



Managing Climate, Peace and Security Risks in the Borderlands of the Lake Chad Region (CPS-Lake Chad)

Rapid Evidence Assessment (REA) Report

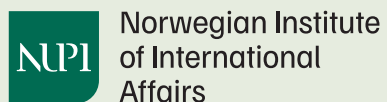
Thor Olav Iversen, Cedric de Coning, Andrew E. Yaw Tchie, Saibou Issa,
Freedom Onuoha, Mino Koefoed and Ingild Brox Brodtkorb

Acknowledgements

This Rapid Evidence Assessment (REA) report is a product of the Cross-Border Conflict Evidence, Policy and Trends (XCEPT) research programme, funded by UK International Development. XCEPT brings together world-leading experts and local researchers to examine conflict-affected borderlands, how conflicts connect across borders, and the drivers of violent and peaceful behaviour, to inform policies and programmes that support peace. For more information, visit www.xcept-research.org or contact us at info@xcept-research.org.

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*Thor Olav Iversen, Cedric de Coning, Andrew E. Yaw Tchie, Saibou Issa,
Freedom Onuoha, Mino Koefoed and Ingild Brox Brodtkorb*

Contributors



Thor Olav Iversen
Senior Reserach Fellow
NUPI



Cedric de Coning
Research Professor
NUPI



Andrew E. Yaw Tchie
Senior Reserach Fellow
NUPI



Saibou Issa
Professor
University of Maroua, Cameroon



Freedom Onuoha
Professor
University of Nigeria, Nsukka



Minoo Koefoed
Assistant Professor
Linköping University



Ingvild Brox Brodtkorb
Research Fellow
NUPI

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Executive Summary

This is a Rapid Evidence Assessment (REA) report for the research project on managing climate, peace and security risks in the borderlands of the Lake Chad Basin Region. The REA is the first output of the research project, and it aims to review the existing policy and academic literature to identify evidence gaps that can inform the research design stage of the research project. Therefore, the REA should be understood as a preliminary and exploratory assessment, aimed at identifying gaps and establishing a baseline for further research at the start of the project.

Most of the climate security academic literature to date has concerned itself with understanding the relationship between climate change and conflict. In this research project, the focus is on the policy response(s), i.e. how best to prevent, manage and adapt to climate change and environmental degradation related instability and insecurity.

To gain insights into the policy response question, the REA studies the Regional Strategy for the Stabilisation, Recovery and Resilience of the Boko Haram affected areas of the Lake Chad Region (RS-SRR). In addition to improving our understanding of the functioning and effects of this strategy in the Lake Chad Region, our aim is to identify principles, processes and factors that can inform the design of future strategies, policies and practices that address the nexus of stability, environment and climate across a diversity of localities.

We find the RS-SRR to be an adaptive and integrative policy framework that places an understanding of socio-ecological systems at the core of its design and theory of change. The RS-SRR attempts to address not only security concerns, but also humanitarian needs, local economic development, the capacity needs of governments, and the effects of climate change and environmental degradation. However, the REA finds that the potential to use climate change and environmental issues as entry points for building peace and stability has been under-utilised.

Summary of key findings, evidence gaps and its implications for research design

Key findings and evidence gaps	Implications for research design
Climate change exacerbates existing vulnerabilities, typically by compounding stress on livelihoods and contributing to mobility. Climate change influences the ecological systems and eco-system services that humans are dependent on. However, decisions about how to adapt to these developments are made within social contexts where politics, economics, and other cultural and social considerations intersect. Factors such as social cohesion, adaptive capacity, and societal resilience impact the choices being made. More evidence is needed on how climate change explicitly affects human insecurities and conflict dynamics in the context of the Lake Chad Region, as well as on how the RS-SRR contributes to mitigating these effects.	<u>Assess influence of climate change</u>: Need to analyse the influence of climate change on specific affected communities. Understanding what the impact of climate change is on affected communities, livelihoods, mobility and resilience. <u>Assess influence of the RS-SRR on Climate Peace and Security (CPS) risks</u>: Need to analyse the influence of the RS-SRR and related initiatives on climate change-related human security, CPS and conflict dynamics. <u>Assess social context</u>: Need to identify and analyse social contextual factors that influence CPS adaptation choices at local to national levels, with special attention to analysing the role of social cohesion, adaptive capacity and societal resilience.
Despite the RS-SRR's aim to integrate sustainable resource management, environmental protection and social equity, the potential of environmental peacebuilding – using natural resource management as an entry point for peacebuilding – is largely untapped within the RS-SRR and its associated initiatives. Will a stronger emphasis on the relationships between climate change, environmental degradation and peace and security dynamics in the implementation of the new phase of the RS-SRR generate new insights, bring new stakeholders to the fore, and open new resource mobilisation opportunities?	<u>Map CPS efforts</u>: Need to analyse how the RS-SRR and related initiatives, assessed and identified CPS aspects, its rationale for the actions taken, as well as which stakeholders and resources were involved. <u>Assess different approaches</u>: Need to assess potential for a strengthened focus on CPS (including Environmental Peacebuilding) in RS-SRR related programming, e.g. at Territorial Action Plan (TAP) level. <u>Assess unintended consequences</u>: Need to assess what unintended consequences a stronger emphasis on CPS may have, e.g. securitisation of climate adaptation efforts.

Key findings and evidence gaps	Implications for research design
Efforts to achieve stabilisation, recovery and resilience require a comprehensive and holistic approach to create a shared operating space for the widest possible set of stakeholders across various dimensions, scales and temporal approaches. The RS-SRR represents an attempt to go beyond stabilisation by including recovery and resilience in the overall framing of the problem and its solutions. More evidence is needed to understand the factors that enable the RS-SRR to generate a process that addresses shared challenges in a way that fosters and sustains peace, resilience and collaboration among a diverse range of sectors and stakeholders. More evidence is needed to assess the effectiveness and value of the roles of traditional leaders, civil society, and Governors in the RS-SRR. In particular, how are these roles understood to leverage local and traditional knowledge, practices and networks to facilitate implementation and adaptation? The evidence emphasises the need to leverage the role of gender, women and youth, but the first and second phases of the RS-SRR have taken different approaches to achieving this aim. More evidence is needed on the effects of these different approaches.	<u>Understand RS-SRR process</u>: Need to identify and analyse key principles and factors that influence how the RS-SRR and related efforts have been able to generate and sustain a holistic, multidimensional, multistakeholder, multilevel and transboundary initiative of this scale and ambition, despite challenging geopolitical dynamics and regional tensions. <u>Assess perception of RS-SRR</u>: Need to assess how stakeholders of the RS-SRR assess and explain its role and effects. <u>Assess bottom-up dynamics of RS-SRR</u>: Need to assess perceptions of traditional leaders, civil society and governors to determine their assessment of the extent to which the RS-SRR efforts reflect local and traditional needs and inputs in planning, implementation, adaptation and evaluation. <u>Assess gender, women and youth</u>: Need to assess perceptions of women, youth, and men and those working on related issues, to determine if the RS-SRR and related efforts reflect their needs and inputs, and the comparative effects of the two different approaches of the first and second phases of the RS-SRR.
More evidence is needed to understand the operational and adaptive capacity of Monitoring, Evaluation, Learning (MEL) and the knowledge systems that support the RS-SRR and related efforts.	<u>Assess the role of MEL, information and knowledge systems</u>: Need to assess the role MEL, information and knowledge have played in RS-SRR and related efforts, and scope for improvements, especially in the context of CPS.

Part one: Introduction

1.1 The CPS-Lake Chad-project and Rapid Evidence Assessment

This Research Evidence Assessment (REA) was carried out over a three-month period, from January to March 2025, as the initial phase of the Lake Chad Region research project. The REA aims to identify evidence gaps that can inform the final design of the research project.

The overall aim of the research project is to contribute to the evidence on managing climate and environmental-related peace and security risks. The project aims to achieve this by improving our understanding of how the Regional Strategy for the Stabilisation, Recovery and Resilience of the Boko Haram Effected Areas of the Lake Chad Region (RS-SRR) influence the relationship between climate change, environmental degradation and stability, recovery and resilience. The project will identify lessons that can be gained from analysing experiences in this region, that may be useful in other contexts that face similar encounters. Whilst each situation is unique and requires its own context-specific responses, we recognise that there may be some principles and factors related to process and approach that are useful to consider across a range of cases. We do not see these as potential blueprints or templates for managing climate and environmental-related peace and security risks. However, they can be thought of as principles and factors that influence effectiveness and help inform the planning and management of stabilisation initiatives, provided they are sufficiently contextualised and localised. This Research Evidence Assessment (REA) was conducted over three months, from January to March 2025, as the first phase of the Lake Chad research project. The REA aims to identify evidence gaps that can inform the final design of the research project.

The REA serves as a baseline for the overall project, and its findings will inform the design of the phase three (field research) of the project. We provide an example of how the Lake Chad Region has taken concerted steps to prevent and manage climate and environmental change-related peace and security risks. The desk research is complemented with two validation workshops, the first with civil society and local researchers from the region, and the second with the policy community engaged in the implementation of the RS-SRR and interrelated efforts. The final phase of the REA triangulates the analysis of the regional stabilisation strategy and related efforts based on the evidence gathered through this REA using a new theoretical framework developed for the project.

The REA is organised in four parts. In the first part, the REA takes stock of the situation in the Lake Chad Region. In the second part, it reviews the evidence on the relationship between climate change and conflict that is currently available in both policy and academic literature. In the third part, we focus in on the Lake Chad Region to understand how the RS-SRR intends to bring about stabilisation, recovery and resilience, and how these efforts may contribute to managing climate change-related peace and security risks. In the fourth and final part, the REA triangulates the analysis of the regional stabilisation strategy and related efforts based on the existing evidence using a new analytical framework developed for this purpose.

1.2 Rapid Evidence Assessment methodology

The nexus of conflict, stability, environment and climate change should be conceived of as relationships that form part of deeply interconnected social and ecological systems that function as complex adaptive systems. By employing the concept of *socio-ecological systems* we recognise that natural and human systems are intertwined, interconnected and interdependent (Biggs et al. 2021) and complex and adaptive (Preiser et al. 2021). Like critiques of modernity forwarded by e.g. science and technology studies, it is based on a notion that clinically separating social and ecological systems is arbitrary, as such divisions are artificial and inadequate for understanding the complex

and intertwined realities of the world (Latour 1987; Jasanoff 2004). This theoretical framing guides our choice of research methodology in a direction that conceptualises the nexus of environment, climate and stabilisation as complex systems that should be addressed through integrated and holistic policy and interventions. In construing an analytical framework for analysing the RS-SRR, we furthermore draw inspiration from the analytical frameworks of adaptive peacebuilding and stabilisation (Tchie 2024; De Coning 2018), which combine complexity theory with insights from peace and stabilisation studies in Africa.

To analyse and inform aspects of the RS-SRR that deal with climate change, we undertake an integrative literature review (Souza, Silva, and Carvalho 2010; Torraco 2005, 2016). With regards to climate change and stabilisation, the relevant literature spans both grey literatures including policy research such as fact sheets, briefs and reports and academic publications. Based on insights gained from the literature review and evidence assessment, we develop an analytical framework for evaluating interventions into this nexus.

