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# THE NEXUS BETWEEN CLIMATE CHANGE AND TERRORISM: AN ANALYSIS OF ISIS' WEAPONIZATION OF WATER IN SYRIA AND BOKO HARAM ACTIVITIES IN THE LAKE CHAD BASIN.



## **THE NEXUS BETWEEN CLIMATE CHANGE AND TERRORISM: AN ANALYSIS OF ISIS' WEAPONIZATION OF WATER IN SYRIA AND BOKO HARAM ACTIVITIES IN THE LAKE CHAD BASIN.**

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## Abstract

The MENA and Sahel regions are suffering from climate-induced phenomena that are accelerating societal tensions and translating into insecurity. These regions are safe havens for violent extremism and non-state actors, who easily recruit young men willing to engage in behavioural radicalisation to sustain their families. Whilst in Syria, ISIS has been weaponizing water and resources to intimidate populations and coerce their enemies, in the Lake Chad Basin Boko Haram is recruiting members of local communities deprived of their harvest and fishing due to climate unpredictability and the disruption of the water cycle. Foreign actors, as well as regional authorities, should act now to revitalise the ecosystem, educate local communities, empower the youth and women, and frame strategic responses against terrorist activities.

## Introduction

Several studies have investigated the nexus between climate change and global security, but few of them have considered the relationship between the former and terrorism and its connection with the rise of violent extremism in fragile countries. Before analysing the relationship between climate change and scarce resources with terrorist activities, it is of paramount importance to comprehend the security-environment association. This can be investigated through the cause-and-effect phenomena of environmental modifications, which have a significant impact on societal development. With the latter being a vital condition for peace and stability, one understands that the lack of safeguards for an orderly ecosystem can generate tensions and conflicts.

When environmental degradation occurs in developed and socioeconomically stable countries, the probability that insecurity arises is lower, as these territories have the tools to frame a strategic and comprehensive approach to respond to the environmental crisis. Instead, environmental degradation and instability are strongly interconnected in socioeconomically fragile countries. Once an ecosystem is damaged, crises and conflicts can be a potential outcome, and if not properly managed, these can extend toward other territories and absorb entire populations whilst preventing their development. Therefore, it would be wrong to think about environmental stress and instability as a binary connection, rather, it is correct to depict this relationship as linked to economic, political, and societal development and human rights.

Climate change is mainly viewed as a catalyst for conflicts or a threat multiplier, which implies consequent escalation of existing ethnic, economic, social, and political tensions (Frimpong, July 2020). More generally, climate remains an indirect contributor to conflicts and violent extremism, albeit a strong accelerator of intra-state or inter-state tensions across populations. In the context of environmental degradation, the increasingly high degree of climate unpredictability is adding an extra stratum of instability, whereby desertification or flooded terrains cannot be productive. This phenomenon is particularly evident in the MENA region countries<sup>1</sup> and the western Sahel region in Sub-Saharan Africa<sup>2</sup>, where climate change is exacerbating security risks.

On June 29, 2022, the North Atlantic Treaty Organisation (NATO) affirmed in its Strategic Concept that these regions are facing multidimensional challenges in the fields of security, economy, demography, and politics, whereby climate change is primarily aggravating the countries' response, their development, and Allied security at large (NATO, 2022). On the Western side, also the European Union (EU) has recently emphasised the climate-security interconnection in its Climate Change and Defence Roadmap, stressing that climate change deters our long-term security, thereby posing a threat to the global stability (EEAS, 2022). Prior to these affirmations, in 2020, the UN Gender, Climate, and Security Report already looked at climate change weather events as contributing factors to livelihood insecurity, adding that this will "compound existing tensions and exacerbate the complex emergencies we are witnessing today in the Sahel, the Middle East and Central America" (UNDP, 2020, p. 7). Although the international community considers climate change to have a harmful impact on societal security, not enough attention is posed to its connection with the rising violent extremism in the regions of interest in this report.

