge remains to coordinate and execute long-term solutions. Tackling the local repercussions of a global challenge such as responding to violent extremism and climate change will require large-scale national and international efforts. However, we must be careful not to lose sight of the vital role that local communities and civil society play. Local knowledge and perceptions are indispensable for understanding how the interaction plays out on the ground. It is also irreplaceable in developing and implementing effective solutions that are workable and responsive to local needs. This makes community engagement fundamental to promoting resilience, both to violent extremism and climate change, and also central to this research, which seeks to highlight and elevate community members' valuable understanding, experience, and insight.

For those of us working to safeguard peace, the potential role of climate change in sparking and exacerbating violence must serve as a call to action. It is our hope that this research not only contributes valuable understanding to the growing scholarship around security and climate change, but also proves an important foundation for future efforts to confront this dual threat. In doing so, it will contribute to the creation of more peaceful societies, greater social cohesion, and a hopeful and prosperous future.



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Abbreviations and acronyms

AMG	African Market Garden
ANADER	National Rural Development Agency
AU	African Union
CPDN	Contribution Prévue Déterminée au Niveau National
CSO	Civil Society Organisation
DDRR	Disengagement, Disassociation, Reintegration and Reconciliation
DELCC	Department for Environmental Education and the Fight Against Climate Change
EU	European Union
EVI	Economic and Environmental Vulnerability Index
FROLINAT	Front de Libération Nationale du Tchad
GCCA+	Global Climate Change Alliance Plus
GDP	Gross Domestic Product
GNI	Gross National Income
HAI	Human Assets Index
IDP	Internally Displaced Person(s)
INFORM	Index for Risk Management
IOM	International Organization for Migration
ISIL	Islamic State of Iraq and the Levant

ISWAP	Islamic State in West Africa Province
LCBC	Lake Chad Basin Commission
MINUSMA	Multidimensional Integrated Stabilization Mission in Mali
MNJTF	Multinational Joint Task Force
ND-GAIN	Notre Dame Global Adaptation Initiative
NGO	Non-Governmental Organisation
NSAG	Non-State Armed Groups
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PANA	Le Programme d'Action National d'Adaptation aux Changements Climatiques
P/CVE	Preventing and Countering Violent Extremism
RSF	Regional Stabilization Facility
RSS	Regional Stabilization Strategy
SIPRI	Stockholm International Peace Research Institute
SNLCC	La Stratégie Nationale de Lutte Contre Les Changements Climatiques au Tchad
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNSC	United Nations Security Council
VE	Violent Extremism

Executive Summary

Located on the banks of Lake Chad in the Sahel, Chad's geography, high poverty levels, and population's dependence on natural resources for productive activities, has made it particularly vulnerable to both climate change, as well as the growing insecurity that has rocked the Sahel in the last decades. As temperatures increase, rainfall becomes more unpredictable, and Lake Chad recedes, these effects of climate change further threaten already unstable livelihoods and exacerbate existing vulnerabilities. It is also in this context that violent extremist groups have operated with increasing frequency and deadliness for many years, making Chad—particularly the provinces of Hadjer-Lamis, Lac, Logone Occidental, Mandoul—acutely relevant for examining the relationship between climate change and violent extremism.

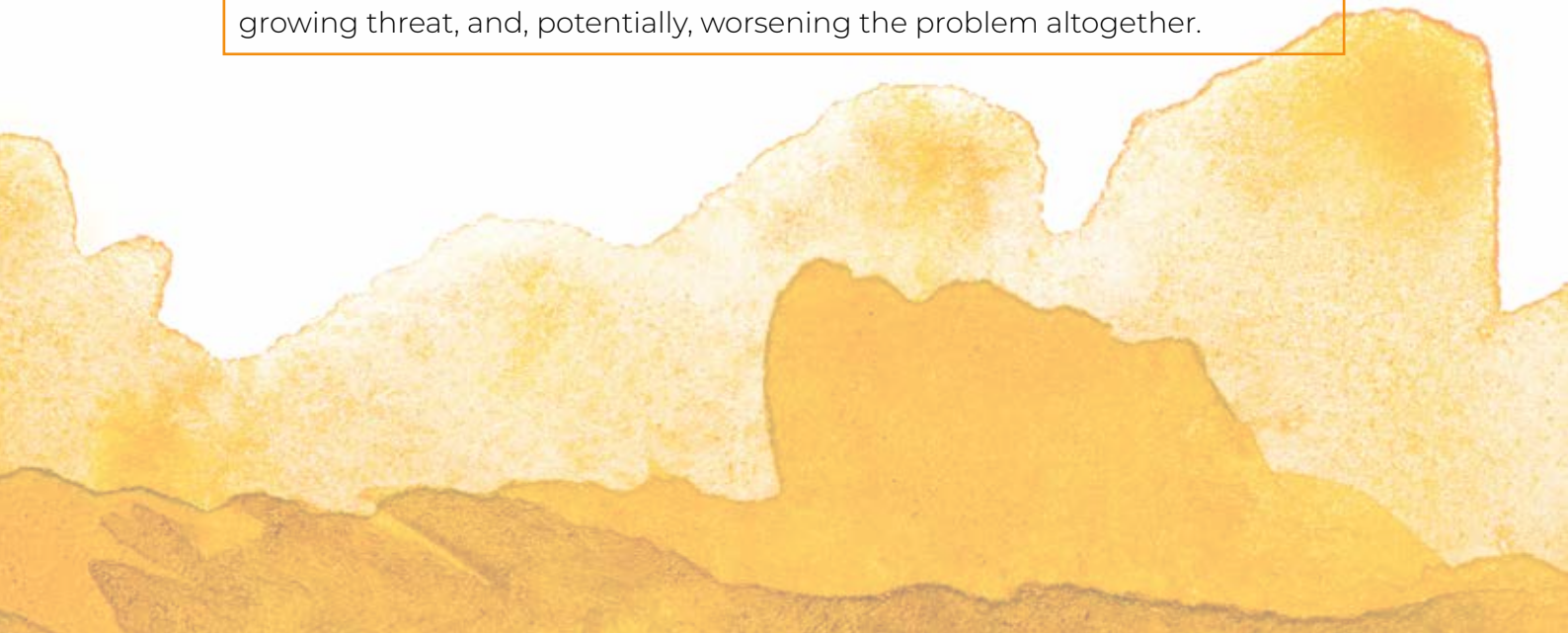
While the links between violent extremism and climate change are far from unanimous or direct, many point to the role of climate change as a “*risk multiplier*” that can exacerbate existing conflicts when communities come under increased economic and survival pressure. It is in this context that this study seeks to unpack community perceptions of the effect of climate change on three interacting areas: productive activities (including farming, herding, and fishing), social cohesion and community violence, and violent extremist recruitment activities. It does this primarily through over 100 in-depth, semi-structured interviews conducted between January and February 2022 with community members and institutional representatives in the four provinces mentioned above: Hadjer-Lamis, Lac, Logone Occidental, Mandoul. Though grounded in the rich scientific and theoretical literature on the mechanisms and effects of climate change and violence, this research is purely qualitative, relying on the perceptions and experiences of key actors in the field to inform its conclusions. In doing so, it also elevates the often unheard voices of those most vulnerable and directly affected by these dual interacting threats of climate change and violent extremism.

Community members and authorities throughout the four targeted areas widely reported having observed or directly experienced the effects of climate change in recent years. This was most often described in the form of variable temperatures and rainfall, including both floods and longer dry seasons, as well as increasing desertification. This, in turn, has had clear and nearly unanimous effects on community members' economic and productive activities. Farmers reported noticing decreases in arable land, lower yields, and being under more pressure to find other areas to farm, forcing them to rely on farming in limited wadis, or fertile, dried riverbeds in deserts, whenever possible. This decrease has also affected the nomadic and semi-nomadic pastoralists in the areas, who reported having to supplement by purchasing feed and migrate further to graze herds, bringing them into increased competition with farmers. Fishers also reported encountering increased desertification and variable rainfall levels, forcing them to confront other fishers and Boko Haram as they venture farther and into less secure areas in search of fish.

These direct effects on the land and productive activities also had a notable effect on social cohesion and inter-communal conflict. Every economic group interviewed—farmers, herders, and fishers—as well as local and traditional authorities, reported increased conflict and deadly violence within and between communities. Indeed, a traditional authority in Mandoul noted that only a week before the interview was conducted, in late February 2022, four people were killed and three wounded in a clash between farmers and herders that was sparked when herds roaming farther in search of pastures damaged the crops of farmers who were themselves also struggling. Interviewees also reported clashes between fishers and herders over competition for water and the need to safeguard fragile fish nesting areas, while farmers, herders, and fishers also conflicted with each other as competition grows for ever-shrinking resources. Though indirect, the link to climate change is clear among interviewed community members: as each actor—farmer, herder, and fisher—seeks to adjust to the effects of climate change, this gives rise to increased opportunities for conflict as communities come into greater contact under conditions of competition, insecurity, increased financial pressure, and fear.

This increased economic pressure, in turn, also affects violent extremism dynamics in the area. Experts and interviewees alike agreed that groups such as Boko Haram have long used poverty, dissatisfaction, and economic desperation as an argument to entice fighters and recruit new members. Though many of those interviewed were aware that the promises offered by Boko Haram are limited, they also reported that the group has explicitly drawn on the economic vulnerability and instability of farming, herding, and fishing as a narrative in their recent recruitment. One interviewee recounted the case of a particularly pointed appeal, in which Boko Haram made this link explicit, asking, “*How much profit do you make from fishing every day? One thing for sure, it’s not much. With us, it is with American dollars that you will be paid.*” Another youth interviewee echoed this view, noting that such appeals have recently resonated with youth for whom, “*working [with] the land is no longer profitable.*” It is in this sense that the link, though indirect, between the effects of climate change and violent extremism in these localities becomes clear, as communities under pressure and heightened conflict become increasingly vulnerable to appeals from armed groups.

Faced with these issues, Chad and its partners have developed various initiatives to support local communities. Communities have often developed their own mitigation measures against both climate change and the activities of extremist groups. These include shifting to small-scale market gardening, internal migration to other areas of Chad, as well as so-called *comités de vigilance* and awareness campaigns against violent extremism. However, these are also not without consequences; community members continue to face constraints over limited land suitable for gardening and potentially harsh and dangerous living conditions when migrating. At the same time, the potential impact of *comités de vigilance* on community cohesion and future conflict dynamics remains to be seen. Given the seriousness of the situation and the complex inter-connectedness of the issues of violent extremism and climate change, these measures risk being insufficient to overcome the growing threat, and, potentially, worsening the problem altogether.



Although a preliminary step, the findings of this study make clear that more research and action are urgently needed. Climate insecurity in the targeted areas is high and acutely felt by community members through increasingly unpredictable rainfall and desertification, which in turn, significantly affects the population's means of livelihood. This creates competition and tension between and within communities as they come under increased economic and survival pressure, in an already fragile and conflict-affected context. This vulnerability, especially the reduction of economic prospects, is then instrumentalized by armed groups to aid recruitment and exacerbate destabilization, creating a vicious cycle. Addressing this problem is neither simple nor straightforward, but it is vital, and a research-grounded approach is needed to support vulnerable communities, deconstruct the narrative of armed groups, and develop and implement innovative adaptation measures.



Specifically, based on this research, UNICRI has identified guiding principles that should form the basis of future PVE interventions that take into account the linkages between climate change and violent extremism in the area. These include:



Integrate climate challenges considerations into PVE strategies: Holistic P/CVE strategies and policies should consider the indirect link between climate change and violent extremism and—in general—a climate security analysis.



Avoid an instrumentalization of climate change: When developing PVE strategies, it is crucial to ensure a nuanced and detailed knowledge of the local context, its dynamics, and the specific drivers of violent extremism. While this should include climate change considerations, it is important to avoid instrumentalizing climate change to justify either disproportionate responses or inaction.



Invest in conflict-sensitive management of critical resources: Partnering with local civil society organisations to invest in developing peaceful dispute resolution mechanisms, including participatory mechanisms for natural resource management, would help to support inclusive community development and foster social cohesion.



Support climate-resilient alternative livelihoods for vulnerable groups: Support to farmers, herders, and fishers to adapt and cope with increased climate insecurity would reinforce livelihoods and reduce the risk of violent conflicts. It is important that such strategies are implemented with a special emphasis on inclusivity, especially for vulnerable populations, women, and young people.

Deconstruct violent extremist groups' recruitment narrative:

It is crucial to support and strengthen counter-narrative projects and resilience-boosting approaches, specifically targeting young people and women, to counteract violent extremist groups' strategic use of natural resource scarcity and food insecurity to boost their propaganda and recruitment.

**Include a gender approach to addressing climate-related security risks:**

It is necessary to improve the understanding of specific gender vulnerabilities, as well as to invest in strategies and policies aimed at women's inclusion, empowerment and access to decision-making processes, offering an alternative model of emancipation and challenging the one presented by violent extremist groups.



More and better data to inform decisions: Each intervention strategy aimed at tackling the effects of climate insecurity on social cohesion and violent extremist propaganda should be grounded in a nuanced knowledge of the specific context and informed ideally by on-the-ground research.



GUIDING PRINCIPLES

01



CHAPTER 01

INTRODUCTION

1.1 Climate change and security in the context of the United Nations

The impact of climate change on global security has long been explored within the context of the United Nations. In April 2007, under the United Kingdom's presidency, during a ministerial-level open debate on the relationship between energy, security and climate,¹ the UN Security Council (UNSC) addressed climate change as a thematic topic for the first time.² In 2009, resolution A/RES/63/281,³ while recognising the different responsibilities of UN organs, invited them to intensify their efforts “in considering and addressing climate change, including its possible

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- 1 United Nations Security Council, “United Nations Security Council 5663rd Meeting,” April 17, 2007, S/PV. 5663, https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv_5663.pdf.
 - 2 “The UN Security Council and Climate Change,” Security Council Report 2021, June 21, 2021, https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/climate_security_2021.pdf.
 - 3 United Nations General Assembly, “Resolution Adopted by the General Assembly” (United Nations General Assembly, June 11, 2009), A/RES/63/281, <https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/res%2063%20281.pdf>.

security implications.”⁴ Following this resolution, the UN Secretary General presented to the General Assembly a report⁵ that highlighted climate change as a *threat multiplier* with the potential to exacerbate existing threats to peace and security.

In 2011, under Germany’s presidency, the UN Security Council held an open debate⁶ on the maintenance of international peace and security, specifically addressing the impact of climate change. In this context, the Council adopted a presidential statement that recognises that “the possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security,”⁷ and called for conflict analysis and the collection of contextual information.

Relevant institutional developments that followed the presidential statement include the joint establishment, in 2018, of the Climate Security Mechanism (CSM). Formed by the UN Department of Political and Peacebuilding Affairs (DPPA), the UN Development Programme (UNDP), and the UN Environment Programme (UNEP), the objective of the CSM is to strengthen the capacity of the UN system to address climate-related security risks.⁸ In the same year, a Group of Friends on Climate and Security was formed, which initially consisted of 27 UN Member States and, as of September 2021 counted 59 members.⁹ The Group aims to work towards joint solutions for the impact of climate change on security, boost the involvement of the United Nations and raise public awareness on this topic.

To foster a more systematic and consistent approach to climate-related security risks, in August 2020, ten members of the Security Council announced the establishment of an Informal Expert Group on Climate and Security. According to a letter submitted to the Secretary-General, the informal expert group aimed to improve “the flow of information and analysis with respect to the peace and security implications of climate change in country- and region-specific

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- 4 United Nations General Assembly, “Resolution Adopted by the General Assembly on 3 June 2009” (United Nations General Assembly, June 11, 2009), A/RES/63/381, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N08/487/65/PDF/N0848765.pdf?OpenElement>.
 - 5 United Nations General Assembly, “Report of the Secretary-General: Climate Change and Its Possible Security Implications,” September 11, 2009, A/64/350, <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/sg%20report%202009.pdf>.
 - 6 United Nations Security Council, “United Nations Security Council 6587th Meeting,” July 20, 2011, S/P.V.6587, <https://documents-dds-ny.un.org/doc/UNDOC/PRO/N11/422/59/PDF/N1142259.pdf?OpenElement>.
 - 7 United Nations Security Council, “Statement by the President of the Security Council,” July 20, 2011, S/PRST/2022/15*, <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/CC%20SPRST%202011%205.pdf>.
 - 8 United Nations Climate Security Mechanism, “Progress Report: May 2021” (United Nations, May 2021), https://dppa.un.org/sites/default/files/csm_progress_report_2021_final.pdf.
 - 9 “Letter Dated 9 September 2021 from the Permanent Representative of Ireland to the United Nations Addressed to the Secretary-General,” September 9, 2021, S/2021/782, https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2021_782.pdf.

situations and sharpen the focus and specificity of Council deliberations and actions.”¹⁰

The issue has increasingly been high on the agenda of the UN Security Council. In September 2021, for instance, under Ireland’s presidency, the UN Security Council held a high-level open debate on the “Maintenance of International Peace and Security: Climate and Security.”¹¹ Subsequently, in December, under Niger’s presidency, the Security Council held a further open debate on “Security in the context of terrorism and climate change.”¹² The link between climate change and violent extremism was addressed again during the February 2021 UNSC open debate hosted by the United Kingdom on “Addressing climate-related security risks to international peace and security through mitigation and resilience building” where several representatives mentioned how the impact of climate change and environmental degradation contribute to creating a breeding ground for violent extremism.¹³ There has been ongoing discourse around a thematic resolution on climate and security both during and on the margins of events such as these.

Regarding the Sahel and the Lake Chad Basin region more specifically, in 2017, UNSC adopted resolution 2349, which addressed the negative security, humanitarian, and developmental dimensions of the Boko Haram crisis, and recognised climate change as one of the factors affecting the stability of the region, “through water scarcity, drought, desertification, land degradation, and food insecurity.”¹⁴ This was echoed by the Lake Chad Basin Commission and the African Union Commission, which, in their Regional Strategy report (2018) explained how Lake Chad has diminished drastically because of climate change-related desertification, which resulted “in the loss of traditional livelihoods and a propensity for populations to explore alternative livelihoods, including violent extremism.”¹⁵

Similarly, in July 2020,¹⁶ the UN Special Representative and Head of UNOWAS warned that continuous attacks by extremist groups in the region undermine

10 “Letter Dated 27 August 2020 from the Chargé d’affaires a.i. of the Permanent Mission of Germany to the United Nations Addressed to the Secretary-General,” August 28, 2020, S/2020/849, <https://digitallibrary.un.org/record/3879109?ln=en#record-files-collapse-header>.

11 United Nations Security Council, “United Nations Security Council 8864th Meeting,” September 23, 2021, S/P.V. 8864, https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_pv.8864.pdf.

12 *Security in the Context of Terrorism and Climate Change-Security Council, 8923rd Meeting* (New York, 2021), <https://media.un.org/en/asset/k1r/k1rw3gy2mo>.

13 “Letter Dated 25 February 2021 from the President of the Security Council Addressed to the Secretary-General and the Permanent Representatives of the Members of the Security Council,” March 1, 2021, S/2021/198, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/054/09/PDF/N2105409.pdf?OpenElement>.

14 United Nations Security Council, “Resolution 2349” (UNSC, March 31, 2017), S/RES/2349, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/086/16/PDF/N1708616.pdf?OpenElement>.

15 Lake Chad Basin Commission, “Regional Strategy for the Stabilization, Recovery, and Resilience of the Boko Haram-Affected Areas of the Lake Chad Basin Region” (Lake Chad Basin Commission, August 2018), <http://www.peaceau.org/uploads/regional-stabilisation-recovery-and-resilience-strategy-rss-.pdf>.

16 “Situation in West Africa, Sahel ‘Extremely Volatile’ as Terrorist Exploit Ethnic Animosities, Special Representative Warns Security Council,” July 9, 2020, SC/14245, <https://press.un.org/en/2020/sc14245.doc.htm>.

peace and security, while climate change exacerbates social tensions and fosters violence. Greater efforts, further research, and institutional developments are therefore needed to better define the impact of climate change on security and violent extremism.