In addition to reviewing the available literature, and in recognition of the fact that a large proportion of this literature has been produced by institutions and researchers that are not located in the region, we have decided to complement the literature review with two virtual validation workshops. The first validation workshop took place on 25 February 2025 in the form of a dialogue with representatives of civil society organisations and researchers based in the Lake Chad Region. The second validation workshop took place on 3 March 2025 in the form of dialogue with the policy community that is engaged with the Lake Chad Region, including representatives from the Lake Chad Basin Commission (LCBC), African Union (AU), United Nations (UN) system and international donors.

Part two: Climate, peace and stability in the Lake Chad Region

2.1 The Lake Chad Region

The Lake Chad Region straddles the territories of Chad, Cameroon, Niger and Nigeria, and provides a lifeline to millions of people in the four riparian countries (Onuoha 2010; Salkida 2012; Usigbe 2024). Over the last four decades, climate change has impacted the inflow to Lake Chad, one of the oldest water bodies in Africa (Coe, 1997). In the 1980s, Lake Chad experienced a significant decline in water storage due to poor water management by its riparian countries, and it has not fully recovered from its continuous decline since then (Thiombiano and Tourino-Soto 2007; UNDP 2017). The Lake's water supports regional economic activities, such as agriculture, mining, fishing, and crafting (Emeribe, Ezech, and Butu 2021). Fishing, agriculture, livestock, and domestic water use consume the most lake water (Ndehedehe, Ferreira, and Agutu 2019). As a result, the Lake Chad Basin has transformed and shifted from its previous status as a remarkable resource in the heart of the Sahel region capable of supplying food and water to a population of 40 million people to increasingly being affected by climate and security risks (FAO 2021; ACCORD 2022).



Figure 1: Map of the Lake Chad Basin Region.

Ongoing challenges in the region over time include mass displacement, poverty, hunger, and a surge in population. There is decreased biodiversity, with many inhabitants struggling for livelihood and resources (Zieba, Yengoh, and Tom 2017). Furthermore, the situation is exacerbated by continuously weak and corrupt governance from all four national governments. This is further complicated by a long-standing history of marginalizing the communities surrounding the lake and ineffective management of scarce water resources.

While some scholars focus on the changes in rainfall patterns in the Lake Chad (Schmidt and Muggah 2021), others highlight how fluctuations in water availability pose major threats to already vulnerable populations, especially to those dependent on rain-fed agriculture to survive (Amali, Bala, and Adeniji 2016; Geerken, Vassolo, and Bila 2010; Schmidt and Muggah 2021). Other scholars have examined the manifestation and impact of droughts on livelihood and agricultural productivity in the region (Brunelin et al. 2022; Yaduvanshi, Srivastava, and Pandey 2015; Saibou 2002). Similarly, some studies highlight rising temperatures in the region as endangering people's lives and livelihoods, including effects on livestock, cattle migration and broader food systems, while others have focused on environmental degradation and its impacts on livelihood, conflict and water resources (Onuoha 2008; Onuoha, Tchie, and Zabala 2024). In parts of the Lake Chad Region these factors have caused a loss of livelihoods for many among Chad's predominantly agropastoral population, further exposing people to poverty and hunger (Musa et al. 2022; Saibou 2002). In many cases, this has contributed to exacerbating existing tensions and pressures within and between communities and societies, particularly during the seasonal movement of livestock from grazing to non-grazing land (Usman and Nichol 2022). Climate variability has also added to existing interstate border challenges due to cross border migration and occupation of arable lands, fisheries and pastures. More recent research has also found that local vulnerabilities create a favourable climate for jihadist extremist recruitment of vulnerable local populations (Aina and Ojo 2025). The implications posed by climate change in the Basin has led to the escalation of existing tensions, including the persistent farmer-herder crisis, intercommunal clashes, and ethnoreligious grievances, which have been characterised by reprisal attacks. In addition to these issues are the harmful activities of violent extremist organisations, such as Boko Haram and its offshoot, the Islamic State in the West Africa Province (ISWAP), which operate throughout the region. The actions of these terrorist groups have resulted in approximately 350,000 deaths (Aina and Ojo 2025). Furthermore, they have contributed to the internal displacement of over 2.8 million people across the region (OCHA 2022). Highly affected areas include Adamawa, Borno and Yobe states of Nigeria; the Diffa region of Niger; Hadjer Lamis and the Lac Region in Chad; and the North and Far North regions in Cameroon.

2.2 Displacement and demographic increase

The population depending on the lake for their livelihoods has increased from 3.5 million in 1960 to over 45 million in 2020 (Kindzeka 2021). Over half of this population earn a living from farming, herding and fishing. The region's population is also expected to increase to 80 million by 2030 (Okonkwo, Demoz, and Gebremariam 2014). As of August 2023, Cameroon, Chad, Niger and Nigeria were hosting an estimated 6,077,690 affected individuals made up of internally displaced persons (IDPs), returnees (former IDPs and returnees from abroad) and refugees (both in- and out-of-camp). Over half of that number (three million people) are internally displaced (IOM 2024). The combined population of the lake countries, which is 246 million continues to grow (UNFPA 2017). Large populations in the region have been exposed to hunger as they have moved to internally displaced camps or communities and become dependent entirely on international agencies to supply food (Pham-Duc et al. 2020) and adopted new practices to survive. One in every four people is food insecure in this region, totalling about 6.9 million people, with 75 per cent of the food insecure population residing in north-eastern Nigeria (World Bank 2020a, 2020b).

While local populations often engage in long-term regional migration, typically tracing the rainfall patterns, or embark on seasonal migration aligned with environmental conditions, over time these practises have been adapted to navigate the challenges posed by shifting climates and economic uncertainties. Consequently, in this region climate migration continues to cross national borders which results in the movement of people and livestock, in turn causing large scale clashes across communities. In the Lake Chad Region, most movement occurs within the confines of these areas, marking a distinct contrast to traditional migration patterns. The repercussions of climate change can profoundly disrupt communities, driving displacement, creating population pressures, and amplifying vulnerabilities often rooted in conflict dynamics.

Maiduguri —located in Northeastern regions of Nigeria, with its dense population—draws individuals seeking refuge due to its relative safety amid the turmoil of Borno State, where violent extremist organisations remain a significant threat. When floods strike, they further exacerbate the already intense rural-to-urban migration spurred by the dual forces of conflict and environmental deterioration. The cycle of population surge(s) places immense strain on natural resources, pressure on fragile governance structure and water systems, food supplies, infrastructure, and governance frameworks, thereby perpetuating an enduring cycle of crisis.

2.3 Rising temperature and irregular rainfall

The temperature across the Lake Chad Basin is increasing at an unprecedented rate (IPCC 2023). The ongoing depletion of the lake's resources, including fishing yields, has been caused by environmental degradation, soil infertility, rising temperatures, and desertification (Frimpong 2020). Consequently, there have been significant and frequent alterations in inter-seasonal rainfall yearly until recent years (Pattnayak et al. 2019). These changes in temperature and rainfall have contributed to a rise in food insecurity in the region, leading to vulnerable youth in local communities turning to terrorist groups due to the lack of job opportunities (Awosusi 2017). The rising temperature has a direct impact on the levels of rainfall in the region and on communities. For example, the Lake Chad Basin experienced a severe climate shock during the 2022 rainy season, typically from May to October (Lyammouri and Bozsogi 2024). The decades between the 1950s and the 1960s were very wet, but the decades between 1980 and 2000 experienced a decline in the yearly rainfall, which affected the flow into the lake from various streams.

Rising temperatures in the region impact rainfall and lead to sporadic patterns, which can in turn lead to scarcity and uneven rainfall distribution, compounded by continuous drought (Pattnayak, 2019). Due to climate change, some rivers that feed into the lake, such as the Chari, Logone, and Komadugu-Yobe, are experiencing drought (Zhu, 2019). The continued unpredictable rainfall — either too little during some seasons or too much rain causing massive flooding in other seasons; disrupting each community's access to food and livelihoods (ACAPS 2022). For example, in Lac Province (in Chad), drought not only degrades natural resources but also threatens the very foundations of life —leading to a stark decline in agricultural, pastoral, and fishery production and eroding the rich tapestry of biodiversity. In the Diffa region (in Niger), bushfires often ignite by accident, yet the dry fodder and harsh harmattan winds fuel their relentless spread. These devastating fires ravage pastures and vegetation, leaving cattle bereft of the vital vegetation they need for sustenance. In northeastern Nigeria, the dire effects of drought are starkly visible as the once-vibrant lake shrinks and fertile soils vanish (*ibid*). Countries like Cameroon rank prominently among African countries with significant surface water potential —second after Congo, with 50 per cent of the continent's reserve and then followed by northern Nigeria (USAID 2020). Yet both Cameroon and Nigeria experience water scarcity despite being the largest recipient of the Lake (FAO 2025). Chad and Niger are landlocked countries with fewer reserve water resources than Cameroon and Nigeria.

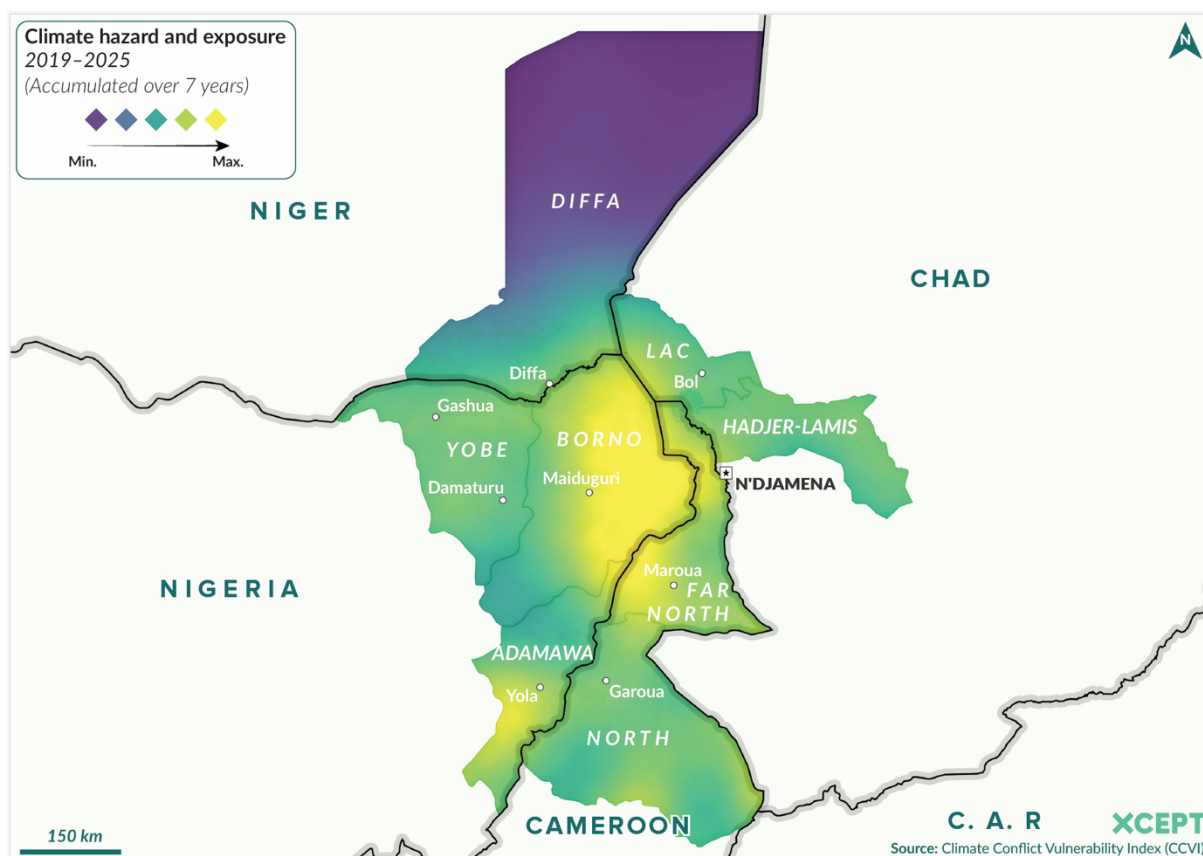


Figure 2: Accumulated climate hazard and exposure in the Lake Chad Basin Region 2019-2025. Measures climate extremes accumulated over the past seven years. The indicator data are largely derived from satellite observations.

