Assessing UN Support for Climate Change Responses in Conflict-Affected States

COLUMBIA UNIVERSITY SCHOOL OF INTERNATIONAL AND PUBLIC AFFAIRS CAPSTONE CONSULTING PROJECT

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ACKNOWLEDGMENTS

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Cover Photo: Олег Сокол (2012) *Pibor Post, South Sudan.* Creative Commons. We would like to extend our warm thanks to the expert interviewees who made this report possible:

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- **Oli Brown**, Associate Fellow, Environment and Society Programme, Chatham House
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- Dr. Johnson Nkem, Climate-Security Advisor, UNMISS
- Justice Nwafor, Independent Journalist in Nigeria
- **Dr. Nassim Majidi**, Founder, Executive Director of Research & Policy, Samuel Hall
- Clara Pergola, Head of Programs, Peace Paradigms Organization
- Maha Skah, Specialist in Climate, Peace, and Security, UNDPPA
- **Dr. Nhial Tiitmamer**, Director of the Environmental and Natural Resources Program, Sudd Institute, Juba University.
- Our other **anonymous interviewees**, whose contributions were invaluable to our work.

We also want to thank our clients at the **International Peace Institute** (IPI), a non-profit think tank dedicated to managing risk and building resilience to promote peace, security, and sustainable development worldwide. Our colleagues at IPI provided valuable guidance throughout this collaborative project, and we are grateful for their efforts.



CONTENTS

Abbreviations 3
Executive Summary 4
1. Introduction 5
2. Methodology
Theoretical Framework7
3. Case Studies
3a. South Sudan
Problematic
Contextualization10
Analysis of UN Efforts11
Key Takeaways 14
3b. Nigeria
Problematic 16
Contextualization19
Analysis of UN Efforts
Key Takeaways 25
3c. Iraq
Problematic 26
Contextualization
Analysis of UN Efforts
Key Takeaways 32
4. Conclusions
Works Cited

ABBREVIATIONS

ALCGON: the Association of Local Governments of Nigeria AU: African Union BAY: Borno, Adamawa, and Yobe regions of Nigeria **CEWARN: Conflict Early Warning and Response Mechanism CPR: Common Pool Resources CSO: Civil Society Organization DRM: Disaster Risk Management DPPA: Department of Political and Peacebuilding Affairs DPO: Department of Peace Operations** DSRSG: Deputy Special Representative of the Secretary-General EU: European Union **ECOWAS: Economic Community of West African States** EGAP: Evidence in Governance and Politics FAO: Food and Agriculture Organization **GCC: Gulf Cooperation Council** GHG: Greenhouse Gas(es) **ICG: International Crisis Group** ICRC: International Committee of the Red Cross IGAD: Intergovernmental Authority on Development ILO: International Labour Organization **IO: International Organization** IOM: International Organization for Migration ISIL: Islamic State of Iraq and the Levant / Islamic State / Da'esh **JMAC: Joint Mission Analysis Centre KRG: Kurdistan Regional Government** MSF: Médecins Sans Frontières (Doctors Without Borders) NGO: non-governmental organization NSAG: Non-State Armed Group OCHA: Office for the Coordination of Humanitarian Affairs **OIC: Organisation of Islamic Cooperation** PaCC: Peace and Community Cohesion **PDIA: Problem-Driven Iterative Adaptation PMF: Popular Mobilization Forces PWG: Priority Working Group** SIPRI: Stockholm International Peace Research Institute SOPs: Standard Operating Procedures STARR: Stabilization, Recovery, and Resilience UNAMI: United Nations Assistance Mission for Iraq (UN)CSM: UN Climate Security Mechanism **UNCT: United Nations Country Team UNDP: United Nations Development Programme** UNESCO: United Nations Educational, Scientific and Cultural Organization **UNEP: United Nations Environment Programme UNFPA: United Nations Population Fund UNHCR: United Nations High Commissioner for Refugees UNHO: United Nations Headquarters UNICEF: United Nations Children's Fund UNMISS: United Nations Mission in South Sudan** UN-REDD: United Nations collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD+) in developing countries **UNSC: United National Security Council** WFP: World Food Programme WHO: World Health Organization

Executive Summary

As climate change poses ever greater security, social, and existential challenges to the international system, conflict-affected states are particularly vulnerable to its effects. In this report, we conduct qualitative assessments of the climate and security contexts in South Sudan, Nigeria, and Iraq to analyze how the UN can best support climate responses in these states. In each state, we identify a key climate-related issue to serve as an entry point for our analysis: flooding in South Sudan, mismanaged GHG emissions in Nigeria, and desertification in Iraq.

Our methodology combines elements of Harvard University's Problem-Driven Iterative Adaptation (PDIA) toolkit with climate security frameworks developed by the UN Climate Security Mechanism (UNCSM) and Stockholm International Peace Research Institute (SIPRI). In conjunction with supporting academic literature, we deconstruct the political, social, and economic contexts of conflict and climate change in each state.

Having identified these national challenges, we turn to the role of the UN. Based on extensive interviews with academics, practitioners, and stakeholders, we map the connections between UN actors, state governments, and other parties in each state's climate-security landscape.

Finally, we draw several conclusions about lessons and best practices based on our case studies. On a positive note, the UN has played a key role in helping governments draft national climate policies and has facilitated the writing of transnational agreements. It is also beginning to hire climate security advisors to coordinate policy among UN actors in several key countries. However, there is still room for improvement in the UN's **coordination**, **transparency, and inclusion** practices when it comes to support for climate responses in conflict-affected states.

1. Introduction

Climate change is a major stressor worldwide, but it has a particularly strong impact on states experiencing violent conflict. In December 2021, United Nations Secretary-General António Guterres spoke to the Security Council, reminding members that "of the 15 countries most exposed to climate risks, eight host a United Nations peacekeeping or special political mission."¹ Climate vulnerability and conflict risks, while not directly correlated, are complexly intertwined.

In this report, we analyze three country contexts: South Sudan, Nigeria, and Iraq. Each of these states represents a unique constellation of climate-related challenges, conflict risks, and involvement by the UN and other international actors. Over the last few years, South Sudan has experienced unprecedented flooding that has internally displaced nearly one million people.² In Nigeria's Niger Delta, four million people live in close proximity to dangerous gas flaring sites, and deforestation is devastating biodiversity and livelihoods.³ Meanwhile, in Iraq, over 39% of the country's land has already degraded due to desertification, and another 54% is under threat.⁴

By supporting climate action, the UN can mitigate human suffering at the intersection of climate and conflict risks. A proactive approach not only reduces the number of people harmed by climate challenges but also limits the need for expensive post-hoc response and recovery efforts. As a transnational actor, the UN is uniquely positioned to mobilize its resources for this purpose.

By using specialized toolkits developed by the UN Climate Security Mechanism and Harvard University's Center for International Development, as well as academic literature and interviews with experts and stakeholders, we analyze the challenges, lessons learned, and best practices for UN support of climate action in conflict-affected states. While the UN system is increasingly prioritizing climate change, based on our findings, there is still room left for improvement. Some of our key takeaways focus on improving coordination, transparency, and inclusion, among several other factors which the UN could take into account to more effectively support climate responses in conflict-affected states, especially in South Sudan, Nigeria, and Iraq.

¹ "People, Countries Impacted by Climate Change Also Vulnerable to Terrorist Recruitment, Violence, Speakers Tell Security Council in Open Debate," Press.UN.org, (2021), https://press.un.org/en/2021/sc14728.doc.htm.

² "Climate Change and Flooding," UNICEF South Sudan, (2021),

https://www.unicef.org/southsudan/what-we-do/climate-change-and-flooding.

³ Leonore Schick, Paul Myles, and Okonta Emeka Okelum, "Gas Flaring Scorches Niger Delta," (2018),

https://www.dw.com/en/gas-flaring-continues-scorching-niger-delta/a-46088235.

⁴ "Iraq's Growing Desertification Problem," Planetary Security Initiative, (2021),

https://www.planetarysecurityinitiative.org/news/iraqs-growing-desertification-problem.

2. Methodology

2a. Overview

First, our team researched the underlying political, social, and economic factors that shape conflict and climate risks in South Sudan, Nigeria, and Iraq. We then used elements of Harvard's Problem-Driven Iterative Adaptation (PDIA) toolkit,⁵ climate-security frameworks developed by the UN Climate Security Mechanism (CSM),⁶ and the Swedish International Peace Research Institute (SIPRI)⁷ to further analyze our findings. Finally, we interviewed a diverse set of experts and stakeholders to conduct an assessment of relevant academic literature.

The team implemented the first two steps of the PDIA toolkit to construct and deconstruct a specific climate security challenge for each country. First, we asked a series of questions that framed each challenge as a problem to be solved, identified key stakeholders, and envisioned what solutions could look like. For example, the problem of flooding in South Sudan was framed as a lack of inclusive and resilient policy responses to flooding. This identified relevant actors, including the national government, displaced and host communities, elites, and international supporters like the UN. We brainstormed what effective policies could look like: early warning systems, food and water security provision, long-term conflict management programs, etc. This raised the question of what would need to change to make these responses a reality.

Answering that question necessitated deconstructing each problem to identify the underlying social, political, economic, and environmental factors that shape it. By arranging these factors in an Ishikawa or fishbone diagram, the team then analyzed the "change space" associated with each factor. The size of this space depended on three components of policymaking: ability (resources, skills), authority (support from key stakeholders), and acceptance (interest and drive to make change). For example, in the case of South Sudan, we found very small change spaces related to underlying economic and political structures, but slightly larger ones associated with climate and conflict, due primarily to increased acceptance as a result of the recent flooding.

The team layered two climate-security frameworks over the PDIA toolkit results. We considered the pathways approach developed by SIPRI as well as the stress/shock, vulnerability/coping capacity, and exposure nexus method pioneered by the CSM. Using these tools, we zeroed in on the climate-security risks associated with flooding in South Sudan, GHG emissions in Nigeria, and desertification in Iraq. With these in mind, we moved on to a series of interviews.

⁵ "PDIA Toolkit," Harvard Kennedy School, (2018), https://bsc.cid.harvard.edu/tools/toolkit/.

⁶ "Toolbox - Conceptual Approach," UN Climate Security Mechanism, (2020).

https://dppa.un.org/en/climate-security-mechanism-toolbox-conceptual-approach.

⁷ Malin Mobjörk, Florian Krampe, and Kheira Tarif, "Pathways of Climate Insecurity: Guidance for Policymakers," SIPRI, November 2020, https://www.sipri.org/publications/2020/sipri-policy-briefs/pathways-climate-insecurity-guidance-policymakers.

These interviews were conducted with diverse experts and stakeholders relevant to each case study. Our team developed a questionnaire based on our background research, PDIA toolkit, and climate-security frameworks, and implemented it during virtual video interviews of one to two hours each. Team members interviewed advisors to UN missions in South Sudan and Iraq, a climate-security researcher at the ICG, a leading journalist in Nigeria, a professor at the University of Juba, members of the CSM in New York, and experts from international CSOs.

Finally, based on this research, analysis, and interviews, we drafted maps of key climate-security actors in South Sudan, Nigeria, and Iraq. These maps allowed us to identify challenges, lessons learned, and best practices relevant to UN support of climate responses in conflict-affected states.

2b. Theoretical Framework

Our team conducted a survey of relevant academic literature on the logic of political survival, resource management, peace and security, and the politics of exclusion. This literature review provided a theoretical framework for analyzing and comparing our case studies.

To begin, we linked Bueno de Mesquita et. al's work on the logic of political survival⁸ to the climate-security challenges facing South Sudan, Nigeria, and Iraq. When resources are mismanaged, conflict risks are exacerbated, and climate issues go unaddressed, then this theory posits that there must be perverse political incentives encouraging decision-makers to make these choices. Each leader, from national presidents to local community leaders, bureaucratic officials, and managers in international NGOs, has a "winning coalition": a group they must satisfy to retain power. The smaller the winning coalition, the less constrained the leader is in their choices and the more incentives they have to provide private goods to a select few rather than public goods to all. Moreover, each winning coalition is drawn from a particular "selectorate" of people, which may be limited by age, geography, ethnicity, religion, gender, and other factors. This pattern of exclusive power dynamics exists in the South Sudanese, Nigerian, and Iraqi contexts.