1.2 Background of the research

While there has not yet been a dedicated Security Council resolution on climate change per se, UNSC now acknowledges security risks related to climate change and calls for appropriate risk assessment and management in specific geographic contexts. Since the first report of the Secretary-General to the United Nations General Assembly underlining the global security risks posed by climate change in 2009, the multidimensional effects of climate change have become of mounting concern to researchers and practitioners in the fields of environmental adaptation and violent extremism alike, and many policymakers and scholars worldwide have recognized climate change as an escalating security threat.¹⁷ Considered separately, both climate change and violent extremism may be expected to have a huge impact globally in the coming years. Yet, when these two challenges overlap, as they increasingly do, they can have a particularly profound impact on the most vulnerable populations, those both most exposed—and least adapted—to the vicissitudes of weather brought about by climate change while simultaneously surviving on the front lines of violent conflict.

Despite this risk, the link between climate change and violent extremism remains understudied and establishing a clear relationship is far from straightforward. Indeed, most studies, including this one, have focused on the role of climate insecurity as a “*risk multiplier*,” rather than a direct cause of violence. In fragile and conflict-affected settings, many have warned that the additional pressures brought about by climate change may trigger or exacerbate existing conflicts whose root causes include other, more direct elements, such as lack of state legitimacy, widespread inequality, persistent poverty, weak institutions, state abuse, and a history of mistrust between communities. In these conflict-fertile contexts, the effects of climate change can cause long-simmering hostilities to intensify, while also allowing non-state armed groups to capitalize on communities’ increased pressure for survival, even capturing and weaponizing ever-scarce natural resources.

Few regions embody these overlapping risks of fragility, climate vulnerability, and pre-existing conflict more than the Sahel. Here, weak state capacity and a growing violent extremist threat, combined with a population that is more than 80% dependent on ever-scarcer natural resources for survival, come together in what the Nigerien leader, Mr. Hassoumi Massoudou, termed “*the*

17 Stefanie Mavroukou et al., “The Climate Change–Terrorism Nexus: A Critical Literature Review,” *Terrorism and Political Violence* 34, no. 5 (July 4, 2022): 894–913, <https://doi.org/10.1080/09546553.2022.2069445>.



crucible of climatic reality,” where “*intensified competition for land, fodder, and water resources,*”¹⁸ fuels community-level conflicts ripe to explode. Indeed, the region’s economic reliance on farming and pastoralism has proven particularly susceptible to the rising temperatures, more variable rainfalls, extreme weather events, and desertification brought about by climate change. Surging population growth and expanding violent extremist groups have resulted in violent tensions, that weak state institutions often struggle to adequately respond to and prevent.

Assisting states to better understand these links, to respond to and prevent future conflict, is of particular interest to the United Nations Interregional Crime and Justice Research Institute (UNICRI). As one of six specialized research and training institutes of the United Nations, UNICRI is mandated to advance the understanding of crime and crime-related problems, foster just and efficient systems, support respect for international standards, and facilitate international law enforcement cooperation and judicial assistance. Since 2015, UNICRI has developed a particular expertise in the Sahel and Maghreb, working on projects to prevent and counter violent extremism through grassroots community action. In November 2020, the Institute published [Many Hands on an Elephant. What Enhances Community Resilience to Radicalisation into Violent Extremism?](#), a report documenting learnings from the Institute’s experience working with more than 80 grassroots civil society organisation across nine countries to improve resilience to violent extremism. Here, too, emerged evidence of the impact of climate change on conflict, as “unfair distribution or unequal access to natural resources,” along with “access to natural resources compromised due to climate change,” were two main grievances cited by local communities affected by violent extremism. This was particularly present in Chad, where 77% of community members surveyed by local civil society organisation working with UNICRI reported either knowing someone or being party themselves to “a conflict related to accessing agricultural areas or livestock farming.”¹⁹

These findings prompted UNICRI to investigate further the links between climate change and violent extremism in the Sahel. In partnership with SWISSAID, it launched this initial research and primary data collection effort within four provinces of Chad: Hadjer-Lamis and Lac in the Sahelian zone, and Logone Occidentale and Mandoul in the lower Sudanian zone. These areas were chosen due to their exposure both to the effects of climate and, in the case of Hadjer-Lamis and Lac, to their exposure to attacks from Boko Haram because of their proximity to international borders with Nigeria, Niger, and Cameroon.

18 United Nations Security Council, “United Nations Security Council 8864th Meeting.”

19 United Nations Interregional Crime and Justice Research Institute, “Many Hands on an Elephant: What Enhances Community Resilience to Radicalisation into Violent Extremism” (UNICRI, 2020), <https://www.crimrxiv.com/pub/3unkoeex>.

Through in-depth interviews with local leaders and community members, the research aimed to better understand if and how the effects of climate change were felt by community members, particularly as it relates to local conflict and violent extremist dynamics. The report that follows begins with an overview of the climate and violent extremist context in Chad, which informed the selection of the four targeted provinces, as well as the data collection methodology and relevant definitions. Delving into the research's main findings, the report then presents interviewees' perceptions of the effect of climate change at two interconnected levels: the direct consequences as experienced on productive activities such as agriculture, livestock, and fishing, as well as the indirect consequences affecting social cohesion and violent extremist recruitment and propaganda. Based on these initial findings, it then concludes with recommendations for further research and climate-relevant P/CVE approaches.

To improve the region's resilience against violent extremism, it is necessary to address the underlying causes of this phenomenon. As UNICRI's previous experience makes clear, this process can no longer be undertaken without an in-depth analysis of the role climate change and the degradation of natural resources have in exacerbating local conflicts, weakening governance, and fuelling radicalization. Although neither definitive nor causal, the following research is a crucial preliminary step in untangling the role of climate change on violent extremism as experienced at the community level and in laying the groundwork for further research and the development of local P/CVE initiatives that take into consideration overlapping climate challenges.

02



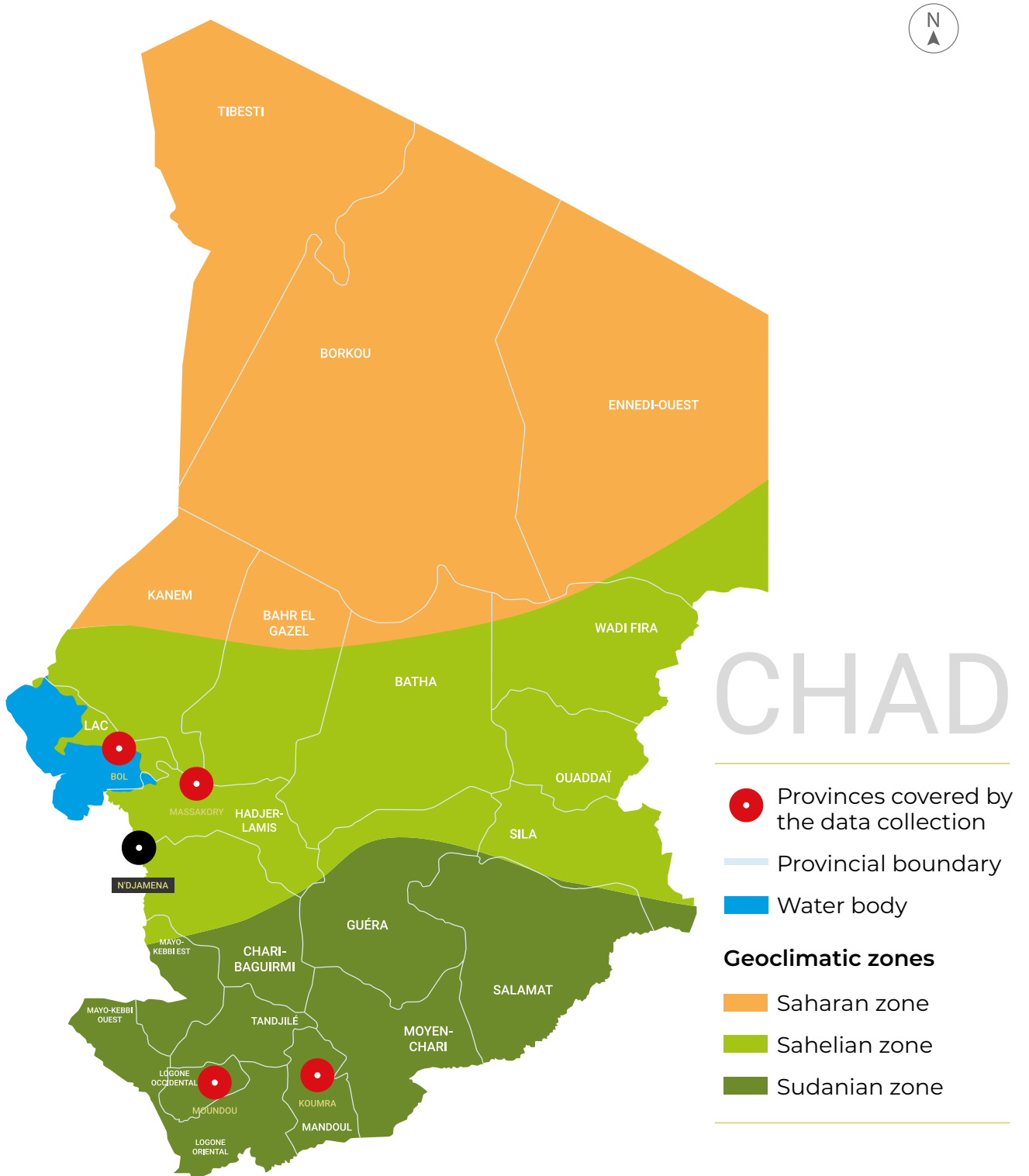
CHAPTER 02

CONTEXT OF THE STUDY

2.1 Geographic context and climate risks

Chad has three distinct geographical and bioclimatic zones: the Saharan zone in the north, the Sahelian zone in the centre, and the Sudanese zone in the south. The climate and geography of these zones vary enormously, with landscapes ranging from woodland in the south and the savannas and steppes of the central region to the sand and mountains of the Sahara. The difference between these zones is mainly due to the varying rainfall gradient, ranging from 1,200 mm per year in the south to less than 100mm in the north. The main productive activities in these bioclimatic zones are livestock herding, agriculture, and – depending on the availability of surface water resources – fishing. Two of the four provinces chosen for this study, Hadjer-Lamis and Lac, are in the Sahelian zone, while the provinces of Logone Occidental and Mandoul are situated in the Sudanese zone.

➤ Map 1: The three main bioclimatic zones breakdown of Chad



Source: PAEPA: Rural Drinking Water and Sanitation Programme

The Saharan zone covers almost half of the territory of Chad (47%).²⁰ This is an arid and mountainous zone with an average rainfall of less than 100mm annually,²¹ the main consequence of which is under-population (2.5% of the Chadian population).²² Camel herding is the main productive activity in this zone, while agriculture is practised exclusively in the wadis²³ and the areas surrounding the lakes Ounianga Kebir and Ounianga Serir.

The Sahelian zone is a transition zone between the Sahara and the rest of the country, covering 43%²⁴ of the national territory. Its climate varies according to the amount of rainfall, and its vegetation differs between the south and north. The Sahelian zone is divided into two sub-zones. The Sahara-Sahel section in the north has a rainfall of between 100 and 200mm annually, while the Sahel-Sudan section in the south typically has an annual rainfall between 200 and 800mm.²⁵ The landscape varies between Lake Chad's lake-side areas, the Kanem region's ergs,²⁶ and the wooded plains of Guéra. There are two types of productive activities: agropastoral and pastoral, which typically involve a combination of rain-fed farming and nomadic herding.

The Sudanese zone in the southern region only covers 10%²⁷ of the national territory, but it is home to more than 40%²⁸ of the country's population. The zone's climate and the many watercourses make the land particularly suitable for agriculture (food and cash crops). This zone's abundance of fodder resources makes it a preferred location for nomadic livestock farmers looking for pasture.

In addition to the contrasting characteristics of these bioclimatic zones, current climate change trends are affecting length, interannual variability, distribution, and total rainfall in the country and the average temperature has increased by 1°C in the last century.²⁹ Natural hazards include drought, desertification, dust-storms, and floods and the number of days with heavy precipitation

20 IRAM/BRACED, "Adaption Aux Changements Climatiques et Renforcement de La Resilience Au Tchad Diagnostic et Perspectives," 2019, http://www.inter-reseaux.org/IMG/pdf/braced_etude_resilience_et_adaptation_tchad_rapport_complet.pdf.

21 IRAM/BRACED.

22 "Institut National de la Statistique, des Etudes Economiques et Démographiques (INSEED)" (République du Tchad, 2009), <https://www.inseed.td/>.

23 These are fertile basins between dunes found in arid or semi-arid regions.

24 IRAM/BRACED, "Adaption Aux Changements Climatiques et Renforcement de La Resilience Au Tchad Diagnostic et Perspectives."

25 Ibid

26 An erg is a desert characterised by wind-swept sand dunes.

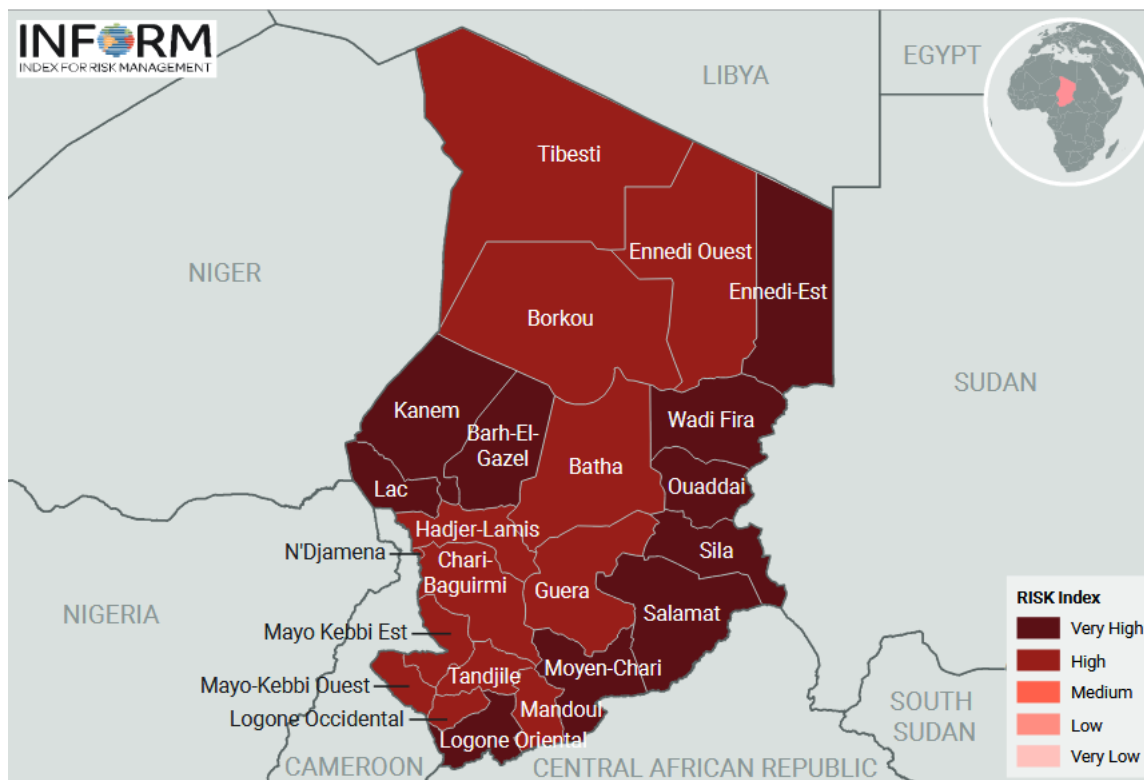
27 IRAM/BRACED, "Adaption Aux Changements Climatiques et Renforcement de La Resilience Au Tchad Diagnostic et Perspectives."

28 "Profil de pauvreté au Tchad en 2018" (Institut National de la Statistique, des Etudes Economiques et Démographiques (INSEED), 2020).

29 "Country Level: Chad" (ICRC Climate Centre, 2021), <https://www.climatecentre.org/wp-content/uploads/RCCC-I-CRC-Country-profiles-Chad.pdf>. Climate Centre, Country Level (2021)

are projected to increase in northern Chad.³⁰ According to the Index for Risk Management INFORM³¹ classification system, the provinces of Lac and Hadger-Lamis both have a 'very high' rating of 8.9/10 and 9.1/10 respectively in relation to the risk of physical exposure to floods. Severe environmental degradation is also exemplified by the falling water level of Lake Chad,³² whose surface area has shrunk from 20,000 square kilometres to 2,000 square kilometres in the last 50 years.³³ The Notre Dame Global Adaptation Initiative (ND-GAIN) index,³⁴ which summarizes a country's vulnerability to climate change and other global challenges in combination with readiness to improve resilience, ranked Chad 182 out of 182, indicating extremely high vulnerability to the effects of climate change.

► **Map 2: Chad Inform Risk Profile 2021, ESRI, UNCS, OCHA, INFORM as of 27 September 2021³⁵**



30 Oli Brown, Foong, Adrian, and Destrijcker, Lucas, "Anticipating Trends in the Sahel: Summary for Policy Makers; A Draft Report from the Predictive Analytics Project in Support of the United Nations Integrated Strategy for the Sahel (UNISS)" (Adelphi Research Gemeinnützige GmbH, October 2021), https://unis-sahel.org/wp-content/uploads/2021/10/Predictive-Analytics-Full-Report_Final-for-sign-off.pdf.

31 The [INFORM scale](#) is a global, open-source risk assessment for humanitarian crises and disasters

32 "Country Summary: Chad" (World Bank Climate Change Knowledge Portal for Development Practitioners and Policy Makers, 2021), <https://climateknowledgeportal.worldbank.org/country/chad>.

33 "BTI 2022 Country Report: Chad" (Bertelsmann Stiftung), accessed July 26, 2022, https://bti-project.org/fileadmin/api/content/en/downloads/reports/country_report_2022_TCD.pdf.

34 C Chen et al., "ND-GAIN: Country Index Technical Report" (University of Notre Dame, November 2015), https://gain.nd.edu/assets/254377/hd_gain_technical_document_2015.pdf.

35 The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

2.2 Socio-economic context

The Sahel is among the regions with the fastest growing and youngest populations in the world, with 64.5% of the population below the age of 25. Within the region, Chad has an average annual rate of population change of 3.04%, compared to 1.09% globally, and life expectancy at birth was below 55 years in 2019.³⁶ While the macroeconomic conditions of the Sahel, such as economic growth, fiscal balance, debt sustainability, and inflation, have been more consistent than the continental average over the past 10 years,³⁷ this fast and non-inclusive population increase has not allowed for this economic growth to reduce risks or improve living standards³⁸ to citizens.

Chad is, in fact, categorised as among the [Least Developed Countries](#) by UNDESA—whose definition considers the gross national income (GNI) per capita, human assets index (HAI), and economic and environmental vulnerability index (EVI)—and is represented at the bottom of the [Human Development Index](#), ranking 187th out of 189.

The agricultural sector, herding, and fishing account for 40% of the GDP, employing approximately 80% of the Chadian population,³⁹ and the country's reliance on informal and subsistence economy makes it particularly vulnerable to the effects of climate change. Indeed, rising temperature and variable rainfall have had a negative impact on harvest rates, which have become low and unpredictable. Because of higher temperatures, erratic rainfall, and population growth, it is projected that per capita water availability will decrease by 75% by 2080 compared to 2000.⁴⁰ Currently, more than 40% of the water supply comes from outside the country,⁴¹ less than 50% of the population has access to water services and only 10% has access to sanitation.⁴² Surface water is limited, and climate change will likely aggravate the pressures on water supply.

36 United Nations Department of Economic and Social Affairs, Population Division, "World Population Prospects 2019," 2019.

37 "UN Support Plan for the Sahel: Working Together for a Prosperous and Peaceful Sahel" (United Nations, May 2018), https://www.un.org/africarenewal/sites/www.un.org.africarenewal/files/English%20Summary%20Report_0.pdf.

