



Conflict Heightens Climate Risk

The Case of Sudan

Johan Schaar

Climate-induced Security Challenges

Climate change – e.g., rising temperatures, rising sea levels, more frequent and intense extreme weather events – not only aggravates existing vulnerabilities such as food and water insecurity but can also lead to heightened competition over diminishing natural resources, widespread displacement, increased societal tensions and conflict.

While science has been unequivocal about the physical impacts of climate change, scientific evidence to support its link to security risks is tenuous. Understanding climate-induced security challenges is crucial, particularly for countries most exposed to climate change impacts. By providing evidence-based perspectives to improve our understanding of climate-induced security risks, this *Insight* series aims to generate insights that support crafting strategies to mitigate such risks.

Cover image: People refilling donkey-drawn water tanks during a water crisis in Port Sudan, where war has exacerbated the effects of climate change and man-made actions on water supply, 9 April 2024. Photo by AFP.

Conflict Heightens Climate Risk

The case of Sudan

Johan Schaar*

Sudan is highly vulnerable to climate change. Like other countries in conflict, it has weak adaptive capacity. When the non-violent revolution toppled the regime in April 2019, Sudan began a plethora of climate initiatives. Supported by constitutional and peace processes addressing some of Sudan's structural problems, adaptation policy and programmes were developed and climate finance secured. However, the outbreak of war in April 2023 has brought climate action to a standstill, triggered massive violations of human rights and new displacement. The Sudan case illustrates the urgent need for peacebuilding and accountability as part of climate security strategy.

The discourse on the relationship between climate change and the risk of conflict is far from settled. That lack of consensus is why the Intergovernmental Panel on Climate Change (IPCC) in its most recent Assessment Report addressed the issue in a measured way, finding that climate change has weak influence on the risk of conflict in comparison with other, non-climatic factors.¹ But in certain contexts, the

¹ Elizabeth Gilmore, Halvard Buhaug, and Helen Adams, "What Next for Climate Security? Implications from IPCC Working Group II 6th Assessment Report", *New Security Beat* (Wilson Center), 11 April 2022,

IPCC finds, where societies are already affected by social tension and where governance is ineffective or dysfunctional, extreme climate-induced events may exacerbate insecurity.

If the causal linkage between climate change and conflict remains tenuous, there is much more certainty about the inability of societies trapped in conflict to deal with climate change, whether reducing emissions, adapting to extreme weather events or protecting vulnerable populations. Paradoxically, there has been less attention given to this aspect of conflict–climate interaction in terms of programme development, allocation of climate finance and aid policies.

This article aims to illustrate the complex interaction of conflict and climate change in the case of Sudan. Its focus is on the short period of political opening and broad public engagement in the country's affairs during 2019–2023. The article aims to show how a country highly vulnerable to climate change was ready to use new political space to address its climate predicament. The outbreak of war in April 2023 has not only put an end to the reform process but also gravely exacerbated the vulnerability of the Sudanese population. The 2019–2023 period demonstrated the importance of democratic space and reforms to address the climate problem.

Country in Conflict

Popular protests against the autocratic Sudanese government began in 2013, culminating in the ouster of president Omar al-Bashir in April 2019. Based on a broad and inclusive popular movement, a transitional government comprising civilian and military members was formed. The pre-2019 period of increasingly well-organised resistance had created the foundation for a reform process that was quickly set in motion with a Constitutional Document and the Juba Peace Agreement as milestones.²

<https://www.newsecuritybeat.org/2022/04/climate-security-implications-ipcc-working-group-ii-6th-assessment-report/>.

² Sudan's Constitution of 2019,

https://constituteproject.org/countries/Africa/Sudan_the

To support the agreed 39-month transition to civilian rule, the UN Security Council established the UN Integrated Transitional Assistance Mission in Sudan (UNITAMS).

“The outbreak of fighting in April 2023 has plunged Sudan and its people into one of the world’s worst humanitarian disasters.”

In October 2021, the military again took power. The coup, supported by Russia and its Wagner Group mercenary force, triggered renewed popular protests, which were crushed by the military.³ In December 2021, a new two-year process towards civilian rule was agreed but many reform efforts were put on hold. Tensions between the Sudanese Armed Forces and the Rapid Support Forces (RSF), a militia that had supported the military’s return to power, over the pace of the latter’s integration into the national army then led to armed conflict between the two, beginning in Khartoum in April 2023. Several states in the region are directly involved in supporting and arming the two sides as the conflict continues to rage.⁴ In December 2023, the Security Council decided to withdraw the UNITAMS mission.