Next, we considered Elinor Ostrom et al.'s principles for managing common pool resources (CPRs).⁹ Ostrom posits that there are similarities between managing small- and large-scale CPRs, from the local to the global level. Certain principles can help groups manage common resources, including clearly defined rules, similarities between rules and needs, collective decision-making, active monitoring, graduated sanctions, low-cost conflict resolution mechanisms, respect for local authority, and nested systems of accountability. Many of these principles are often violated in the contexts we analyzed, from responding to flooding in South Sudan to managing greenhouse gas emissions in Nigeria to mitigating desertification in Iraq.

⁸ Bruce Bueno de Mesquita, Alastair Smith, Randolph M. Siverson, and James D. Morrow, "The Logic of Political Survival," Cambridge, MA: MIT Press, 2003.

⁹ Elinor Ostrom, "Governing the Commons: The Evolution of Institutions for Collective Action," Cambridge: Cambridge University Press, 1990.

Building on Ostrom's work, a group of researchers working on the Evidence in Governance and Politics (EGAP) initiative has found that community monitoring improves CPR management.¹⁰ However, since incentive structures and patterns of power distribution shape how all resources are governed, there is no one-size-fits-all solution to climate mitigation or adaptation problems.

In terms of peace and security, Elisabeth King and Cyrus Samii find that recognizing ethnic diversity can lead to better peace outcomes.¹¹ Séverine Auteserre's research concludes that local peacebuilding can be just as effective as top-down initiatives and that international institutions such as the UN could better meet their goals by supporting these programs.¹² Finally, Scacco and Warren emphasize the importance of intergroup trust and inclusion in conflict settings.¹³

Some of the literature drew parallels between our case studies. For example, selectorates and winning coalitions are relevant to climate and conflict management in South Sudan, Nigeria, and Iraq. In all three states, leaders have incentives to serve only their key supporters and exclude groups they do not need. In addition, the principles for common pool resource management highlighted opportunities for improved governance of water, land, and air, especially locally.

However, other papers emphasized the differences between the social, political, economic, and environmental contexts in each state. Explicit ethnic/religious power-sharing arrangements, such as those in South Sudan and Iraq, seem to have exacerbated rather than mitigated intergroup mistrust and conflict. Local governance is often preferable, but in many places, it is nearly impossible to connect with national systems of nationally concentrated power. Grassroots peacebuilding may be useful, but it cannot replace national systems, especially when people are displaced by climate and conflict. High mobility complicates the very definition of "local."

Finally, while most of the literature deals with government policies, our focus is on UN support for these policies. There seem to be gaps in the research on the positive and negative impacts of intergovernmental support for national climate policies. These support efforts are highly politicized in South Sudan, Nigeria, and Iraq, such that UN cooperation with national governments is challenging. Our expert and stakeholder interviews confirmed this to be the case.

Overall, existing literature in political science, political psychology, and political geography highlighted similarities and differences across country contexts, as well as common challenges.

¹² Séverine Autesserre, "The Frontlines of Peace: An Insider's Guide to Changing the World" (2021).

https://academic.oup.com/book/39745/chapter-abstract/339796447?redirectedFrom=fulltext.

¹⁰ "Adoption of Community Monitoring Improves Common Pool Resource Management Across Contexts," Evidence in Governance and Politics (2021), https://www.pnas.org/doi/10.1073/pnas.2015367118.

¹¹ Cyrus Samii and Elisabeth King, "Why recognizing different ethnic groups is good for peace," OUPblog, 31 May 2020, https://blog.oup.com/2020/05/why-recognizing-different-ethnic-groups-is-good-for-peace/.

¹³ Alexandra Scacco and Shana S. Warren, "Can Social Contact Reduce Prejudice and Discrimination? Evidence from a Field Experiment in Nigeria," American Political Science Review 112, no. 3 (2018): 654–77, (2018).

3. Case Studies

3a. South Sudan

Problematic

South Sudan, the world's youngest state, is home to almost 11 million people and over 60 ethnic groups. The Intergovernmental Authority on Development (IGAD) and Partners' Forum have, since 2005, been responsible for brokering the Comprehensive Peace Agreement (CPA) in South Sudan. In January 2005, the CPA ended 22 years of conflict between the Sudan People's Liberation Movement/Sudan People's Liberation Army (SPLM/SPLA) and the Sudanese Government in Khartoum. Despite years of painstaking negotiations, doubts remained whether it would be a lasting solution, mainly because the document contained an escape clause. In January 2011, South Sudan voted to secede from Sudan and became an independent state on July 9, 2011. However, in December 2013, a civil war began to divide and devastate the nascent nation.



South Sudan is highly vulnerable to climate-related shocks, particularly flooding, which has destroyed innumerable livelihoods. Since 2019, it has suffered unprecedented annual floods. The May-November 2021 floods, the most devastating since the early 1960s, affected 9 out of 10 states in South Sudan, impacting around one million people and displacing more than 300,000.

As a result, the South Sudanese Government requested aid and declared flood-affected national disaster zones in 2022. This request was made following extremely heavy rains, leading to

hundreds of fatalities and thousands left homeless in Jonglei, Unity, and Upper Nile states. Since 2019, flooding has been a factor in interethnic conflict. Floods cause displacement and livelihood loss, increasing competition for scarce resources and exacerbating intergroup violence.

Conflicts in Jonglei state are best understood through the lens of overlapping climate and conflict risks, which result in conflicts between the Dinka, Nuer, and Murle ethnic groups over scarce resources.¹⁴ Recurring climatic shocks and stressors, such as floods, have contributed to increasing conflict and humanitarian needs. As of December 2020, the International Organization for Migration estimated that a total of 1.71 million people remain displaced in South Sudan (including 6% who were previously displaced abroad) and that there are now 1.73 million returnees across the country (just under a third of whom have returned from abroad). These figures indicate that new displacements and instances of returnees are co-occurring.

Notwithstanding the profound challenges associated with displacement, many people are experiencing limited services and support in response to the flooding. These would-be returnees return to displacement sites, move to different locations, and influence the decisions of others to return – all of which have implications for security, protection, integration, and livelihoods.

Contextualization

Flooding has impacted different areas and groups differently. For example, in Jonglei state, the Dinka, Nuer, and Murle ethnic groups have been displaced by flooding to Eastern and Central Equatoria States. They relocated to safer areas when their primary source of livelihood—cattle, pastures, and land—was devastated. Not only have their livelihoods been destroyed, but their displacement has escalated intergroup conflicts between displaced and host communities in Eastern Equatoria, which are interconnected with land disputes between farmers and herders.

South Sudan is home to a wealth of natural resources, including hydropower, land for grazing and farming, petroleum, iron ore, copper, chromium ore, zinc, tungsten, mica, silver, and gold. Since the nation's independence, very few citizens have benefited from its oil or mineral wealth. Instead, these benefits are distributed strategically by the central government, which exacerbates local conflicts by funding domestic counterinsurgencies and requesting international assistance.

A prime example was the deadly confrontation in 2013 when the President fired his deputy Riek Machar over claims of an attempted coup. This conflict quickly took an ethnic undertone. Egypt agreed to provide military support in exchange for water on behalf of the government. Both parties eventually agreed to a secret deal to resume construction of the contentious Jonglei Canal.¹⁵ To this day, interethnic violence is prevalent in the Malakal region of Upper Nile State,

¹⁴ James Maker Atem, "Efficacy of Dispute Resolution Process among Ethnic Groups Within Jonglei State of South Sudan," Lucknow, IJMCI, Issue 2 (2016) https://www.researchgate.net/publication/311546148.

¹⁵ James Maker Atem, "Jonglei Canal: The Flawed Logic of Hydro-Diplomacy in the Nile Basin," Journal of International Affairs at Columbia University (2022), https://www.jstor.org/stable/27203131.

where the Nuer and Shilluk were pitted against each other by the government, and in Jonglei State, where the Murle, Dinka, and Nuer fight for control over the land, livestock, and pastures.

Violence has escalated in several areas of South Sudan between July 2022 and early 2023 partly due to contestation over scarce natural resources. In the Upper Nile region, a sizeable Lou Nuer armed group attacked the Cholo Kingdom, killing and displacing hundreds. While the Lou Nuer were fighting the Shilluk in Upper Nile state, a well-organized group of armed Murle youth raided Lou Nuer and Dinka land, stealing cattle, abducting children, and burning three villages.

When the Lou Nuer armed group returned, they found their villages devastated. This triggered a broader mobilization that galvanized Nuer and Dinka youth from areas that had suffered attacks. The mobilized force split into two fronts, both launching attacks. Simultaneously, the Anuak and Toposa ethnic groups became involved in land disputes on the periphery of this larger conflict.

In Central Equatoria state, the continued presence of Dinka pastoralists displaced by flooding over the past several years has created fears that their presence may become permanent. These fears have led to accusations of land grabbing, destruction of crops, and intimidation. This conflict has recently escalated with the shooting of cattle and revenge attacks on communities.

Each of these local conflicts has exhibited patterns of retaliatory and repetitious attacks. They contribute to a near-permanent state of low-level conflict that may escalate at any time. This status quo has dire economic consequences. The conflict between Abyei and Twic groups in Warrap state has already led to increased food prices in that state, because traders must circumvent dangerous areas, causing goods to be delayed. In addition, conflicts that spill over borders, such as land disputes between the Toposa of South Sudan and the Turkana of Kenya, raise the prices of key imports from Kenya and Uganda, including maize and other staples.

The combination of high vulnerability, low coping capacities due to underdevelopment, and increasing exposure to climate impacts have exacerbated conflicts throughout South Sudan. Displacement from the unprecedented floods has further stressed a primarily UN-driven IDP service provision system that was already at capacity due to the previous civil war. South Sudan's poorest, most rural, most excluded, and most underserved populations are most at risk.

Analysis of UN Efforts

Many UN actors are active at the intersection of climate and security risks in South Sudan. These can be divided into two categories: the UN Country Team (UNCT), consisting of UN agencies, and the peacekeeping mission (UNMISS), whose mandate includes the protection of civilians, facilitation of humanitarian aid, support of the national peace process, and monitoring of human rights.¹⁶ Importantly, the mandate mentions climate not only in its introductory clauses but also in its operative clauses, making this mission uniquely authorized to address climate challenges.

¹⁶ UN Security Council Resolution 2677 (March 8, 2023), UN Doc. S/RES/2677.

Per these requirements, in September 2022, a Climate and Security Advisor (CSA) joined the mission. Since beginning his tenure in this position, Dr. Johnson Nkem has convened an informal "Climate and Security Working Group," that includes representatives from each UNCT office, as well as each team within the mission, to coordinate climate and security work in South Sudan.¹⁷ Dr. Nkem and the Working Group are supported by the Climate Security Mechanism,¹⁸ and they in turn support their teams' implementation of climate and security-sensitive initiatives.

One example of the Working Group's work consists of a series of workshops, based on materials developed by the CSM. In February 2023, the Working Group met three times, twice virtually and once in person in Juba, to learn about the two climate-security frameworks used by the CSM and SIPRI: the pathways approach¹⁹ and the nexus model.²⁰ In the final meeting, members of the Working Group applied both models to their work and brainstormed ways in which they could integrate climate-security risks into their work plans and standard operating procedures (SOPs).²¹

Along with a variety of government ministries, members of the Working Group support conferences and dialogues at the national, regional, interregional/ethnic, and local levels. These have a variety of themes, including migration, livestock, and intra- and inter-ethnic disputes.^{22 23} ²⁴ They are key tools for building trust and bottom-up consensus, but they are imperfect. A recent investigation by the New Humanitarian found that some stakeholders view them as too short-term, as implementers perceive that donors are more eager to fund one-off conferences than multi-year processes.²⁵ The same research also found that these conferences often exclude non-state armed groups and informal leaders, which limits their impact on power structures.²⁶

The participation of government ministries in the UN's climate- and conflict-related work is not institutionalized but depends on the dedication of individual ministers.²⁷ This arrangement presents long-term challenges, as disinterested ministers or new appointees can bar entire ministries from engaging with the UN and other partners on climate-security risk management.

www.wvi.org/stories/south-sudan/south-sudans-cattle-keepers-join-dialogue-foster-peace-ending-cattle-raids-and. ²⁴ "UNMISS addresses intercommunal tensions at dialogue forum in Raja County," UN Peacekeeping, (2022), https://peacekeeping.un.org/en/unmiss-addresses-intercommunal-tensions-dialogue-forum-raja-county.