38 Oli Brown, Foong, Adrian, and Destrijcker, Lucas, "Anticipating Trends in the Sahel: Summary for Policy Makers."

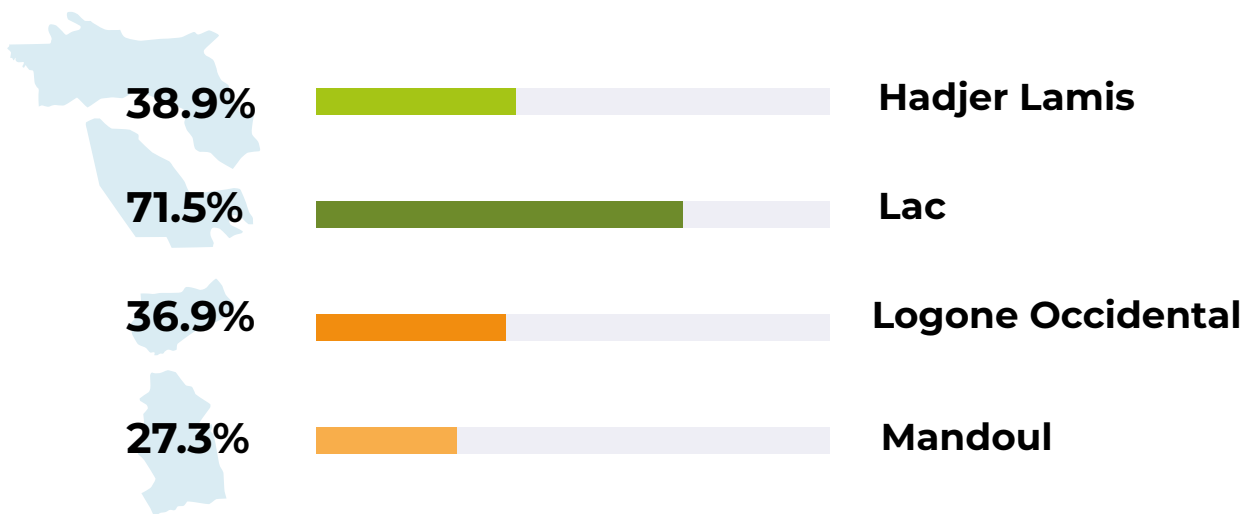
39 "BTI 2022 Country Report: Chad."

40 Julia Tomalka et al., "Climate Risk Profile: Chad," Climate Risk Profiles for Sub-Saharan Africa Series (Bonn: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2020), https://publications.pik-potsdam.de/rest/items/item_25250_1/component/file_25272/content.

41 Oli Brown, Foong, Adrian, and Destrijcker, Lucas, "Anticipating Trends in the Sahel: Summary for Policy Makers."

42 World Health Organisation (WHO) and United Nations Children's Fund (UNICEF), "Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines" (Geneva: World Health Organisation and United Nations Children's Fund, 2017), <https://data.unicef.org/resources/progress-drinking-water-sanitation-hygiene-2017-update-sdg-baselines/>.

LEVEL OF FOOD INSECURITY IN THE TARGET PROVINCES



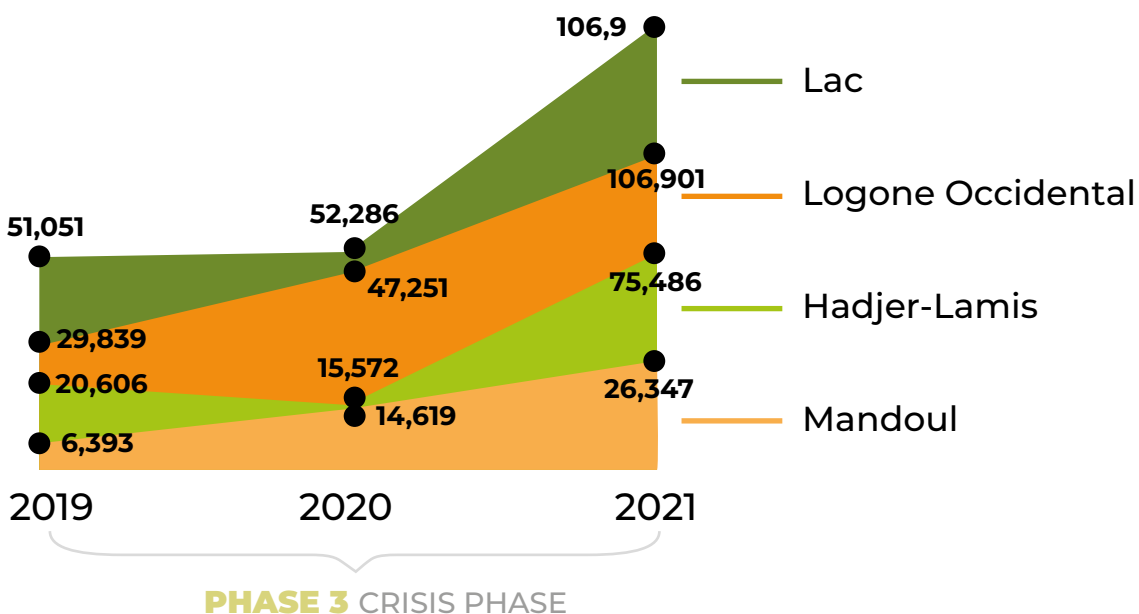
Source: Enquete national de Sécurité Alimentaire (ENSA), 2021

IN CHAD
FOOD INSECURITY



IS AFFECTING APPROXIMATELY **5.3** million people
and **1.7** million are considered 'severely food insecure'

CHANGE IN THE NUMBER OF PEOPLE NEEDING FOOD AID IN THE TARGET PROVINCES



Source: OCHA 2022. In the Cadre Harmonisé (Harmonised Framework), phase 3 is considered a "crisis phase".

A rapid demographic growth and climate risks add pressure on natural resources and, consequently, the country's main sources of livelihoods, with long-term health implications.⁴³ Food insecurity is widespread in Chad, affecting approximately 5.3 million people, of which 1.7 million are considered 'severely food insecure'.⁴⁴ With an unequal distribution of income, Chad has shown a steady decline in poverty in the past 20 years,⁴⁵ with rural areas both most affected and most vulnerable to increasing climate risks, due to their dependence on agricultural and agropastoral systems.

2.3 Context of political violence and governance in Chad

Post-colonial Chad has a turbulent history characterized by cycles of violence, civil war, and political crises, the effects of which are still felt by its population today. Governance-related issues, ongoing political crises, and the porous nature of the borders with neighbouring countries have created a favourable environment for political violence and violent extremism.

Colonized by France until its independence in 1960, Chad experienced relatively light colonial penetration, with France opting for more indirect rule and enlisting tribal leaders from Chad's 200 different ethnic groups to enforce its rule.⁴⁶ When Chad became independent, this left only a handful of trained Chadian civil servants, weak national government structures, and a tendency to rely on traditional authorities to assert state power, particularly in more remote areas.⁴⁷ Since its independence, Chad's political climate has been tumultuous, marked by three successive armed uprisings and coups d'état.

The first rebel movements emerged shortly after independence in opposition to president Ngarta Tombalbaye, led by the Libyan and Sudanese-backed Chadian National Liberation Front (FROLINAT).⁴⁸ Tombalbaye resisted until he was killed in post-colonial Chad's first military coup in 1975.⁴⁹ Conflict continued, with rival forces backed by Libya and France⁵⁰ until the second president, Hissène Habré, seized control of the capital N'Djamena in 1982, controlling the

43 "Country Level: Chad."

44 United Nations Office for the Coordination of Humanitarian Affairs (OCHA), "Chad Country Report" (United Nations Office for the Coordination of Humanitarian Affairs (OCHA), July 15, 2022), <https://reports.unocha.org/fr/country/chad>.

45 Klaus von Grebmer et al., "Global Hunger Index (GHI): One Decade to Zero Hunger Linking Health and Sustainable Food Systems" (Dublin/Bonn, October 2020), <https://www.globalhungerindex.org/pdf/en/2020.pdf>.

46 "Conflict Profile: Chad (1965-)" (Political Economy Research Institute, University of Massachusetts Amherst), accessed July 26, 2022, <http://peri.umass.edu/fileadmin/pdf/Chad.pdf>.

47 Ibid

48 Ibid

49 "Renversement Du Président Tchadien Ngarta Tombalbaye" (Perspective Monde, April 13, 1975), <https://perspective.usherbrooke.ca/bilan/servlet/BMEve/1295>.

50 "Conflict Profile: Chad (1965-)."

central government until he, too, was ousted by a coup in 1990.⁵¹ This second coup was led by Idriss Déby, the leader of a rebellion backed by Sudan and Libya.⁵² Déby remained in power for over three decades until April 2021, when he was killed in combat while leading Chad's security forces against rebels in the country's central region.⁵³ It was announced shortly after his death that a military council led by Déby's son, a general in the Chadian army, would govern for the next 18 months before "free and democratic elections" promised to be held following the transition period.⁵⁴

Beyond domestic political clashes, Chad is also at the nexus of several regional, neighbouring conflicts, in the Sahel and Lake Chad Basin, making it particularly vulnerable to cross-border instability and spill over. This is the case with Libya to the north, the Central African Republic to the south, Nigeria to the west, and Sudan to the east. The Libyan border is viewed by many observers as largely ungoverned and a highly used corridor for the illegal movement of arms and various other types of illicit trafficking.⁵⁵ To the south, the long and porous border is exposed to the effects of the conflict in the Central African Republic, including large movements of internally displaced persons (IDPs) hosted in Chad. Meanwhile, in the west, increasing attacks from Boko Haram have destabilised the border with Nigeria; it is the western area that forms the primary focus of this research, due in part to the locations of the target regions near Lake Chad.

Yet despite this history of political violence, and the relative geographic proximity with N'Djamena, the areas in and around Lake Chad have remained somewhat symbolically distant from the capital and centre of power in Chad. For decades, the areas surrounding Lake Chad have long served as a "refuge" for smugglers,⁵⁶ rebels, and illegal trade. As reported by the International Crisis Group, "the dynamism of the economy and the limited local presence of the state, encouraged trafficking in fuel, medicines, drugs, weapons, identity documents and people... [Lake Chad's] topography, its distinctive vegetation, and the difficulty of navigating its labyrinth of islands also helped smuggling to flourish."⁵⁷ In the past three decades, there has also reportedly been an increase

51 Ibid

52 Abdullahi Tukur, *Crisis and Development: Lake Chad Region and Boko Haram*, 2018.

53 Nina Soyev and Pierre Desorgues, "Le président tchadien Idriss Déby est mort, un conseil militaire dirigé par son fils le remplace," *Le Monde*, April 20, 2021, <https://information.tv5monde.com/afrique/direct-le-president-tchadien-idriss-deby-est-mort-un-conseil-militaire-dirige-par-son-fils>.

54 Andrew Harding, "Chad's President Idriss Déby Dies after Clashes with Rebels," *BBC*, April 20, 2021, <https://www.bbc.com/news/world-africa-56815708>.

55 "En Libye, « les stocks d'armes restent élevés et suffisants pour alimenter tout conflit futur », estiment des experts de l'ONU," *Le Monde avec AFP*, December 1, 2021, https://www.lemonde.fr/afrique/article/2021/12/01/en-libye-les-stocks-d-armes-restent-eleves-et-suffisants-pour-alimenter-tout-conflit-futur_6104289_3212.html.

56 Tukur, *Crisis and Development: Lake Chad Region and Boko Haram*.

57 "Fighting Boko Haram in Chad: Beyond Military Measures," Crisis Group Africa (Nairobi/Brussels: International Crisis Group, March 8, 2017), <https://icg-prod.s3.amazonaws.com/246-fighting-boko-haram-in-chad-beyond-military-measures.pdf>.

in *zarginas* or highway robberies,⁵⁸ and rebels from Chad's successive civil wars have also often escaped to the areas around Lake Chad, sometimes shifting from rebel, to highway robber, to member of Boko Haram.⁵⁹

This sense of periphery also extends to the Chadian State's governance in the region, as well as the sense of national identity among the population. Despite attempts at large-scale development projects in the 1960s and 1980s—both derailed in part due to security issues—and a growth in oil revenues in the early 2000s, the areas around Lake Chad remain chronically underdeveloped, with gross school enrolment below 30% and approximately one doctor for every 140,000 inhabitants.⁶⁰ In the regions surrounding Lake Chad, in particular, this is also accompanied by relatively low levels of national identity or connection with national institutions.⁶¹ Many inhabitants of the Lake areas, particularly semi-nomadic herders, have traditionally moved across national borders freely—prior to the borders' closure for security reasons—and may possess identity documents from multiple states.⁶² As the International Crisis Group reports, “inhabitants on the Chadian shore of the lake have looked more to Maiduguri [the birthplace of Boko Haram in Nigeria] than to N'Djamena,” and often use the Nira (Nigerian currency) rather than the Franc CFA (currency used in Chad).⁶³

In the southern provinces studied as part of this research—Mandoul and Logone Occidentale—the governance situation is often better, but far from ideal. Both provinces rank high (7.9/10) on the INFORM Risk Index in the areas of “Lack of Coping Capacity,” which includes measures of physical infrastructure, communications, governance, and access to healthcare.⁶⁴ Overall, limited access to basic social services like education and healthcare, unemployment, poverty, and malnutrition—as well as low coping capacity by the Chadian State—is a daily reality in all the regions studied.

58 Ibid

59 Ibid

60 Ibid

61 Chitra Nagarajan et al., “Climate-Fragility Profile: Lake Chad Basin” (Berlin: Adelphi Research Gemeinnützige GmbH, 2018), https://www.adelphi.de/en/system/files/mediathek/bilder/Lake%20Chad%20Climate-Fragility%20Profile%20-%20adelphi_0.pdf.

62 “Fighting Boko Haram in Chad: Beyond Military Measures.”

63 Ibid, page 8

64 “Index for Risk Management (INFORM) Subnational Model of Chad” (Collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission., 2019), <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Subnational-Risk/Chad>.

2.4 Context of violent extremism⁶⁵ in Chad

In recent years, Chad has also been greatly affected by violent extremist attacks; in the regions studied in this research, this has particularly come from Boko Haram, as well as its offshoot, the Islamic State in West Africa Province (ISWAP). Formed in Nigeria's Maiduguri in 2002, *Jama'atu Ahl al-Sunna lid Da'wati wa al-Jihad*, commonly known as Boko Haram, has waged a bloody war over the past two decades.⁶⁶ Primarily operating in northern Nigeria, but having spread to neighbouring south-eastern Niger, far north Cameroon, western Chad, and as far afield as northern Mali, Boko Haram has killed over 18,000 people, displaced millions and was named in 2014 as "the world's most deadly terrorist organization."⁶⁷

Yet despite this bloodshed, Boko Haram's initial operations remained largely confined to Nigeria. Notably, there were no major attacks in Chad during the first decade of the group's operations, despite the lake-adjacent regions' physical and cultural proximity to Maiduguri, and the fact that the group has always had Chadian members.⁶⁸ This was due, in part, to an initially neutral stance by the Chadian State and a "tacit non-aggression pact between Boko Haram and Chad."⁶⁹ However, this came to an end in February 2015, when Chad's government changed its position, sending troops to neighbouring Cameroon and Niger to support in containing the group's activities; the terrorist group's first attack on Chadian soil followed shortly after, in Ngouboua, a village on the shore of Lake Chad.⁷⁰ Indeed, 2015 would prove among the bloodiest years in Chad's engagement with Boko Haram, both in terms of the number of attacks, as well as the fatality of those attacks.⁷¹

65 A note on definitions: violent extremism has been given several differing definitions, none of which are universally accepted. According to the UNSG Plan of Action to Prevent Violent Extremism, defining these terms falls under the prerogative of Member States, given that such definitions must also be consistent with country obligations under international law, and in particular human rights law. As such, the UN has adopted a "practical approach," to preventing and countering violent extremism, largely not addressing the issue of definition. However, for the purposes of this research, the term "violent extremism" generally follows the definition offered by UNESCO: "the beliefs and actions of people who support or use violence to achieve ideological, religious or political goals," including "terrorism and other forms of politically motivated and sectarian violence." Within this research's specific context, this primarily concerns the actions of Boko Haram, as this is the most active and dominant violent extremist organization currently operating in the study regions.

66 Andrew Walker, "What Is Boko Haram?," Special Report (United States Institute of Peace, June 2012), <https://www.usip.org/publications/2012/05/what-boko-haram>.

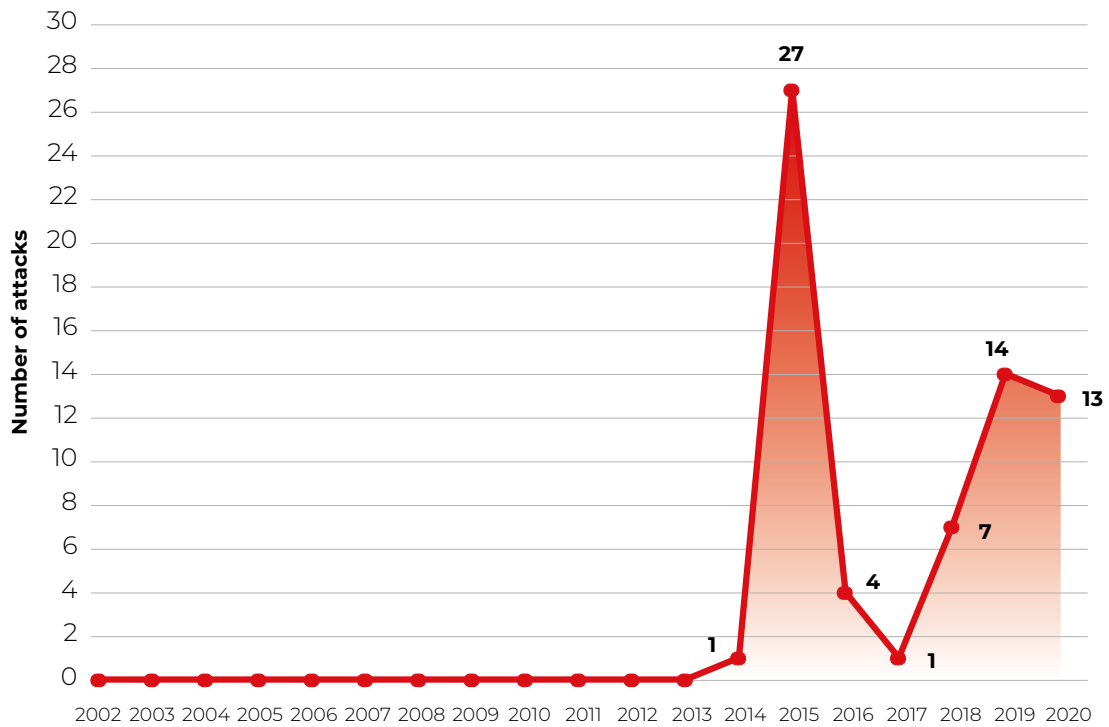
67 Audu Bulama Bukarti, "The Origins of Boko Haram--And Why It Matters," *Hudson Institute*, January 13, 2020, <https://www.hudson.org/research/15608-the-origins-of-boko-haram-and-why-it-matters>.

68 "Fighting Boko Haram in Chad: Beyond Military Measures."