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In 1999, the United Nations Environment Programme (UNEP) Report “Environmental Conditions, Resources, and Conflicts: An Introductory Overview and Data Collection” indicated that conflicts over water resources appear to be a major source of international conflict, adding that “indirect intra-national conflicts are commonly caused by resource depletion issues - deforestation, soil erosion, desertification, flooding and pollution” (UNEP, 1999). Building on this, it is remarkable to highlight that the security crises involving Syria and the Lake Chad Basin (LCB) region have demonstrated that climate-induced variations have increasingly become a triggering factor for new terrorist groups’ recruitments, intra-state attacks, and weaponization of resources. As a matter of fact, in the aftermath of the Syrian civil war, the Islamic State of Iraq and Syria (ISIS) locally recruited over two-thirds of its fighters among the intimidated population which was left with no water or electricity. Similarly, over the last years, Boko Haram has expanded its recruiting activities aimed at young men in Nigeria or Cameroon, who, deprived of their monthly income based on fishing or agriculture because of climate variability, have to resort to Boko Haram to support their families.

### **ISIS’ weaponization of water in Syria**

Access to water in some parts of the world, such as in some MENA region countries, is considered a potential political tool on which one can exert power and if needed, violence. As M. Daoudy (2020) affirms, terrorist groups frame water as a symbol of identity given its value as a vital source of livelihood. Prior to the beginning of the 2011 street demonstrations against Assad’s regime, Syrians had already witnessed four years of drought that damaged their land and negatively impacted agricultural productivity. This, inter alia, triggered societal tensions and climate-induced migration from rural to urban areas of more than 1.5 million people. Nonetheless, it is crucial not to think about the Syrian conflict’s rooted causes concerning climate change only.

Already in the 1980s, the government focused a lot on agricultural policies in order to make the country more independent from other MENA states, however, the failure of these policies, the overall dissatisfaction over the government’s incompetency, people’s lack of freedom, and high unemployment generated the high degree of frustration in the Syrian population, which eventually fostered the 2011 civilian unrests. As a matter of fact, before the start of the civilian war, 2 to 3 million people were already recorded to be below the poverty level (UNDP, 2019). Droughts and degraded lands became an accelerator for societal imbalance, bringing with it societal anger and malaise. In this framework, terrorist groups found natural resources the perfect scapegoat to intimidate the population and their enemies. By exploiting the scarcity of water and resorting to its weaponization as a strategy, ISIS could leave entire villages without water and manipulate its enemies.

As soon as the Islamic caliphate was unilaterally established by ISIS in June 2014, with capital in Raqqah, it started to deploy different strategies that involved control over the allocation of water and hydroelectricity to achieve its territorial expansion strategy. In this way, ISIS was able to impose taxes on subjugated communities, thereby gaining profits to acquire new arms and enlarge their “business”. In the same year, after the conquer of Raqqah, ISIS was already controlling the provision of water services and inflicted strong punishments whenever the population was not respecting its rules or not paying taxes. This resulted in episodes whereby ISIS terrified, coerced, and injected fear into Syrian society whilst provoking general distress by strategically weaponizing such a basic service as the supply of water. At the same time, the weaponization of water across the Syrian territory allowed ISIS to expand its ideology through fear and recruit new people thanks to the revenues gained from the “water taxes”. In order to boost recruitment, the terrorist group disseminated propaganda among all Muslims to pledge allegiance to the group not only in but also through the use of social media to strengthen their image.

Apart from menacing the population, ISIS weaponized water services as a conflict destabiliser toward the Syrian government. This occurred in Aleppo, Homs, Hama, and Raqqah between 2013 and 2014, whereby water plants ceased to properly function because hit by multiple attacks by the parts in the conflict. Both the regime forces and terrorists used water to gain power over populations that were resisting one or the other’s rule, making such resources an equaliser force during the war at the expense of civilians.