²⁵ "No quick fix: The challenge of local peacebuilding in South Sudan," The New Humanitarian, (2023), https://www.thenewhumanitarian.org/analysis/2023/01/19/South-Sudan-peacebuilding-dialogue.
 ²⁶ Ibid

¹⁷ "UN Climate Advisor, UNMISS/UNDP Interview," (2023).

¹⁸ "UN Climate Security Mechanism Member, UNCSM Interview," (2023).

 ¹⁹ M. Mobjörk, Florian Krampe, and Kheira Tarif, "Pathways of Climate Insecurity: Guidance for Policymakers," https://www.sipri.org/publications/2020/sipri-policy-briefs/pathways-climate-insecurity-guidance-policymakers.
 ²⁰ "Toolbox - Conceptual Approach." UN Climate Security Mechanism, (2020),

https://dppa.un.org/en/climate-security-mechanism-toolbox-conceptual-approach.

²¹ "UN Climate Advisor, UNMISS/UNDP Interview," (2023).

 ²² "Three-day conference results in 11 communities reaching peace agreements," Reliefweb, (2022), https://
 ²³ "South Sudan's cattle keepers join dialogue to foster peace," World Vision International, (2021), https://

²⁷ "UN Climate Security Mechanism Member, UNCSM Interview," (2023).

Finally, the set of actors cooperating on climate-security risk analysis in South Sudan is diverse. There are two such task forces under UNDP: the Peace and Community Cohesion (PaCC) team, and the Stabilization, Recovery, and Resilience (StaRR) division. There is a similar group within UNMISS, the Joint Mission Analysis Centre (JMAC). These three groups, along with the Intergovernmental Authority on Development (IGAD)'s Conflict Early Warning and Response Mechanism (CEWARN) team and a range of international policy analysis NGOs, often collaborate on climate and security analyses. We also identified two local actors who are engaged in this process: the University of Juba's Sudd Institute, led by Dr. Nhial Tiitmamer,²⁸ and the Community Empowerment for Progress Organization (CEPO), led by Mr. Edmund Yakani.²⁹

Local, regional, and global actors working on climate-security analyses in South Sudan face distinct challenges. We were able to identify several of these through stakeholder interviews:

- 1. A lack of quantitative data, but plenty of anecdotal evidence, on climate-security risks.
- 2. A lack of consistent or systematic methodologies for measuring climate-security risks and impacts (interview questions, measurable indicators, etc.).
- 3. A lack of data and analysis-sharing platforms, accessible at least to UN actors and NGOs (sharing with the South Sudanese government was reported to be a fraught issue).³⁰

Finally, while all UNCT agencies and UNMISS teams contribute to some climate responses, UNHCR is particularly active in South Sudan. The refugee agency is currently engaged in

- 1. Providing seasonal climate forecasts and early warning in advance of climate shocks.
- 2. Funding the construction of dikes and drainage systems in Unity state.
- 3. Convening dike maintenance committees and dike construction trainings in Jonglei state.
- 4. Leading peacebuilding efforts between IDPs and host communities in Eastern Equatoria.
- 5. Distributing flood- and drought-resistant seeds and constructing irrigation infrastructure.
- 6. Providing IDP camp residents with high-efficiency cooking stoves, converting camp waste into clean-burning briquettes, and converting camp water pumps to solar power.³¹

²⁸ "Nhial Tiitmamer," The Sudd Institute, https://www.suddinstitute.org/who-we-are/team/member/3.

²⁹ "Mr. Edmund Yakani Berizilious," Community Empowerment for Progress Organization (CEPO), South Sudan. http://cepo-southsudan.org/team/mr-edmund-yakani-berizilious.

³⁰ "UN Climate Advisor, UNMISS/UNDP Interview," (2023).

³¹ "Climate change has hit South Sudan hard – here's how UNHCR is responding," UNHCR Africa News (2022), https://www.unhcr.org/africa/news/news-releases/climate-change-has-hit-south-sudan-hard-heres-how-unhcr-respon ding.



(Box 1): Climate, Peace, and Security Stakeholder Map: S. Sudan

<u>Key Takeaways</u>

Our analysis of UN support for climate security responses in South Sudan has revealed several challenges, best practices, and lessons learned. Common themes among these include coordination, transparency, and inclusion.

First, resourcing is a serious challenge to UN support for climate responses in South Sudan, as in all conflict-affected states.³² This issue requires technical and political innovation at the global, regional, state, and local levels. One factor that may increase climate funding for fragile states is additional coordination between climate and security-focused donors and implementers. Increased transparency in climate security finance on the part of both local and global actors' issues could also lead to the inclusion of more underrepresented voices in resource allocation.

Second, coordination at all steps of climate-security data gathering, analysis, and monitoring is key. In South Sudan, a variety of UN actors, international NGOs, and local organizations are engaged in parallel processes of gathering data on climate-security risks, analyzing these findings, and disseminating their analyses. Multiple interviewees noted the lack of coordination between these actors and suggested more systematized guidelines for data gathering and sharing. While complete transparency is hindered by the highly politicized nature of conflict and climate issues, increased information sharing between local and global NGOs could be useful. The inclusion of additional actors, such as universities in the Global South, is also highly advisable.

³² "Climate Finance for Sustaining Peace," UN Climate Security Mechanism (2021), Climate finance for sustaining peace | Climate Promise (undp.org).

Third, experience suggests that local projects and individual agencies' strategies are not enough. National-level policies are needed for effective climate-security risk management. In contexts like South Sudan, where power is highly concentrated, it may be easier to circumvent national power structures and make changes on the margins. But this is not a sustainable or inclusive approach. All actors interested in improving climate, peace, and security outcomes in South Sudan, including the UN, should consider efforts to depoliticize climate data and promote evidence-based decision-making. According to Andrew Ciacci of the Crisis Group, this process may include clarifying that climate does not always or directly affect conflict, and taking regional and ethnic dynamics into account when sharing climate-security data and analysis.³³

Finally, best practices for UN support of climate responses in South Sudan may include close attention to ethnic and regional dynamics of power, conflict, and exclusion; coordination and transparency among UN actors, and between the UN and its partners; inclusion of underrepresented groups, including marginalized ethnic and religious groups, women, youth, displaced people, traditional leaders, and, when possible, armed groups; and the institutionalization and systematization of climate- and security-sensitive approaches.

(Box 2): HIGHLIGHTED PROJECT

Rice Farming as Flood Adaptation in Jonglei and Warrap States



In Jonglei and Warrap states, rice farming has been introduced to help local communities adapt to unprecedented flooding. It is impossible for locals to grow sorghum, maize, or groundnuts, or to raise livestock, in these conditions, but rice thrives. UN actors should pay close attention to these efforts by its non-UN NGO partners, including Action Against Hunger and World Vision International.³⁴ Adaptation, more than mitigation efforts, seems to be key to climate change responses in conflict-affected areas.

Photo: Peter Caton, Action Against Hunger. Creative Commons.

³³ "Climate, Environment and Conflict researcher, International Crisis Group interview," (2023).

³⁴ Susan Martinez, "South Sudan's floods inspire a first generation of rice growers," The Guardian, (2023), https://www.theguardian.com/global-development/gallery/2023/feb/07/south-sudans-floods-inspire-a-first-generatio n-of-rice-growers-in-pictures.

3b. Nigeria

Problematic

Moving westward towards the Gulf of Guinea lies Nigeria, a country that has become too familiar with the devastating impacts of climate change. While the North faces desertification and drought, the South is experiencing record-breaking floods. Despite the climate shocks affecting both regions, most international humanitarian and development interventions, as well as academic research, have been directed toward the North. This is partly due to the strategic relevance of the North-based Boko Haram armed group to intervening powers,³⁵ given its nature as an Islamist terror group and its rumored links to other transnational jihadi organizations.³⁶



Meanwhile, Southern Nigeria also grapples with the impacts of climate change and protracted conflict. In 2022, the southern Niger Delta region experienced Nigeria's worst flooding in a decade,³⁷ displacing 1.4 million and killing 500.³⁸ The flood's catastrophic humanitarian impacts attracted global attention to the urgent need to address climate change in Southern Nigeria.

³⁶ Alex Thurston, "'The disease is unbelief': Boko Haram's religious and political worldview," (2016) https://www.brookings.edu/wp-content/uploads/2016/07/brookings-analysis-paper_alex-thurston_final_web.pdf ³⁷ "Displaced by devastating floods, Nigerians are forced to use flood water despite cholera risk." (2022) https://www.cnn.com/2022/10/26/africa/bayelsa-flood-victims-nigeria-intl-cmd/index.html.

³⁸ "Flooding in Nigeria kills 500, displaces 1.4 million, government says," (2022)

³⁵ John Campbell, "U.S. Policy to Counter Nigeria's Boko Haram," Council on Foreign Relations, Council Special Report No. 70 (2014).

https://www.washingtonpost.com/climate-environment/2022/10/15/nigeria-flooding-displacement-deaths/.

Researchers from the World Weather Attribution consortium traced the causes of these floods to human activities that exacerbate climate change, especially greenhouse gas (GHG) emissions.³⁹

The Niger Delta region is a hub of anthropogenic activities linked to climate change. Crucially, this region is home to Nigeria's rich oil and gas sector. Gas flaring is one of the most common practices in the sector, with 75% of gas produced through crude oil extraction being flared in the Niger Delta.⁴⁰ This has led to a high concentration of GHGs in the atmosphere, resulting in adverse environmental and socio-economic impacts, putting livelihoods at serious risk, and exacerbating the impacts of climate change in Nigeria and beyond.

Communities that live near gas plants are exposed to the smell and noise of gas-flaring night and day.⁴¹ As a result, the temperature in gas-flaring areas is higher, and the noise from gas flaring disrupts the sleep of locals. Many Niger Delta inhabitants suffer from incapacitating and fatal diseases linked to gas-flaring, such as asthma, bronchitis, and blood disorders. Moreover, the byproducts of gas flaring contaminate the soil near the plants, making it impossible for farmers, who constitute the majority of livelihood-earners in the region, to generate their standard yield. This reduces farmers' income, adversely affecting their ability to fund their children's education. Not only does gas flaring negatively affect the environment, but it disrupts the socioeconomic development of communities in the Niger Delta. By contaminating natural resources and reducing local populations' ability to provide for themselves, gas flaring burdens livelihoods.

Another local environmental challenge is oil spills, which have also contributed to extensive pollution. Almost 70 years ago, Shell began extracting crude oil from the Niger Delta; for more information on local resistance to Shell Oil, view Box 3. Amnesty International now reports that the region is one of the most polluted on the planet.⁴² In 2022, the National Oil Spill Detection and Response Agency (NOSDRA) of Nigeria's Federal Ministry of Environment recorded 581 oil spills.⁴³ However, environmental activists dispute this number, believing it to be higher.⁴⁴ Oil spills have immense impacts on livelihoods in the Niger Delta. Nigerians in this region rely on clean water for drinking, farming, and fishing, activities dramatically affected by oil spills which, if not addressed quickly enough, seep into the soil and cause further damage, exacerbating the already-challenging realities of poverty in the area.

³⁹ "Climate Change Fueled Rains Behind Deadly Nigeria Floods, Study Finds," (2022)

https://www.voanews.com/a/climate-change-fueled-rains-behind-deadly-nigeria-floods-study-finds-/6838154.html. ⁴⁰ Urenmisan Afinotan, "How serious is Nigeria about climate change mitigation through gas flaring regulation in the Niger Delta?" *Environmental Law Review* 24 (4), 288-304 (2022).

⁴¹ "Justice Nwafor interview." (2023)

⁴² "The Niger Delta is one of the most polluted places on earth," (2018),

https://www.amnesty.org/en/latest/news/2018/03/niger-delta-oil-spills-decoders/.

⁴³ "Nigeria Oil Spill Monitor, Visualizing oil spill data from NOSDRA," (2022), https://nosdra.oilspillmonitor.ng/.