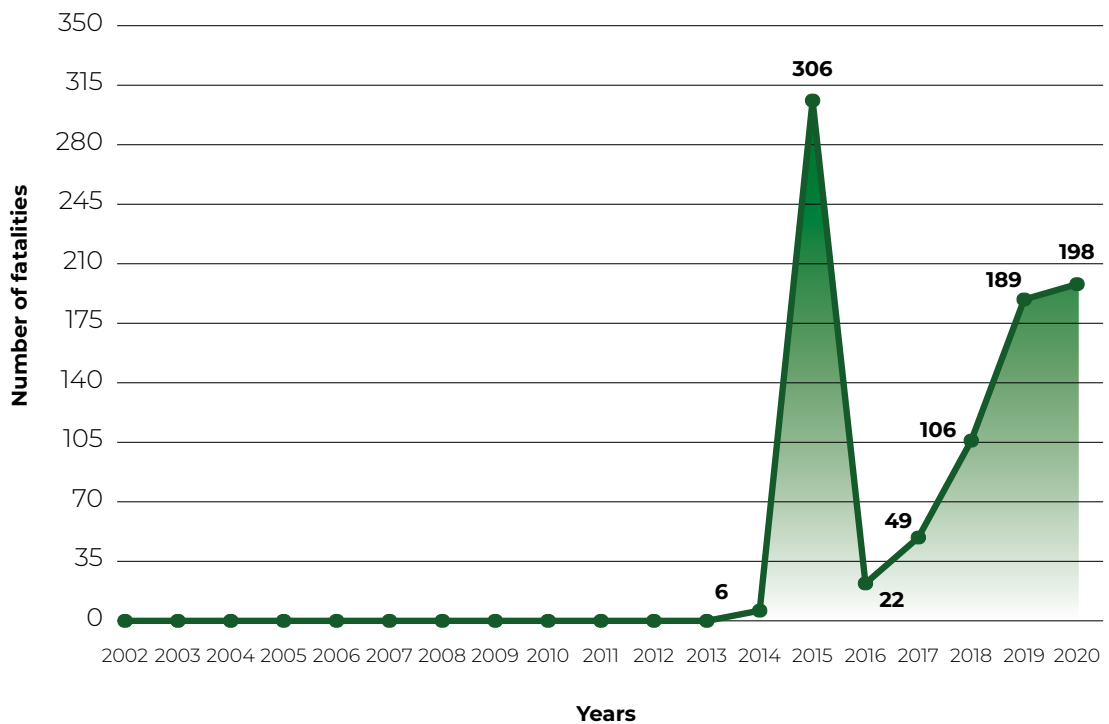
69 Ibid

70 Ibid

71 START (National Consortium for the Study of Terrorism and Responses to Terrorism). (2022). *Global Terrorism Database 1970 - 2020* [data file]. <https://www.start.umd.edu/gtd>



► Figure 1: Number of attacks by Boko Haram in Chad, 2002-2020. (Source: Global Terrorism Database)



► Figure 2: Number of fatalities from Boko Haram attacks per year. (Source: Global Terrorism Database)

In Chad, attacks have been particularly prevalent in two provinces, Lac and Hadjer-Lamis,⁷² which is why these two provinces are among those included in this research. These regions are worse affected due to their proximity to northern Nigeria and location along Lake Chad, which—with its remote islands—allows Boko Haram militants to seek easy refuge.⁷³ Indeed, since the first incursions in 2015, attacks in Lac and Hadjer-Lamis have been almost continuous.

In March 2020, Chad experienced its deadliest terrorist attack since the incursions began, when Boko Haram militants killed 92 Chadian soldiers in an attack in Boma, a town in the Lac province. In August 2021, Chad was again shaken by a Boko Haram attack on the island of Tchoukoutalia, 190 km northwest of N'Djamena,⁷⁴ in the Lac province, with 24 soldiers killed.



72 Ngonn Lokar, "3 kamikazes frappent Guité et Mitériné," *TchadInfos*, February 1, 2016, <https://tchadinfos.com/tchad/3-kamikazes-frappent-guite-et-miterine/#:~:text=8%20morts%20et%2051%20blessés,préfecture%20de%20Mani%20à%209h15>.

73 "Fighting Boko Haram in Chad: Beyond Military Measures."

74 "Tchad : une attaque de Boko Haram tue une vingtaine de soldats," *France24*, August 5, 2021, <https://www.france24.com/fr/afrique/20210805-tchad-une-attaque-de-boko-haram-tue-une-vingtaine-de-soldats>.



03



CHAPTER 03

LITERATURE REVIEW

3.1 Climate change insecurity, conflict, and violent extremism

Many policymakers and scholars worldwide have recognised climate change as an escalating security threat.⁷⁵ While there has not yet been a dedicated United Nations Security Council (UNSC) resolution on climate change per se, it now acknowledges security risks related to climate change and calls for appropriate risk assessment and management in specific geographic contexts.

The academic community has explored the links between climate change and security since the early 2000s, focusing mainly on establishing whether climate change is a causal factor of internal conflicts and interstate wars.⁷⁶ Large-scale quantitative analyses aiming to identify general patterns and correlations between proxies of climate change and security outcomes have been the source of highly contested debates. A meta-analysis of 60 studies found that for every standard deviation of the change in temperature and precipitation, levels of

75 Mavrakou et al., "The Climate Change–Terrorism Nexus: A Critical Literature Review."

76 Nina von Uexkull et al., "Civil Conflict Sensitivity to Growing-Season Drought," *Proceedings of the National Academy of Sciences* 113, no. 44 (2016): 12391–96, <https://doi.org/10.1073/pnas.1607542113>.

interpersonal violence increased by 14% and group violence by 4%.⁷⁷ A smaller but significant strand of the literature has also focused more specifically on terrorism and violent extremism, looking at how climate change effects may tempt individuals to join violent extremist groups.⁷⁸ For example, a study of 129 countries between 1998 and 2012 found that natural climate disasters increase the likelihood of transnational terrorism.⁷⁹

However, these findings have been disputed by researchers who claim that models should include social and political variables.⁸⁰ This debate has not been fully resolved, and in the past decade, the literature on the security implications of climate change has expanded rapidly in scope as well as in volume, with various studies looking at the role of climate-related factors as drivers of specific conflicts, such as the civil wars in Syria⁸¹ and Darfur, Sudan,⁸² as well as the Lake Chad crisis. A dominant thesis in the early climate security literature is that environmental scarcity, such as water scarcity and land degradation, directly leads to violent conflict. For example, many researchers agree that an anthropogenically-caused drought in Syria led to a large migration of people to urban areas, causing competition for limited available resources and, ultimately, political unrest. Consequently, this instability facilitated the rise of violent extremist groups such as ISIL and Al Nusra Front and allowed them to gain control of certain areas.

According to this notion, scarcity encourages certain groups to divert resources to benefit themselves, undermining social cohesion.⁸³ The reduction of crop yields and the impact of climate variability on agriculture and subsequent food insecurity also increase the likelihood of violence. Similarly, conflict increases vulnerability and worsens the impacts related to climate variability and change. However, there is a wide discrepancy between studies on what type of climate change leads to conflict. Notably, Salehyan and Hendrix have argued that water abundance, rather than scarcity, contributes to political violence, as lower rainfall penalises rebel groups as they find it more difficult to sustain themselves.⁸⁴

77 Solomon M. Hsiang, Marshall Burke, and Edward Miguel, "Quantifying the Influence of Climate on Human Conflict," *Science* 341, no. 6151 (September 13, 2013): 1235367, <https://doi.org/10.1126/science.1235367>.

78 Katharina Nett and Lukas Rüttinger, "Insurgency, Terrorism and Organised Crime in a Warming Climate" (Berlin: Adelphi Research Gemeinnützige GmbH, October 2016), https://climate-diplomacy.org/sites/default/files/2020-10/CD%20Report_Insurgency_170724_web.pdf.

79 Aniruddha Bagchi and Jomon A. Paul, "Youth Unemployment and Terrorism in the MENAP (Middle East, North Africa, Afghanistan, and Pakistan) Region," *Socio-Economic Planning Sciences* 64 (2018): 9–20, <https://doi.org/10.1016/j.seps.2017.12.003>.

80 Solomon M. Hsiang and Marshall Burke, "Climate, Conflict, and Social Stability: What Does the Evidence Say?," *Climate Change* 123, no. 1 (March 1, 2014): 39–55, <https://doi.org/10.1007/s10584-013-0868-3>.

81 Guy J. Abel et al., "Climate, Conflict and Forced Migration," *Global Environmental Change* 54 (2019): 239–49, <https://doi.org/10.1016/j.gloenvcha.2018.12.003>.

82 Alexander De Waal, ed., *War in Darfur and the Search for Peace* (Cambridge, MA): [London: Global Equity Initiative, Harvard University; Justice Africa, 2007].

83 Colin Kahl, *States, Scarcity, and Civil Strife in the Developing World* (Princeton, N.J. Woodstock: Princeton University Press, 2008).

84 Idean Salehyan, "Climate Change and Conflict: Making Sense of Disparate Findings," *Special Issue: Climate Change and Conflict* 43 (November 1, 2014): 1–5, <https://doi.org/10.1016/j.polgeo.2014.10.004>.

Moreover, during favourable environmental conditions and sufficient rain, high grass may provide cover for livestock raiding as part of intra-group conflicts between pastoralist communities.⁸⁵ With no proven direct link between climate change and violent extremism, Swain and Jakerskok describe the role of climate change as a "threat multiplier" that can increase the likelihood of conflict and violence.⁸⁶ According to Swain and Jakerskok, the interaction between climate change and conflict typically manifests in three ways:

1. Climate change worsens competition around natural resources, which leads to increased conflict. These factors provide fertile grounds for the emergence of Non-State Armed Groups (NSAGs), such as in the case of Syria, who fill the vacuum left by the government and claim authority by providing essential services to the population.⁸⁷
2. Deteriorating livelihood conditions and reduced tax revenue can weaken states' capacity to provide access to basic services and mitigate tensions between communities. In a context where people feel that their fragile livelihoods are threatened due to food insecurity or water/land shortages, NSAGs offer alternative livelihoods and economic incentives to gain trust and recruit new members.
3. In turn, violent extremists use natural resources as a weapon of war by controlling access to them and strategic territory. An example is the takeover of the Mosul dam by ISIL (Da'esh) in Iraq, which gave the group control of enormous water and power resources.

Lately, rather than viewing the interactions between climate change and violent extremism through a deterministic lens, authors have approached the topic with more nuance.⁸⁸ Recent studies are based on the understanding that the factors under which climate change leads to conflict and violent extremism depend on the specific context. Scholars have found correlations between the two that can be positive or negative depending on other factors, such as the nature of the government or agricultural production, that can change from country to country. In some cases, as argued by a study from the International Crisis Group in 2020, the apparent link between climate change and violent extremism can deflect attention from other pre-existing factors conducive to violence, such as bad governance, inequality, corruption, and unresolved

85 Janpeter Schilling et al., "On Raids and Relations: Climate Change, Pastoral Conflict and Adaptation in Northwestern Kenya," *Climate Change and Conflict: Where to for Conflict Sensitive Climate Adaptation in Africa?*, January 1, 2014, 241-67.

86 Ashok Swain and Anders Jägerskog, *Emerging Security Threats in the Middle East: The Impact of Climate Change and Globalization*, 2016.

87 Nett and Rüttinger, "Insurgency, Terrorism and Organised Crime in a Warming Climate."

88 Security and the United Nations SSRC Academic Network on Peace and Joshua Busby, "The Field of Climate and Security: A Scan of the Literature," 2019, <https://apo.org.au/node/236441>.

legacies of conflict.⁸⁹ Bourekba argues that oversimplifying the relationship can explain government inaction in addressing poverty.⁹⁰

In conclusion, the multifaceted nature of violent extremism makes it difficult to provide a straightforward narrative of climate change as a causal factor. Villa-Vicencio, Buchanan-Clarke and Humphrey argue that “there is no single pathway to violent extremism, and engagement should be seen as a complex psychosocial process... Structural marginalisation, the breakdown of family and community structures, the proliferation of criminal gangs, youth unemployment and corruption, human rights abuses, individual and collective trauma, among other factors, merge in different ways to create environments conducive to the spread of extreme ideologies.”⁹¹ For this reason, it is important to recognise the contextual drivers and indirect pathways through which climate change has an impact, such as rural-urban migration, land use, and institutional strength.⁹² As a SIPRI report from 2016 argues, “political institutions are critical for understanding why some local resource conflicts turn violent, while most do not.”⁹³ Therefore, political, spatial and temporal factors must be included when studying these links. In other words, water scarcity, depressed agricultural production, and other environmental factors *may* or *may not* lead to violent extremism. The ultimate result depends on a combination of local social, political, and economic variables at the micro and macro levels that can exacerbate push factors and conditions deemed necessary for violent extremism, such as economic deprivation and political alienation.

89 “The Central Sahel: Scene of New Climate Wars,” Crisis Group Africa (Dakar/Niamey/Brussels: International Crisis Group, April 24, 2020), <https://icg-prod.s3.amazonaws.com/b154-sahel-new-climate-wars.pdf>.

90 Moussa Bourekba, “Climate Change and Violent Extremism in North Africa,” Spotlight Study (Barcelona Centre for International Affairs (CIDOB), October 2021), https://www.cidob.org/en/publications/publication_series/project_papers/cascades/climate_change_and_violent_extremism_in_north_africa.

91 Charles Villa-Vicencio, Stephen Buchanan-Clarke, and Alex Humphrey, “Community Perceptions of Violent Extremism in Kenya,” Occasional Paper 21, Justice and Reconciliation in Africa (Cape Town, South Africa: The Institute for Justice and Reconciliation, 2016).

92 Adam Savelli et al., “The Climate Security-Mobility Nexus: Impact Pathways and Research Priorities” (CGIAR FOCUS Climate Security, May 2022), <https://cgspace.cgiar.org/handle/10568/117589>.

93 Malin Mobjörk and Sebastian van Baalen, “Climate Change and Violent Conflict in East Africa: Implications for Policy,” Policy Brief (Stockholm: Stockholm International Peace Research Institute (SIPRI), May 2016), https://www.statsvet.su.se/polopoly_fs/1.279892.1463642555!/menu/standard/file/Policy%20brief%2C%20Climate%20change%20and%20violent%20conflict%2C%20April%202016.pdf.

3.2 Climate change and violent extremism in the Sahel region and the Lake Chad Basin

The Sahel region and, more specifically, the Lake Chad Basin are commonly referenced in the literature as a key case study that exemplifies the complex relationship between climate change and violent extremism. In March 2017, while discussing the activities of Boko Haram in the Lake Chad Basin, Security Council Resolution 2349⁹⁴ recognised climate change as one of the factors affecting the region's stability, "through water scarcity, drought, desertification, land degradation, and food insecurity."

The literature on the region's dynamics generally highlights the relationship between climate change and violent extremism through four pathways: a) worsening livelihood conditions, b) increased migration flows and demographic change, c) response by armed groups, and d) weak governance and conflict resolution mechanisms. These broad processes consider both climate-induced scarcity and the role of institutional failures in conflict and how they interact. As outlined in the previous subsection, most authors agree that the severity of the climate impacts in the region depend on the socio-economic and political conditions and vulnerability in each country.⁹⁵

For instance, a study on the central Sahel suggests that extreme climate events, such as floods or droughts, through their effect on food security, led to an increase of 5% and 7%, respectively, in violence involving non-state armed groups.⁹⁶ The frequency of violence grew to 22% in peripheral areas with low economic activity. However, the majority of climate, development, and security experts surveyed in the same study believe that the main drivers of violent extremism and armed conflict in the region are foreign military interventions and marginalisation of pastoralist communities, with only 23% identifying climate change impacts as such.

While there is some debate as to whether the Sahel is becoming drier or wetter, there is consensus that extreme climate events disrupt livelihoods in climate-sensitive agriculture, pastoralism, and fishery.⁹⁷ The geographic shifts in resource availability and changing livelihood strategies are impacting migration patterns, potentially contributing to a concentration of resource

94 United Nations Security Council, "Resolution 2349"

95 Piers Blaikie et al., *At Risk: Natural Hazards, People Vulnerability and Disasters 1st Edition*, 1994, <https://doi.org/10.4324/9780203428764>.

96 Oriol Puig Cepero et al., *Climate Change, Development and Security in the Central Sahel*, 2021.

97 Mouhamadou Bamba Sylla et al., "Climate Change over West Africa: Recent Trends and Future Projections," in *Adaptation to Climate Change and Variability in Rural West Africa*, ed. Joseph A. Yaro and Jan Hesselberg (Cham: Springer International Publishing, 2016), 25–40, https://doi.org/10.1007/978-3-319-31499-0_3.

use and competition over land and water between pastoralist communities and sedentary agriculturalists. Many studies show how long-distance transhumant pastoralism has increased in the Sahel due to desertification's negative impact on grazing resources.⁹⁸ In Nigeria, this has led communities to adapt by directing their migratory routes towards the south in search of foraging resources, increasing overcrowding and the risk of livestock damaging seasonal agriculture and wildlife habitats previously left untouched. Vice versa, population growth, the agricultural sector's development, and the expansion of farmland limit herders' access to natural resources.⁹⁹ Due to this competition over land, research shows the herders in Niger have started carrying small arms or resort to illegal activities, such as cattle raiding or kidnapping, as alternative sources of income.¹⁰⁰ However, some authors stress that while climate change is a factor, violence between communities can be traced back to longer-term historical grievances and structural policies favouring large-scale agriculture to the detriment of pastoralism.¹⁰¹

Increased competition over water and human migration are the two key conflict drivers that have been identified in the Lake Chad Basin.¹⁰² The fertile areas of the Lake have attracted new settlers throughout history; in particular, the great drought of 1973 led to an influx of fishers and nomadic pastoralists searching for aquatic grasses. This general population growth and the arrival of people displaced by conflict from Nigeria and north Cameroon had resulted in increased pressure on water resources already exposed to climate change and competition for control of the Lake's islands. The Lake's population has grown from 700,000 inhabitants in 1976 to about 2.2 million in 2018,¹⁰³ clustered along the southern shores. While in the 1960s, the Lake was able to sustain the livelihoods of 200,000 commercial fish sellers,¹⁰⁴ fishing yields have since collapsed by up to 90% due to increased temperatures and soil infertility. Maladaptation and environmentally damaging practices, such as lake-bottom

98 Madeline Velluro, "The Erosion of Pastoralism in the Sudano-Sahel: Time to Recognize a Growing Security Threat?," International Order and Conflict Issue Brief (Stimson, April 24, 2020), <https://www.stimson.org/2020/the-erosion-of-pastoralism-in-the-sudano-sahel/>.

99 Dickson Igwe, "Climate Variation-Induced Migration, Land Conflicts, and Security Situation in Nigeria," *The Age of Human Rights Journal*, June 15, 2020, 63–75, <https://doi.org/10.17561/tahrj.v14.5478>.

100 Brigitte Thébaud and Simon Batterbury, "Sahel Pastoralists: Opportunism, Struggle, Conflict and Negotiation. A Case Study from Eastern Niger," *Global Environmental Change* 11, no. 1 (April 2001): 69–78, [https://doi.org/10.1016/S0959-3780\(00\)00046-7](https://doi.org/10.1016/S0959-3780(00)00046-7).

101 Tor Benjaminsen and Hanne Svarstad, "Climate Change, Scarcity and Conflicts in the Sahel," 2021, 183–205, https://doi.org/10.1007/978-3-030-56036-2_8.

102 Osei Baffour Frimpong, "Climate Change and Violent Extremism in the Lake Chad Basin: Key Issues and Way Forward," Africa Program Occasional Paper (Wilson Center, July 2020), <https://www.wilsoncenter.org/publication/climate-change-and-violent-extremism-lake-chad-basin-key-issues-and-way-forward>.

103 Nagarajan et al., "Climate-Fragility Profile: Lake Chad Basin."

104 United Nations Environment Program, "The Tale of a Disappearing Lake," February 28, 2018, <https://www.unep.org/news-and-stories/story/tale-disappearing-lake#:~:text=Over%20the%20last%2060%20years,than%201%2C500%20square%20kilometers%20today>.

cropping, further pollute the Lake's water.¹⁰⁵ This population surge and diminishing resources, coupled with mass youth unemployment, have had devastating consequences on the communities as fishing accounts for 45% of household incomes in the region.

In this context of worsening livelihood conditions in climate-exposed regions, armed groups can leverage divisions within a community to gain and boost their support. Boko Haram and ISWAP have exploited the economic grievances in the Lake Chad region by portraying themselves as alternative providers of basic services and jobs.¹⁰⁶ Boko Haram has recruited young people to engage in trafficking in drugs and arms, as well as cattle rustling, to generate revenue. According to reports, the group also has specialised kidnapping task forces to abduct businesspeople and civil servants in exchange for ransom or the release of imprisoned militants.¹⁰⁷ The research also highlights how weak governance and the absence of good conflict and dispute resolution mechanisms can escalate conflicts between different groups, both locally and between states. In a study of conflict in the Sahel, Raleigh concluded that politically marginalised ethnic groups that settle in underdeveloped areas experience the most conflict due to environmental pressures.¹⁰⁸ Without the resources to represent their voices in the corridors of power, they tend to use violence against other rival communities with the support of armed groups such as Boko Haram.