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In the aftermath of the capture of Syria's largest dam by ISIS, Tabqa dam, it was able to dissuade any potential attack by threatening to cut electricity delivery to Damascus (Lahn & Shamout, 2015). This essentially proved correct as, in 2016, ISIS was able to deter American bombings of the infrastructure, thereby slowing down the United States (US) counteroffensive to Raqqa in the spring of 2017. In this way, ISIS also hoped to create and share anti-US propaganda in which it would accuse US forces of trying to harm the dam and thereby threatening to flood all the residents around it (Lahn & Shamout, 2015).

In the end, the American Task Force 9 – the US Special Operations forces working alongside the Syrian Democratic Forces (SDF) on the Raqqa advance – bombed the dam in 2017 causing a territorial defeat for ISIS. Henceforth, one can understand how ISIS weaponised water to deprive the Syrians of their basic services and rights whilst using it as an offensive military tool and, at the same time, as a defensive leverage against their enemies. Through the weaponization of water, ISIS undoubtedly increased the number of its fighters and followers, especially among young men, who can be easily radicalised given their poor living conditions and indoctrination through cyber-jihadism.

### **The threats posed by Boko Haram in the Lake Chad Basin**

Similar to ISIS, also Boko Haram<sup>3</sup> has been intimidating populations around the Lake Chad region since 2013 in particular. Geography is fundamental when talking about the Sahel region. The LCB covers 8% of the African continent (Nagarajan, 2018) and extends over four countries: Cameroon, Chad, Niger, and Nigeria. The Basin has witnessed climate-induced changes over the last five decades, such as severe droughts accompanied by extreme temperatures, whilst at the same time becoming more vulnerable to regional instability and violence perpetrated by Boko Haram. Certainly, Lake Chad is a valuable water resource for riparian communities, however, it has shrunk by 90% since 1960, leading to agricultural disruption, higher levels of poverty, internal and cross-border displacement, and youth unemployment (Stuart, 2022). Citing the words of Chad's former president, I. Déby, "the disappearance of Lake Chad is a security crisis that is fuelling terrorist groups like Boko Haram" (UNCCD, 2015).

Nevertheless, it is essential to emphasise that the climate vulnerabilities posed to the Basin do not originate from the Lake's shrinking size but rather from the high degree of climate unpredictability and the water cycle variability, as confirmed in an interview with G. Mastrojeni, Italian diplomat and Senior Deputy Secretary General at the Secretariat of the Union for the Mediterranean, done by the author in December. As a matter of fact, since the 1950s, the Lake has witnessed wet decades followed by heavy droughts until the 1980s and more abundant rainfall in the past two decades. Lake Chad's sensitivity to climate change implies critical challenges to the region's populations, who bear the burden of shifting from "flood recession agriculture to livestock farming and fishing when risks of early flooding seem high" (Nagarajan et al., 2018, p. 22).

Although changing livelihoods can be considered a smart approach to climate sensitivity, it is becoming harder to cope with restricted control of the land or water cycle when this results in restricted access to these services because of rain variability or violent attacks by non-state actors across the Lake. This has pushed many people to migrate on purpose, thereby fostering their vulnerability because of forced displacements and enhancing societal underdevelopment and poverty levels because of low productivity. Whilst this has converted into societal pressures among susceptible communities, Boko Haram has found a safe haven for recruiting activities among young men prone to gain money. By offering what can appear to be an extremely low monthly salary of between \$600 and \$800, Boko Haram has been able to cultivate local support among young men whose grievances and lack of economic opportunities encouraged them to take part in armed conflicts. Therefore, people recruited by Boko Haram often engage in terrorist activities for a financial return only, thereby not believing in Boko Haram's "principles and values". Therefore, in this pattern of behavioural radicalisation, climate change is a multiplying driver that lies at the roots of societal grievances, which consequently lead deprived young men to get closer to Boko Haram, which exploits these situations for its ultimate benefits.