⁴⁴ "In Niger Delta, Oil Spill is Impoverishing Residents, Devastating Environment, Dislocating Cultures," (2022) https://earthjournalism.net/stories/in-niger-delta-oil-spill-is-impoverishing-residents-devastating-environment-disloc ating.

(Box 3): Women at the Forefront of Environmental Justice Federation of Ogoni Women's Association (FOWA)

"We are hungry and we plant and nothing comes of it, because they have drawn all the oil from us." - a woman from Ogoniland

"They [Shell] all simply stood there and watched us. There is power in the palm branch that Ken showed us. This palm branch is the bullet you see." - Karalole, a member of FOWA

In 1958, Shell Oil began its exploration in Ogoniland, in the Niger Delta. What followed were years of corroding pipelines, oil spills, and the consequent uprooting of farmers and communities whose soil and water were degraded. In 1990, the Ogoni people created a nonviolent human rights organization called the Movement for the Survival of the Ogoni People (MOSOP), and they formed a women's arm called the Federation of Ogoni Women's Association (FOWA) in 1993. Because Ogoni women were mostly responsible for farming and trading in their communities, oil pollution hurt their yields and livelihoods. FOWA members successfully ousted the big oil corporation with significant community support, organizing,

prayer, and singing. Since then, they have continued organizing against corporate environmental threats. In 2011, FOWA contributed to the UNEP environmental assessment in Ogoniland. Today, FOWA's nonviolent advocacy work continues, honoring the importance of land to the Ogoni people and holding human rights workshops for Ogoni women.⁴⁵



Members of FOWA marching for justice, 2016. Photo: Babawale Obayanju, Flickr. Creative Commons.

Another major anthropogenic contributor to climate change in the Niger Delta is unabated deforestation. It is estimated that over 400,000 hectares of forest are cleared each year in Nigeria,⁴⁶ predominantly in the Niger Delta. This is problematic because forests play a crucial role in sequestering carbon dioxide, one of the primary gasses that cause climate change. At the current annual deforestation rate of 1.3%, Nigeria will continue to emit more GHGs, with

⁴⁵ Text and photo: Domale Keys, "Ogoni Women's Climate Justice was Decades Ahead of Today's Debates," University of Virginia, https://wgs.as.virginia.edu/news/story/ogoni-women%E2%80%99s-climate-justice-was-decades-ahead-today%E2%80%99s-debates.

⁴⁶ "Nigeria launches REDD+ strategy to curb deforestation and forest emissions," (2023). https://www. forestcarbonpartnership.org/news-story/nigeria-launches-redd-strategy-curb-deforestation-and-forest-emissions

emissions projected to rise from 9.5 Mtc/year in 1990 to 15.5 MtC/year in 2030.⁴⁷ This trend is projected to have detrimental consequences for the Niger Delta's ecosystems and communities.

Nigerian geographer John Wajim concludes that deforestation has worsened already poor crop yields and reduced income for farmers in the Niger Delta, on top of the effects of gas flaring.⁴⁸ When trees are cut down, the vegetative cover for slash-and-burn farming is removed, exposing the soil to the harsh tropical sun and heavy rainfall. This causes the soil to lose fertility, leading to lower crop yields and reduced incomes. The combined effects of deforestation, gas flaring, and oil spills on soil in the Niger Delta have left many farmers unable to sustain their livelihoods.

Against the backdrop of rising GHG emissions and climate change in the Niger Delta, a long-standing conflict has emerged between ethnic militias and the Nigerian government. For over two decades, minority ethnic groups have been protesting the exploitation of their oil resources and the resulting environmental degradation of their communities by multinational corporations and the government. They have employed tactics such as kidnapping, car bombings, and attacks on oil pipelines to draw attention to their grievances.⁴⁹ Despite government efforts to address the situation, including soliciting international assistance from the UN to conduct an environmental assessment and recommend suitable remedies, the conflict is ongoing.

As the impacts of gas flaring, oil spills, and deforestation persist in the context of a protracted conflict, communities in the Niger Delta are left in hazardous environmental, socioeconomic, and security conditions. In 2021, the Nigerian government pledged to eliminate GHG emissions by 2060, in line with its commitments at COP26.⁵⁰ To achieve this target, the government is collaborating with the UN on initiatives such as the Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD).⁵¹ However, Nigeria has yet to make significant measurable progress toward its goal of eliminating GHG emissions.

Contextualization

When we deconstruct the problem of mismanaged GHG emissions in Nigeria's Niger Delta, particularly gas flaring and deforestation, we uncover four significant underlying factors that impede the country's ability to implement resilient, inclusive, and effective mitigation measures.

⁴⁹ "Nigeria militants 'bomb' oil pipelines in Niger Delta," (2016),

https://www.bbc.com/news/world-africa-37999388.

⁴⁷ Federal Ministry of Environment, 2010.

⁴⁸ Wajim, John, "Impacts of Deforestation on Socio-Economic Development and Environment in Nigeria," *The International Journal of Social Sciences and Humanities Invention* 7(03): 5852-5863, (2020).

⁵⁰ "COP26: Nigeria vows to reach net-zero by 2060 but stresses role of gas," (2021),

https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/110321-cop26-nigeri a-vows-to-reach-net-zero-by-2060-but-stresses-role-of-gas.

⁵¹ Ravilious et al. "Carbon, biodiversity and ecosystem services: Exploring co-benefits. Nigeria: Preliminary Results," (2010 UNEP-WCMC, Cambridge, UK,

https://www.un-redd.org/sites/default/files/2021-10/Nigeria%20Fin_lowres.pdf

The phenomenon of elite capture in Nigerian politics is a major obstacle to the successful implementation of mitigation measures. This can be seen in the practice of "godfatherism," which has become a pervasive feature of Nigerian politics. Onu and Biereenu-Nnabugwu explain godfatherism as a "new way of describing political patronage and, by extension, paternalism,"⁵² which grants certain individuals or groups undue influence and control over decision-making.

For example, in Cross River State in the Niger Delta region, the governor is "the godfather of all the politicians in Cross River, because he controls the budget and security apparatus."⁵³ As the head of the state chapter of the People's Democratic Party (PDP), the governor is responsible for nominating candidates for local government elections. This enables the governor to purchase the loyalty of local government officials, who are beholden to him once they are elected.

In a study conducted by Emmanuel O. Nuesiri, a sitting local government chairman admitted that "we cannot make important decisions independently, we follow what the governor wants [...] if we make the governor angry, he can manipulate to remove any of us at any time."⁵⁴ As a result of godfatherism, local government officials are answerable not to the communities that they are elected to serve, but to the political "godfathers" who facilitated their appointments.

As a result of this power dynamic, climate mitigation policies are likely to overlook the interests of local communities, reflecting instead the preferences of the godfathers. This was evident in the Nigeria-REDD program,⁵⁵ a collaborative program with UN-REDD. Due to the subordination of local authorities in Cross River state to the governor, the state's Forestry Commission excluded local officials from participatory forums. This led to the formulation of mitigation policies that disregarded local knowledge and practices, resulting in unsustainable outcomes.

Another major obstacle that undermines Nigeria's ability to implement sustainable climate mitigation measures is the economy's dependence on natural resources. The economy's reliance on oil, which accounts for 94.1% of total export earnings as of 2019,⁵⁶ has perpetuated a situation whereby leaders prioritize providing private goods to their inner circle rather than public goods to the entire country. In line with the "resource curse" theory, political elites' dependence on oil

⁵² Onu, G., & Biereenu-Nnabugwu, M. Dialectics of Patronage Politics and Representative Democracy: The case of Anambra State of Nigeria. In V.O. Okafor (Ed.), *Nigeria's Stumbling Democracy and Its Implications for Africa's Democratic Movement* (pp.56-78). Westport: Prager Security International.

⁵³ Emmanuel Nuesiri, "Godfather Politics and Exclusionary Local Representation in REDD+: A Case Study of the Design of the UN-REDD-Supervised Nigeria-Redd Proposal," Chapter 2 of *Global Forest Governance and Climate Change* (2018), Palgrave Macmillan, London, UK.

 ⁵⁴ Emmanuel Nuesiri interview of Cross River Local government Chairperson in "Godfather Politics and Exclusionary Local Representation in REDD+: A Case Study of the Design of the UN-REDD-Supervised-Nigeria-Redd Proposal," *Global Forest Governance and Climate Change*, (2018). Palgrave Macmillan. London, UK.
 ⁵⁵ Ibid.

⁵⁶ "How oil dependence truncated Nigeria's industrial development," (2022),

https://punchng.com/how-oil-dependence-truncated-nigerias-industrial-development/

revenue absolves them of the obligation to seek domestic income through public taxes or earn public legitimacy. Instead, they can maintain power simply by providing private goods to their inner circle. This has created an incentive for them to retain the maximum possible amount of profit from petroleum sales, making it challenging to implement regulatory mitigation measures.

Despite committing to reducing gas flaring in the oil and gas sector, the federal government has yet to invest in the necessary technology for gas collection, processing, and exportation.⁵⁷ Former heads of state Generals Babangida and Abacha⁵⁸ skillfully used natural resource revenue to appease their inner circle, including other military generals and northern traditional rulers, to consolidate power. Their rule left a legacy of rent-seeking politics fueled by petroleum revenues which still inhibits the implementation of sustainable climate mitigation measures in Nigeria.

Multinational corporations (MNCs) operating in the Niger Delta have also contributed significantly to blocking climate mitigation measures. They continue gas flaring at the expense of the environment and community livelihoods, as it is cheaper to do so. Companies such as Texaco, Shell, and Mobil Oil exploit Nigeria's regulatory framework by engaging incompetent but well-connected consultants to conduct Environmental Impact Assessment (EIA) studies,⁵⁹ resulting in ineffective compliance with the government's stated mitigation policies.

Finally, the protracted conflict in the Niger Delta between ethnic militias and the government is a significant obstacle to the implementation of effective climate mitigation measures. Ethnic militias such as the Niger Delta Volunteer Force⁶⁰ have emerged as combatants against government forces in the region, representing the grievances of the local communities excluded from decision-making regarding oil exploitation and resource distribution. The tactics employed by these militias include the sabotage of oil extraction processes, which often interferes with oil production processes, leading to oil spillage and gas flaring.⁶¹ The government's failure to resolve community grievances in the Niger Delta to date has only exacerbated the situation, causing ethnic militias to intensify their sabotage, leading to more oil spillages and gas flaring.

Overall, Nigeria's ability to implement sustainable climate mitigation measures is hindered by four underlying factors: elite capture, reliance on oil revenues, MNCs' exploitation of regulatory frameworks, and ongoing conflict. However, these factors can also serve as entry points for external actors, such as the UN, to support and facilitate Nigeria's climate mitigation efforts.

⁶¹ "Hostilities in Nigeria's Niger Delta blamed on government neglect,"

⁵⁷ Orhioghene Akpomuvie, "Tragedy of Commons: Analysis of Oil Spillage, Gas Flaring and Sustainable Development of the Niger Delta of Nigeria," Vol. 4, No.2, (2011).

⁵⁸ Camilla Sandbakken, "The Limits to Democracy Posed by Oil Rentier States: The Cases of Algeria, Nigeria and Libya," https://www.tandfonline.com/doi/epdf/10.1080/13510340500378464?needAccess=true&role=button

⁵⁹ Orhioghene Akpomuvie, "Tragedy of Commons: Analysis of Oil Spillage, Gas Flaring and Sustainable Development of the Niger Delta of Nigeria," Vol. 4, No.2, (2011).

⁶⁰ "Nigeria: Existence and activities of the Niger Delta Volunteer Force; treatment of its members and leaders by the authorities (1998-1999)," https://www.refworld.org/docid/3ae6ad6c8c.html

https://corporate.dw.com/en/hostilities-in-nigerias-niger-delta-blamed-on-government-neglect/a-41270034.

Analysis of UN Efforts

The UN has a strong presence in Nigeria, with several resident and non-resident agencies. The Nigeria Country Team, a group of representatives and practitioners from UN agencies, is engaged in capacity development, technical assistance, data collection and analysis, and policy advising across the gender, environmental, development, and humanitarian spaces. Unlike South Sudan and Iraq, there is no UN peacekeeping mission in Nigeria.