Moreover, although Lake Chad is not geographically remote and is a crucial source of agricultural products for N'Djamena, a 2017 study by the International Crisis Group argues that it shares many characteristics of a peripheral area far from the centres of power.¹⁰⁹ President Déby's first visit to the Lake only after the 2015 attacks, is an example of how the area has stayed off the political agenda for many decades. This perceived irrelevance and lack of public services may explain the local population's mistrust of authorities and the attractiveness of Boko Haram, especially for young people and women, as a source of alternative livelihoods and social power.¹¹⁰

The Lake Chad Basin Commission's (LCBC) Development and Climate Change Adaptation Plan has also identified resources management and tensions between ethnic groups as a key driver of radicalization around the Lake.

105 Churchill Okonkwo, Belay Demoz, and Sium Tesfai, "Characteristics of Lake Chad Level Variability and Links to ENSO, Precipitation, and River Discharge," *TheScientificWorldJournal* 2014 (November 27, 2014), <https://doi.org/10.1155/2014/145893>.

106 "Watchmen of Lake Chad: Vigilante Groups Fighting Boko Haram" (Brussels: International Crisis Group, February 23, 2017), <https://icg-prod.s3.amazonaws.com/244-watchmen-of-lake-chad-vigilante-groups-fighting-boko-haram.pdf>

107 "Global Terrorism Index 2017" (Institute for Economics and Peace, November 2017), <https://www.visionofhumanity.org/wp-content/uploads/2020/10/Global-Terrorism-Index-2017.pdf>.

108 Clionadh Raleigh, Héni Nsaibia, and Caitriona Dowd, "The Sahel Crisis since 2012," *African Affairs* 120, no. 478 (January 1, 2021): 123–43, <https://doi.org/10.1093/afraf/adaa022>

109 "Watchmen of Lake Chad: Vigilante Groups Fighting Boko Haram."

110 "Motivations and Empty Promises: Voices of Former Boko Haram Combatants and Nigerian Youth" (Mercy Corps, April 2016), https://www.mercycorps.org/sites/default/files/2019-11/Motivations%20and%20Empty%20Promises_Mercy%20Corps_Full%20Report_0.pdf.

Previously, on the Lake's southern shores, land rights and occasional internecine struggles were resolved by local chieftdom judges. However, as the area has become one of the most culturally mixed in Africa, hosting an estimated 70 different ethnicities,¹¹¹ it has become almost impossible to define the legitimacy of indigenous claims for resource access and management of land rights. This situation is worsened by the manipulation of land issues by urban elites from other regions and commercial investment in livestock and agriculture with exclusive use for landowners. With land prices skyrocketing, a political system marked by cronyism, and weak transboundary water governance, vulnerable communities see aligning with Boko Haram as an opportunity to recover grazing land, market spaces and protection.¹¹² Armed groups can therefore be viewed as providing justice for pastoralist communities within a context of mismanagement and unequal distribution of natural resources.¹¹³ This is evident in other parts of the Sahel, such as Mali, where armed groups have forced customary pastoral leaders (the *jowros*) to reduce the fees charged for access to grazing land.¹¹⁴ A 2020 study by the International Crisis Group suggested that the rise of violence in the Sahel can be partially explained by the transformation in the modes of production and the lack of effective mediation mechanisms between communities.¹¹⁵

Studies also caution that a militarised approach to conflict, violent extremism, and a focus on one particular ethnic group can further exacerbate existing tensions and a sense of marginalisation and exclusion. For example, Benjaminsen argues that the Tuareg uprising in Mali and associated arms proliferation can be traced to the political exclusion and marginalisation of pastoralist Tuaregs in the 1970s.¹¹⁶ This led to many young Tuareg migrating to Libya and Algeria, where they were exposed to revolutionary trends and acquired the military knowledge needed to lead the rebellion decades later, with broad regional consequences for peace and security. In the Lake Chad region, military operations against Boko Haram, restrictions on movement, emptying of the islands to search for militants, and closure of the fish markets have also affected local communities' access to natural resources and sources of income, further increasing their vulnerability. These responses can increase the appeal of violent extremist ideologies as displaced people become dependent

111 Christian Seignobos, "Boko Haram et Le Lac Tchad: Extension Ou Sanctuarisation ?," *Afrique Contemporaine* 255 (January 1, 2015), <https://doi.org/10.3917/afco.255.0093>.

112 Ibid.

113 Niagalé Bagayoko, Boubacar BaBoukary Sangaré, and Kalilou Sidibé, "Gestion des ressources naturelles et configuration des relations de pouvoir dans le centre du Mali: entre ruptures et continuité" (Accra: ASSN, June 2017), <http://www.africansecuritynetwork.org/assn/gestion-des-ressources-naturelles-dans-le-centre-du-mali/>.

114 Luca Raineri, "If Victims Become Perpetrators: Factors Contributing to Vulnerability and Resilience to Violent Extremism in the Central Sahel" (International Alert; UNICRI, 2018), <https://www.international-alert.org/wp-content/uploads/2021/08/Sahel-Violent-Extremism-Vulnerability-Resilience-EN-2018.pdf>.

115 "The Central Sahel: Scene of New Climate Wars."

116 Tor A. Benjaminsen, "Does Supply-Induced Scarcity Drive Violent Conflicts in the African Sahel? The Case of the Tuareg Rebellion in Northern Mali," *Journal of Peace Research* 45, no. 6 (November 1, 2008): 819–36, <https://doi.org/10.1177/0022343308096158>.

on humanitarian aid, and specific communities are stigmatised, particularly the Buduma population.¹¹⁷

In conclusion, the case of the Lake Chad Basin illustrates the complex nexus between climate change and violent extremism in the Sahel. Specifically, climate change and institutional weaknesses interact to shape conflicts and disputes, exacerbating pre-existing local vulnerabilities and factors for violent extremism which could have been otherwise mitigated. As outlined by Eriksen, “vulnerability to climate change is driven by multiple and diverse social processes, such as dispossession of land, conflict, and loss or lack of employment opportunities.”¹¹⁸

117 “Radicalization, Violence, and (in)Security: What 800 Sahelians Have to Say” (Centre for Humanitarian Dialogue / United Nations Development Programme, 2016), <https://www.researchgate.net/project/Radicalization-insecurity-and-violent-extremism-in-the-Sahel>.

118 Marianne Mosberg, Elvin Nyukuri, and Lars Naess, “The Power of ‘Know-Who’: Adaptation to Climate Change in a Changing Humanitarian Landscape in Isiolo, Kenya,” *IDS Bulletin* 48 (July 31, 2017), <https://doi.org/10.19088/1968-2017154>.

04



CHAPTER 04

RESEARCH OBJECTIVES AND METHODOLOGY

4.1 Research objectives

The purpose of this study is to provide a situation report on the cross-cutting and specific climate challenges in the context of the provinces of Hadjer-Lamis, Lac, Logone Occidental and Mandoul, which could potentially be driving factors for involvement in violent extremism.

More specifically, the study aimed to:

- ▶ Identify the cross-cutting and context-specific climate challenges that may act as driving factors for engagement into extremist groups in the target areas, through the collection and analysis of primary and secondary data;
- ▶ Collect local communities' perceptions of the effects of climate change and their impact on productive activities, social cohesion and recruitment into violent extremism;
- ▶ Explore how the resilience of communities to violent extremism is affected by climate insecurity. This involved the analysis of the relationship between the level of climate insecurity and food security, adaptation measures, competition over resources and its impacts, such as migration and recruitment into extremist groups.

4.2 Methodology

The initial phase of the study was devoted to desk research, relying on scientific publications, expert reports, government documents and a number of articles. This phase allowed to contextualise and establish the broad outlines of the researched topics and was followed by field visits to the Hadjer-Lamis, Lac, Logone Occidental, Mandoul provinces in January and February 2022. The field visits aimed to gather information from local communities, through 131 in-depth, semi-structured interviews conducted with community members, local leaders and representatives of institutions.

■ Approach

Given the purely qualitative nature of the study, the tool used for data collection was the interview guide. To ensure the quality of the study, interviewees were selected through an inclusive approach that incorporated different categories of respondents who could provide relevant information. Consequently, the guides were developed according to the profile of individuals surveyed.

The surveys involved heads of decentralised state technical services, administrative authorities, traditional leaders, and the various segments of the population (male and female, adults and young people). The diversity of stakeholders interviewed provided a comprehensive overview of the problem. In specific terms, data collection was carried out through the following questions:

- ▶ What is the level of climate insecurity facing the populations of the provinces of Hadjer-Lamis, Lac, Logone Occidental, Mandoul?
- ▶ What impact does climate insecurity have on social cohesion in the aforementioned provinces?
- ▶ What are the effects of climate change in relation to the presence of violent extremist groups and recruitment mechanisms?

■ Techniques used

Through semi-structured interview guides, individual interviews were conducted to gather insights and practices, as well as examine the lived experiences, perceptions, roles and responsibilities of the surveyed communities and local context. During the data-gathering process, interviews were conducted in two departments in each of the target provinces of the study. Urban centres, villages and *ferricks*¹¹⁹ were covered by the surveys. Particular attention was paid to the different categories of persons surveyed, namely young people, women and men, as well as their varied productive activities.

With regard to the processing of the data, it should be noted that the qualitative survey makes use of social and human sciences, which take a purely qualitative approach, even if some numerical data is occasionally used. As such, the data analysed came primarily from discussions, surveys and the transcriptions of notes taken during the field visits.

Based on these notes, summaries were then produced in two formats: unprocessed interview summaries and theme-based summaries by province. Verbatim transcripts, i.e., relatively short word-for-word excerpts of responses given by the respondents were also gathered. These integral, meaningful phrases expressed by the interviewees in local languages or French, represent very useful remarks and comments, that enrich the analysis in this report.

■ Target groups

A total of 131 people were interviewed. These included community members (farmers, herders and fishers), traditional leaders (heads of villages, *ferricks* and cantons), administrative and institutional authorities. Of the 131 people surveyed, 93 were male, including 19 young men, and 38 were female, including 12 young women. Besides community members (101 individuals), interviews were conducted with 12 heads of decentralised state technical services, 11 traditional leaders, four heads of departments of the *Ministère de l'Environnement et de la Pêche* (Ministry of the Environment and Fisheries), two administrative authorities and one person from the United Nations Development Programme.¹²⁰ This allowed the researchers to reach the saturation point of the information gathered, defining saturation as the process that allows the conduct of surveys to be halted when there is little or no change in the information gathered. After collection, the data were processed and analysed with the aim of presenting the findings of the research. The table below provides an overview of the locations covered by the data collection.

119 Arabic term referring to a nomadic herder encampment.

120 All of the people interviewed from these organisations were male.

Locations covered by the data collection

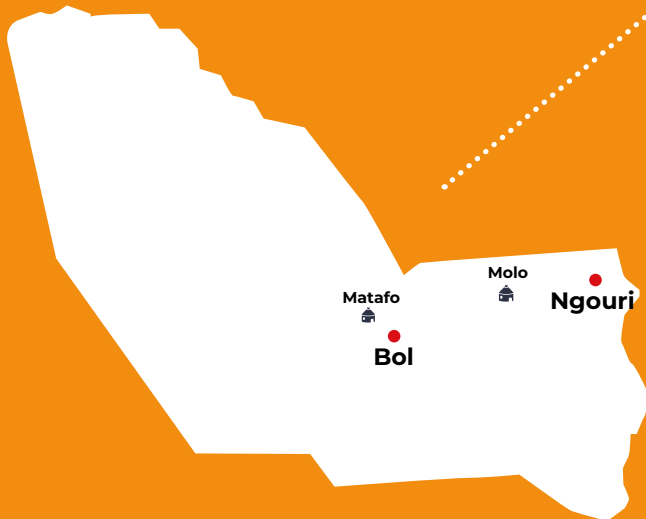
Institutions



- Department for Environmental Education and the Fight Against Climate Change (DELCC)
- Special Fund for the Environment
- UN Development Programme (UNDP)



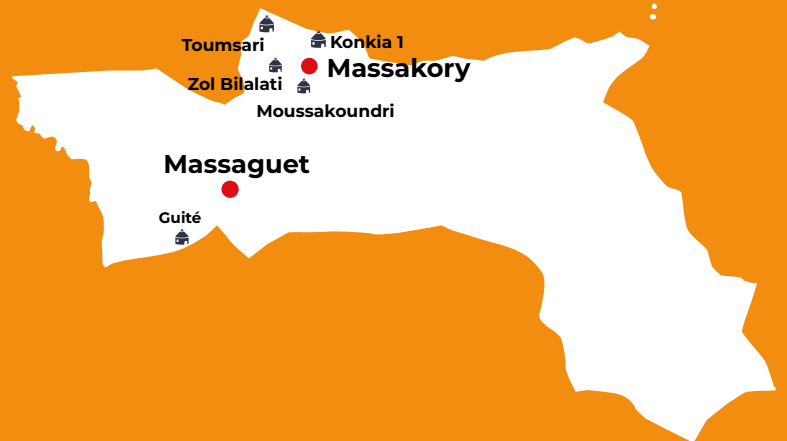
NDJAMENA



LAC

● Bol
● Ngouri

🏠 Matafo
🏠 Molo



HADJER-LAMIS

● Massaguet
● Massakory

🏠 Guité
🏠 Moussakoundri
🏠 Toumsari
🏠 Zol Bilalati
🏠 Konkia 1

Legend

-  Urban centres
-  Villages



LOGONE OCCIDENTAL

-  Moundou
-  Bénoye
-  Déli

-  Bah 1
-  Boulanga 1
-  Miladeur
-  Tilo
- Ngara
- Kaga 1

MANDOUL

-  Bédjondo
-  Bessada
-  Koumra

-  Kol
-  Korkian
-  Narbanga 1
-  Narbanga 2
- Séwé

■ Limitations

This study aimed to explore community members' perceptions of the effects of climate change and its links with social cohesion and violent extremism in Chad. For this purpose, the qualitative methods utilised for this research were better suited for capturing and understanding the nuances of respondents' lived experiences. At the same time, the subject of this study, i.e., communities' perceptions, as well as the methodology used, i.e., qualitative, means that data presented in the report should be considered and interpreted with caution. The study, in fact, collects individuals' opinions and self-declared information, which cannot be considered as definitive evidence of the researched topics. For this reason, what has occasionally been reported as a correlation between the effects of climate change and violent extremist groups' recruitment techniques, cannot and should not be considered as a causal link.

The study relied on the data collected during the field visits, and the report has therefore been developed on a theme-based categorisation of content from the interviews. While semi-structured interviews envisage a set of predetermined questions, they also allow the researchers to explore topics that are relevant to each interviewee. As a result, the research findings do not provide a comprehensive overview of all the relevant aspects related to climate change and violent extremism in the region, but only focus on the information and themes that were raised and shared by respondents.

Additionally, while the study aimed to achieve gender balance among respondents, ultimately women and girls accounted for 30% of interviewees. The low number of women holding key positions within administrative, institutional, and traditional authorities constituted the first hindrance to achieving the balance. On the contrary, in the context of local communities, women and girls were usually more actively engaged in productive activities compared to men, e.g. attending weekly markets or working in the fields, which impeded their identification as respondents as well as their physical presence to take part in the interviews. To reduce the gap and reach more women, interviews were conducted in more locations than originally planned.

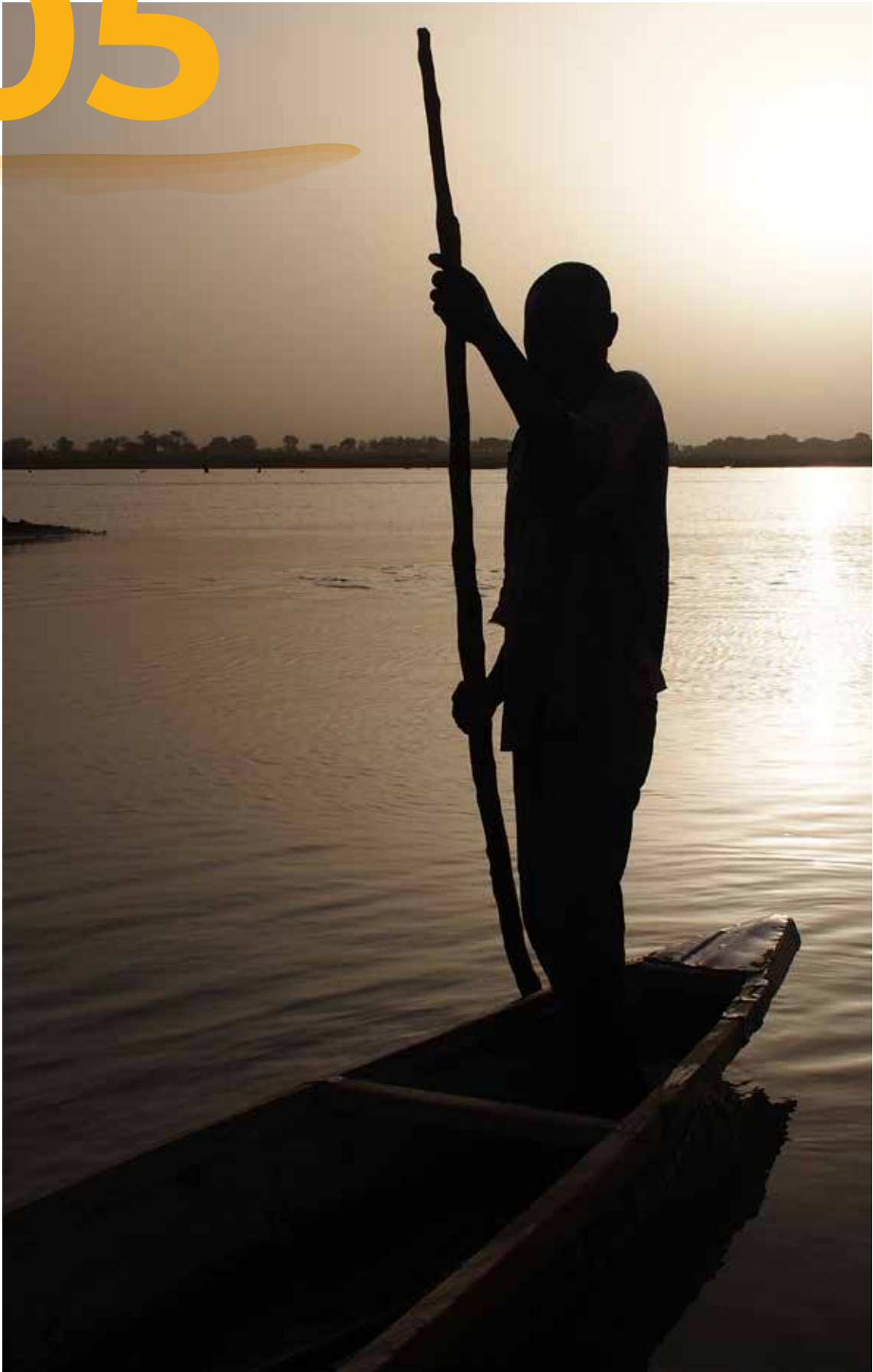
The report is geographically focused on the provinces where research has been conducted i.e. Hadjer-Lamis, Lac, Logone Occidental and Mandoul, in Chad. While the perceptions of individuals interviewed in these provinces could be reflective of other communities of the Lake Chad Basin, this study should not be considered as representative of national or regional perceptions on the topic.

Lastly, considering the evolving nature of both subjects of this research—violent extremism and climate change—while the results of this study aim to reflect the situation as described by respondents at the beginning of 2022 when field research was conducted, they do not necessarily indicate how communities' perception will change in the future.



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05



CHAPTER 05

SITUATION REPORT ON THE EFFECTS OF CLIMATE CHANGE ON THE STUDY AREA

This section presents the effects of climate change, as experienced and observed by community members on the ground in the area of study, and the perceived impacts on the main productive activities (farming, livestock farming and fishing), social cohesion, and violent extremism.

5.1 Different types of effects of climate change in the study area and how they manifest

In the four target provinces, the manifestations of climate change most observed and reported by respondents included the disruption of rainfall cycles—with flooding, droughts and extended dry spells—as well as desertification, along with heat waves, and high winds.

Between 2019 and 2020, the provinces of Lac, Logone Occidental and Mandoul all experienced notable flooding, with the most recent of these occurring in

Lac in 2020. In addition, 2020 left a lasting mark on the populations with flash floods that affected almost every region in Chad.¹²¹ Often these floods were the result of a series of heavy rains that could no longer be absorbed by the dry ground, as was primarily the case in Logone Occidental and Mandoul. While Lac was also affected by this first form of flooding, it also experienced rainfall-induced overflow of surface waters, namely the rivers and tributaries of Lake Chad. While interviewees in Hadjer-Lamis did not note having experienced flooding in 2021, it nevertheless remains highly exposed to this phenomenon.