2.4 Floods

Severe flooding in Cameroon's Far North in October 2020 resulted in the displacement of thousands, the destruction of homes and the inundation of farms and roads (USAID 2022; Aina and Ojo 2025). Recent floods in the Lake Chad Basin and surrounding countries have not only devastated the lives of thousands but have compounded existing challenges that communities face. Floods are compounded by poor management and neglect, exacerbating the disaster's impact (Handbury 2024). For example, floods in 2024 displaced 414,000 people and killed 30, making it Borno state's (in Nigeria) worst flood disaster in three decades, according to the UN (Oba 2024). Borno State was particularly affected when a dam burst, flooding the city of Maiduguri and displacing 70 per cent of its 870,000 inhabitants, with at least 269 fatalities (Handbury 2024; Kingimi 2024). In response to the severe economic impact caused by floods that submerged half of Maiduguri, Nigeria, Borno State Governor Babagana Umara Zulum requested an additional \$36 million from the State House of Assembly. This request supplements the initial budget of \$215 million. The additional funds are intended to support the reconstruction of damaged infrastructure, provide emergency relief and humanitarian aid, assist farmers, promote economic recovery, and facilitate environmental management (Olugbode 2024). Hundreds of thousands of displaced persons are now forced to shelter in Bakassi Camp and other centres, which used to house those fleeing the Jihadist insurgency primarily. Previous reports indicate that more than one million people have been displaced by flooding across Nigeria, Chad, Cameroon, and Niger (USAID 2022; World Bank 2020a). In Cameroon, flooding has impacted at least 365,000 people and claimed over 30 lives (OCHA 2024). More than 56,084 houses have been destroyed, 82,509 hectares of farmland submerged,

and over 5,000 livestock have been lost. In Chad, almost two million people have been affected by the flooding, and 576 lives have been lost (UNFPA 2024). Finally, the Logone and Chari Rivers have reached unprecedented levels, leading to extensive destruction of farmland and significant crop losses. Compounding this destruction, the failure to harness available arable land in different countries for crop production and animal husbandry has resulted in a never-ending battle over arable land between herders and farmers in Lake Chad. Several lives are lost yearly to this clash, much agricultural produce is damaged, and biodiversity has been depleted (Ehiane and Moyo 2022).

The construction of dams which draw water from rivers draining into Lake Chad, such as the Tiga dam and the Challawa Gorge dam have emerged as an issue (World Bank 2002). The Challawa dam has been underutilised, but the Tiga dam contributes significantly to the Watatari irrigation scheme, where Nigeria generally irrigates 311,150 ha of farmland (LCBC 2016). Nigeria irrigates 50 per cent more than the other countries' combined capacity. The Maga Dam in Cameroon irrigates over 5000 hectares of land (Vassolo et al. 2016). Cameroon irrigates over 25,650 ha of its land, and Niger has an irrigation project to serve 12 per cent of its cultivated land, cumulating into 99,890 ha of irrigated land. However, the impact of dams in 2022 led to flooding in Cameroon partially triggered by a dam being overwhelmed by rainfall, compounded by the failure to complete another dam on the Nigerian side of the same river (World Weather Attribution 2022). The management of these dams has also led to overflowing in parts of the region, which has caused communities to be displaced and often forced to move into other communities impacting on the already limited resources. As a result, upstream dam construction, land degradation, soil erosion, deforestation and bush burning continue to create serious environmental degradation problems.

2.5 Utilising natural resources

While the Lake Chad Basin covers 2,434,000 km² and is shared with Chad (45 per cent), Niger (28 per cent), CAR (9 per cent), Nigeria (7 per cent), Algeria 4 (4 per cent), Sudan (4 per cent), Cameroon (2 per cent) and Libya (0.5 per cent). Chad and Niger are those with the largest shared territory, but three-quarters of the water comes from the Central African Republic (40 per cent of the inflow) and Cameroon (Global Water Partnership 2013). It is composed of two basins—north and south—separated by a zone of shallows, the "Great Barrier." The main inflows come from the Chari and Logone rivers from the south (80-90 per cent), while the remaining inflows are from smaller tributaries and rainfall (Lemoalle and Magrin 2017). During low water periods, the Great Barrier can emerge and separate the two basins—if the north basin does not benefit from the overflow of the south basin, it can completely dry out (*ibid*). Currently, there exist several water acts (and plans) that are either yet to be implemented or are actively being implemented in the Lake Chad Basin Commission which have not been planned or coordinated with each other. These uncoordinated efforts include the water acts in the Inter-Basin Water Transfer, Strategic Action Programme (SAP), Natural Resource Management, Lake Chad Vision 2025, Lake Chad Water Chart, and joint task against Boko Haram (Fougou and Lemoalle 2022; Asah 2015). However, the lack of integrated management of water resources at the national, subregional, and regional basin levels, coupled with no effective monitoring system for supervising the quantity and quality of water, continues to impact the Lake Chad Basin.

Due to intensive agricultural operations in the region, different irrigation techniques are employed (Ahmad et al. 2017), but flooding irrigation is the standard method of irrigation that contributes to a significant amount of water losses, evapotranspiration, and runoff. Extensive irrigation schemes have also been implemented, such as the South Chad Irrigation Project (SCIP), which the Nigerian government started (Kolawole 1987; Coe and Foley 2001). Feeding the irrigation project is one of the significant reasons why the lake has shrunk to the point where rainy-season rice cultivation is impossible, and dry-season wheat production is limited (Coe and Foley 2001). Additionally, the decline of Lake Chad's capacity to meet local/regional water demands has also been caused by the

increased population in each of the surrounding countries by more than 80 per cent between 1950 and 2021.

Varying conditions allow for the growth and cultivation of different crops adapted to specific environmental requirements and allow crops to thrive in their respective climates. Agriculture generates 25 per cent of Lake Chad's income, with 41 per cent of the total population actively participating in agriculture. Other employment activities include fishing, pastoralism, and modest commercial businesses (Nilsson et al. 2016). Conflicts, population dynamics, fertiliser procurement, political programmes, land availability, and development projects are other factors that affect crop production and variability in this region (Nilsson et al. 2016; Ouédraogo et al. 2017). For example, maize is a popular staple food in the basin and an essential crop because it can be used directly as food and processed into other food products such as cornflakes. It also serves as a significant source of biomass for animal feeding. In some cases, maize stover is used as fuelwood and could also be harnessed as an industrial raw material to obtain products such as oil, jam, alcohol, and paper (Zieba, Yengoh, and Tom 2017; Nilsson et al. 2016). Too much water is unsuitable for growing maize, and drought could terminate its life cycle (Huang et al. 2022). There is a requirement for enough water to meet crop water demand, which is inaccessible to most farmers due to declining water supplies. This means more planning is needed to provide water for other water-dependent activities in the community.

Fishing is a dominant occupation for people in this region because of the lake, but some inhabitants still practice agriculture and livestock rearing. The livestock has increased by 75 per cent; 83 per cent and 92 per cent of cattle, goats, and sheep, respectively, between 2012 and 2020 in Chad (FAOSTAT 2020; LCBC 2016). In the 1960s, commercial fishing accounted for about 200,000 jobs for fish farmers (Aina and Ojo 2025; UNEP 2018). However, the reduction in Lake Chad's size led to inhabitants seeking employment (i.e., sustenance and solace) in animal production, and nomadic herders also started entering the area and taking over more lands to feed and water their herds (Sarch 2001).

In mid-2021, climate-driven scarcity triggered tensions between fishing, farming, and herding communities, resulting in an eruption of violence. Subsequent hostilities have caused an estimated 60,000 Cameroonians to seek refuge in neighbouring Chad (UNHCR 2022). The situation has become interconnected with refuges for insurgents who inhabit the thousands of small islands that have emerged in the former lakebed. These islands have become refuges for insurgents, notably Boko Haram and ISWAP, as well as criminal organisations that exploit the vulnerabilities of local fishing communities. Over the years, communities have started to use the proceeds from their fishing activities to purchase farm inputs and other assistance for intensified agriculture (Sarch 2001). The surface water receding in its strength and capacity pushed more fishermen and fisherwomen into other occupations, and various regional crises compound the problem as more people embraced aquaculture as a form of sustenance. Many of them come from Internally Displaced Persons (IDP) camps (Kamta et al, 2020; Kamta et al, 2021) and have been trained in a programme facilitated by the Food and Agriculture Organisation (FAO) and the World Food Programme (WFP).

The interplay between rising unemployment, poverty, conflict, and environmental changes has caused significant hardship in the Lake Chad Region. Ongoing violence between state security forces and armed opposition groups has intensified, making three of the countries in the Lake Chad Region among the ten least peaceful in Africa, as reported in the Global Terrorism Index (2025).

While Boko Haram has been ruthlessly preying on civilians, coercing them into joining their ranks through fear and through incentivised structure such as providing sources of income. In contrast, ISWAP seeks to earn the goodwill of communities, aiming to gather religious taxes (Zakat) through providing services and security rather than intimidation. The groups have been able to leverage livelihoods as a vital bargaining chip, engaging with communities in a more strategic manner and focusing its attacks on security forces and humanitarian workers, demonstrating a deliberate approach to their operations that sets them apart from their more brutal counterparts (ICG 2020).

Ongoing efforts by the Multinational Joint Task Force (MNJTF) to defeat the Boko Haram insurgency have made significant strides in containing the violence, with research finding that political solutions to the crisis are needed, along with sustainable economic intervention and increased policing capacity at the community level (Onuoha, Tchie, and Zabala 2023; Zabala 2023; Connor 2017).

Both Boko Haram and ISWAP have also evolved in their tactics of ‘jihadi banditry’, such as hit-and-run operations, theft of valuable goods and livestock and kidnapping for ransom (Oginni 2024). The mixture of violent extremist actors and bandits accompanies diverging risk and threat perception. While banditry is often seen as a lesser threat, the mixture of approaches can risk larger responses that miss addressing the root causes of conflict. New dynamics have also witnessed elites in Cameroon and Chad purchasing large herds of cattle and hiring armed herdsmen who use violence to control water points and grazing pastures, which impacts existing vulnerabilities and further divides the already fragile stability that exists (Refugee International 2022). Finally, insurgents exploit water scarcity, using resource control as a weapon and recruitment tool. Armed groups use access to natural resources in remote borderlands for financing their organisations, and to pay their members (African Union and Adelphi 2024).