However, the UN has supported Nigeria at the national, regional, state, and local levels. At the national level, as part of its commitment to the UN Sustainable Development Goals (SDGs), the Nigerian government has created a Nationally Determined Contribution (NDC) plan to address climate and environmental issues. In this NDC, Nigeria pledges to stop gas burning by 2030.⁶²

The UN has also been active in Nigeria at the state level, particularly when it comes to humanitarian aid. In Northeast Nigeria, the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) is active in the Borno, Adamawa, and Yobe (BAY) states. The conflict in Northeast Nigeria is related to the rise of non-state armed groups, poverty, and weak or absent governance institutions. More than two million people have been internally displaced due to insecurity in this region. In addition, the three factions of Boko Haram have an antagonistic view of humanitarians. Originally formed in opposition to the Nigerian government, Boko Haram views humanitarians as collaborators with the government who aim to change the local culture and religion.⁶³ One senior humanitarian explained that because of these views, UN actors have extremely limited contact with Boko Haram outside hostage negotiations. The conflict in the BAY states is also exacerbated by food insecurity, flooding (which spreads water-borne diseases such as cholera), and a weakened healthcare system.⁶⁴

Furthermore, in the more politically conservative North, women and children are especially vulnerable. Due to a lack of access to education, economic opportunities, justice, and healthcare, women and children are excluded from much of public life. Decision-making at both the household and political level is not a reality for most women and children in Northern Nigeria.

Even when humanitarian aid is distributed, adverse power dynamics emerge. For example, UN OCHA staff discovered that food rations are sometimes abused. These rations, calibrated by the number of people in a household, are occasionally taken by male members of the household, who sell them for meat or for money to marry a second wife. Despite UN OCHA efforts to reach the most vulnerable, intended beneficiaries are not being served. Despite these challenges, UN

⁶² Nigeria's Nationally Determined Contribution (2021),

https://unfccc.int/sites/default/files/NDC/2022-06/NDC_File%20Amended%20_11222.pdf.

⁶³ "Interview with Senior Humanitarian," (2023).

⁶⁴ "Interview with Senior Humanitarian," (2023).

OCHA in Nigeria is ramping up humanitarian and development efforts, having delivered humanitarian aid to 4.7 million people in 2022.⁶⁵

In Nigeria, UN humanitarian aid exists only in the three BAY states in the Northeast. While communities in the Niger Delta are being displaced due to oil spills and gas flaring, humanitarian aid is not available there. Instead, in the South, UN assistance takes a different form, such as local environmental and climate assessments.

One of the major projects the UN implemented in the South was the 2011 Environmental Assessment of Ogoniland.⁶⁶ At the request of the Federal Government of Nigeria, over 14 months, UNEP team members conducted an assessment in the Ogoni region of Rivers State. They visited 200 locations, examined 122 kilometers of pipeline, evaluated 5,000 medical records, and met with over 23,000 people at local community meetings.⁶⁷ The assessment concluded that over 50 years of oil operations in Ogoniland have led to devastating environmental effects that are more wide-ranging than previously expected.

Many projects have emerged from UNEP's findings. One is a school program called Green Frontiers. Green Frontiers, pioneered by UN staff, is an environmental education initiative in the Ogoni region meant to encourage youth to take action for environmental preservation. The pilot phase included eight schools in Ogoniland, and over 650 students participated.⁶⁸ Activities in the Green Frontiers program include tree planting and participation in community sanitation days.

Another outcome of the Ogoniland Assessment was the subsequent cleanup initiative. In 2018, UNEP worked to strengthen the existing Hydrocarbon Pollution Remediation Project (HYPREP). By identifying and distributing responsibilities within established project management systems, the project aimed to assist in the oil contamination cleanup in Ogoniland. HYPREP was established by the Federal Ministry of Environment and continues its work today.

The UN has had mixed experiences engaging local communities in a way that prioritizes their experiences and knowledge. UN-REDD is currently funding a 'Reducing Emissions from Deforestation and Forest Degradation with the added goals of Conserving and Enhancing Forest Carbon Stocks, and Sustainably Managing Forests' (REDD+) initiative. This initiative incorporates local and political representation to strengthen responses to deforestation. It does so,

https://reliefweb.int/report/nigeria/nigeria-humanitarian-response-plan-2023-february-2023?gclid=CjwKCAjwoIqhB hAGEiwArXT7K5Smar2W2AXiyKXUBNimtkalGg-BT956xrB4vS4QeA4l4Vz2QOdB5BoCwDcQAvD_BwE.

⁶⁶ "Environmental Assessment of Ogoniland: Site Factsheets, Executive Summary and Full Report," UNEP.
 https://www.unep.org/resources/assessment/environmental-assessment-ogoniland-site-factsheets-executive-summary
 -and-full?_ga=2.91059354.1036452039.1677785187-223900786.1677677927.
 ⁶⁷ Ibid

⁶⁵ "Nigeria Humanitarian Response Plan 2023 (February 2023)," UN OCHA, 16 February 2023,

⁶⁸ "Green frontiers," UNEP, https://www.unep.org/explore-topics/disasters-conflicts/where-we-work/nigeria/green-frontiers?_ga=2.215725783.177958089.1680035746-223900786.1677677927.

however, in a symbolic manner rather than a substantive one. This means that certain representative stakeholders, such as NGOs, are prioritized over community representatives.

In the case of the Nigeria-REDD program, while certain NGOs do have relationships with local people, they are not required to be accountable to locals, unlike community-level governmental authorities. Furthermore, the Nigeria-REDD program held consultative meetings in which local government officials were sidelined in favor of the state government. To strengthen local political participation in meaningful decision-making processes, Nigeria-REDD should consider prioritizing working with local governments over state governments and NGO representatives.⁶⁹ Without prioritizing local government, forest-dependent Nigerians are susceptible to elites' desires regarding deforestation. This same logic applies to the oil and gas sector.



⁶⁹ Emmanuel Nuesiri, "Godfather Politics and Exclusionary Local Representation in REDD+: A Case Study of the Design of the UN-REDD-Supervised Nigeria-Redd Proposal," Global Forest Governance and Climate Change (2018), Palgrave Macmillan. London, UK, https://doi.org/10.1007/978-3-319-71946-7_2.

Key Takeaways

The UN is actively engaged in Nigeria, but this does not mean that the effects of oil spills, gas flaring, and deforestation on increasing GHG emissions have been meaningfully managed. Building on established mechanisms for mitigation, the UN could better support Nigeria's responses to climate change in three ways.

First, the UN could give local governments more say in policy formulation. It could do this by incorporating local government officials into decision-making boards, such that clean-ups and climate mitigation programs are more inclusive and effective. The inclusion of local government perspectives in decision-making legitimizes policy outcomes, ensuring that they are considerate of the culture and practices of the local communities that they are intended to serve. In Nigeria, local government authorities have unions representing their interest to the central government and international organizations, including the Association of Local Governments of Nigeria and the Commonwealth Local Government Forum.⁷⁰ These unions could be included in policy boards, such as the UN-REDD, to create more inclusive and sustainable mitigation policies.

Second, the UN could capitalize on its global influence to pressure the Nigerian government to keep up with its commitment to eliminate GHG emissions by 2060 and to enforce its regulatory framework for GHG-emitting sectors. The UN could do this by continuing to monitor and evaluate mitigation in the oil and gas industry and the deforestation sector in Nigeria. It could also use its field research to advocate for the needs of particular communities affected by GHG emissions. Tailored responses to individual communities' experiences are key to effective programming for sustainable climate action. The UN could also use its influence to pressure the government to regulate MNCs more efficiently, such that mitigation efforts are more effective.

Third, the UN could consider expanding humanitarian aid delivery to southern Nigeria, and ensure that cross-sectional considerations in humanitarian policy translate into implementation. Northern Nigeria certainly needs aid, however, the plight of Nigerians in the Niger Delta should not be overlooked. By diversifying its humanitarian response to include southern Nigeria, the UN could provide for communities affected by overlapping climate and conflict risks.

The conflict in the South that leads to attacks on oil pipelines is exacerbating the effects of climate change. Those affected, who no longer have access to viable soil and clean water, need humanitarian assistance. Therefore, additional humanitarian operations in the South could address both climate change and conflict. Finally, by learning from the shortcomings of aid delivery in Northern Nigeria, particularly regarding unintentional gender discrimination in aid delivery, the UN could more effectively and inclusively implement aid delivery in the South.

⁷⁰ "Clgf Pledges to Help Strengthen Local Government in Nigeria," (2011),

https://www.clgf.org.uk/whats-new/news/clgf-pledges-to-help-strengthen-local-government-in-nigeria/?muraadminp review=&mobileformat=false.

3c. Iraq

Problematic

After several decades of periodic violent conflict and subsequent political instability, Iraq has also been struggling to mitigate and adapt to climate change. Corruption, political competition, strong dependency on fossil fuel exports, and financial mismanagement have inhibited the government's ability to respond to climate change. According to recent reports by the World Bank, Iraq is highly vulnerable to several climate-related shocks, including flooding, droughts, dust storms, climate-enabled epidemics, earthquakes, desertification.⁷¹ Public sectors such and as agriculture, water, food, housing, and public health are negatively impacted by these disasters, which have a direct, but unequal, impact on people's lives in Iraq.



The 2021 report "Migration, Environment, and

Climate Change in Iraq" by the IOM states that increasing temperatures and low precipitation rates have intensified droughts, desertification, dust, and sand storms in Iraq.⁷² Temperatures above 50°C in summer, with extreme heat waves, are becoming more frequent and are predicted to continue rising, diminishing soil moisture and amplifying water scarcity.⁷³ With only 150 mm of rainfall per year and extremely reduced flow to the Tigris and Euphrates, mainly due to upstream dams in Türkiye and Iran, the country has reached a Water Stress Index of 3.7 out of 5 points. This index is only expected to rise in the future, reaching 4.6 points by 2040. Decreased rainfall would further extend drought periods and jeopardize food and water security in Iraq.⁷⁴

Desertification occurs when low precipitation rates result in the loss of vegetation, which protects soil through moisture retention in plant roots and prevents wind erosion of upper soil layers (geologic saltation). As a consequence, the soil is left exposed to damaging sunlight,

⁷¹ "World Bank Climate Change Knowledge Portal," Vulnerability | Climate Change Knowledge Portal, https://climateknowledgeportal.worldbank.org/country/iraq/vulnerability#:~:text=Iraq%20is%20most%20susceptibl e%20to,%2Drelated%20epidemics%2C%20and%20earthquakes.

⁷² "Migration, Environment, and Climate Change in Iraq," International Organization for Migration, 2022, https://iraq.un.org/sites/default/files/remote-resources/079bd27fc79b4084e48157653d335c8f.pdf.

⁷³ Nasrat Adamo et al., "Climate Change: Consequences on Iraq's Environment," Journal of Earth and Geotechnical Engineering, 8, no. 3, 2018, https://www.researchgate.net/publication/324681020_Climate_Change_Consequences_on_Iraq's_Environment.

⁷⁴ Hélène Sallon, "In Iraq, Desertification Leads to Multiple Sandstorms," Le Monde, May 2022, www.lemonde.fr /en/international/article/2022/05/17/in-iraq-desertification-leads-to-multiple-sandstorms_5983823_4.html.

creating desert-like conditions.⁷⁵ Desertification affects approximately 39% of Iraq's territory,⁷⁶ increasing the frequency and intensity of dust and sandstorms both nationally and regionally.⁷⁷

Water access is another key regional challenge due to its increasing scarcity. As a downstream state in the Tigris and Euphrates River basins, Iraq is largely reliant on Türkiye and Syria, and to a lesser extent Iran, for its access to fresh water.⁷⁸ Competition for energy and water among Iraq's upstream neighbors has led them to construct dams, which decrease downstream water quantity and quality.⁷⁹ More seawater intrudes upon these rivers as their freshwater levels lower, increasing their salinity. Currently, 50% of Iraq's agricultural land is suffering from over-salinization. Additionally, the industrial waste from oil and gas considerably reduces the quality of water. These factors combined drastically decrease the amount of land and water suitable for crop production, threatening both food security and public health.⁸⁰

Soil degradation also decreases soil's ability to absorb water, making rainfall less manageable. These impacts are particularly acute amongst Iraq's southern Marshlands communities,⁸¹ which struggle to adjust to unpredictable extreme weather conditions between drought and flooding.⁸² Many are thus forced to abandon traditional ways of life as they relocate to nearby urban centers.