Drought and extended dry seasons were also among the effects of climate change cited repeatedly in the interviews. While the southern regions of Chad tend to be lush with more rainfall, drought can, and has, affected all the provinces studied. In addition, respondents noted a link between extended dry spells and a perceptible increase in temperatures, with higher temperatures tending to follow rainy seasons in which the level of rainfall was already low, creating a reinforcing cycle.

Interviewees explained that in their areas they have been experiencing increasing soil aridity because of rainfall deficits. This can be seen in the desiccation of vegetation as well as the soil over a long period. Of the four provinces studied, in the opinion of the respondents, Hadjer-Lamis and Lac are most affected by this phenomenon.

Given the low rainfall in Hadjer-Lamis and Lac, the respondents reported that these provinces are displaying the typical features of drought, namely: the drying up of water points, the scarcity of grazing land and withered vegetation, etc. One respondent interviewed in Massaguet spoke of this situation in the following terms: ***“what we’re experiencing is worrying. I cannot even imagine the price of cereals in the weeks to come. There are barely any herders in the surrounding area due to the lack of grazing and water.”***¹²²

Furthermore, according to the people interviewed, regions further to the south are now also affected by drought and extended dry spells. Indeed, according to the interviewees, over several years the level of rainfall has dropped dramatically. In Mandoul, for example, interviewees reported that the backwaters are no longer able to retain water for long periods. A fisherman interviewed in the village of Narbanga II states that: ***“for almost ten years now we have been experiencing a strange phenomenon. Our pool dries up in the middle of March, so we don’t fish. Even market gardening¹²³ activities take a hit due to the lack of pool water.”***¹²⁴

121 Zeineddine Nouaceur, “La Reprise Des Pluies et La Recrudescence Des Inondations En Afrique de l’Ouest Sahélienne,” *Physio-Géo*, no. Volume 15 (March 12, 2020): 89–109, <https://doi.org/10.4000/physio-geo.10966>.

122 Interview with a young man in Massaguet, Hadjer-Lamis, February 1, 2022.

123 Market gardening here refers to the small-scale production of fruits and vegetables for the primary purpose of being sold, rather than larger-scale production of grains, corn, etc.

124 Interview with a fisherman in Narbanga II, Mandoul, February 22, 2022.

Along with drought and dry spells, sand encroachment and desertification were also often cited by the respondents. The two terms, sand encroachment and desertification, are used here interchangeably to refer to the land degradation, build-up of sand, and ensuing lost productivity created by high wind, loss of water, human activities, and climatic changes.¹²⁵ This typically Saharan phenomenon is now being observed across the Sahel,¹²⁶ and was most frequently cited in the Lac province, as well as in some areas of Hadjer-Lamis.

➤ **Photo 1: Sand encroachment on agricultural land in Toumsari (Hadjer-Lamis). According to the owner, the previous year in the same plot he had grown pearl millet. In less than a year, the same plot has become covered with sand and unusable.**



The appearance of sand encroachment can be seen as an extension of drought, since it progresses much more rapidly in arid areas. It poses a threat on many levels, as it not only negatively impacts the living environment of the population, but also the areas used for agricultural activities and grazing. Researchers and interviewees noted the phenomenon in wadis and fields, which were sometimes transformed from productive areas to plots covered in sand in the span of only a year.

The phenomenon of sand encroachment and desertification were also observed in the provinces of Logone Occidental and Mandoul, where interviewees mentioned the presence of sand in fields as a result of soil degradation. This was highlighted by one respondent who stated: ***“there is a problem with arable land and sand encroachment on our fields. You sow and then soon***

125 *Ecology of Desert Systems* (Elsevier, 2020), <https://doi.org/10.1016/C2017-0-02227-9>.

126 “Le désert du Sahara s’est étendu de 10 % en un siècle,” *Le Point*, April 10, 2018, https://www.lepoint.fr/sciences-nature/le-desert-du-sahara-s-est-etendu-de-10-en-un-siecle-10-04-2018-2209482_1924.php.



▼ Photo 2: Sand encroachment on a wadi in Toumsari (Hadjer-Lamis)

➤ Photo 3: Sand encroachment on an agricultural plot in Kol (Mandoul)

after, the sand invades your field, stopping the crops from growing.”¹²⁷ This type of sand encroachment is often the result of overuse of agricultural plots, which may have the potential to become self-reinforcing as arable land shrinks and farmers are less able to leave fields fallow, which, in turn, increases the risk of overexploitation of fields and desertification.

Other effects of climate change observed in the regions studied are wind or fog,¹²⁸ which respondents linked to the health of the population. This further contributes to already-existing problems, as wind encourages the spread of the phenomenon of sand encroachment. These are not new occurrences, but their increasing frequency and the resulting impact are a point of concern. An interviewee from Ngourima offered the following observation: **“recently, children have been suffering from regular illness due to the dusty environment caused by the constant winds.”**¹²⁹

Interviewees in the target study area, reported experiencing high temperatures and abnormal cold, which community members viewed as among the notable effects of climate change. In general, local opinion equates these phenomena with variations in rainfall. For example, some of those interviewed believe that the high temperatures are a result of irregular rainfall which causes drought. In addition, when the rains exceed the level seen as normal by the population, the months following the end of the rainy season are marked by perceptions of unusually cold temperatures.

In Hadjer-Lamis and Lac, those interviewed reported feeling equally high and low temperatures during the periods indicated. A resident of Molo village expressed their incomprehension of the situation as follows: **“This year, we recorded less rainfall, but it is extremely cold. I don’t understand because this is not normal. The cold destroyed some plants such as the tomatoes.”**¹³⁰

Conversely, last year the two provinces in the south had plenty of rain, but when the field survey was carried out in February, the climate showed early signs of a coming heatwave. An inhabitant of the banks of the Logone river seemed at a loss with regard to the climate situation: **“the world is going crazy. For a few years now, we have been unable to manage the variation in rainfall. Even in years when it rains less, we are experiencing unprecedented cold. And even if it rains heavily, as it has done this year, we’re struck by searing heat. We have no control over anything anymore.”**¹³¹

127 Interview with a young farmer in Kol, Mandoul, February 19, 2022.

128 Interviewees used the term “brouillard” in French, which translates to “fog.” Given the climatic and environmental conditions of the area, this may refer to fog, as well as potentially to dust storms, which are also common occurrences in the region.

129 Interview with a woman in Ngouri, Lac, January 29, 2022.

130 Interview with a farmer in Molo, Lac, January 27, 2022.

131 Interview with a local resident of the Logone River, Moundou, February 11, 2022.

5.2 Impacts of the effects of climate change in the study area

This section presents the various ways in which the manifestations of climate change, as experienced by the populations in the study area, have affected three areas of life: productive activities, social cohesion, and the dynamics of violent extremism. These three areas are inter-related, and the following section will highlight this relationship, as the difficulty in practising production activities causes increased financial pressure and poverty, which, in turn, has an impact on social cohesion and community conflict and provides fertile ground for propaganda and recruitment by terrorist groups.

5.2.1 Direct impact on productive activities (farming, herding and fishing)

The impact of climate change certainly varies according to different economic activities, but nearly all productive activities in the regions of the study are affected in one way or another. As the target areas are predominantly used for farming, followed by herding and fishing, these are the focus of this section, with trade as a cross-cutting activity.

■ Farming

Farming activities are heavily exposed to the effects of climate change, including variations in rainfall and the poor quality of soil, according to those interviewed. The Spokesperson for the National Rural Development Agency (ANADER) confirmed this state of affairs, explaining: ***“during the 2020-2021 crop year, it rained late (May-June). As a result, the first seedlings of peanut, cotton, maize and sorghum took a hit. But from June to July, it rained often and heavily, which made it possible to plough. [However] this rainfall pattern has resulted in the flooding of fields located in amorphous and marshy lowland areas.”***¹³²

Interviewees also reported that the excess rain does not necessarily guarantee a satisfactory crop year, as it often causes floods, which destroy crops. Residents in three of the four regions studied have experienced the phenomenon of flooding more or less regularly recently. This is particularly the case in the provinces of Logone Occidental and Mandoul, where the interviewees pointed to cases of flooding over the last three years. An interviewee in the village of Tilongara explains the impact of this phenomenon on their activities: ***“the excess rains have a negative effect on crops. They cause run-offs, which lead to the***

132 Interview with a representative of ANADER in Koumra, Mandoul, February 21, 2022.

leaching of the area and of the inputs that are essential for the ploughing of cotton, for example.”¹³³

Although the Lac province has not experienced the same quantity of rainfall (200 to 300mm¹³⁴) as the two southern provinces (more than 1,000mm), it is not immune to the phenomenon of flooding. In 2019 and 2020, Lac was severely affected by floods. A respondent interviewed in the village of Matafo made the following comments on the episode: ***“In August 2020, we were severely affected by the floods. It was badly timed as the plants were in their growth phase, and there was no chance of saving anything in the fields.”¹³⁵*** The same situation was also described by a vegetable farmer, ***“the heavy rains of 2020 led to considerable delays in our activities. The waters of the wadi did not dry up quickly to allow the layout of oilseed crops. It was hard for us as market gardening is our only activity.”¹³⁶*** In Hadjer-Lamis and Lac, market gardening¹³⁷ is generally practised in the wadis and lowland areas. Consequently, the activities can only begin if the rainwater dries up on time.

However, flooding is not the only concern for farmers. Even with rainfalls, respondents interviewed in the provinces of Hadjer-Lamis and Lac also stated that drought is also possible due to the increasing overall shortage in rainfall and longer dry spells over recent years. The shortage of rainfall in 2021 had a detrimental effect on farming activities. The local populations estimate that stocks ran out well before the lean season. A farmer from the village of Molo confirmed this: ***“the last crop year was particularly hard for our area due to the rain which has become scarce. We have all had failed harvests. The crops were poor and there is a real danger of famine. We fear for our children.”¹³⁸***

This interviewee also highlights another key element that accompanies the environmental changes: fear and anxiety for survival. Already facing precarious living conditions, when confronting even more shortages and volatile climatic conditions, community members may become fearful for their families' and their own survival. While this alone is noteworthy for the impact it has on the quality of life, it is also particularly important for its potential impact on the ability of communities to mediate conflict and competition peacefully. When accompanied by increasing fear, conflicts that may otherwise have been manageable have the potential to explode.

133 Interview with a farmer in Tilo-ngara, Logone Occidental, February 13, 2022.

134 *Climat - Tchad*. Climat Tchad: températures, précipitations, quand partir, que mettre dans la valise. (n.d.). Retrieved July 29, 2022, from <https://www.climatsetvoyages.com/climat/tchad>

135 Interview with local resident in Matafo, Lac, January 24, 2022.

136 Interview with a market gardener in Matafo, Lac, January 25, 2022.

137 Market gardening here refers to the small-scale production of fruits and vegetables for the primary purpose of being sold, rather than larger-scale production of grains, corn, etc.

138 Interview with a farmer from the village of Molo, Lac, January 28, 2022.

In addition to floods and droughts, the phenomenon of desertification and sand encroachment poses a real threat to agricultural production in the areas, with Lac by far the worst affected province, according to those surveyed. A traditional leader of the region describes the situation as follows: ***“In Liwa, the areas surrounding homes are almost submerged. Sometimes, from the outside it looks as though these houses are not occupied, but when you enter the courtyard, they are.”***¹³⁹ Hadjer-Lamis, on the other hand, remains partially affected according to the interviewees, with the village of Toumsari noted as an area exposed to desertification and sand encroachment.

This phenomenon is even more worrying given the further pressure on arable lands caused by population growth. Some communities mention a depletion of land resources suitable for farming activities. One farmer stated: ***“It’s hard to find farming land these days. Each inhabitant holds onto their plots as best they can. People don’t even sell land here anymore.”***¹⁴⁰

Similarly, an important concern to mention is that of agricultural pests, which experts have warned may also pose an increasing threat to harvests due to the effects of climate change.¹⁴¹ This was reflected in interviews, with respondents repeatedly mentioning the difficulties stemming from pests. Agricultural pests are a threat to both rain-fed farming and market gardening activities.

Concerted efforts are required to address this threat. Due to a lack of financial resources, market gardeners purchase pesticides using credit that must be repaid after the harvest. These pesticides are an additional financial cost for market gardeners. According to them, it represents a financial sacrifice since even daily needs are barely being met.

■ Herding

Herders noted the effect of flooding on their activities, with excessive rain leading to degradation that resulted in the shortage of pasture forage. When grazing lands are flooded, feeding cattle becomes a real problem; with pastures underwater, herders are forced to other locations, while stagnant water also pose significant health problems for livestock. A herder from the village of Korkian outlines the negative impact of flooding: ***“Rain doesn’t bother the livestock but stagnant water can cause problems. There’s a risk of infection when the cattle’s hooves remain in water for long periods of time. The animal can lose its hooves if it strikes a solid object. That’s why, in times of flooding, we have to seek out another suitable location.”***¹⁴²

139 Interview with a community leader in Bol, Lac, January 24, 2022.

140 Interview with a farmer in Ngouri, Lac, January 29, 2022.

141 “Climate Change Fans Spread of Pests and Threatens Plants and Crops, New FAO Study,” FAO, June 2, 2021, <https://www.fao.org/news/story/it/item/1402920/icode/>.

142 Interview with a herder in Korkian, Mandoul, February 21, 2022.



Photo credit: Olivier Guiryman (2022).

➤ Photo 4: Agricultural pests in the Molo wadi (Lac)

Droughts also have negative repercussions for pasturing according to the herders interviewed in the regions of Hadjer-Lamis and Lac, where the shortage of grazing lands and the lack of water sources (surface water as well as livestock wells) are felt the hardest. When rainfall is scarce, the pastures around the villages are quickly depleted. This situation means that herders need to constantly adapt. In Moussakoundri, a herder appeared upset when he described the situation in his village since the rainfall stopped early: ***“For now, we’re buying millet stalks to make up for the lack of pasture. The dry season is quite long, so how much longer will we need to keep buying them for? Migrating to other regions also requires the means to do so. It’s difficult!”***¹⁴³

In the province of Lac, the drought is less dire due to the availability of surface water. However, some locations, such as Ngouri, which are relatively far from the lakeside, do not have this option. The availability of grazing lands is a real problem for the herders in these areas, and the province of Hadjer-Lamis also finds itself in the same situation.

While some herders from Hadjer-Lamis chose to migrate to other regions to escape the effects of drought, those who remain can struggle to access forage and water. Some herders have opted to purchase fodder to feed their livestock. However, access to water remains a challenge, with more investment and financial resources needed to extract it. This is notably the case for petrol water pumps whose acquisition and use represent a significant financial cost. These issues have already led to a decline in livestock numbers according to the people interviewed. A herder from the village of Toumsari recounts: ***“The situation is difficult this year. I’ve lost one cow and a goat already. It’ll only get worse in the coming months.”***¹⁴⁴

The loss of livestock is also being experienced in the province of Mandoul, where access to water is a real challenge for herders, forcing them to travel great distances to access water for their livestock. A herder interviewed in a nomad encampment in Korkian was worried about disruption to his livelihood caused by climate change, saying: ***“We’re experiencing a lot of difficulties in our line of work. We travel a long way in search of water for our livestock and to collect drinking water. Many herders encounter this problem on a daily basis, especially during the dry season.”***¹⁴⁵ Unlike the province of Mandoul, Logone Occidental is less affected by this issue of water availability. However, the challenge in these areas is more related to the access to water by the pastoralists, since farmers often occupy and farm along the transhumance corridors.

143 Interview with a herder in Moussakoundri, Hadjer-Lamis, January 29, 2022.

144 Interview with a herder in Toumsari, Hadjer-Lamis, January 31, 2022.

145 Interview with a herder in Korkian, Mandoul, February 21, 2022.



Photo credit: Olivier GUIRYANAN (2022).

- **Photo 5: Cattle carcass in Toumsari. Herders interviewed reported shortage of pasture forage due to draughts and floods which resulted in loss of livestock.**

Herders interviewed during the research indicated that desertification was also affecting their livelihoods. The consequences of this phenomenon can be seen on two levels. Firstly, they are faced with a lack of grazing lands because of desertification. Secondly, poor crop yields have indirectly led to a significant shortage of hay for feed during the dry season.

■ Fishing

Fishing is also affected by climate change, notably as it affects the water level of nearby fishing areas, with both particularly high-water levels, and particularly low levels having a negative impact on the number of fish. Fishers interviewed explained that when the water level is particularly high, such as during floods in the rainy season, fishing can no longer be practised intensively. The natural rise in water levels at fishing locations significantly reduces the intensity of activities as rising water levels promote the proliferation of grasses which act as nesting sites for fish to reproduce. As a result, catches during this time are often very poor in terms of quantity. As such, flooding often represents a significant challenge for fishing.

However, the reverse—low water levels due to the phenomenon of sand encroachment—has also been noticed and impacts activities.

The provinces of Lac and Logone Occidental are particularly affected by this problem, with silt taking over water sources. A fisher met on the banks of the Logone river reported the changes he has observed: ***“For several years now, the riverbed has been full of silt. This negatively affects the reproductive capacity of fish since the river is not as deep as before. Fishing has become very difficult.”***¹⁴⁶

Regardless of the major productive activity, whether farming, herding, or fishing, one of the common characteristics of the different communities interviewed in the study is the poor quality of life of these populations following a decline in economic activity. Faced with what appears to be a daily struggle for survival, communities, particularly in the provinces of Hadjer Lamis and Lac, are left with very few options. This leads to a real sense of abandonment and fear among these populations. At a community level, the decrease in natural resources, including the depletion of arable and grazing land, and the difficulties in practising fishing, due to the effects of climate change have all led to more competition for these natural resources. This competition sometimes leads to clashes which puts a strain on the social cohesion of these populations, further discussed in the following section.

5.2.2 Consequences for social cohesion and increasing breaches of *contrats sociaux*¹⁴⁷

As the effects of climate change on productive activities discussed above bring communities and individuals under increased pressure to survive, they often react and seek to adjust to these changing circumstances in a variety of ways. In some cases, these varying reactions bring communities into increased

¹⁴⁶ Interview with a fisherman in Moundou, Logone Occidental, February 11, 2022.

¹⁴⁷ *Contrats sociaux*, kept here from the original French version, is used to refer to expectations, mores, and standards of interaction and conduct between various groups in society.

competition with one another, which combined with an increased sense of fear, often leads to violence. The following section explores community reports and perceptions of inter-communal conflicts, i.e., herders-farmers, and herders-fishers, as well as intra-communal conflicts, i.e., herders-herders, farmers-farmers, and fisher-fisher, and the erosion of social cohesion that has emerged in the study areas.

According to the people interviewed, in the province of Mandoul, conflicts between herders and farmers often occur mainly due to the availability of fodder resources in an area with high agricultural activity. Conflicts can be caused by herders and farmers occupying the same space around natural resources, such as land, water, and pastures. Throughout the agricultural cycle, conflicts remain constant or increase in intensity and this cohabitation appears to be more that of *“cohabi-tension.”*¹⁴⁸ A traditional authority figure from the village of Narbanga explained that: ***“In the province of Mandoul in general, and in this area in particular, clashes between herders and farmers are commonplace. The herders who come in search of water or grazing lands for their herd devastate the fields and market gardens. Not much more than a week ago, there was a clash here resulting in three dead and three persons injured on our side, and one dead on the side of the herders.”***¹⁴⁹

In addition to the destruction of crops caused by grazing animals, the expansion of cultivable areas by farmers also leads to conflict. In the southern provinces, some farmers said they sometimes occupy transhumance corridors due to the lack of land, which can create tensions. However, it is evident that the real sources of conflict are not only these coping strategies, but a combination of population growth and dwindling natural resources. An interviewee from Bénoye acknowledges that population pressure in the region is influencing some of these adaptive mechanisms: ***“There’s already a lot of us, and land is becoming scarce. Families are constantly increasing in size but their resources in terms of available land remain the same.”***¹⁵⁰

Similarly, in the province of Lac, many of the same causes produce the same effects. For example, clashes between farmers and pastoralists are the result of the continuous search for pasture combined with the lack of transhumance corridors. In this region, the movement of pastoralists is mainly between the mainland and the islands of Lake Chad. A herder from the village of Matafo explained that: ***“generally, once the pasture has been depleted, we find grass for our cattle near the shores of the lake.”***¹⁵¹ Due to the presence of water on the islands, vegetation is lush and benefits the livestock.