The growing Jihad-Banditry dynamics mixed with the rise of armed group mobilisation and inter-communal conflict create new regional migration patterns (Jaldi and Ouassif 2022). Cattle herders and farmers have clashed over access to shrinking pastures, and the number of deaths has now surpassed 15,000, rivalling Boko Haram’s toll (Awosusi 2017). Nomadic herders in northern Nigeria, started moving to the south, and the problem became more serious. Those in the south are primarily farmers of maize or other crops. Herders invade such farms with their cattle and turn their fields into animal feed (Iocchi 2020; Coe and Foley 2001). The farmers seek revenge, attempt to kill cattle, or, in some cases, farms are set on fire, destroying communities and properties. Cattle rustling is another issue (Ehiane and Moyo 2022). In mid-2021, climate-driven scarcity triggered tensions between fishing, farming, and herding communities, resulting in an eruption of violence. Subsequent hostilities have caused an estimated 60,000 Cameroonians to seek refuge in neighbouring Chad (UNHCR 2022). Communities often find themselves trapped between security forces and insurgents, which pushes them into divided loyalties, either facing repercussions by state security forces or armed groups.

Part three: Literature review

3.1 Policy interventions

Issues of peacebuilding, environment and climate change are increasingly serving as entry points for integrating a wide range of policy areas (Ide et al. 2021; Krampe et al. 2024) as well as stabilisation policies (Tchie and Brodtkorb, 2026). The policy literature largely emphasises the need for integrative, cross-cutting and holistic approaches to the nexus of stability, environment and climate change. In the context of the Lake Chad Region, Adelphi suggested “an integrated push that brings together development, security and sustainability” (Vivekananda et al. 2019, p. 76), to go beyond short-term stabilisation and humanitarian concerns. To break free of the regional conflict, the policy literature suggests that impacts of climate change need to be tackled as an integrated part of peacebuilding efforts, constituting a consolidative push across many policy areas that cuts across sectoral silos to break the feedback loop (Vivekananda et al. 2019; Gaston et al. 2023; GIST 2024). Integrated approaches should also include coordination and cooperation between humanitarian and development aid and related actors (Bøås, Kroknes, and Mustapha 2025). Such integration could also span other spatial and social spheres.

The synergies of the gender-climate-peacebuilding nexus are garnering increased attention (Gaston et al. 2023), including in African contexts. The gendered effects of climate change are seminal to take into account, as well as how women and girls and youth can play unique roles in contributing to climate action and peacebuilding (Iversen and Khalifa 2023; Gaston et al. 2023). Although women and girls are highly affected by climate conflicts, African women have in contexts such as e.g. Burundi, Ethiopia, Kenya and South Sudan played important roles in strengthening and enabling the mitigation of climate related conflicts at community level, but also as advocates and agents for peace (Mokgonyana 2023; Prech 2025).

Consequently, understanding the impacts of climate, peace and stabilisation projects with a focus on youth is also important. Reviews have suggested that simply expanding opportunities for inclusion and participation in climate mitigation, adaptation and peacebuilding may not be enough (Gaston et al. 2023, p. 56). Leveraging the challenges and opportunities facing youth in this regard could enhance knowledge of climate, peace and stabilisation dynamics and, in turn, support youth participation.

Recent studies on climate-related stabilisation and peacebuilding stress the importance of cross-border, sub-regional and regional approaches (Gaston et al. 2023; Vivekananda et al. 2019; UNDP 2021). While policies addressing climate change, peace and stability largely remain on the national level, regional and transboundary approaches are often siloed, dispersed and minimal, and maintain less effect due to inadequacies in addressing interlinkages and cross-border issues. Hence, the development of transboundary frameworks is essential for fostering regional resilience to climate change (CCCPA 2022).

One example of the importance of transboundary approaches for conflict dynamics in the Lake Chad Region is pastoralist livelihoods (Herbert and Birch 2022). Policy responses shape cross-border pastoralist movement in different ways. Governments in the region have largely not been able to protect or support pastoralism and the required mobility, while some policy responses have been harmful. Pastoralist communities are affected by a range of cross-border conflict issues, such as armed insurgencies, cattle rustling, conflicts between herders and farmers, state violence, and violent crime (Herbert and Birch 2022, p. 12).

The policy literature furthermore emphasises the importance of participation and contextual sensitivity. Vivekananda et al. (2019) suggests participatory natural resource management approaches in the Lake Chad Region which address the needs of both migrants and host populations.

Recent research from scholars in the region has argued that the militarised approach to insecurity which connects to climate change needs a new approach. It has also led to call that in the face of climate change, it is increasingly crucial to adopt climate adaptation measures as a powerful, non-kinetic counter-terrorism strategy. These measures seek not only to combat the root causes of vulnerability but also to diminish the allure of violent extremism for susceptible populations. By embracing non-kinetic adaptation strategies, one can take a proactive, non-military stance aimed at strengthening local communities impacted by climate-related shocks. In doing so, they are empowered to resist jihadist recruitment, ultimately fostering resilience and stability in the face of adversity (Aima an Ojo, 2025).

The policy literature furthermore centres on the interconnected concepts of resilience, adaptation and social cohesion. The strategy aims to build resilience in tandem with stability and recovery (LCBC and AUC 2018). Vivekananda et al. (2019) suggests that the Lake Chad Region is emblematic of the need to adopt a resilience-focused approach in areas affected by climate change and conflict. Supporting climate adaptation is considered to enhance resilience to climate shocks and improve natural resource management as a vehicle for peacebuilding.

The policy literature furthermore claims a paucity of relevant data and analysis. Data on climate, peace and security is characterised by lack of integrated and holistic metrics (Iversen and Khalifa 2023). Integrated data in the field is severely lacking across conflict and climate, but also in terms of spatial dimensions such as data integration across local, national and regional levels. Knowledge production in the field of climate, peace and stability is often hampered by the limited timeframes of relevant projects, leading to a scarcity of longitudinal evaluations and data (Day 2020).

3.2 Academic research

Research into how we understand the relationship between climate change, environmental stressors, conflict and stability has made substantial progress in recent years (Buhaug 2015; Buhaug, de Coning, and von Uexkull 2023; Von Uexkull and Buhaug 2021). The literature on climate, peace and security emphasises that climate change will never be the singular and rarely the main causal factor for increased conflict and insecurity in each context. The effects of climate change exacerbate existing vulnerabilities, often by compounding stress on livelihoods and contributing to mobility. Its influence shapes the social and natural environment, and decisions about how to adapt to climate change are taken in a social context where politics, economics and other cultural and social considerations, including factors such as social cohesion, adaptive capacity and societal resilience, inform the choices being made. Therefore, climate, peace and security can be viewed as a systemic issue that exposes and compounds risks that are inherent in socio-ecological systems – especially in fragile and conflict-affected societies. Climate-related security risks are thus highly context-specific (Mobjörk, Krampe, and Tarif 2020).

When studying complex systems, facts are often uncertain and knowledge claims contested (Funtowicz and Strand 2007; Funtowicz and Ravetz 1993b, a). It is therefore not surprising that the nature, intensity and causal pathways of interactions between climate change, the environment, peace and stability around Lake Chad Region are heavily disputed. The Sahel is among a selection of African contexts that have been extensively studied and are over-represented in the literature on climate security (Benjaminsen 2024; Daoust and Selby 2023). This is a partial result of the privileging of cases that are already suffering from high levels of conflict in the literature on climate change and conflict, amounting to a “streetlight effect” (Adams et al. 2018, p. 202). Such skewed sampling, in turn, runs the risk of producing overly deterministic narratives about the negative impacts of climate change on peace and stability which do not take the potential for collaboration and peacebuilding in managing natural resource management, climate change and environmental issues into account. Such over-selection may also reproduce harmful colonial stereotypes, leading to e.g. the stigmatisation of certain African contexts as inherently violent or unable to cope with climate change (Adams et al. 2018). To combat such stereotypes and skewed case selection, it is therefore

important to study initiatives to create peace and stability that actively take climate change and the environment into account. This is particularly the case for locally and regionally led and formulated initiatives to create peace and stability, such as the RS-SRR.

With regards to the political implications of such causal debates, there may also exist incentives to frame climate change as a primary cause of conflict, diverting attention from socially combustible explanations of conflict and fragility, such as inequality, social neglect and poor governance (Hulme 2023). The climate, peace, and security agenda can be susceptible to being used by political elites as an “anti-politics” tool, allowing them to deflect attention from their own roles in specific conflicts by narratively displacing political and historical context (Benjaminsen 2024, p. 16; Daoust and Selby 2023). The outcome of such a displacement may be that political and historical drivers of conflict could become under-recognised and remain unaddressed and evolving with time. This point is equally pertinent for political dynamics in efforts aimed to support stabilisation.

Such narrative displacement may not only pertain to socioeconomic marginalisation and heavily militarised state responses to conflict, but also resource management. The climate security research on Lake Chad Region has also been criticised for obscuring the role of water management projects such as irrigation and dam-building in negatively affecting the environment (Daoust and Selby 2023, p. 1302). These and other human actions may be the main reason that Lake Chad Region has not fully recovered after the droughts of the 1970s and 1980s. Climate change has at times been invoked to explain environmental changes and crises which may mainly be caused by local developmental initiatives and mismanagement (Selby et al. 2017; Selby 2019), including in other parts of the Sahel (Benjaminsen et al. 2012). Similar critiques have also been directed at the narratives promoted by the LCBC, which has dual roles of security and water management (Daoust and Selby 2023). Therefore, discussions on the impacts of climate change on stability, peace and human security should not detract from the contingencies created by historical legacies or agency exerted by political actors. Analyses of the impacts of climate change in the Lake Chad Region that do not take political dynamics, history, marginalisation, resource management, and environmental policy into account could serve as an obstacle to effective and equitable climate adaptation, justice, and mitigation. This is a particularly pertinent point for stabilisation policy, with its emphasis on state capabilities, authority, and legitimacy.

Furthermore, the RS-SRR is heavily supported by international actors such as the UNDP and the World Bank. The agenda on climate, peace and security is shaped by unequal power structures at the international level. Despite significant agency exerted by actors from Africa, Small Island Developing States and the broader Global South (Iversen et al. 2024; Mohan 2025), the politics of climate, peace and security on the African continent remains partially embedded in the contentious politics of social transformation towards lower carbon emissions in donor countries (Benjaminsen 2024). Attempts to enforce a ‘green transition’ in high income countries have led to a backlash of recent, resulting in policy cuts to national emissions targets at home that are rebalanced through financing climate mitigation in poorer countries, rather than addressing emissions domestically. The policy area of climate, peace and security also encompasses other central areas of concern for countries in the Global North, such as the interconnected policy areas of migration, terrorism and stability (Iversen et al. 2024). Given these power dynamics, it is crucial to facilitate policies on climate change, environment stability that actively draw on the participation and agency of local actors, from affected communities and civil society to local governments and regional organisations.