These interlinked and mutually reinforcing climate challenges deepen extant intergroup and interstate tensions, exacerbating and complicating conflict risks in Iraq.⁸³

Contextualization

Iraq is a diverse country with a wide range of religious, ethnic, and cultural groups. The population of the country is approximately 38 million, with Muslims representing 97% of the population. The three largest demographic groups are Shia Muslims, Sunni Muslims, and Kurds. Due to the absence of recent census data as well as political sensitivities, reliable demographic distribution is not accessible. According to the 2020 International Religious Freedom Report,

⁷⁵ Zuhair Farooq and Ahmed Fartm, "Desertification in Iraq and How to Combat It," IOP Conference Series: Earth and Environmental Science, August 2020, https://www.researchgate.net/publication/343891389_Desertification_in_ Iraq_and_how_to_Combatit

⁷⁶ "Iraq: Expending Deserts Searing Temperatures and Dying Land," International Committee of the Red Cross, https://www.icrc.org/en/document/iraq-expanding-deserts-searing-temperatures-and-dying-land-climate-crises-deepe n-struggle.

⁷⁷ Zuhair Farooq and Ahmed Fartm, "Desertification in Iraq and How to Combat It."

⁷⁸ Türkiye and Syria contribute 90% and 10% of the Euphrates' water flow respectively. Türkiye, Iraq and Iran contribute 40%, 51% and 9% of the Tigris' water flow respectively. For more see: Aysegul Kibaroglu and Waltina Scheumann, "Evolution of Transboundary Politics in the Euphrates-Tigris River System: New Perspectives and Political Challenges," *Global Governance* 19, no. 2 (2013): 282.

⁷⁹ Tann, Noa, and Madeline Flamik. "Interstate Dam Disputes Threaten Global Security." American Security Project, 2018. http://www.jstor.org/stable/resrep19813.

⁸⁰ Zuhair Farooq and Ahmed Fartm, "Desertification in Iraq and How to Combat It."

⁸¹ "Migration, Environment, and Climate Change in Iraq," International Organization for Migration. ⁸² Ibid.

⁸³ "Climate, Peace and Security Fact Sheet: Iraq," Stockholm International Peace Research Institute (2022), https://www.sipri.org/sites/default/files/NUPI_Fact_Sheet_Iraq_April2022_new%5B46%5D.pdf.

Shia Muslims, predominantly Arabs, represent 55-60% of the population. Sunni Muslims constitute around 40% of the Iraqi population, with Arabs representing 24% and Kurds 15%. Altogether, Arabs represent approximately 80% of the population, and Kurds around 15%. In terms of geography, Shia live predominantly in the south and east and make up a majority of Baghdad's population; whereas Sunnis are mostly located in the west, center, and north.

Due to decades of on and off conflict, but also the negative impacts of climate change, Iraq struggles immensely with internal displacement. According to the IOM, approximately 1.2 million people are internally displaced, mainly in the North of the country.⁸⁴ Iraqi ethnic and religious minorities have been considerably impacted by the ISIS occupation, and their return has been complicated by the destruction of housing during the conflict.⁸⁵ Aside from terror-related displacement, the lack of economic opportunities and water access in rural areas is also causing rapid urbanization in Iraq, with 70% of the population now living in cities.⁸⁶ This places additional burdens on urban public infrastructure, which already struggled to meet the demands of city residents. Iraq's education system has suffered considerably, with 3.2 million school-aged children not attending school.⁸⁷ Half of all internally displaced children are left outside of the educational system altogether, with girls being disproportionately affected. In addition, youth unemployment is estimated at 32% for males and 62% for females.⁸⁸

Iraqi institutions themselves pose challenges to effectively combating climate change. In 1992, the autonomous Kurdistan region was established inside Iraq, making the country's political landscape more complex. By then, the foundations had been set for proportional representation within the federal government for the aforementioned ethno-sectarian groups. During the invasion of Iraq by the United States, this system, called the "muhasasa," was institutionalized, and it is now built into the national constitution and power-sharing agreements among Iraq's ministries.⁸⁹

Over the last few decades, the flaws of this approach have become increasingly apparent and contested. Each political party is incentivized to retain power within its ethnic group, breeding patronage networks, nepotism, and elite collusion. Protests against the muhasasa began as early as 2019, but have escalated since.⁹⁰ Attempts to form a government after the 2021 parliamentary

⁸⁴ "Overview of Internal Displacement in Iraq," International Organization on Migration, 2021, https://iraqdtm.iom. int/files/ILA/202112132848459_iom_DTM_ILAVI_Overview_of_Internal_Displacement_in_Iraq.pdf.

⁸⁵ "Country Report: Iraq," Minority Rights Group International, https://minorityrights.org/country/iraq/.

⁸⁶ "Country Report: Iraq," UN-Habitat, https://unhabitat.org/iraq and "Displacement Tracking Matrix," IOM, 2021 https://dtm.iom.int/iraq.

 ⁸⁷ "Quality Education: UNDP Iraq's commitment to the Sustainable Development Goals in Iraq," UNDP, 2023, https://www.undp.org/iraq/stories/quality-education-undp-iraqs-commitment-sustainable-development-goals-iraq.
 ⁸⁸ "Country Office Annual Report 2022: Iraq," UNICEF. 2022,

https://www.unicef.org/media/136761/file/Iraq-2022-COAR.pdf.

⁸⁹ Arwa Ibrahim, "Muhasasa, the Political System Reviled by Iraqi Protesters," Al Jazeera, 2019, https://www.aljazeera.com/news/2019/12/4/muhasasa-the-political-system-reviled-by-iraqi-protesters.

⁹⁰ İbid.

election exacerbated this problem, after several months of standstill while the coalescing parties selected the prime minister in October 2022. This growing discontent with the government is only intensified by the increasing visibility of climate change challenges.

The muhasasa also affects the economy of Iraq. Each ministry has control over its budget, creating incohesive public resource allocation. The nation's most important ministries, like the Ministry of Oil, are an exception, with no ethno-sectarian rule. This is especially pertinent when considering that Iraq's national revenues mainly depend on its crude oil industry. As of June 2022, "oil revenues have accounted for more than 99% of exports, 85% of the government's budget, and 42% of gross domestic product (GDP)."⁹¹ This alone has made the Minister of Oil and the Minister of Environment contradict one another in their messaging, especially on climate change.⁹² All of this points to bureaucratic disagreement on natural resource management in Iraq.

Domestic expenditures are, therefore, also heavily dependent on oil industry rents. These patronage networks in Iraq's ministries have created employment opportunities; however, this has created a bloated public sector. Over 40% of Iraq's workers are employed in the public sector.⁹³ As of 2020, 75% of state expenditures were allocated simply to paying off the salaries of these employees, 90% of which were funded by oil revenues. But the volatile effects of COVID-19 on oil prices made this very difficult for the state to accomplish, resulting in months of unpaid labor for many civil servants in Iraq.⁹⁴ With so much funding going towards salaries, little is left for the public services needed for rapid climate- and conflict-driven urbanization.

Like anywhere else, the climate crisis is a transnational issue in Iraq, and many external actors are involved in addressing Iraqi climate security. Desertification and water disputes are frequent subjects of bilateral and multilateral dialogue for Iraq and its neighbors. Tensions over water access between Iraq and its neighbors were at their highest during the 1980s and 1990s. After a period of cooperation during the 2000s, momentum to reach an agreement over sustainable water sharing and management with Syria and Türkiye has stalled as a result of the Syrian Civil War and disputes over the presence of members of the Kurdistan Workers' Party (PKK) in Iraq.⁹⁵ Despite recent Iranian cross-border military operations targeting Kurdish militant groups based in Iraq and concerns over water sharing in the Tigris basin, bilateral relations between the two countries seem to be conducive to increased cooperation on climate security issues.

⁹¹ "Overview: Iraq," World Bank. https://www.worldbank.org/en/country/iraq/overview

⁹² Despite the Oil Minister's denial, the Environment Minister has recently made a public statement acknowledging the negative impact of gas flaring on civilians' health and the impending need for energy sector reform. For more see: Esme Stallard, "Iraqi Minister Admits Gas Flaring Cancer Link," BBC News, 17 October 2022, https://www.bbc.com/news/science-environment-63284896

 ⁹³ Samya Kullab, "Bloated Public Salaries at Heart of Iraq's Economic Woes," AP News, 23 October 2020, https://apnews.com/article/financial-markets-baghdad-iraq-middle-east-cf1789e0fa482600f133aae71a8d34d8
 ⁹⁴ Ibid.

⁹⁵ "Turkey, Syria and Iraq: Conflict over the Euphrates-Tigris," Climate Diplomacy,

https://climate-diplomacy.org/case-studies/turkey-syria-and-iraq-conflict-over-euphrates-tigris.

Following the territorial defeat of the Islamic State (ISIS), Iraq chose to maintain its partnership with the United States. The U.S. maintains a non-combat military presence in Iraq, contributes a significant amount of security assistance to Iraq's security forces, and remains Iraq's top humanitarian donor.⁹⁶ Although the U.S. military presence in Iraq was recently reaffirmed by Prime Minister al-Sudani, it remains a controversial issue, especially amongst supporters and members of Iran-backed political parties and militias. Tensions between the U.S. and Iran-backed Iraqi groups have escalated into violence in the past. These groups are ostensibly under the authority of the Ministry of Interior as part of the Popular Mobilization Forces (PMF), however, they are not fully accountable to Iraq's central government. This violence has been limited to isolated incidents, however, the presence of such militia groups and non-state armed groups like ISIS continues to complicate efforts to mitigate and adapt to the ongoing climate crisis.

Though widespread incidents of organized violence have largely abated since the territorial collapse of ISIS, Iraq is still at risk of conflict. Remnants of ISIS continue to operate in remote areas in the north. In its current state, the group cannot threaten the state's legitimacy beyond its immediate area of operations, however, it remains a concern for local and national governments.

Tensions between Iraq's central government and the Kurdistan Regional Government (KRG) are another potential source of instability. Punitive cross-border operations by Turkish and Iranian forces targeting Kurdish militant groups in Iraqi Kurdistan have aggravated relations.

In recent years, the most significant contributor to conflict risk has been popular protests against the central government. Frustrated by ineffective and corrupt governance, unemployment, and failing public services and infrastructure, citizens have repeatedly taken to the streets in recent years to demand reforms. These protests, coupled with heavy-handed responses from security forces and PMF groups, represent a potential pathway to renewed violent conflict in Iraq.

Analysis of UN Efforts

The United Nations Assistance Mission for Iraq (UNAMI) and the UN Country Team (UNCT) are the principal actors involved in climate and security risk management in Iraq. UNAMI's mandate, under Security Council resolution 2576 (2021), first recognized climate and ecological change as threats to stability in Iraq in 2021.⁹⁷ This resolution, which was reaffirmed under Security Council resolution 2631 (2022), expanded on previous mandates, authorizing UNAMI to support the Iraqi government's climate adaptation and mitigation efforts.⁹⁸ Two years later, the mission is anticipating the arrival of its first dedicated Climate, Peace, and Security Advisor in May 2023.⁹⁹ In general terms, the Climate, Peace, and Security Advisor's role varies from

⁹⁶ Christopher M. Blanchard, "Iraq," Congressional Research Services, 8 February 2023, https://crsreports.congress.gov/product/pdf/IF/IF10404.

⁹⁷ UN Security Council Resolution 2576 (May 27, 2021), UN Doc. S/RES/2576.

⁹⁸ UN Security Council Resolution 2631 (May 26, 2022), UN Doc. S/RES/2631.

⁹⁹ "Interview with UN DPPA personnel," (2023).

mission to mission, and as a new position, it will evolve over time. This addition will hopefully be key to including climate security considerations in UNAMI's support of the Iraqi government.

Iraq's UNCT, which coordinates the activities of 19 resident and five non-resident UN agencies currently operating in Iraq, has also prioritized supporting the Iraqi government in addressing climate change. The UNCT has identified "Promoting Natural Resource and Disaster Risk Management, and Climate Change Resilience" (SP4) as a strategic priority for achieving the UN SDGs in Iraq. This inclusion affirms the UNCT's commitment to integrating climate into its strategic plan. Importantly, this approach considers both rapid-onset climate shocks as well as the long-term environmental stressors caused by a changing climate. Though, perhaps by design, SP4's key outcomes do not explicitly mention climate security.