148 Expression borrowed from Lanfia Sinaba to indicate cohabitation with high tension due to differences in the imaginary community of Farafinland. *Cohabi-tension à Farafinland : Tollé et Tohu-bohu dans un pays en proie à une instabilité multiforme*, Bamako, EdiMan, 2018.

149 Interview with a traditional leader in Narbanga 1, Mandoul, February 22, 2022.

150 Interview with a young man in Bénoye, Logone Occidental, February 11, 2022.

151 Interview with a herder in Matafo, Lac, January 25, 2022.

However, during the rainy season, the water level on the islands increases considerably and is no longer suitable for herding. The return of the herders from the islands, due to both high water levels and need to search for available pastures, coincides with a period of agricultural activities on the mainland. Given that the province of Lac is a prime agricultural area, especially on the mainland, the presence of herders is a potential trigger of conflict. The devastation of fields, inadvertently or intentionally, is among the main causes of tension between herders and farmers.

In contrast, according to this research, clashes between farmers and herders are not common in the Logone Occidental province, due to the low presence of the latter in the area. With an estimated population of 1,008,241 over an area of 8,695km² Logone Occidental is in fact characterised by a relatively high population density of 115 inhabitants per square kilometre, leaving little space, and land, for herders.

As mentioned, in addition to inter-communal conflicts, clashes between herders also contribute to weakening social cohesion. According to the interviews conducted by UNICRI, these are more often observed in Hadjer-Lamis and Lac provinces, while they are less common in Mandoul and Logone Occidental. This type of conflict is linked to a decrease in the amount of rainfall, which leads to scarcity and reduction of pasture and consequently to a high concentration of herders in the areas where they can graze their cattle. It should also be highlighted that the livestock numbers are increasing—while available land is not—putting more pressure on local resources. This is because businesses in the country are increasingly investing in livestock and employing more herders to manage their cattle (for example several herders interviewed confirmed that they were not owners but were employed to look after the livestock). Furthermore, the southern (Central African Republic) and western (Nigeria, Cameroon, and Niger) borders of Chad, which have traditionally been used as a safe passage for transhumance and trade routes, have been closed for almost a decade due to security reasons, restricting pastoralists' access to local livestock markets and pasture on the other side of the border. In Lac province, conflicts between herders are frequent and cause loss of human life. These clashes are usually observed during the dry season when herders travel to the islands where pasture is available, unlike on the mainland. Since some local families consider themselves the owners of the grazing land, they charge a fee for access to the pasture. However, some herders question the right and legitimacy of this ownership, resulting in intra-communal conflicts, sometimes arising even in the same family group—when two or more family members claim ownership of a given pasture at the same time.

Conflicts between herders and fishers are also eroding social cohesion. While this type of conflict rarely occurred in the past, it has recently been observed in

Lac province. Clashes have been reported annually between March and the end of June, when pasture drastically decreases or is depleted in most areas, except around the arms of the Lake. The presence of livestock around these fishing spots often leads to tensions as cattle damage facilities, tools and equipment used for fishing.

Fishers have also experienced some intra-communal conflict and clashes with surrounding villages. Travelling farther in search of richer waters, fishers report that in some areas they encounter people who are intolerant of the presence of outsiders, especially as competition and pressure on fishing resources increases. The respondents also reported the imposition of levies and violent reactions from inhabitants. A fisher in Guité recounts these practices, saying: *“Nowadays, we have to travel far and wide in search of fish, but we’re having a lot of difficulties, especially with the Buduma.¹⁵² They tell us that they own the waters, and that we have to pay them before we can go fishing. Sometimes, we have been expelled as if we don’t even exist. Even recently, in Koulbouda, we were sent away.”¹⁵³*



***The state must intervene in these island areas. Doesn't the land belong to the state? It's not right for someone to prevent others from accessing available pastures simply because they got there first. This needs to change, otherwise we will see more killings each year.*¹⁵⁴**



The declines in returns of agricultural, pastoral, and fishing activities caused by the effects of climate change have seriously weakened the economic situation of local populations, eroding social cohesion in the areas researched. The resulting poverty puts these populations in a vulnerable position financially and psychologically, as they experience increased pressure to survive heightens fear and desperation. These two elements of extreme poverty and the erosion of social cohesion have been used and exploited by extremist groups in the area.

152 The Buduma are the dominant ethnic group in Lac.

153 Interview with a fisherman in Guité, Hadjer-Lamis, February 4, 2022.

154 Interview with a traditional leader in Bol, 24/01/22.

5.2.3 Impact on the dynamics of violent extremism

“

How much profit do you make from fishing every day?

One thing for sure, it's not much.

With us, it's with American dollars that you'll be paid.¹⁵⁵

”

It was in Bol, the main town of the Lac province, during one of the first interviews for this study, that someone jokingly remarked that in investigating the link between climate change and violent extremism, this research was searching for a link between things that were diametrically opposed, or at least unrelated. Indeed, the effects of climate change, how they are felt by people from diverse walks of life in these communities, and, ultimately, how this may expose populations to extremist rhetoric and recruitment has not been adequately studied and is poorly understood. This forms the main objective of this research: exploring how climate change vulnerability can lead to changes across all aspects of community life and, in doing so, expose populations to violent extremist activities and rhetoric.

Yet drawing a line between climate change and violent extremism has not been straightforward. As the previous sections in this chapter lay out, many effects of climate change are indeed noticed and felt by communities, particularly in relation to productive activities—that is, as it affects their everyday survival. Even if they are not aware that the changes observed in the environment are due to climate change specifically, community members clearly report experiencing variations in temperature, rainfall, and sand encroachment, along with the subsequent impacts on farming, herding, and fishing. Crucially, they also underline the food and financial insecurity, and the fear, that come along with the impacts on productive activities. As the quote at the beginning of this section emphasizes, it is this instability in the means of subsistence of local communities, and the accompanying potential increase in poverty, economic pressure, and food insecurity, that can greatly impact the dynamics of violent extremism.

155 Interview conducted in Guité, Hadjer Lamis, February 4, 2022.

The data gathered here suggests the primary mechanism through which climate change and violent extremism are linked in the region is through economic vulnerability and the related food insecurity, which appears to interact with the existing exploitation of poverty by Boko Haram, making community members potentially more receptive to Boko Haram's promises and claims. In addition, direct ecological pressures can reinforce violent extremism dynamics by driving communities to "safer" areas, while ruptures in social cohesion may result in opportunistic appeals to Boko Haram to "settle scores" or seek revenge against community members.

As was often repeated by the respondents of this research, Boko Haram has exploited poverty, among other factors, to recruit fighters in Hadjer- Lamis and Lac provinces from the very beginning of their operations in Chad. Over the years, Boko Haram has used several recruitment methods, including religious indoctrination, kidnapping, as well as enticing people to join voluntarily using monetary incentives. Among these, monetary incentives and promises of a better future to poor community members have proved to be among the most successful in recruiting fighters. In Guité village, Hadjer-Lamis, an interviewee recounts this recruitment method previously used by Boko Haram: ***"people working for Boko Haram came to meet the parents of some youths. They promised them things and they (the parents) were so naive that they even encouraged others to join. This is what used to happen."***¹⁵⁶ In this case, the people interviewed clearly identified poverty as being a key element targeted by Boko Haram in Hadjer-Lamis and Lac, with the promise of wealth at the heart of the recruitment method used by members of the terrorist group operating in these two regions.

Faced with growing uncertainty, these promises of wealth can prove a real source of temptation. Again, in Guité, another interviewee recalled the case of some young fishers being kidnapped by Boko Haram. To the surprise of the village's inhabitants, the kidnapped youths were released without ransom. According to the inhabitants, this leniency was deliberate. Some village members believe that by releasing these youths, the discourses, communications, and—importantly—promises offered by Boko Haram during their confinement would spread throughout the community and could reach people looking to make easy money.

While exploiting poverty may have always been a part of Boko Haram's recruitment strategy, it may become more effective as communities come under increased financial pressure. This sentiment is expressed by another interviewee from around Guité: ***"You know, young people today are impatient. Our usual livelihoods no longer allow us to lead what was once a modest life. Young people are suffering, and here you have the promise of an easy life from Boko Haram. The state is not helping either. Young people find***

156 Interview with local resident in Guité, Hadjer Lamis, February 2, 2022.

*themselves stuck in the middle and they can quickly go over to the wrong side.*¹⁵⁷ In fact, a reformed former recruit of Boko Haram interviewed in the province of Lac confirmed this, saying:

*“Poverty is pushing women to join Boko Haram. Here, in our village, people are poor and the government gives them nothing to eat. So if, on the one hand, people like Boko Haram are offering them a better life, then why not join them and at least get some food. Look around you, at the situation we’re in; there’s no water to drink, nothing to eat. If this were you, would you accept these harsh living conditions?”*¹⁵⁸

The increased financial and survival pressure faced by the communities is often met with limited state capacity and support to help in coping with the changing environment. As discussed in Chapter 2, state infiltration and public service provision are often extremely limited in the target areas, particularly in Hadjer-Lamis and Lac. This can further fuel tensions and offer additional points for Boko Haram to exploit, by manipulating and redirecting communities’ anger and fear towards the state. This was reflected in the words of a housewife and former member of Boko Haram from Méléa, who stressed how this sense of marginalization or abandonment contributed, saying: *“What caused the creation of the extremist groups in Chad in general is abandonment, and the frustrations of some communities at the actions of the state, which is absent from some areas of the country.”*¹⁵⁹

This was echoed by another female former fighter from Bagasola (Lac province), who noted that *“The extremist groups discourage the population from paying taxes to the state, arguing that the State does nothing for them and they say that the state is satanic.”*¹⁶⁰ By emphasizing a limited state response and framing state officials as the source of their poverty, Boko Haram simultaneously offers a scapegoat for the decline in living conditions, coupled with promises of improvement if community members join the group.

Along with increased financial instability, two other effects of climate change, one direct and another indirect, merit discussion for their impact on violent extremism in the area. The first is the direct ecological pressure brought about by climate change, which poses a risk for recruitment and violence from Boko Haram. As the president of a group of fishers in Bol explains: *“The threat of Boko Haram in the island areas has led to fishermen concentrating in safer areas. The growing number of fishermen has led to increasing pressure on fish stocks. As a result, deep waters must be crossed in order to catch fish, and the areas where fish is available are often under Boko Haram’s control.”*

157 Interview with a farmer in Guité, Hadjer-Lamis, February 4, 2022.

158 Interview with a former Boko Haram recruit in Bol, Lac, January 20, 2022.

159 Interview with housewife and former Boko Haram recruit in Méléa, February 21, 2022.

160 Interview with former Boko Haram recruit in Bagasola, Lac, February 23, 2022.

Interviewees also provided examples of two groups of young people who adopted the same strategy, with different results. In Guité, Lac province, where migration of fishers is particularly widespread, a group of young fishermen was killed when they sought fish in less-travelled areas,¹⁶¹ while another group was kidnapped by Boko Haram and, before being released, promised payment in US dollars if they recruited other people. Similarly, interviewees reported that insecurity and the displacement of populations fleeing violence resulted in the reproduction and an increase of fish in abandoned waters, making the insecure areas more lucrative to fishermen seeking alternatives to overexploited fisheries.

As discussed in the earlier section, climate change also leads to scarcity in water and arable land, and community members are often forced to migrate and/or find themselves in increased competition for scarce resources, resulting in intra- and inter-communal tensions, confrontations, and ethnic conflicts. For example, herders faced with the scarcity of water and pasture often have to change their migratory routes in search of both resources. This often leads them to populated or agricultural areas, resulting in conflict with these communities. The often violent confrontations are exploited by Boko Haram, who use them to grow and increase their regional operations.¹⁶² Some respondents reported that individuals also joined Boko Haram to access weapons to settle disputes between families or communities. This situation benefits Boko Haram, which seeks to increase the number of its fighters. As an interviewee from Lac province confirmed: ***“Some attacks recorded in the region are not entirely connected to the Boko Haram conflict. It is sometimes a case of our brothers taking revenge through these attacks under the guise of this terrorist group.”***¹⁶³


The productive sectors—farming, herding, and fishing—greatly contribute to the survival of populations in the four provinces of this study. However, when engaging in these activities no longer meets basic needs, the affected population is forced to look for alternatives, including the option of joining Boko Haram. Hadjer-Lamis and Lac provinces, who have in the past provided fighters to Boko Haram, are now the subject of renewed interest from the group. A young man interviewed in Guité points out this threat, even though he does not necessarily share the extremists’ ideology: ***“Young people have no livelihood, and they are not trained either. Working the land is no longer viable. Life is difficult, so when these terrorist groups make promises to young people, some of them might accept.”***¹⁶⁴

161 Interview with traditional leader in Guité, February 4, 2022.

162 Frimpong, “Climate Change and Violent Extremism in the Lake Chad Basin: Key Issues and Way Forward.”

163 Interview with a traditional leader in Bol, Lac, February 24, 2022.

164 Interview with a young man in Guité, Hadjer-Lamis, February 2, 2022.



A former recruit of Boko Haram acknowledged that the reason he had joined the group was because of his living conditions and lack of information. ***“Poverty is definitely pushing young people to join extremist groups. Here in our community, most young people do not have arable land and have no means to acquire it either. So, these extremist groups tell them that they have the solution to the problems these vulnerable people are encountering on a daily basis. In reality, however, nothing is as simple as they would have you believe. Improving your living conditions by brutally killing people does not lead to any fulfilment.”***¹⁶⁵

¹⁶⁵ Interview with a former Boko Haram recruit in Bol, Lac, February 25, 2022.



06



CHAPTER 06

ADAPTIVE MECHANISMS AND INITIATIVES TO RESPOND TO THE EFFECTS OF CLIMATE CHANGE AND VIOLENT EXTREMISM

6.1 Mechanisms developed by local communities

■ Mechanisms to adapt to the effects of climate change

According to the persons interviewed for this study, local communities adopt different strategies to respond to the effects of climate change. In relation to agriculture, for instance, market gardening is used as the one of the main adaptation mechanisms. Market gardening (or the African Market Garden (AMG)) is a

horticultural system for small producers based on low-pressure drip irrigation, which, compared to traditional production systems, allows for a reduction in labour as well as amount of water used.¹⁶⁶ This research showed that, due to a substantial decrease in harvests, local populations have shown an increased interest in market gardening to make up for the poor yields of rain-fed crops. A young man interviewed in Bol explains that: ***“In 2015, we easily harvested 40 sacks of maize from one hectare of land. However, in the last few years, and in particular this year, we barely got 10 sacks from one hectare. We have no choice but to practice market gardening in order to make ends meet.”***¹⁶⁷

Due to the challenges of the agricultural sector, market gardening is therefore used to respond to the increased financial pressure and poverty, one of the factors contributing to communities being more susceptible to recruitment narratives of Boko Haram.

However, due to limited access to land, especially in the provinces of Hadjer-Lamis and Lac, very few people have the capacity to engage in market gardening. Access to wadis is extremely difficult, especially for vulnerable families, women, and young people. A woman interviewed in Ngouri expressed her concern about this: ***“Nowadays, market gardening in the wadis brings in enough money. Rain-fed crop farming is getting harder and harder. Before there was erratic rainfall and the threat of livestock. Now the real problem is accessing these wadis. Some have access thanks to women’s groups, but a lot of people still don’t have access.”***¹⁶⁸

This problem of accessibility, combined with soil fertility, deprives a good portion of the population of profitable opportunities, contributing to poverty and migration. Considering that marginalization in the Sahel tends to be one of the main drivers towards violent extremism, and that youth and women are amongst the most at-risk demographic groups in the context of radicalization,¹⁶⁹ the barriers to accessing land faced by these groups¹⁷⁰ and their resulting economic vulnerability create fertile ground for extremist groups’ recruitment strategies. Several NGOs in collaboration with national, local, and traditional authorities are making efforts to improve access to land for vulnerable groups, while also providing technical support and equipment to support those involved in market gardening.

In addition to market gardening, according to interviewees, internal (within Chad) and external (towards other countries) migration is the most common

166 Dov Pasternak et al., “Intensification and Improvement of Market Gardening in the Sudano-Sahel Region of Africa,” *Chronica Hort.* 46 (January 1, 2006): 24–28.

167 Interview with a young man in Bol, Lac, January 24, 2022.

168 Interview with a farmer in Ngouri, Lac, January 28, 2022.

169 United Nations Interregional Crime and Justice Research Institute, “Many Hands on an Elephant: What Enhances Community Resilience to Radicalisation into Violent Extremism.”

170 In the Sahel property law is often an area affected by discriminatory practices in relation to women, especially as regards land ownership. This is in fact strongly discouraged for women with the justification to better preserve family property, since the land passes directly down the male line.

coping strategy throughout the four provinces of the study. This is in line with existing research on this topic, according to which the Sahel has long employed human mobility as a mechanism to respond to varying climate conditions and secure livelihoods. Looking at climate-related migration specifically, United Nations Integrated Strategy for the Sahel (UNISS) models that estimate internal migration in a selection of UNISS countries indicate a general increase in internal climate migrants, reaching as high as 16 to 50 million on average in 2050.

Climate mobility is particularly complex in relation to pastoralists, whose identity is closely linked to their livelihood and cattle.¹⁷¹ Furthermore, internal migration can also have an impact on the social structure of rural areas, where, following the emigration of males to urban centres, women and girls remain marginalized within the community and are often left to fend for and raise the children, while bearing the role of educators, and building the sense of social cohesion with limited access to education or the labour market.¹⁷²

Specifically in relation to Chad, based on this research's findings, while regional capitals such as Bol, Koumra, Massakory and Moundou are sometimes included in the internal migration routes, the most common destination remains N'Djamena. Besides the capital, the artisanal gold mining sites in the north of the country are a very popular destination for internal migrants, despite their poor living conditions. As explained by a young man interviewed in Bessada, the decision to migrate is often because of unfavourable conditions for young people: ***“Here in this village, opportunities are rare. Young people practice farming to take care of themselves, but the regular devastation of the fields by herders does not make you want to stay here.”***¹⁷³

Faced with these daily hardships, “going north” can relieve the pressure on an entire family. A young man who had previously attempted this route mentioned that: ***“Due to the lack of work, support, and consideration, young people are embarking on extremely difficult ventures. This is notably the case for those going in search of gold mining. I was one of those people in past, as I had decided to migrate to that area.”***¹⁷⁴ Despite the benefits that can come from artisanal gold mining as an adaptation strategy, the working conditions of this occupation are extremely harsh. According to an interviewee: ***“When we work, everything is billed to us. Even the water we drink has an exorbitant cost that’s taken from our wages. Once we get paid, there’s practically nothing left.”***¹⁷⁵ These unbearable working conditions could lead to frustration and exacerbate tensions amongst miners. As recently as May 2022, a dispute

171 Oli Brown, Foong, Adrian, and Destrijcker, Lucas, “Anticipating Trends in the Sahel: Summary for Policy Makers.”

172 United Nations Interregional Crime and Justice Research Institute, “Many Hands on an Elephant: What Enhances Community Resilience to Radicalisation into Violent Extremism.”

173 Interview with a young man in Bessada, Mandoul, February 24, 2022..

174 Interview with a former artisanal miner in Bessada, Mandoul, February 23, 2022.

175 Interview with a young man in Bessada, Mandoul, February 24, 2022.

between workers degenerated into violent clashes that led to the death of dozens of gold miners in the Kouri Bougoudi district, near the Libyan border.¹⁷⁶

Temporary or long-term migration can therefore help reduce pressure on natural resources and decrease the resulting risks of conflict and recruitment into violent extremist groups, while potentially create new risks and vulnerabilities, pushing people towards illegal or unsafe livelihoods.¹⁷⁷ This is the case, for instance, at the border with Libya, where trafficking operations and organised crime can attract people looking for fast financial gain.