In the context of the deep complexity that often characterises stabilisation and peacebuilding, harnessing a plurality of different perspectives and knowledges is particularly important in order to facilitate effective policy interventions (De Coning 2018). There is a growing interest in interdisciplinary approaches across different scientific traditions in environmental studies, entailing the use of various forms of scientific knowledge, from statistical modelling to deeply contextual case studies and ethnography, amounting to an epistemological pluralism (Beaumont and Coning 2022). Local and indigenous communities furthermore possess valuable knowledge about the nexus of climate, peace and security. Koefoed (2025, p. 17) proposes a principle of epistemological

deepening entailing that climate security researchers, seek to consider perspectives rooted in at least one subaltern, alternative or non-western epistemological positionality.

A body of explicitly critical scholarship has emerged within the field of climate, peace and security in recent years, questioning some of the presumptions and approaches in the dominant research literature, from often postcolonial, Global Southern or otherwise critical theoretical positionalities and perspectives. Siddiqi, for instance, criticise the mainstream climate security literature for predominantly engaging with western dominated epistemologies, what she terms an Eurocentric 'epistemic bias's characterising the field (Siddiqi, 2022). She contends that there is an urgent need to incorporate insights from the voices of people and communities living in climate vulnerable communities in the Global South from the positionality of granular contextual understandings. Furthermore, Siddiqi (2022) discusses assumptions about interlinkages between climate change and conflict in the Global South which do not resonate with experiences of climate vulnerable communities. One example is the assumption that climate change could directly or indirectly lead to conflicts related to resource scarcity but based on her experience and research on climate vulnerable communities, such communities tend to experience insecurities associated with forced relocation as a measure by governments to protect them from natural hazards.

Other research points at unintended negative consequences of climate mitigation on local communities, sometimes conceptualised as 'the boomerang effect' (Swatuk et al., 2021). Lamain argues that climate policies themselves frequently contribute to socio-environmental conflicts (Lamain, 2022). In the Arctic region for instance, in the context of indigenous peoples, climate mitigation strategies associated with "green transition" and commercial initiatives involving extractive industries have led to a high number of socio-environmental conflicts (Hanaček et al., 2022). Ide (2025) lifts to the surface how the notion of 'climate conflicts' traditionally have been conceived of in narrow terms, and propose that climate security literature also should address conflicts related to popular opposition and resistance to climate mitigation (climate action) and popular mobilisation rooted in discontent over governments' failure to sufficiently address climate change (climate inaction) (Ide, 2025).

Part four: Climate change in the RS-SRR and validation dialogues

4.1 The structure and history of the RS-SRR

The RS-SRR reflects an uptake across the continent in the usage of stabilisation terminology and policies for intervention across the Africa (Tchie and Brodtkorb 2026, p. 1; Tchie 2024). The history of stabilisation in the context of Africa can be broken into four key responses. First, the UN peacekeeping operations have engaged in stabilisation efforts through its deployment's that have peace enforcement mandates such as the mission to the Central African Republic, the Democratic Republic of Congo and Mali. Second, African-led stabilisation led by a diversity of actors such as the AU, the Regional Economic Communities/Regional Mechanisms (RECs/RMs), and Ad-hoc Security Initiatives (ASIs). Third, stabilisation efforts designed to stabilise the conditions or impact of climate change that emerged in the early 1980s, largely focused on rising temperatures. The fourth response has focused more on the need to support aspects of development in contexts where there is a need to create on-going stability. The latter response(s) has been used by the UNDPs and development agencies in stabilisation settings, designed to operate in environments of instability, short term and in context where support towards stabilisation efforts is designed to help the state to achieve a return to forms of governance and development. It is within the latter context that the RS-SRR was designed and deployed to.

In response to the conflict in the Lake Chad Region, the countries affected by the instability and several regional and international partners, under the guidance of the African Union (AU), developed the RS-SRR. This evolving regional stabilisation initiative is not driven by top-down counter-insurgency campaigns, but rather coordinated sub-national and multi-dimensional humanitarian, development and peace initiatives that are aimed at addressing the root causes of conflict. Consequently, the RS-SRR serves as an overarching framework that outlines its purpose, principles, and partners. The RS-SRR is managed through several mechanisms that coordinate the overall effort across several pillars of the HDP nexus. An annual governor's forum — that centre around the eight governors of the territories bordering Lake Chad in Cameroon, Chad, Niger and Nigeria — takes stock of progress and adapts the focus of the RS-SRR for the next implementation period.

The RS-SRR was preceded by the authorisation and deployment of the Multinational Joint Task Force (MNJTF) by the AU Peace and Security Council (AU PSC). The task force was first organised as a solely Nigerian force in 1994 and was in 2012 resuscitated to fight Boko Haram (ICG 2020). In 2015, it moved to Chad with authorisation by the AU PSC (African Union 2015). The MNJTF plays a central role in fighting Boko Haram and stabilising the region to allow the free movement of people and facilitating the revitalisation of developmental activities. Despite continuing military operations under the MNJTF, questions remain about the level of effective coordination across its participating states (Amani Africa 2024).

In November 2017, the AU, LCBC and international partners such as the UN, the European Union (EU) and World Bank organised the first Conference on the Development of a Framework for a Regional Stabilisation Strategy (RSS) in the Lake Chad Region. The RSS aimed at facilitating a transition from active military engagement to addressing the root causes of ongoing crises to stabilise areas affected by Boko Haram, ensuring a transition from stabilisation and early response to recovery and development efforts. It thus emphasised the importance of coupling security efforts with developmental policy interventions through a transformative approach that support the short, medium and long-term stabilisation and development (LCBC and AUC 2018, p. 21).

As a result, the RSS identified three separate, but interrelated, cross-cutting and mutually reinforcing crises were identified in need of intervention: 1) A structural and persistent development deficit; 2) A breakdown of the social contract that had manifested in lawlessness and violent extremist insurgency; and 3) An environmental disaster that was considered impossible to stop, but which required attention and resources to mitigate impacts, and to help affected communities absorb shocks and adapt over time.

The success of the strategy was deemed to be contingent on the success of military operations, but not feasible through military and securitised responses alone. Rather, the situation was diagnosed as opportunities to “*win hearts and minds*” (p. 22) and to build trust between communities, governments and security actors. However, a “*win hearts and minds*” is by its nature attached to and part of a military approach designed to bring communities on board. The outlined method to achieve such goals aimed at anchoring the strategy and its implementation in localised, inclusive, participatory, transparent, accountable, rights-based and collaborative approaches with ongoing processes of coordination, monitoring, evaluation and adaptation. This sentiment was formed into cross-cutting principles to inform the design of localised action plans that would facilitate implementation: 1) Do No Harm; 2) A Whole-of-Society Approach; 3) The Rule of Law & the Primacy of Human Rights; 4) Focus on Children, Women and Youth; 5) Environmental Sustainability; and 6) International Humanitarian Principles.

At the core of the RS-SRR is the Governors Forum, which is a mechanism consisting of governors of the regions surrounding the Lake Chad Basin. The governors had a primary ownership over the creation, design and implementation of the Territorial Action Plans (TAP), articulating planning, needs and interventions for each respective territory. The different aspects of the strategy should be linked and coordinated across regions and borders through the TAPs for the worst-affected States or Regions around Lake Chad (LCBC and AUC 2018). The annual Governors forum is intended to bring key actors together annually to discuss the strategy and consider progress and efforts. The actors involved in implementing the TGA are at the centre of the discussions, with an aim to achieve coherence and strengthen national ownership of the outcomes (GIST 2024).

The strategy outlined nine pillars of intervention with underlying strategic objectives to address these crises which are as follows: Political Cooperation; Security and Human Rights; Disarmament, Demobilization, Rehabilitation and Reintegration of Persons associated with Boko Haram; Humanitarian assistance; Governance and the Social Contract; Socio-economic Recovery and Environmental Sustainability; Education, Learning and Skills; Prevention of Violent Extremism and Building Peace and Empowerment and inclusion of Women and Youth.

The strategy aims to enable horizontal linkages across pillars to allow for synergies, national and local ownership and contextualised responses. Four clusters were used to organise the planning for implementation at the territory level and formed the structure for the development of the TAP (GIST 2024). The clusters included 1) *Governance* (Including the Political Cooperation, Governance and Social Contract, and Empowerment and Inclusion pillars); 2) *Security and Protection* (Including the Security and Human Rights, Disarmament, Demobilization, Rehabilitation, Reinsertion and Reintegration (DDRRR), and the Prevention of Violent Extremism (PVE) and Building Peace pillars); 3) *Development and Humanitarian* (Including the Humanitarian Assistance, Socio-economic Recovery and Environmental Sustainability, and Education learning and Skills pillars); and 4) *Cross-Border Interventions* cluster that is supposed to work across all the pillars. Furthermore, the strategy encompasses 40 strategic objectives and 110 indicators that are intended for use in monitoring and evaluation. The RS-SRR furthermore explicated ambitions with regards to how to respond to the adverse effects of climate change and environmental deterioration on stability. This topic will be further detailed in the next part of the report.

An adjusted RS-SRR was approved in February 2025 following a strategic review of the previous strategic period and a consultative process. The adjusted RS-SRR (2025, p. 13) has moved away from the concept of pillars of intervention and replaces it with (four) strategic areas that intend to provide

a holistic and transformative response to the crisis in the Lake Chad Region. Each strategy is, in turn, accompanied by several intermediate objectives and outcomes. The four strategic areas include, 1. Sustainable Peace and Security; 2. Durable Solutions and Protection; 3. Socio-Economic Recovery and Livelihoods; and 4. Regional Cooperation and Governance

The next part of the report considers the theory of change and approach of the 2018-2024 framework of the RS-SRR and briefly touches on the latest or adjusted RS-SRR that was approved in 2025. It pays explicit attention to the role of climate change and environmental degradation in the RS-SRR.

4.2 The role of climate change and environmental degradation in the RS-SRR

The RS-SRR emphasises the convergence of environmental, climatic and developmental challenges that had characterised the region before the emergence of Boko Haram. A main aspect of these challenges is claimed to be the diminishing of Lake due to climate change and desertification, resulting in the loss of traditional livelihoods for the benefit of recruitment to armed groups characterised by violent extremism. However, environmental issues extended beyond variable water levels in Lake Chad. Cyclical flooding had made riparian populations highly resilient to flooding, and caused them to adapt their source of livelihood as a response to local environmental challenges (LCBC and AUC 2018, p. 15). The adaptive capacity was however claimed to be put under pressure due to population growth, with a population that had quadrupled since 1960. These demographic changes were expected to increase competition for natural resources in conjunction with greater volatility in climate and weather. Such effects of climate change were evaluated as posing a direct challenge to peace and stability, with the ongoing conflict, in turn, causing environmental deterioration.

The strategy (2018, p.16) stated the conflict itself has “*destroyed vital agricultural infrastructure and expertise, caused degradation in lands, forests, rivers and lakes, and has exacerbated the impact of droughts, floods and desertification.*” The interconnected layers between the nexus of ongoing crises were claimed to undermine community resilience and the ability of populations to absorb shocks and adapt to climate change. Future investments in socio-economic development was deemed necessary to be climate proofed (LCBC and AUC 2018, p. 13).