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Given climate unpredictability and the reduction in Lake Chad's water levels, competition over scarce natural resources started to spread across the Basin. As a consequence, climate security became an instrument of political legitimisation used by the Nigerian government in 2009 when, following the radicalisation of Boko Haram and the killing of its leader Mohammed Yusuf, state leaders started to blame climate change for the terrorist group's formation. Boko Haram exploits these tensions and uses them as a scapegoat for violent operations, paving the way for the illicit traffic of drugs and arms across the porous borders between LCB nations. Although Nigeria has been the epicentre of Boko Haram's violent activities, due to resource conflict and environment-induced displacement of persons, it has started to target Cameroon, Niger, and Chad as well.

In June 2019, Boko Haram insurgents attacked a military outpost in Cameroon's Far North Region, signalling the first major confrontation in Cameroonian territory. The most recent attack near the Nigerian border of the LCB was on November 22, 2022, when Boko Haram fighters killed 10 soldiers as per The Counterterrorism Group (Sahli et al., 2022). The latter has also affirmed that violence around oil infrastructures will likely increase, whilst the four riparian countries will join military efforts through their support to the Multinational Joint Task Force (MNJTF). Operations by the MNJTF, which was established in 2012 and authorised by the African Union (AU) in 2015, have focused on the protection of populations around the Basin against Boko Haram activities. Although there has been some progress thanks to the MNJTF, which has managed to reduce assaults by insurgents, the unpredictability of Boko Haram attacks is rising, and, with it, also the violence used in each confrontation (International Crisis Group, 2020).

## **Ways forward: recommendations**

The international community has been quite reactive in addressing the climate-induced challenges posed to fragile countries in the MENA and west Sahel regions. However, climate security policies should not only require a unique militarised security approach for all countries, rather, it is necessary to target each territory with different strategies and empower the local populations in primis. Undoubtedly, climate-security policies in fragile countries tend to be directed toward militarised approaches by the international community. Nonetheless, in the regions of interest in this report – characterised by high socioeconomic instability and human underdevelopment – a crucial aspect that is often neglected by the international community is the humanitarian response. Whilst it is fundamental to keep investing in these countries, it is also primary to create parallel projects that aim at the societal development of local communities. Since climate and the water cycle have become more volatile, top-down monetary funds cannot be the solution to climate-induced instability anymore. The following recommendations should guide future policy actions to a more comprehensive approach when it comes to climate security in unstable countries.

### **I. From a top-down solution to a community-based approach through education**

As Ethiopia has been doing over the last few years, it is crucial to build a watershed management approach based on local people's knowledge of their territory (Battistelli et al., 2022). To address the challenges posed by climate security, one first has to comprehend the local territory and identify the root causes of climate degradation in order to revitalise the land and the ecosystem at large, as endorsed by Senior Deputy Secretary General at the Secretariat of the Union for the Mediterranean, G. Mastrojeni. For instance, policymakers should shift their focus from a top-down solution to a bottom-up strategy prioritising local communities rather than militarising territories. In an interview with Dr S.D. Henkin, Professor and Senior Researcher in the Geospatial Unit at the National Consortium for the Study of Terrorism and Response to Terrorism (START), done by the author in December 2022, it appeared of paramount importance to educate the local communities to create comprehensive projects that could improve their livelihood resilience.

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This is significant when it comes to climate security for two reasons. First, the more the local communities are educated, the more they can study and learn new methods to manage their production in case of climate variability and consequently adapt to climate change. For example, the IFAD-supported Strengthening Productivity and Resilience of Agropastoral Family Farms Project (RePER), in Chad, aims at helping local farmers to diversify their agricultural and productivity systems whilst educating them on new methods of production because of climate vulnerability (IFAD, 2018). Similar projects could be implemented in Cameroon, Niger, and Nigeria with the help of international financial institutions, international actors such as the European Union (EU), and regional authorities like the African Union (AU), whose Comprehensive African Agricultural Development Programme (CAADP) intends to help African governments in rural development under the framework of Agenda 2063 (African Union, 2021).