■ Mechanisms to prevent and counter violent extremism

Local communities in Chad have formulated several initiatives aimed at preventing and countering violent extremism. The most common mechanisms cited by interviewees in the context of this study were awareness campaigns and the creation of *comités de vigilance*.

Vigilantism has a long history in the Lake Chad region. It was initially used to fight against Boko Haram in Nigeria in 2013, before spreading to Chad in 2015.¹⁷⁸ According to findings by UNICRI, members of these committees in Hadjer-Lamis and Lac provinces are usually volunteer residents of the areas most affected by or exposed to terrorist attacks. Their mission includes collecting intelligence, sharing information, and conducting inspections during large gatherings such as weekly markets and prayers in mosques. The groups' main role is to report any suspicious person identified in their area to military officials. The committees work closely with security forces to enhance their understanding of the local context and identify emerging trends. This is in line with research by the Crisis Group,¹⁷⁹ which reported that vigilante group leaders have the phone numbers of relevant military officials and quickly link up with them when needed. According to a traditional authority in Bol: ***“Whenever we see someone suspicious in the local area, members of the committee inform the security forces so they can stop and question the suspect”***. Young people play a significant role in these committees: ***“The members of these groups are mainly made up of young people. They sign up to fight against Boko Haram. They know the people living in the local area very well and those capable of causing harm to the peaceful population.”***¹⁸⁰

Interviewees in this study generally spoke positively of this phenomenon. Vigilantism can indeed be a “powerful counter-insurgency tool,”¹⁸¹ facilitating the success of military operations and allowing civilians to regain control and

176 “Clashes between Chad Gold Miners Leave 100 Dead,” *BBC*, May 30, 2022, <https://www.bbc.com/news/world-africa-61633026>.

177 Nett and Rüttinger, “Insurgency, Terrorism and Organised Crime in a Warming Climate.”

178 “Watchmen of Lake Chad: Vigilante Groups Fighting Boko Haram.”

179 Ibid

180 Interview with a community leader in Bol, Lac, January 24, 2022.

181 “Watchmen of Lake Chad: Vigilante Groups Fighting Boko Haram.”

protection. However, the risk factors that have been highlighted by several studies conducted in this region are worth noting. On one hand, when aligned with the state, vigilante groups and related communities have often become the targets of reprisal attacks by Boko Haram, on the other hand, there is evidence that members of these committees sometimes take advantage of their role to resolve personal matters by falsely accusing people.¹⁸² More generally, there are concerns regarding the lack of impunity of such committees, especially when they fuel the emergence of armed local militias. Further research is required to assess the extent of vigilantism and its long-term role in fragile contexts.

In the framework of prevention initiatives, raising awareness has become an essential tool. Both traditional and national authorities support the idea that awareness campaigns can significantly reduce the number of people joining violent extremist groups. According to local authorities, radicalization into violent extremism is often linked to a lack of education and limited access to information. A government official interviewed in Massaguet explained that awareness campaigns were used to illustrate how violent actions are harmful to the community as a whole: ***“The message we’re spreading to the people is based on loving one’s neighbour. Sure, we have problems, we’re hungry too, but killing our compatriots doesn’t solve anything.”***¹⁸³ As a preventive measure, awareness campaigns can help improve local communities’ understanding of this phenomenon and consequently increase their resilience to violent extremism.

Furthermore, local authorities in Hadjer-Lamis and Lac provinces cited the low availability of basic public services in some areas as a motivational factor for radicalization. While poverty is often cited as the main reason for radicalization into violent extremist groups, lack of a sense of national identity and a disconnection with national institutions that emanate from weak governance systems are contributory factors. A young man interviewed in Bol confirmed that: ***“in some areas, for example in the island regions, there’s no educational infrastructure. What’s more, the people living in these areas have very little contact with other communities. They don’t have a real sense of belonging to the country, so it’s easy to turn them against the other communities.”***¹⁸⁴

Respondents in Hadjer-Lamis and Lac provinces reported that awareness campaigns had positive results and were effective in curbing the recruitment efforts of violent extremist groups. The failure to indoctrinate and recruit new members voluntarily had a backlash as it led to kidnapping as a means of forced recruitment. In Massakory, Hadjer-Lamis, a livestock service official attributed this change in tactics to effective awareness campaigns. ***“Lately, people are beginning to understand that Boko Haram’s promises are just an illusion. Voluntary recruitment is less common. This has led Boko Haram’s fighters***

182 International Crisis Group, *Fighting Boko Haram in Chad: Beyond Military Measures* (2017)

183 Interview with a government official in Massaguet, Hadjer-Lamis, February 1, 2022.

184 Interview with a young man in Bol, Lac, January 25, 2022.

to kidnap people. Before, lots of people went to join Boko Haram. However, since 2017, a lot of progress has been made thanks to support from the state and NGOs. Awareness campaigns over the radio and in places of worship have produced results.”¹⁸⁵

6.2 State-led initiatives and partnerships at the national level

■ Initiatives to adapt to the effects of climate change

The initiatives listed in this chapter focus on strengthening institutional, financing, and governance capacities to develop climate resilience in Chad. For instance, as one of the least developed countries, Chad has benefited from the support of the United Nations Development Programme (UNDP) to identify priority initiatives to adapt to climate change, and in 2010 developed *Le Programme d'Action National d'Adaptation aux changements climatiques* (PANA). The document lists potential adaptation measures to the country's key vulnerabilities, i.e., food security, water, and land resources. More recently, in 2017, *le Ministère de l'Environnement et de la Pêche* formulated *La Stratégie Nationale de Lutte Contre Les Changements Climatiques au Tchad* (SNLCC), which aims to develop an inclusive and participatory process to implement coherent policies and initiatives based on a diversified economy, sustainable development of natural resources and energy transition.

Besides the policies above and recognising the impact that climate vulnerability risks have on productive activities, Chad has also signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and the Paris Climate Agreement. In accordance with this latest agreement, in 2015 the country published its first *Contribution Prévue Déterminée au niveau National* (CPDN), and it has recently updated the document for the period 2021-2026, confirming its commitment to the objective of the international community to building resilience and reducing vulnerabilities to climate change. In synergy with the work of updating the CPDN and following the implementation of PANA (which focused on urgent adaptation needs), the Government of Chad, with the support of UNDP, also prepared *Le Premier Plan National d'Adaptation au Changement Climatique*. This document addresses short, medium, and long-term climate risks to build capacity, mainstream climate change into development planning and budgeting processes, and catalyze investments for climate change adaptation.

185 Interview with a livestock service worker in Massakory, Hadjer-Lamis, January 30, 2022.

Another relevant programme is the European Union (EU) flagship initiative Global Climate Change Alliance Plus (GCCA+), which supports the world's most vulnerable countries to address climate change. In Chad, the current programme (2020-2024) focuses on increasing resilience to climate-related stresses and shocks; mainstreaming in policies, strategies, plans; and developing sector-based climate change adaptation and mitigation strategies.

■ Preventing and Countering Violent Extremism (P/CVE) Initiatives

Chad does not have a specific National Action Plan to counter or prevent violent extremism, but Law No. 003/PR/2020 on the Suppression of Acts of Terrorism defines what should be considered a terrorist act and lists the competent national authorities as well as penalties for these types of offences, ranging from fines, a minimum of five years custodial sentences and up to a maximum of life imprisonment (Article 9).

From early 2015, Chad has pursued a predominantly military approach against Boko Haram, deploying a substantial number of soldiers in the Lake Chad Basin, and the country is considered a key military player in the fight against terrorism in the Sahel.¹⁸⁶ These efforts have been developed in the context of the Multinational Joint Task Force (MNJTF), which aims to gather the resources of Benin, Cameroon, Chad, Niger, and Nigeria in the fight against Boko Haram. Prior to the appearance of Boko Haram, the original mission of the task force, established in 1994 by the Lake Chad Basin Commission (LCBC), was to fight against organised crime and facilitate the free movement of people in the Lake Chad region. In 2014, when the Boko Haram insurgency reached new heights, the mandate of this initiative was revised to focus on this new regional threat. The current form of the MNJTF was therefore designed to play a key role in terms of joint military operations coordination in the border regions of the Lake Chad Basin.¹⁸⁷

To complement the security efforts of the MNJTF, in 2018 the Lake Chad Basin Commission (LCBC), with the support of the African Union (AU), prepared a *Regional Strategy for the Stabilisation, Recovery, and Resilience of the Boko Haram-affected areas of the Lake Chad Basin Region (RSS)*, which aims to address short, medium, and long-term needs of the region. The Strategy outlines nine primary pillars of intervention focused on political cooperation; human rights and security; the disarmament, disengagement, rehabilitation, resettlement, and reintegration of violent extremist offenders; the prevention of violent extremism; humanitarian aid; governance; socio-economic recovery and environmental sustainability; education, learning and skills; and empowerment

186 "Watchmen of Lake Chad: Vigilante Groups Fighting Boko Haram."

187 Camillo Casola, "Multinational Joint Task Force: Security Cooperation in the Lake Chad Basin," March 19, 2020, <https://www.ispionline.it/it/pubblicazione/multinational-joint-task-force-security-cooperation-lake-chad-basin-25448>.

and inclusion of women and youth. The Strategy also promotes the involvement of local communities in the implementation of development initiatives.

Another relevant regional initiative is the G5 Sahel, created in 2014 by Burkina Faso, Chad, Mali, Mauritania, and Niger to provide an institutional framework to facilitate cooperation around development and security matters. In this context, the G5 Sahel Joint Force is specifically aimed at combating armed and violent extremist groups in the region. In recent years, thanks to UN Security Council resolution 2531 (2020), the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) has expanded its strategic priorities and has strengthened its support to the Joint Force, increasing interinstitutional coordination on the prevention of violent extremism in the Sahel.

International Organisations have also widely contributed to the development of P/CVE programmes in Chad. One relevant example is the initiatives developed within the Disengagement, Disassociation, Reintegration and Reconciliation (DDRR) framework of the International Organization for Migration (IOM). This programme offers a reintegration pathway to former members of violent extremist groups, in particular Boko Haram, while strengthening the capacities of local and national authorities to develop similar initiatives.

UNDP has also developed several relevant initiatives in the country. The Chad National Prevention of Violent Extremism Project,¹⁸⁸ concluded at the end of 2021, provided a multi-dimensional response to the issue of violent extremism and it was focused on the province of Lac. Additionally, the Preventing Violent Extremism Programme¹⁸⁹ is currently implementing activities aimed at supporting the creation of a legal and institutional framework capable of responding to violent extremism while respecting basic human rights and strengthening communities' resilience to violent narratives. At the regional level, in 2019 UNDP launched the Regional Stabilization Facility (RSF), a multi-donor basket fund to facilitate the implementation of the Regional Stabilization Strategy (RSS) of the Lake Chad Basin Commission.

188 "Chad National Prevention of Violent Extremism Project: 2021 Summary Report" (UNDP, July 27, 2022), https://api.open.undp.org/media/export_pdf/out_1659100497.pdf.

189 "Programme de Prévention de Lextremisme Violent: 2022 Summary Report" (UNDP, July 27, 2022), https://api.open.undp.org/media/export_pdf/out_1659101061.pdf.



07



CHAPTER 07

CONCLUSION AND KEY PRINCIPLES FOR PROGRAMMING

Through qualitative research, this study has shed light on how communities perceive and experience the effects of climate change in the provinces of Hadjer-Lamis, Lac, Logone Occidental and Mandoul, in Chad. During field visits, respondents widely reported increased economic and survival pressure, as the main productive activities—farming, herding, and fishing—suffer from variable rainfall, floods, and desertification. As the effects of climate change impact communities' everyday survival, competition for ever-shrinking resources has led to increased conflict and deadly violence within and between communities, causing a rupture in social cohesion.

In line with the focus of the study, respondents also described how violent extremist groups have explicitly drawn on the instability of farming, herding, and fishing as a narrative in their recent recruitment. Considering this qualitative research concentrated on individual perceptions and lived experiences, the nexus that has been reported between the effects of climate change and violent extremist groups' recruitment techniques, should not be considered as a causal link. However, although the link is an indirect one, communities' increased vulnerabilities connected to the effects of climate change have clearly been instrumentalized by armed groups in the region.

For these reasons, it is clear that more research and action are urgently needed to be able to define the relationship between climate change and violent extremism more clearly. Considering the research findings and the concerns raised by local communities, UNICRI—in line with its mandate—has identified some guiding principles¹⁹⁰ that should form the basis of future P/CVE interventions that take into account the linkages between climate change and violent extremism in the area.



INTEGRATE CLIMATE CHALLENGES CONSIDERATIONS INTO PVE STRATEGIES

The indirect link between climate change and violent extremism—and—more generally—the climate security analysis, may provide important insights and should be considered when designing P/CVE strategies and policies. The establishment of a government working group on this issue could help in raising awareness among policy makers as well as in facilitating the design of a comprehensive and holistic PVE approach that takes into consideration the implications related to climate insecurity.

Guiding principles

¹⁹⁰ In line with UNICRI's mandate, the identified guiding principles focus more on the PVE aspect, than on climate insecurity.



AVOID INSTRUMENTALIZATION OF CLIMATE CHANGE

When developing PVE strategies, ensure a nuanced and detailed knowledge of the local context, of its dynamics as well as of the specific drivers to violent extremism, avoiding instrumentalization of climate change to justify disproportional responses or—on the other hand—lack of factions. This report shows how climate insecurity, in the target study areas, may contribute to creating an enabling environment for propaganda, appeal and recruitment by violent extremist groups. However, it is key to recognize that an effective PVE strategy must address the main drivers and root causes of radicalization into violent extremism in the Sahel—including weak governance, marginalization, lack of state services and state abuse.



INVEST IN CONFLICT- SENSITIVE MANAGEMENT OF CRITICAL RESOURCES

Interviews held with local communities and authorities confirmed that intercommunal conflicts around access and use of natural resources could provide opportunities for violent extremist propaganda and recruitment. Investing in peaceful dispute resolution mechanisms, including with regards to natural resources, could help to support community development and foster social cohesion. In this endeavor, local civil society is a critical partner to engage with and strengthening its capacity to implement participatory mechanisms for natural resource management could improve the re-establishment of strong social cohesion.



SUPPORT CLIMATE-RESILIENT ALTERNATIVE LIVELIHOODS FOR VULNERABLE GROUPS

Providing concrete support to farmers, herders, and fishers to make use of adaptive mechanisms to cope with increased climate insecurity, through programming and policies that focus on locally led efforts, would reinforce livelihoods and reduce the risk of violent conflicts. For example, local communities interviewed have shown a significant interest in market gardening as a strategy to respond to increased financial pressure and poverty. Technical, financial and infrastructure support should be provided to scale up the initiatives, while—most importantly—strategies to ensure access to wadis especially for vulnerable populations, women, and young people must be established.



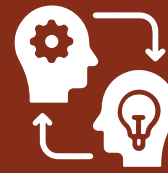
DECONSTRUCT VIOLENT EXTREMIST GROUPS' RECRUITMENT NARRATIVE

From interviews with local communities, it is clear how violent extremist groups strategically use the scarcity of natural resources and the subsequent food insecurity to boost their propaganda and recruitment. This is particularly true for young people, who very often lack economic opportunities, access to crucial resources and resilience strategies. Programmes to support and strengthen the capacity of government as well as civil society actors to design and implement counter-narrative projects and resilience-boosting approaches, specifically targeting young people and women should be encouraged.



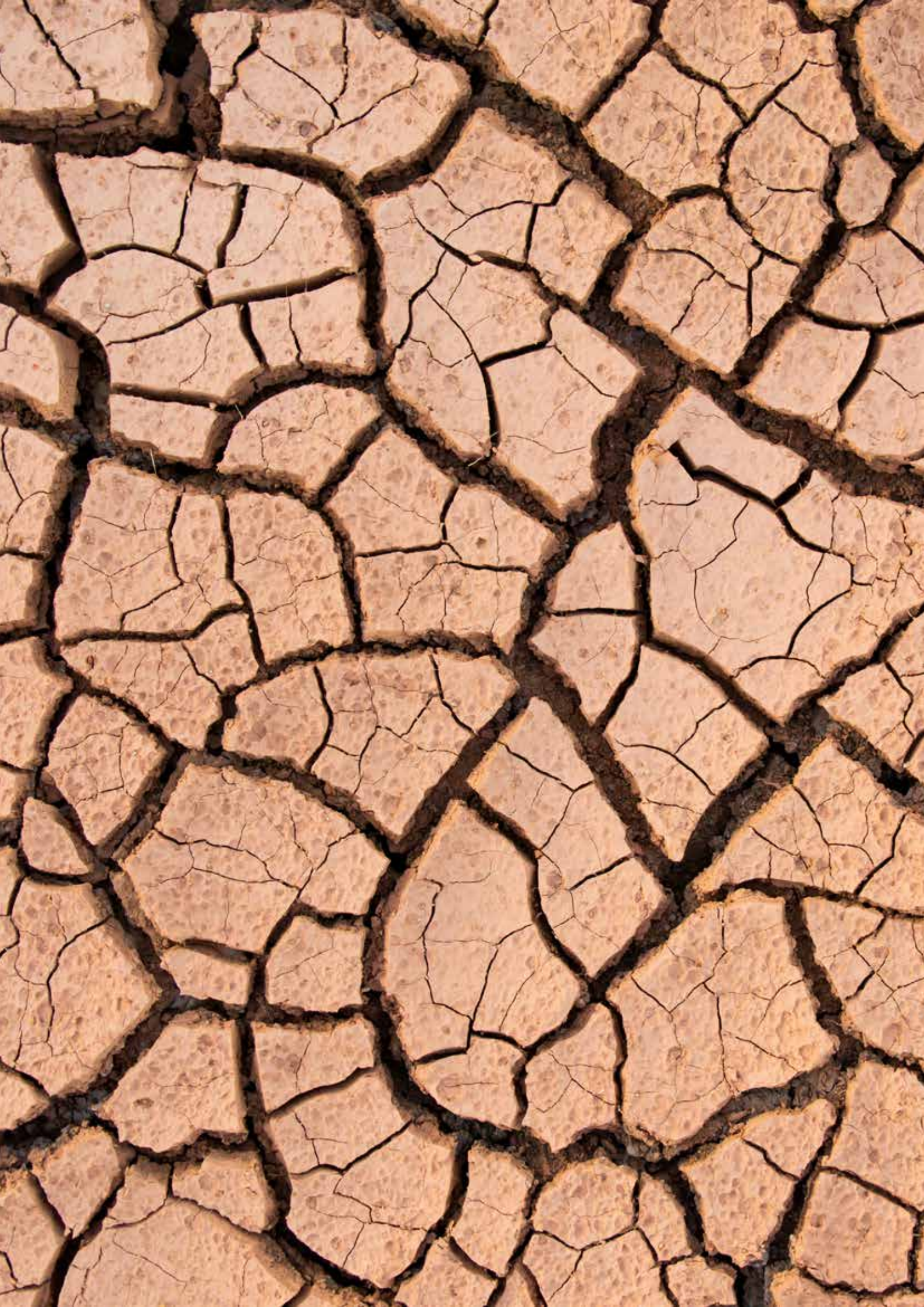
INCLUDE A GENDER APPROACH TO ADDRESSING CLIMATE-RELATED SECURITY RISKS

Connections between gender, climate change and violent extremism have not been adequately studied. However, from the analysis of the interviews conducted, local populations report a modification in the social composition of communities (mainly because the scarcity of resources and violent conflicts often drive men to migrate) as a critical aspect to consider. Women are often obliged to take on a greater role in economic activities as well as the role of head of household. At the same time, gender context-related vulnerabilities might be exploited by violent extremist groups. It is necessary to improve the understanding of specific gender vulnerabilities, as well as to invest in strategies and policies aimed at women's inclusion, empowerment and access to decision-making processes, offering an alternative model of emancipation, challenging the one presented by violent extremist groups.



MORE AND BETTER DATA TO INFORM DECISIONS

Most of the issues touched by this report would require further research: from the differentiated effects of climate change and violent extremism on men and women to the efficiency and sustainability of adaptive mechanisms implemented by local communities. In general, availability and reliability of data are critical challenges to be taken into consideration in the design of programmes. However, each intervention strategy aimed at tackling the effects of climate insecurity on social cohesion and violent extremist propaganda should be grounded in a nuanced knowledge of the specific context and informed ideally by on-the-ground research.



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