At the aggregate level, the strategy aimed to serve as a tool tailored to address a set of identified challenges affecting the Lake Chad Region, including mitigating the adverse and increasing impacts of climate change. Consequently, the content of the RS-SRR such as environmental sustainability was diagnosed as a crisis in and of itself. Additionally, the RS-SRR also adopted environmental sustainability as a cross-cutting principle intended to inform the design of localised action plans that would facilitate implementation. Understanding the current and future implications of environmental degradation and climate change around the Lake and the interaction of such factors with security and development were deemed essential in preparing for long-term development plans. Therefore, environmental fragility assessments were mandated to be integrated into the Territorial Action Plans (TAPs) which formulate implementation frameworks for the strategy across different geographical and administrative contexts. Another important aspect was improving stakeholders' awareness and capabilities to address current and future risks from climate change, which could heighten conflicts over natural resources, especially land and water, as well as among different livelihoods, such as those between pastoralists and farmers.

Pillar five on governance and the social contract emphasises that governance has been hampered by persistent underdevelopment and that this dynamic has been worsened by demographics, economic, political and environmental stresses. “*Good governance*” (p. 34) is regarded as key component for breaking this crisis. Strengthening local governance and sub-regional governance structures was regarded as central to achieving overall success. This points to the importance of

promoting seamless movement of goods and services and shared management of transboundary issues and natural resources.

Climate change is (perhaps unsurprisingly) the most present in Pillar six on Socio-economic Recovery and Environmental Sustainability. The pillar refers to the close ties between socio-economic prospects and environmental changes, as well as the importance of enhancing absorptive and adaptive capacities for communities, which had already been established as a strategic objective for the RS-SRR. As livelihoods become more insecure, the strategy identified dangers that the region “*becomes more fertile for extremist involvement*” (p. 24). Pillar six was partially inspired by the Lake Chad Development and Climate Resilience Action Plan (LCBC 2015).

Pillar six highlights how the crisis around Lake Chad has destroyed much of the economic activity. The ability to produce goods (from agriculture) has been significantly hampered the ability to get such goods to markets. This has resulted in a loss of livelihoods and decline in food security. Stabilisation interventions therefore need to achieve economic growth through revitalising local economies and boosting trade, while ensuring that local communities benefit (LCBC and AUC 2018, p. 37). As part of this effort to induce economic growth and revitalisation, the pillar planned to target strategic areas in the nexus of climate change and stabilisation. First, it centred around strengthening and adapting livelihoods, particularly in farming, fishing and livestock rearing. The pillar was intended to mitigate potential adverse economic effects from mounting stresses of conflict and environmental change.

Strengthening environmental protection was furthermore stated as crucial in maintaining the health of critical ecosystems that livelihoods in the region depend on. The RS-SRR emphasises the significance of natural resources for primary livelihoods. It suggests that traditional resource management practices can be improved through various interventions, such as watershed management, ecosystem-based planning, natural resource management, climate-smart agriculture, and soil conservation techniques aimed at rehabilitating environmentally degraded areas (LCBC and AUC 2018, p. 37). The RS-SRR also highlights the need to invest in infrastructure that integrates borderlands and connects them to regional centres. Enforcing regulations on environmental sustainability was furthermore considered a part of creating economic diversification and a favourable business environment.

In the adjusted RS-SRR, such concerns are particularly formulated in intermediate objective 3.1 on improving sustainable management and ensuring equitable access to natural resources (LCBC and AUC 2025, p. 36). The objective includes enforcing policies that integrate sustainable resources management, environmental protection and social equity. The section cites climate change, changes in rainfall patterns and over-extraction of water as causes of the Lake’s dramatic variation in size over the past several decades. It highlights the need for inclusive and participatory governance frameworks, including regional and national frameworks, to mitigate disputes between countries and communities over water use and management. Finally, it demonstrates a need to address environmental issues and ensure sustainable management of natural resources. Such participation should include marginalised groups such youth and women. The intermediate outcomes (3.1.3) furthermore emphasise the need to reduce resource-related conflicts by implementing preventive strategies and conflict resolution methods that uphold human rights.

The importance of adopting *sustainable* and *climate-smart* practices and technologies in agriculture, herding and fishing is furthermore stated in intermediate objective 3.2 on enhancing food security in the Lake Chad Region (LCBC and AUC 2025, p. 39). The intermediate outcome (3.2.1) highlights the need to strengthen local environmental stewardship. Objective 3.3 on diversifying and strengthening livelihood strategies furthermore argues for increasing the adaptability within livelihood sectors, implementing climate-resilient livelihood strategies as well as strengthening the environmental protection that local livelihoods depend on. Such approaches could for instance include forecasting and early warning systems (LCBC and AUC 2025, p. 41). The intermediate outcomes reflect the strategy’s goal of promoting diverse, climate-adaptive, and secure income sources, with a focus on

social inclusion and marginalised groups, including women and youth (3.3.1). Additionally, it aims to develop climate-resilient livelihoods that prioritise the protection and rights of affected communities (3.3.2). Objective 3.4 emphasises the need to enhance the capacity of governing institutions, particularly in improving service delivery during conflicts and conflict-related disasters.

4.3 Validation dialogues with civil society, local researchers and policy experts

We recognise that the policy and academic literature has predominantly been produced by institutions that are not based in or from the Lake Chad Region. As a result, the desk research was complemented with two virtual validation workshops. The first with civil society and local researchers from the region. The second with the policy community engaged in the implementation of the RS-SRR and related efforts.

CSO and local research dialogue

The CPS-Lake Chad-project held a virtual dialogue workshop on managing climate change and environmental related risks in the Lake Chad Region with civil society organisations 25 February 2025. Participants in the dialogue expressed broadly that climate change in the Lake Chad Region impacts food security, displacement, conflict and environmental deviation, which in turn worsens climate vulnerability, and makes communities more vulnerable to coercion and recruitment by armed groups. The issue of climate change continues to influence the stabilisation effort(s) and changed realities on the ground during on-going implementation of the RS-SRR. Such impacts include inhibiting the ability of CSO in carrying out planned activities, and ensuring their effectiveness, both independently and in the context of the RS-SRR.

The participants expressed appreciation for the integrative ambitions of the RS-SRR but indicated that meaningful change is not visible from the local community perspective, despite the central roles allocated to traditional leaders and the state governments in the RS-SRR. The RS-SRR was for some considered to be utilising a top-down approach in practice which does not sufficiently incorporate specific community-led needs. Concerns were also raised with the broader inclusivity of the strategy. One participant stated that governments predominantly plan RS-SRR activities, with affected communities having little leverage in informing and shaping these responses and approaches. Some expressed that CSOs, and organisations should be further embedded in the design of and implementing of the strategy. The value of CSOs in accessing areas and getting information that is difficult to access for other actors was also highlighted.

The 2018-2024 version of the RS-SRR included a pillar of intervention dedicated to Empowerment and inclusion of Women and Youth Women. The adjusted 2024, RS-SRR has moved away from the concept of pillars of intervention and replaces it with (four) strategic areas, none of which are wholly dedicated to inclusion of youth and women. Such themes are rather intended to be mainstreamed throughout the adjusted RS-SRR as a cross-cutting principle. Civil society participants expressed concern that such a change may lead to neglect such priorities and make them less visible through the strategy's overall framework.

Another point that was raised is awareness building. One participant emphasised that focusing on education systems and embedding knowledge about the impacts of climate change into the school curriculum could help enhance knowledge and raise the awareness of children, youth and families.

Policy community dialogue

The CPS-Lake Chad-project held a virtual dialogue workshop on managing climate change and environmental related risks in the Lake Chad Region with the local, regional and international policy

community on 3 March 2025. Participants expressed concern regarding the increasing negative impact of climate change on economic activities in the Lake Chad Region, such as agriculture and livestock holding. Such impacts were claimed to increase the attractiveness of illicit trade and trafficking of goods, as well as the economic incentives and recruitment offered by armed groups. Climate change was also claimed to be causing displacement and greater conflicts over natural resources, e.g. land conflict between farmers and herders. One participant highlighted how such multidimensional issues require a multidimensional response(s). Furthermore, a participant pointed to a lack of private sector engagement in the strategy and economic initiatives that emphasise youth and women.

Participants pointed out that even though the first RS-SRR itself did not include a pillar of intervention on climate and environment, the LCBC and stakeholders have increasingly needed to adapt to and mitigate the impacts of climate change. For example, the impact of extreme weather events on implementation, e.g. the need to respond to flooding in Maiduguri in 2024 and redirection of funding to recovery and humanitarian efforts allowed for a widened focus on disaster response and climate adaptation. The implementation of the strategy was claimed to have been organically adapted to the increasing impacts of climate change and environmental deterioration. The strategy was also claimed to be important in facilitating two key environmental initiatives for the lake: Improving water management and removing invasive weeds. One participant suggested that emphasising resilience provides a way to integrate include climate policy and adaption into the strategy.

Another participant pointed to how climate change and variability has direct consequences for regional military operations, particularly navy operability on the Lake Chad Region. Another participant claimed that the strategy's connection of the military and civilian sides, engaging in topics like protection of civilians and community relations, has led to a reduction of human rights violations in the region.

One participant highlighted how the RS-SRR plays a useful role as an overarching framework and coherent vision for stabilisation in the region. This was claimed to be reflected in how national institutions, the UNDP and international financial institutions refer to it in their policy and planning. Another participant emphasised how the regional role of the LCBC has gained prominence and relevance through the RS-SRR, resulting in it being a trusted partner for regional and international organisations. Participants highlighted how the RS-SRR is locally owned but has significant international support from funders.

However, participants suggested that policy coordination and coherence between the local, national, regional and international approaches should further strengthened. One participant pointed to the revised strategy's ambition to update TAP. The participant also shared that the strategy's monitoring and evaluation framework is being revised to this effect with particular emphasis on working with governors' offices to improve reporting of what is happening at the territorial level. Another participant suggested that better collaboration between member states and the RS-SRR is needed, and that Benin should be included in the future. Participants furthermore argued that history, geopolitics and regional politics are important dimensions of the conflict that should be addressed through further research.

Furthermore, the LCBC holds convening powers for a wide range of different actors in the region, including heads of state. One participant pointed to the introduction of the new multi-stakeholder Nexus Funding Facility as a flexible and inclusive funding instrument that necessitates that international actors include local partners but does not require similar partnerships for local actors that apply for funding.