Second, prioritizing education in local communities would help practitioners in gaining data useful for monitoring and evaluation plans, which are fundamental to adjusting future projects or re-direct policies, and most of the time is missing in international organizations' projects. In this way, experts would directly engage with "targeted" members of the local communities, who are usually respected individuals who know the local territory and can easily identify key indicators to be included in sustainability plans. This process, which Dr. Henkin referred to as "train the trainers", is particularly beneficial in unstable regions like the LCB where 4 different countries clash in a territory of tribal communities. There, the educational experience between the expert and the respected individual – the trainer – would function as a chain: the teachings conferred to the trainer will pass from person to person and reach the youngest men and women in the tribe. The expected outcome is a higher educational level for the entire tribe, fostering societal and economic development, and paving the way for a lower uptake for young men to join non-state actors such as Boko Haram.

## **II. Enhancing governance levels and the rule of law:**

The improvement of government policies is pivotal in the climate security agenda of unstable countries. As countries in the MENA or Sahel region suffer from corruption and poor governance (CPI 2021, 2022), it is important at the macro level that international donors and organisations keep investing in strong and accountable governance institutions. Therefore, developing assistance and articulating strategies to help these countries to face climate variability could be done through public healthcare and other basic services. This does not only entail the help of international actors but also of regional developed countries, which should financially commit to more fragile countries and provide the agreed \$100 billion a year for climate financing toward developing countries (Bower, 2022). The promised sum, which was pledged during Cop15 in Copenhagen, back in 2009, has never been met and should be promptly honoured to combat the climate crisis affecting the most fragile MENA and Sahel countries.

Despite this, at the micro level, it is necessary to empower local communities through the help of NGOs to build or improve trust between the government and the tribes or local communities. It is imperative to frame a bilateral relationship based on mutual respect and conviction, for which citizens can receive support from more transparent governments without resorting to non-state actors. Given the presence of social inequalities, governments should work toward the inclusion of marginalised communities that are often overlooked and more vulnerable to climate change. Within these groups, the youth but especially women play a crucial role in human development. Henceforth, focusing on women's empowerment would help governments to gain more trust from the local communities whilst advancing development and humanitarian efforts.

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### **III. Counter-terrorism practices:**

While education helps the local communities to improve their livelihood resilience, prevents the youngest from joining Boko Haram and allows experts to gain evidence-based data for monitoring and evaluating projects, foreign and regional actors' aids encourage the local governments to be more transparent and parallelly sustain the human development of local communities. Nonetheless, the menace of Boko Haram does not easily evaporate, thus, to reduce its threats after building societal resilience both community dialogues and investments in regional authorities are required. Given the significance of local response, policymakers should prevent militarising territories against non-state actors and shift their approach toward local leaders empowered by governmental authorities. These leaders, knowledgeable of their territory and terrorists' goals, can assist foreign actors in tailoring decision-making strategies or peace-building initiatives.

Similarly, it is essential to boost transregional and transnational cooperation. First, a coordinated security response in the Sahel is brought forward by G5 Sahel, created in 2014 by Burkina Faso, Mali, Mauritania, Niger, and Chad, and whose Police component FC-G5S is supported by INTERPOL since 2019 (INTERPOL, 2022). Despite the challenges posed by Mali's withdrawal from the force in May, international support for the G5 should be reiterated. In this regard, the EU should continue to offer its support to the G5 through the EU Regional Advisory and Coordination Cell (RACC), with a particular focus on border security and management between Chad and Niger, whose environments are suffering from Boko Haram smuggling of drugs, humans, and weapons (EEAS, 2022).