UNCT action across the five strategic priorities is coordinated by a Joint Steering Committee, which meets at least annually and is led by officials from the Iraqi government and the UN Resident Coordinator. This inclusive body works to align the UN's priorities in Iraq with those of the host government. Priority Working Groups (PWGs) have been established to coordinate, monitor, and report on activities for each of the five strategic priority areas. The PWGs are mandated to meet quarterly, but in practice, they meet more often on an ad hoc basis. PWG4, responsible for disaster risk management (DRM) and climate, is co-chaired by UNDP, FAO, and WFP, and includes technical experts from UNICEF, IOM, UN-Habitat, and the WHO. Several other UN agencies are active in Iraq, including UNEP, which is assisting the Iraqi Government in drafting its National Adaptation Plan, and UNESCO, which is working to protect Iraqi cultural heritage sites impacted by climate and conflict stressors.

PWG4 plays an important role in synchronizing climate actions across the many UN agencies active in Iraq. Nevertheless, these organizations largely continue to operate in isolation from one another, with varying degrees of engagement with local communities. Despite this, several UN agencies are pursuing projects that will bolster Iraq's resilience to climate-security threats.

In partnership with the Ministry of Environment, UNDP began the three-year *Catalytic Climate Action in Iraq* project in 2022 to develop renewable resources, increase resilience to climate-induced hazards, and implement natural resource management policies. UNDP is helping to prepare officials from the Ministry of Water Resources for water access negotiations with Türkiye and Iran. This capacity-building entails supporting the Iraqi team with technical water management expertise and negotiation skills training. At the national and sub-national levels, key outputs of the project include supporting the Iraqi government's energy transition and improving drought preparedness and risk reduction.¹⁰⁰ As climate impacts worsen, UN and Iraqi leaders will

¹⁰⁰ "Catalytic Climate Action in Iraq: United Nations Development Programme," UNDP, Accessed 3 May 2023, https://www.undp.org/iraq/publications/catalytic-climate-action-iraq.

continue to prioritize similar projects. This will hopefully make coordination and integration of climate security considerations into future UN activities in Iraq a growing imperative.



(Box 5): Climate, Peace, and Security Stakeholder Mapping: Iraq

<u>Key Takeaways</u>

Given the vast amount of collaboration the UN has taken on with the national government of Iraq, it appears as though the UN is using this opportune time to build off the high motivation that the current administration has for responding to climate change. This is to be expected, considering the current president of Iraq is the former Minister of the Environment. It would be beneficial for the UN to continue to capitalize on this high level of political will by encouraging the national government to engage more with local authorities, communities, and CSOs. With this in mind, there are four key considerations for UN climate and security action in Iraq:

First, the UNCT and UNAMI may continue to learn from local solutions and find potential for upscaling. While individual UN agencies have particular projects in which they engage with local communities, most administrative activity at the UNCT level does not reach the local level. In this way, the UNCT is not equipped to act as a direct facilitator between local populations and the national government. However, the UNCT could assist in creating policies and mechanisms which more closely connect national and local actors. While the UNCT might not always work directly with local organizations, it would benefit from continued information-gathering on their activities to propose potential solutions that might be upscaled by the Iraqi government. One such local actor working on solutions at the nexus of climate and conflict is highlighted in Box 6.

(Box 6): Example of Community Engagement Peace Paradigms Org. Conducts Mediation with Local Leaders

Peace Paradigms Organization (PPO), a private consulting company based in Iraq, has been facilitating mediation for inter-community, localized agreements since 2019. In response to displacement caused by an ISIS-related land dispute, PPO helped local leaders from the sub-district of Zummar, both Kurdish and Arab, establish a political dialogue and sign the "Covenant for Peaceful Coexistence and Support to the Rule of Law" to create coordination and collaboration in the return of IDPs to the region. As climate change creates more internal displacement within Iraq, a growing number of rural and tribal communities are entering urban areas, creating tension among the residents with competing social norms. As a response, PPO is aiming to use the need for climate adaptation as an entry point for dialogue. In their up-and-coming work, PPO aims to help respond to climate-related displacement coming from the marshlands into the city of Basra by engaging local tribal leaders and police to redefine the local social contract and build social cohesion. In collaboration with the IOM, they have published a "Local Peace Processes Toolkit" which can instruct other local actors on how to engage in similar work throughout Iraq.



Photo: PPO (2021)

Second, aside from local actors, the UNCT and UNAMI could consider the positionality and power of other external actors in Iraq as well. More research is needed on how exactly the national government and the UNCT should interact with the private sector in the country. As for bordering states with climate impacts on Iraq like Kuwait, Türkiye, and Iran, the UN should continue to provide technical support in negotiations regarding resource management and desertification mitigation.

Third, the UN could prioritize unifying the efforts of complex multi-agency missions. UNAMI and the UNCT are both mature organizations and currently benefit from a positive relationship with their host government. The Joint Steering Committee and the functionality of the priority

working groups are evidence of this maturity. As previously noted, climate security has not been a focus of UNAMI or the UNCT thus far. The reasons for this may be academic, political, or a result of the field's emergent status as an analytical lens in conflict mitigation

Lastly, the new Climate, Peace, and Security Advisor will require agency and agenda-setting power to effectively integrate climate security into existing mission structures in Iraq. Having the simple ability to travel throughout the country to visit government counterparts, affected communities, and project sites will be critical for the advisor's situational awareness and relationship-building early in their tenure. This is a challenge for many of the UN operations in Iraq (outside of the KRG), where freedom of movement is limited due to security concerns. Travel constraints inhibit UN staff's ability to engage with Iraqis in official and unofficial capacities, making it more difficult for the mission to understand and support Iraqi needs.

4. Conclusions

On a positive note, the UN as a whole has moved beyond empty rhetoric in its approach to climate and security risk management. With the recent and upcoming appointment of climate, peace, and security advisors, it is evident that these challenges are increasingly prioritized. On the international level, the UN acts as a liaison, mediator, and facilitator in environmental negotiations. It has also shaped many international and national policies focusing on climate change prevention, mitigation, and adaptation. And, within each country where they operate, UN agencies and missions work with national actors to implement innovative projects.

However, the UN falls short in its ability to engage with, or even to simply learn about municipal, local, and tribal communities. Much debate revolves around whether it is appropriate or even within the UN's authority to involve itself directly in local affairs, since this may be seen as a threat to national sovereignty. But this does not absolve the UN of the responsibility to learn about local perceptions and realities, particularly in conflict-affected countries where civilian populations may have complex relationships with national leadership structures. Because the UN works with national governments, as its Member States and main constituents, it often internalizes and reflects the frameworks of current regimes and administrations. These frameworks may be rooted in corruption and clientelism, or at the very least lack innovation.

UN personnel are often not reflective of the people who live in the countries where they work. To enhance local connectivity, the UN should consider creating more opportunities for including locals among its recruits and observers. This inclusion could help the UN take more thoughtful action in selecting trusted community partners, combating misinformation, and adopting more intersubjectivity, impartiality, and critical approaches.

In some cases, this lack of local knowledge is due to inaccessibility. Conflict-affected states may not have the resources to provide secure access for UN staff into these communities. Therefore, alternative methods of communication and engagement could be explored. One such method that the UN could employ is increasing the use of evidence-based surveys for more substantial data collection, using low-tech and low-cost devices such as cell phones and tablets.¹⁰¹ This data could then be used to map social relationships, geolocate them around environmental phenomena, and scale up effective local climate change responses across communities.¹⁰²

There is also room for improvement for the UN on the internal level. While in some countries, like Iraq, the UN has been present for decades and has established a vast network of partners, in other countries, it is less well established and struggles with coordination. Across contexts, UN country teams and missions in conflict-affected states are just beginning to integrate climate

¹⁰¹ Adekola Olalekan et al., "Towards adoption of mobile data collection for effective adaptation and climate risk management in Africa," RMetS (2022), https://doi.org/10.1002/gdj3.156.

¹⁰²Adelekan et al., "Intangible Cultural Heritage, Diverse Knowledge Systems, and Climate Change," ICOMOS & ICSM CHC (2022).

security concerns into their structures, work plans, and standard operating procedures.

We summarize our findings in the following set of considerations for UN support to climate change responses in conflict-affected states:

- 1. **Coordination** in data-gathering, data-sharing, analysis, and dissemination of information is key to streamlining the integration of climate and security risk management processes.
- 2. **Transparency** among and between UN actors and partners on data, analysis, implementation, and monitoring and evaluation may greatly increase climate-security capabilities.
- 3. **Inclusion** is crucial at every level, from leaders to donors, implementers, and partners, but especially at the level of UN interaction with **local** governments and communities.
- 4. While the UN depends on national governments' consent and cooperation, climate change responses may require more **critical approaches** to national power structures.

A major limitation of our work was a lack of transparency within and among UN teams and missions. We attempted to assess complex systems of climate and security risk management through research and interviews, but we may have missed or misinterpreted some roles/linkages.

Fruitful areas for future research may include expanding this study to examine other countries, or to center actors other than the UN, such as regional, national, and/or sub-state authorities.

WORKS CITED

- "2020 International Religious Freedom Report: Iraq." (2020). U.S. Department of State. https://www.state.gov/reports/2020-report-on-international-religious-freedom/iraq/.
- Adamo, Nasrat, et al. "Climate Change: Consequences on Iraq's Environment." (2018). <u>https://www.researchgate.net/publication/324681020_Climate_Change_Consequences_o</u> <u>n_Iraq's_Environment</u>.
- Adekola, Olalekan, et al. "Towards adoption of mobile data collection for effective adaptation and climate risk management in Africa" RMetS. (2022). <u>https://doi.org/10.1002/gdj3.156</u>.
- Afinotan, Urenmisan. "How serious is Nigeria about climate change mitigation through gas flaring regulation?" Environmental Law Review Vol. 24 (4) 288-304 (2022).
- Andrews, Matt, Lant Pritchett, and Michael Woolcock. Building State Capability: Evidence,
- Analysis, Action. Oxford University Press, 2017. Part II.
- Atem, James Maker, "Efficacy of Dispute Resolution Process among Ethnic Groups Within Jonglei State of South Sudan". (2016). Lucknow, IJMCI, Issue 2, (PDF). <u>https://www.researchgate.net/publication/311546148_Efficacy_of_Dispute_Resolution_P</u> <u>rocess_amongst_Ethnic_Groups_within_Jonglei_State_of_South_Sudan</u>.
- Atem, James Maker, "Jonglei Canal: The Flawed Logic of Hydro-Diplomacy in the Nile Basin". Journal of International Affairs at Columbia University in the City of New York. (2022). Vol. 75th, Issue No.1, <u>https://www.jstor.org/stable/27203131</u>.
- Akpomuvie, Orhioghene. "Tragedy of Commons: Analysis of Oil Spillage, Gas Flaring and Sustainable Development of the Niger Delta of Nigeria", Vol. 4, No.2, (2011).
- Autesserre, Severine, 'Peace by Piece', The Frontlines of Peace: An Insider's Guide to Changing the World (New York, 2021; online edn, Oxford Academic, 18 Feb. 2021).
- Aysegul Kibaroglu and Waltina Scheumann, "Evolution of Transboundary Politics in the Euphrates-Tigris River System: New Perspectives and Political Challenges," Global Governance 19, no. 2 (2013): 282.
- Biddle, Stephen. "Nonstate Warfare: The Military Methods of Guerillas, Warlords, and Militias." Princeton University Press. (2021). <u>https://doi.org/10.2307/j.ctv17nmzgx</u>.
- Blanchard, Christopher M. "Iraq," Congressional Research Services, (2023). https://crsreports.congress.gov/product/pdf/IF/IF10404.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. The Logic of Political Survival. Cambridge, MA: MIT Press.
- Campbell, John. "U.S. Policy to Counter Nigeria's Boko Haram" Council on Foreign Relations, Council Special Report No. 70 (2014).
- "Catalytic Climate Action in Iraq: United Nations Development Programme." UNDP. Accessed May 3, 2023. <u>https://www.undp.org/iraq/publications/catalytic-climate-action-iraq</u>.
- "Climate Change and Flooding." UNICEF South Sudan. (2021) https://www.unicef.org/southsudan/what-we-do/climate-change-and-flooding.
- "Climate Change Fueled Rains Behind Deadly Nigeria Floods, Study Finds." (2022) <u>https://www.voanews.com/a/climate-change-fueled-rains-behind-deadly-nigeria-floods-st</u> <u>udy-finds-/6838154.html</u>.
- "Climate Governance: Assessment of the Government's Ability and Readiness to Transform Nigeria into a Zero-Emissions Society," (2022). Climate Action Tracker. <u>https://climate</u> actiontracker.org/documents/1014/2022_02_CAT_Governance_Report_Nigeria.pdf.