Part five: Analysis and conclusion

5.1 Analysis of the efforts to manage climate, peace and security risks in the Lake Chad region through the RS-SRR

In this part of the report, we draw lessons from the broader debates and the literature on the nexus of climate change, environment and stabilisation to evaluate the strategic content and theories of change of the RS-SRR. We attempt to do this by synthesising the core topics from the policy and academic literatures on climate change related peace and security risks in the Lake Chad Region with the study of complex adaptive systems, as complexity science specifically studies how complex social and ecological systems react and adapt under stress from changes in their environment. The result is an analytical framework for evaluating interventions that pertain to the nexus of climate change, the environment and stability. The framework proposes evaluating such interventions along five dimensions which are coherent with complexity-thinking and a broad range of critical and applied research on this nexus:

- 1) *Integration and the Humanitarian-Development and Peace (HDP) Nexus;*
- 2) *Localisation and context specificity;*
- 3) *Multi-stakeholder participation;*
- 4) *Adaptation;* and
- 5) *Knowledge production and learning.*

A key lesson from the literature review is the importance of integrative policies and participation by local and regional actors (as reflected in dimensions 1 and 3). We draw inspiration from two theoretical frameworks that combine complexity thinking with relevance to the nexus of climate, peace and stabilisation. Adaptive Peacebuilding emphasises the need to manage complexity in building and sustaining peace and security. It recognises that complex systems cope with challenges posed by changes in their environment through co-evolving together with their environment in a never-ending process of adaptation (de Coning 2018, p. 305). It is this process, inherent in the behaviour of all complex systems, that the Adaptive Peacebuilding approach seeks to draw upon, through participatory exploration, experimentation and adaption to build and sustain peace. The approach emphasises the inherent uncertain and unpredictable nature of complex systems, pointing to the pitfalls of deterministic assumptions and linear planning methods when building and sustaining peace (de Coning, Saraiva, and Muto 2023). At its core, the approach is a “*continuous process of exploration and adaptation that generates an emergent understanding of the system as it evolves*” (de Coning 2018, p. 310). With regards to knowledge and learning, Adaptive Peacebuilding recommends working with the affected communities to collaboratively develop and continuously adapt self-awareness and understanding of the evolving causes and drivers of conflict in the system. The aim of the Adaptive Peacebuilding approach is to support the emergence of resilient social institutions that assist affected communities to expand their ability to sustain peace themselves. Societies and communities that are intended to benefit from a peacebuilding intervention should thus be fully involved in all aspects of the peacebuilding initiative (de Coning 2018, p. 307). Adaptive Peacebuilding particularly directs our attention to the need for stabilisation initiatives, like the RS-SRR, to adapt with the emergence of new information and changing conditions on the ground (as reflected in dimension 4), and to integrate and leverage the interests, knowledges and perspectives of the affected communities (as reflected in dimensions 3 and 5).

Tchie (2024) in his African-led stabilisation initiatives paper applies the Adaptive Peacebuilding approach to a stabilisation context and outlines a new Adaptive Stabilisation approach emphasising 1) clear understandings of leadership and who will be the intervening body; 2) precise and clearly

defined mechanisms that support stabilisation efforts; 3) for all stages of a stabilisation effort to work towards restoring order and forms of normalcy; 4) focus on the people affected by emergency; 5) for stabilisation interventions to be agile and flexible and adapt to changes on the ground; 6) the utilisation of existing AU mechanisms and organs; 7) for the operation to be context-specific and knowledgeable about its respective context while managing the political aspects of its operation and emphasising an integrated approach; 8) achieving strategic coherence which ensures consistency across its operations with regards to strategic choices and pivoting the operation towards a unified set of goals; 9) clear leadership and 10) for the operation to be dependable and accountable to the people it serves. In line with the study of complex adaptive systems, Adaptive Peacebuilding and Adaptive Stabilisation, the analytical framework emphasises the value of coordinating multiple dimensions, stakeholders and scales through integrated approaches that are combined with strategic coherence, as well as flexibility, agility and adaptiveness (as reflected in dimension 2). It is applied to study the RS-SRR in the following sub-sections.

Integration and the Humanitarian-Development-Peace (HDP) Nexus

The RS-SRR is, with its multiple pillars and clusters, inherently a strategy that places an understanding that it is influencing a complex social-ecological system at the core of its theory of change. Its response thus aims to influence not only security but also integrate aspects such as managing the effects of climate change and environmental degradation, responding to humanitarian needs, and developing governance capacity to deliver basic services and ensure rule of law. The emphasis in the strategy on not only stabilisation, but also recovery and resilience, opens a more explicated and granular emphasis on how the economic development, humanitarian assistance and peace and security dimensions of the HDP Nexus are interdependent and deeply interconnected. This is especially the case when we frame the challenges in the Lake Chad Region in the context of climate, peace and security, as this framing rests on a recognition that social-ecological systems are inherently holistic. Therefore, the implication is that the relationship between climate change and peace and security is deeply interconnected, but not linear, direct or set. The climate and environment shape the space in which a society acts, but its influence is not deterministic. It is always up to the society to choose how to adapt to changes in its environment and social context. The more resilient a society is, the more options it must respond and adapt to shocks to its system, regardless of whether these are social or environmental.

GIST (2024) recommends working with the full range of security, development and humanitarian actors to ensure that they are appropriately engaged and aligned with the RS-SRR, as well as the need to place even greater emphasis on the inclusion of affected territories and populations. It furthermore recommends trying to close the gap between humanitarian and developmental activities and agendas through concepts such as *durable solutions*, which involve longer term resolutions of humanitarian issues, and which require close alignment with development and security measures of the strategy. We propose that the concept of *resilience* could serve similar functions. It is a concept that is shared across the HDP Nexus, as well as in the climate, peace and security discourse, and it is a core concept for the RS-SRR (WFP 2024; UNDP 2025; LCBC and AUC 2018).

A stronger emphasis on the climate and environmental dimensions of the challenges and responses to the crisis in the Lake Chad Region can potentially generate new insights, bring new stakeholders to the fore and generate new resources, but unfortunately this opportunity is only partially tapped into by the 2018 RS-SRR, as well as the new 2024 adjusted strategy. One of the most important omissions is that the potential for environmental peacebuilding is generally unrecognised, despite the strategy's aim to integrate sustainable resource management, environmental protection and social equity (LCBC and AUC 2025, p. 36). The potential to strategise and integrate the multiple approaches and pathways by which the management of environmental issues can support conflict prevention, mitigation, recovery and resilience (using the definition of Ide et al. (2021)) into regional

stabilisation efforts thus remains largely untapped. The presence of climate change and environmental issues in the pillars, clusters and objectives of the strategy remains weaker than it is in the overall rationale, strategy and cross-cutting principles of the strategy.

The 2018 RS-SRR saw a lack of cross-cutting focus on gender and youth empowerment in project activities, according to GIST (2024). Therefore, further mainstreaming themes of gender, women and youth consistently across all activities is important. The emphasis on women remains disconnected in the adjusted RS-SRR, whose third strategic objective aim to ensure equitable resource access, boosting food security and creating sustainable livelihoods particularly for youth and women (LCBC and AUC 2025, p. 15). Including women in peacebuilding efforts, such as environmental peacebuilding activities, can help to draw upon the different roles that women and men may take on when conflict disrupts the institutionalised division of labour, and may help stimulate the role of women as agents of change, and change perceptions of women as solely victims (Ide et al. 2021; Côté and Huang 2020; Afshar and Eade 2004). Including women in stabilisation, recovery and resilience efforts may hold an even broader range of benefits, due to the cross-cutting nature of stabilisation efforts that also include developmental, humanitarian and peacebuilding activities across the HDP Nexus. Acknowledging and including women as holders of essential knowledge concerning conflict dynamics and community grievances is also essential to ensure effective peacebuilding and stabilisation across the region.

There is further potential for integrating a range of more granular issues, such as the implications of climate change and environmental deterioration for extremist recruitment, human rights, transboundary issues, humanitarian access and operations, and governance and the social contract. There is thus much potential for using the RS-SRR to provide a platform for integrating further issues that shape the implications of climate change and environmental deterioration for peace and stability. This is equally the case with regards to both mitigating the negative effects of climate change and facilitating cooperation in resource management and climate adaption with benefits for peacebuilding.

Localisation and context specificity

The RS-SRR is unique in its approach to devolving focus, authority and locally led stabilisation responses to regional and state levels, combining territorial action plans for implementation with forums like the Lake Chad Governors Forum. However, the implementation of the strategy is complicated by the diversity of stakeholders, scales and models of governance in the region, which makes it important to streamline and standardise mechanisms for ensuring coherence. GIST (2024) recommends strengthening of territorial action plans that are tailored to each affected region as the primary planning system for implementation of the RS-SRR. This will ensure that not only is the response localised, but the analysis and planning is also context specific. Placing the territorial action plans, which are due to be updated in the second phase of the RS-SRR, at the centre of the overall planning and coordination of the RS-SRR could contribute to closing the gaps between international partners and the diverse needs of the affected communities. This will also facilitate support for each affected territory and its regional government while ensuring that strategic activities are localised, context-specific, and coordinated. Territorial action plan working groups should, where relevant, be linked with international partners.

Strengthening the role of territorial action plans would contribute to localising a diversity of responses, and if care is taken to couple them with the overall RS-SRR, including the overall monitoring, evaluation and learning system, thus also ensuring that strategic coherence is maintained. The adjusted RS-SRR aims to strengthen the capacity of its coordination unit as a priority for the second phase of the strategy and enhance regional cooperation and political engagement (LCBC and AUC 2025, p. 58). It also promises to map ongoing and proposed national

and international interventions to identify programmatic gaps, support coordination and avoid duplication.

GIST (2024) however recommends empowerment of the LCBC through better resourcing (GIST 2024). The secretariat needs an increase in capabilities to consistently support implementation through the territorial actions plans, regional task forces and to use data and monitoring to ensure progress towards the strategic goals. This should involve recruiting more staff, e.g. facilitated by international partners. Another suggestion puts forth that implementation of the RS-SRR should be organised through three (down from four) clusters, 1) security; 2) development and humanitarian; and lastly 3) regional. Whilst the recommendations regarding the clusters are partially reflected in the new adapted RS-SRR in 2024, the strategy remains weak in its articulation of the role of climate change and environmental degradation as well as the ways in which environmental peacebuilding and a stronger focus on climate, peace and security can strengthen the RS-SRR. As documented in this report, themes of climate change, shared resource management and environmental protection could also serve as mainstreamed topics across the RS-SRR at large.

Multi-stakeholder participation

The concept of stabilisation comes from the security and development sectors and was developed to strengthen and extend weak states ability to manage internal violence and extend state authority, legitimacy and control (Tchie 2024). Therefore, stabilisation operations adopt state-centric approaches in many, if not most cases where it has been applied as an explicit response strategy. The focus of the RS-SRR on meaningfully engaging affected communities, traditional leaders and local civil society, and the devolution of focus to sub-national territories and Governors is thus quite unique. Whilst many stabilisation efforts aim to engage local communities and civil society, most fail to integrate locally. At the same time, the RS-SRR has managed to keep the national governments, regional organisations and international partners closely engaged. The LCBC and its core partners, including especially the UNDP and the AU, has been key in ensuring that this complex array of stakeholders, vertically across local to global scales, and horizontally across the HDP Nexus, remain closely connected, informed and engaged.

Civil society is already a crucial partner for implementing the RS-SRR which also has included a dedicated Civil Society Forum. Civil society should become further empowered and integrated into relevant bodies and mechanisms (Vivekananda et al. 2019). Civil society has however been less involved at the level of clusters for implementation. Territorial action plan working groups should therefore consist of both state governments and civil society, ensuring a stronger focus on civil society along with state governors in activities in the affected regions. Civil society should be more extensively involved in the assessment, discussions and decisions made through the Lake Chad Governors' Forum, e.g. by consistently aligning and co-locating the Governors Forum with the Civil Society Forum (GIST 2024).