As the RACC is mainly involved in security missions through the EU-funded surveillance and intervention rapid action groups (GAR-SI), it is necessary to foster collaboration with both INTERPOL and the United Nations Office on Drugs and Crime (UNODC). On the other hand, the Economic Community of West African States (ECOWAS), which should respond to the threat of violent extremism across the Sahel, has failed to coordinate an adequate approach due to its inability to take central decisions against terrorist activities (ISS, 2019). The overlapping of ECOWAS with G5 Sahel, the MNJTF, and, in particular, the Nigerian government, hinders the efficiency of ECOWAS operations, which are too superficial to face Boko Haram. As a way forward, foreign actors such as the EU and the UN should assist regional countries in giving ECOWAS ad hoc arrangements different from those of other task forces present in those areas.

Lastly, in seeking to improve transnational cooperation, international and regional partners should not aim at creating large administrative units that overlap and have little impact on the ground. The international community should support the MNJTF from its roots, thereby helping it with basic services, such as establishing rigorous communication with the population, which, as previously mentioned, is vital in these regions. The MNJTF headquarters must have the appropriate infrastructure to gather intelligence information and use it for transregional missions. According to a Report on Boko Haram' activities by the International Crisis Group (2020), national governments should be more prone to share operational planning with the MNJTF. In this way, there would be fewer challenges or confusion when coping with terrorist activities across the regions.

### **Final remarks**

This extensive analysis has evidenced the nexus between climate-induced phenomena and terrorist activities, which is not as disputed as it should be due the significant presence of non-state actors in the MENA and the Sahel regions. Whilst the link between climate change and terrorism remains indirect, as confirmed by interviews with experts done by the author, climate change is becoming an important accelerator of societal and political tensions that easily convert into conflicts or terrorist recruitments. It is no secret that livelihood insecurity has been a trigger for recruiting young people dissatisfied with their lives in poverty.

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This is exemplified both in Syria, where ISIS exploited water to intimidate entire populations and through resource weaponization, it welcomed new members and in the Lake Chad Basin. The latter, due to the climate unpredictability and Lake Chad's water cycle's variability, has witnessed higher levels of forced displacements, underdevelopment, and social inequality, which have led many young men to join Boko Haram and engage in behavioural radicalisation activities.

Although there exists no "one fits all" approach to address climate security in the fragile regions of interest in this report, it is essential to shift from a top-down to a bottom-up and community-based strategy. This has the potential to educate local people, and positively use their territory's knowledge as a basis for new projects between their governments and foreign actors. In this way, not only experts would gain evidence for monitoring and evaluation useful for future sustainability plans, but the local communities would be empowered. Within this framework, it is essential to focus on the youth and women, whilst building trust between local authorities and tribes. Undoubtedly, the international community should keep investing in projects that aim at enhancing governance and the rule of law in these countries and encourage rich regional states to honour the promise made at Cop15 in Copenhagen to release \$100 billion for climate financing. Lastly, to combat non-state actors, community dialogues led by local leaders should be promoted whilst reinforcing transregional and transnational operations such as the G5 Sahel, MNJTF, and ECOWAS. In this context, the AU, but also international actors such as the EU, the American government, and the UN have the important duty to assist these countries not only through military and security missions but especially through humanitarian and peace-building actions.

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## Footnotes

1 This is the most water-scarce region in the world (UNICEF, 2021), leaving 60% of its population with little access to drinkable water given water shortages.

2 Sub-Saharan Africa is exceptionally impacted by a surge in climate-induced temperatures, increasing droughts, and decreasing rainfall provoking water shortages and loss of biodiversity.

3 Jama'atu Ahlis Sunnah Lida'awati Wal Jihad (JAS, or People Committed to the Propagation of the Prophet's Teachings and Jihad) is commonly known as Boko Haram. It was founded in 2002 as a non-violent Islamic movement in opposition to other Islamic groups in Nigeria and protesting against state corruption and inequality. In 2009, this non-state actor radicalised and started to directly target the Nigerian government through insurgencies across the LCB.

4 In some parts of Nigeria, underemployment reaches 75% and the wage is almost a tenth of what terrorist groups offer to their new members. (Anderson, Hendrix, 2021).

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