- "Climate Governance in Nigeria," (2022). Climate Action Tracker. https://climateactiontracker.org/publications/climate-governance-in-nigeria/.
- "Climate, Peace and Security Fact Sheet: Iraq" (2022). SIPRI. <u>https://www.sipri.org/sites/default/</u> files/NUPI_Fact_Sheet_Iraq_April2022_new%5B46%5D.pdf.
- "COP26: Nigeria vows to reach net-zero by 2060 but stresses the role of gas" (2021)., <u>https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-tran</u> <u>sition/110321-cop26-nigeria-vows-to-reach-net-zero-by-2060-but-stresses-role-of-gas</u>
- "Country Office Annual Report 2022: Iraq." (2022). UNICEF. https://www.unicef.org/media/136761/file/Iraq-2022-COAR.pdf.
- "Country Report: Iraq." Minority Rights Group International. https://minorityrights.org/country/iraq/.
- "Country Report: Iraq".UN-Habitat. https://unhabitat.org/iraq
- Dietz, Thomas, Elinor Ostrom and Paul Stern. 2003. "The Struggle to Govern the Commons." Science. <u>https://www.science.org/doi/10.1126/science.1091015</u>
- "Displaced by floods, Nigerians forced to use flood water despite cholera risk." (2022) <u>https://</u> www.cnn.com/2022/10/26/africa/bayelsa-flood-victims-nigeria-intl-cmd/index.html
- "Displacement Tracking Matrix" (2021). IOM. https://dtm.iom.int/iraq.
- Egborge, A.B.M. "Government, Oil Companies, the People and the Niger Delta Environment." (2000) Delta State University 4th Convocation Lecture. Benin City; Ben Miller Books.
- "Environmental Assessment of Ogoniland: Factsheets, Executive Summary, and Report." UNEP. <u>https://www.unep.org/resources/assessment/environmental-assessment-ogoniland-site-fac</u> <u>tsheets-executive-summary-and-full</u>
- Fartm, Zuhair. "Desertification in Iraq and How to Combat It." (2020). IOP. <u>https://www.</u> researchgate.net/publication/343891389 Desertification in Iraq and how to Combatit.
- "Federal Ministry of Environment," Federal Ministry of Environment. https://environment.gov.ng/.
- "Federation of Ogoni Women's Association (FOWA)," Wiser Directory. https://wiser.directory/organization/federation-of-ogoni-womens-association-fowa/.
- "Flooding in Nigeria kills 500, displaces 1.4 million" (2022) <u>https://www.washingtonpost.com/</u> <u>climate-environment/2022/10/15/nigeria-flooding-displacement-deaths/</u>
- "Green frontiers," UNEP, <u>https://www.unep.org/explore-topics/disasters-conflicts/</u> where-we-work/Nigeria/green-frontiers.
- "Hostilities in Nigeria's Niger Delta blamed on government neglect." <u>https://corporate.dw.com/</u> en/hostilities-in-nigeria's-niger-delta-blamed-on-government-neglect/a-41270034
- "How oil dependence truncated Nigeria's industrial development" (2022). https://punchng.com/how-oil-dependence-truncated-nigerias-industrial-development/
- Ibeanu, Okechukwu. "Oiling the Friction: Environmental Conflict Management in the Niger Delta, Nigeria." (2000). https://www.wilsoncenter.org/publication/oiling-the-friction-environmental-conflict-management-the-niger-delta-nigeria.
- Ibrahim, Arwa. "Muhasasa, the Political System Reviled by Iraqi Protesters." (2019). Al Jazeera. <u>https://www.aljazeera.com/news/2019/12/4/muhasasa-the-political-system-reviled-by-ira</u> <u>qi-protesters</u>.
- "In Iraq, Desertification Leads to Multiple Sandstorms" (2022). Le Monde. <u>https://www.lemonde.fr/en/international/article/2022/05/17/in-iraq-desertification-leads-to-multiple-sandstorms_5983823_4.html</u>.

- "In Niger Delta, Oil Spill Impoverishing Residents, Devastating Environment, Dislocating Cultures" (2022) <u>https://earthjournalism.net/stories/in-niger-delta-oil-spill</u> <u>-is-impoverishing-residents-devastating-environment-dislocating</u>.
- "Iraq: Expanding Deserts, Searing Temperatures, and Dying Land." (2022). ICRC. <u>https://www.icrc.org/en/document/iraq-expanding-deserts-searing-temperatures-and-dying-land-climate-crises-deepen-struggle</u>.
- "Iraq's Growing Desertification Problem." Planetary Security Initiative. (2021) https://www.planetarysecurityinitiative.org/news/iraqs-growing-desertification-problem.
- Keys, Domale, "Ogoni Women's Climate Justice Was Decades Ahead of Today," (2022). University of Virginia, Women, Gender & Sexuality. <u>https://wgs.as.virginia.</u> <u>edu/news/story/ogoni-women's-climate-justice-was-decades-ahead-today's-debates</u>
- King, Elisabeth, and Cyrus Samii. 2020. Diversity, Violence, and Recognition: How Recognizing Ethnic Identity Promotes Peace. New York: Oxford University Press.
- Kullab, Samya. "Bloated Public Salaries at Heart of Iraq's Economic Woes." (2020). AP News. <u>https://apnews.com/article/financial-markets-baghdad-iraq-middle-east-cf1789e0fa48260</u> 0f133aae71a8d34d8.
- Mai-Bornu, Dr. Zainab, Fidelis Allen, Roy Maconachie, and Dr. Miho Taka. "Green Futures for Environmental Peacebuilding in Nigeria" Ecosystem for Peace. https://www.ecosystemforpeace.org/compendium/inclusion-4.
- "Migration, Environment, and Climate Change in Iraq." (2022). IOM. <u>https://iraq.un.org/sites/default/files/remote-resources/079bd27fc79b4084e48157653d335c8f.pdf</u>.
- Mugenda, Olive and Mugenda, Abel G. "Research Methods: Qualitative and Quantitative Approaches". (1999). African Centre for Technology Studies. Nairobi, Kenya.
- "Niger Delta Negligence," Amnesty International.
- https://www.amnesty.org/en/latest/news/2018/03/niger-delta-oil-spills-decoders/.
- "Nigeria," (2023). Global Centre for the Responsibility to Protect. https://www.globalr2p.org/countries/nigeria/.
- "Nigeria: Existence and activities of the Niger Delta Volunteer Force (1998-1999)", https://www.refworld.org/docid/3ae6ad6c8c.html.
- "Nigeria Humanitarian Response Plan 2023 (February 2023)," (2023). ReliefWeb. <u>https://</u>reliefweb.int/report/Nigeria/Nigeria-humanitarian-response-plan-2023-february-2023.
- "Nigeria launches REDD+ strategy to curb deforestation and forest emissions." (2023). <u>https://www.forestcarbonpartnership.org/news-story/nigeria-launches-redd-strategy-curb-</u> <u>deforestation-and-forest-emissions</u>.
- "Nigeria militants 'bomb' oil pipelines in Niger Delta." (2016). https://www.bbc.com/news/world-africa-37999388.
- Nigeria's Nationally Determined Contribution (2021), <u>https://unfccc.int/sites/default/files/NDC/</u> 2022-06/NDC File%20Amended%20 11222.pdf.
- "Nigeria Oil Spill Monitor, NOSDRA" (2022) https://nosdra.oilspillmonitor.ng/.
- Nuesiri, Emmanuel. "Godfather Politics and Exclusionary Local Representation in REDD+: A Case Study of the Design of the UN-REDD-Supervised Nigeria-Redd Proposal". *Global Forest Governance and Climate Change*. (2018). Palgrave Macmillan. London, UK.
- Nwafor, Justice. "Gas Flaring in the Niger Delta Harming Health, Climate and Environment," (2022). Earth Journalism Network. <u>https://earthjournalism.net/stories/gas-flaring</u> <u>-in-the-niger-delta-harming-health-climate-and-environment</u>.

- Nwafor, Justice. "In Niger Delta, Oil Spill Is Impoverishing Residents, Devastating Environment, Dislocating Cultures." (2022). Earth Journalism Network. <u>https://earthjournalism.net/stories/in-niger-delta-oil-spill-is-impoverishing-residents-deva</u> <u>stating-environment-dislocating</u>.
- Nwankpa, Amara. "Managing existential risk and climate resilience," (2022). Brookings. <u>https://www.brookings.edu/blog/africa-in-focus/2022/03/14/managing-existential-risk-an</u> <u>d-climate-resilience-the-case-of-nigeria</u>.
- Onu, G., & Biereenu-Nnabugwu, M. Dialectics of Patronage Politics and Representative Democracy: The case of Anambra State of Nigeria. In V.O. Okafor (Ed.), Nigeria's Stumbling Democracy and Its Implications for Africa's Democratic Movement (pp.56-78). Westport: Prager Security International.
- "Overview: Iraq" World Bank. https://www.worldbank.org/en/country/iraq/overview.
- "Overview of Internal Displacement in Iraq." (2021). International Organization on Migration. <u>https://iraqdtm.iom.int/files/ILA/202112132848459_iom_DTM_ILAVI_Overview_of_Int</u> <u>ernal_Displacement_in_Iraq.pdf</u>.
- "Quality Education: UNDP Iraq's commitment to Sustainable Development" (2023). UNDP. <u>https://www.undp.org/iraq/stories/quality-education-undp-iraqs-commitment-sustainable-development-goals-iraq</u>.
- Ravilious et al. "Carbon, biodiversity, and ecosystem services: Exploring co-benefits. Nigeria: Preliminary Results" .(2010 UNEP-WCMC, Cambridge, UK https://www.un-redd.org/sites/default/files/2021-10/Nigeria%20Fin_lowres.pdf.
- Sandbakken, Camilla. "The Limits to Democracy Posed by Oil Rentier States: Algeria, Nigeria and Libya", https://www.tandfonline.com/doi/epdf/10.1080/13510340500378464.
- Schick, Leonore, Paul Myles, and Okonta Emeka Okelum. "Gas Flaring Scorches Niger Delta" (2018) <u>https://www.dw.com/en/gas-flaring-continues-scorching-niger-delta/a-46088235</u>.
- Stallard, Esme. "Iraqi Minister Admits Gas Flaring Cancer Link." (2022) BBC News. https://www.bbc.com/news/science-environment-63284896.
- Tann, Noa, and Madeline Flamik. "Interstate Dam Disputes Threaten Global Security." American Security Project, 2018. <u>http://www.jstor.org/stable/resrep19813</u>.
- "The Niger Delta is one of the most polluted places on earth." (2018). https://www.amnesty.org/en/latest/news/2018/03/niger-delta-oil-spills-decoders/.
- "Turkey, Syria and Iraq: Conflict over the Euphrates-Tigris," Climate Diplomacy. <u>https://</u> climate-diplomacy.org/case-studies/turkey-syria-and-iraq-conflict-over-euphrates-tigris.
- "Climate change has hit South Sudan here's how UNHCR is responding." UNHCR (2022). <u>https://www.unhcr.org/africa/news/news-releases/climate-change-has-hit-south-sudan-har</u> <u>d-heres-how-unhcr-responding</u>.
- Wajim, John. "Impacts of Deforestation on Socio-Economic Development and Environment in Nigeria." International Journal of Social Sciences and Humanities Invention 7(03): 5852-5863, (2020).
- "World Bank Climate Change Knowledge Portal." Climate Change Knowledge Portal. <u>https://climateknowledgeportal.worldbank.org/</u>.