A clear strength of the RS-SRR is that it centres issues of governance, politics and legitimacy rather than exclusively applying a technocratic or hard security lens to the conflict. However, the empowerment of civil society could take on a more central place in the governance dimensions and cluster of the RS-SRR. Greater resource allocations and capacity development should also accompany greater emphasis on civil society. The adjusted RS-SRR underscores the potential for a greater regional role for civil society organisations. It also highlights the importance of civil society in updating and implementing territorial action plans.

Furthermore, the strategy does not discuss including civil society that works specifically on climate, resource management, and the environment. Explicating a role for civil society that works on climate and environment may provide a more integrative policy platform and facilitate the development of environmental peacebuilding interventions. There is also a potential role for drawing more on the

agency and knowledge of affected communities and civil society in designing monitoring and evaluation systems. This potential is further explored at the end of this chapter.

Adaptation

One of the characteristics of complex adaptive systems is that they manage to continuously adapt to changes in their environment. This process is a self-organised response driven by learning through feedback. The fact that the RS-SRR has continuously adapted over time through learning based on feedback is an indication that the community of stakeholders engaged in the RS-SRR has, over time, self-organised into a complex adaptive system that is co-managing its collective efforts to try to stabilise the Lake Chad Region.

The RS-SRR has seen several iterations reflecting an institutional capacity to revise the strategy in response to changing realities. The LCBC has evolved from a body established to manage a shared water resource to a body now coordinating a shared effort to stabilise the region and coordinate recovery and resilience efforts. Similarly, the MNJTF has been revitalised to play a new role and is closely coupled with the LCBC to ensure that the security dimension contributes to a holistic whole-of-society approach to managing and restoring stability in the Lake Chad Region.

Towards this aim, the strategy emphasises the role of recovery and resilience, and the 2018 version of the RS-SRR has developed nine pillars across the HDP Nexus to ensure a comprehensive and integrated approach. The 2024 adapted strategy has now reduced the nine pillars to four strategic objectives, which is a further example of how the community adapts its strategy based on the GIST (2024) evaluation and other learning and self-reflection processes. The adjusted strategy repeatedly states its ambition of continued adaptation to changing realities on the ground and pledges to organise mid-term and final reviews of its second phase utilising inclusive and participatory approaches.

The unique features of the RS-SRR highlighted earlier, including its multi-stakeholder, multi-scaler and multi-dimensional approaches, also reflect learning and adaptation based on lessons identified from not only other stabilisation experiences but also based on hundreds of years of governance experiences in the region that have generated a regional approach to collective co-governance that has informed the design of the governance structures of the RS-SRR. The role of traditional leaders and civil society further attests to how more contemporary understandings of inclusive governance have been weaved into traditional forms of governance to ensure a very broad and inclusive approach to engagement, participation and partnership.

Knowledge production and learning

While dispersed across several pillars, the RS-SRR has maintained a focus on learning and generating data and knowledge about its processes and progress, and this has enabled and supported several knowledge products and data collection efforts over time. These have provided actionable and useful information to guide the continuous adaptation of the RS-SRR and related responses (LCBC and AUC 2018). The adjusted RS-SRR pledges to strengthen and develop its online Knowledge Management Platform, which aims to serve as a source and information about Lake Chad, a repository for related reports, lessons learnt and good practices and coordination tool (LCBC and AUC 2025, p. 63). Proposed actions include leveraging global expertise and resources to bolster its knowledge base through strong partnerships with international, regional and national research institutes, think-tanks and academia. The LCBC should continue to develop its knowledge management system, including further developing its information system that maintains a record of the data generated by its implementation processes (GIST 2024). The LCBC could furthermore play an important role in facilitating data sharing between its diversity of partners and stakeholders. In the second phase of the RS-SRR, the LCBC aims to leverage its Community Connect platform to

promote knowledge sharing and strategic analysis among practitioners, policy makers and civil society (LCBC 2025).

The adjusted RS-SRR pledges to utilise inclusive and participatory approaches in its progress reviews (LCBC and AUC 2025, p. 62). To act on this ambition, the LCBC and similar bodies elsewhere should pursue knowledge production and curation that is led by ideals of epistemic pluralism and deepening. Some have called for bringing together what is often considered opposite knowledge forms and action, integrating bottom-up and top-down approaches when studying the impacts of climate change on peace and stability (Geneva Peacebuilding Platform 2022). This should involve both funding of a variety of basic research that stretch across a diversity of methodologies, from deeply contextual ethnography and fieldwork to quantitative studies that utilise new sources of data and models. Such a perspective could shift the discourse towards new methodologies that entail greater inclusivity and more self-awareness. This would require combining the knowledge of under-represented groups, such as indigenous peoples and local communities, with big data and new technologies. Such efforts should take particular care to integrate the learned experiences of practitioners as well as leveraging the agency and knowledges of affected communities and civil society to ensure greater equity and validity.

Literature on monitoring of stabilisation operations is limited in general and particularly when it pertains to environmental and climatic aspects of stabilisation. Capturing causal effects is however always complicated in interventions aimed when attempting to monitor environmental peacebuilding (Ide et al. 2021). Monitoring in the field has therefore shifted towards evaluating the contribution of an intervention in combination with other factors to a certain outcome, rather than attributing an outcome solely to certain interventions. Such a monitoring philosophy is even more relevant to stabilisation programmes, which due to their inherent multidimensionality also spans not only environmental peacebuilding, but issues like state authority, humanitarian operations and development across the HDP Nexus.

There is also significant potential in drawing on the agency and knowledge of affected communities in designing outcome indicators, and participatory monitoring and evaluation systems. Participatory approaches based on dialogue and information sharing rather than top-down, directive, and expert-led interventions, may furthermore be suggested as especially suitable to integrate and capture the multidimensional nature of instability and insecurity. Participatory methods in the measurement of peace and security could serve as an apt inspiration for such monitoring systems in stabilisation. The Everyday Peace Indicators build on survey questions suggested by communities affected by insecurity and may provide templates for how to develop similar indicators (Mac Ginty 2013; Mac Ginty and Firchow 2014). So can methodologies that consult affected communities in designing adaptive frameworks for operational monitoring and impact assessment, such as the CPAS-framework adopted by the UN from 2018 for producing data, results and reporting for peacekeeping operations (De Coning and Brusset 2018; Forti 2022). Methodologies that draw upon such epistemic diversity hold promise in accounting for the experiences of those impacted by long-term instability and insecurity. Considering the complexity, dynamism and power dynamics of stabilisation operations, monitoring systems should thus aim be both participative and adaptive.

The adjusted RS-SRR pledges to establish a revised results framework to accompany its updated territorial actions plans, serving as the base for monitoring and evaluation (LCBC and AUC 2025, p. 62). The monitoring systems of the RS-SRR are also in need of substantial standardisation, reflected in the ambition in establishing joint analysis, pooled data and implementation of common monitoring and evaluation frameworks across its diversity of partners and stakeholders in its second phase (LCBC and AUC 2025, p. 54). Most international partners have maintained their standard organisational systems for management of projects, including for reporting and resource mobilisation (GIST 2014, p. 14). A diversity of measurement approaches in conjunction with multiple data systems have thus been used for donor reporting, significantly complicating the efforts of the Secretariat in gathering and disseminating progress for evaluating its programmes. The RS-SRR has furthermore seen limited integration of project reporting outside the UN, leaving projects developed

and implemented with support of e.g. the World Bank and African Development Bank underreported (GIST 2024). This has resulted in underreporting on its projects that have aimed to improve upon infrastructure and livelihoods. A pursuit of epistemic pluralism and deepening should thus be committed to in tandem with simplification and standardisation of reporting systems.

5.2 Conclusion

This REA is the first output of the research project. Its aim was to review the existing policy and academic literature to identify evidence gaps that can inform the research design stage of the research project. It has been a preliminary and exploratory assessment, aimed at identifying gaps and establishing a baseline for further research at the start of the project. In the next stage of the project the research design will be revised and updated, based on the evidence gaps identified by the REA. Thereafter the field research will be conducted, and the results will be analysed, shared for validation by the local, regional and international policy communities.

The REA found that the RS-SRR, with its multiple pillars and clusters, are based on an understanding that social and ecological systems are interlinked, and that this starting point has influenced the design and theory of change of the strategy. It addresses insecurity and integrates aspects such as managing climate change and environmental degradation, responding to humanitarian needs, and developing governance capacity to deliver basic services and ensure the rule of law. In this REA, we have developed an analytical framework for evaluating interventions that aim to influence the nexus of climate change, the environment and stability, along five dimensions coherent with complexity thinking and a broad range of critical and applied research on this nexus. This framework is intended to be relevant for evaluating the RS-SRR and related interventions around Lake Chad, as well as other stabilisation and peacebuilding interventions that aim to influence this nexus across various scales and localities.

The REA found that the potential to utilise climate change and environmental issues as entry points to foster stability, resilience and development, for example by building peace through shared management of resources, climate adaptation and environmental protection, remains under-utilised in the Lake Chad Region. There is potential for using the RS-SRR to make climate change and environmental initiatives more conflict-sensitive and peace responsive, as well as to ensure that stabilisation initiatives don't have negative impacts on the environment. When both climate change and environmental programming, as well as peace and security initiatives, are recognised as deeply interlinked parts of a holistic approach to stabilisation, recovery and resilience, then new insights can be generated, new stakeholders can be identified and engaged, and new resources can be identified and generated.

The REA found that the RS-SRR has continuously adapted through learning based on feedback. The stakeholders of the RS-SRR have self-organised over time into a complex adaptive system that is collectively co-managing their efforts to try to stabilise the Lake Chad Region. The RS-SRR had to reconcile the dual objectives of localising interventions in specific socio-ecological context while maintaining strategic coherence across various scales and stakeholders. Strengthening the role of territorial action plans in the second phase of the strategy would contribute to further localising a diversity of responses. At the same time, care needs to be taken to ensuring that strategic coherence is maintained. Further developing and operationalising the resilience dimension of the RS-SRR could help to integrate its humanitarian, developmental and peace goals and activities.

The need to balance diversity with coherence and standardisation also extends to knowledge systems, monitoring and evaluation. This report argues that the RS-SRR should take particular care in integrating practitioners' learned experiences and leverage the agency and knowledge of affected communities and civil society to ensure equity and validity. Methodologies that draw upon such diversities of knowledge are crucial in accounting for the experiences of those impacted by long-term instability and insecurity. Given stabilisation operations' complexity, dynamism, and power

dynamics, monitoring, evaluation, and knowledge systems should be participatory and adaptive while ensuring that all stakeholders use compatible frameworks.

The policy dialogues conducted by the project also point to the increasing impact of climate change on peace and security in the region and the implementation of the RS-SRR itself. Even though climate change has not been included as a pillar of intervention or strategic objective, the implementation of the RS-SRR has adapted and directly responded to the increasing impacts of climate change. The REA also found that while the strategy's distinctive design seeks to enhance coordination, inclusion, and integration, further improvements are necessary in all three areas. This includes delivering tangible outcomes for fostering stability, promoting development, and addressing climate-related security risks in communities impacted by conflict and climate change.

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