The outbreak of fighting in April 2023 has plunged Sudan and its people into one of the world’s worst humanitarian disasters. More than half the population is in acute hunger. Meanwhile, millions have been forcibly displaced or have fled the country. These include many who

Juba Agreement for Peace in Sudan Between the Transition Government of Sudan and the Parties to the Peace Process, 3 October 2020,

<https://constitutionnet.org/vl/item/sudan-peace-agreement>.

³ Marina Caparini, “The Role of the Wagner Group and Other Russian Private Military and Security Companies in Armed Conflicts in 2023”, In *SIPRI Yearbook* (Oxford University Press, 2024), 134–136. www.sipriyearbook.org.

⁴ Human Rights Watch, “Fanning the Flames, Sudanese Warring Parties’ Access To New Foreign-Made Weapons and Equipment”, (9 September 2024),

<https://www.hrw.org/news/2024/09/09/fanning-flames>.

were already displaced.⁵ Much of the capital, Khartoum, has been destroyed and some government institutions have relocated to Port Sudan.

Violence against the civilian population is being perpetrated by both sides. In early September 2024, the Fact-Finding Mission mandated by the UN Human Rights Council reported extensive human rights violations as well as crimes against international human rights and humanitarian law and called for an international stabilisation force to protect the population.⁶ The mandate of the Fact-Finding Mission was renewed on 11 October 2024.

The period between April 2019 and October 2021 had allowed the opening of political space that enabled Sudan to take the first steps towards democracy. That space has now been firmly closed. As violence resurges and displacement reaches new heights, Sudan remains one of the most exposed and vulnerable countries to climate change.

Climate Change in Sudan

Sudan is a largely agricultural economy, where the majority of citizens and the nation's exports depend on crop production and livestock. As climate change is increasingly experienced as biophysical trends – such as changes in temperature and precipitation averages, migration of species and ecosystems, transformation of earth systems, and extreme weather events – this dependency is becoming a concern beyond the familiar uncertainty affecting Sudan's rural population, always at the mercy of the vagaries of weather and climate.

In Sudan, 73% of households are rural, 65% of which work in agriculture, which, before the current conflict, accounted for one-third of

⁵ UN Office for the Coordination of Humanitarian Affairs (UNOCHA), “Sudan Humanitarian Update”, 1 October, 2024, <https://www.unocha.org/publications/report/sudan/sudan-humanitarian-update-1-october-2024>.

⁶ UN Human Rights Council, “Report of the Independent International Fact-Finding Mission for the Sudan”, 5 September 2024, <https://www.ohchr.org/en/hr-bodies/hrc/ffm-sudan/index>.

GDP and 50% of export earnings.⁷ More than 90% of agriculture is rainfed, as sedentary, agropastoral and pastoralist systems.

In the World Bank's compilation of recent models and projections, average temperatures in Sudan are estimated to increase by between 0.5 and 3°C by 2050.⁸ Higher temperatures will intensify droughts through higher evapotranspiration and lower soil moisture.

Precipitation forecasts for Sudan are more uncertain but indicate drier conditions in the scarcely populated and mainly pastoralist north, and less change or possibly increasing rainfall in the more densely populated south.

“In the World Bank's compilation of recent models and projections, average temperatures in Sudan are estimated to increase by between 0.5 and 3°C by 2050.”

In addition, projected precipitation changes beyond Sudan's borders in the upstream basins of the Blue and the White Nile, respectively, have significant impacts in Sudan. Projections for the Blue Nile are inconclusive, whereas precipitation in the White Nile basin is projected to increase.⁹

⁷ Khalid Siddiq, Davit Stepanyan, Manfred Wiebelt, et al., “Climate Change and Agriculture in the Sudan: Impact Pathways Beyond Changes in Mean Rainfall and Temperature”, IFPRI Working Paper 13, 2018, <https://www.ifpri.org/publication/climate-change-and-agriculture-sudan-impact-pathways-beyond-changes-mean-rainfall-and-temperature>.

⁸ World Bank, “Climate Change Knowledge Portal Sudan”, <https://climateknowledgeportal.worldbank.org/country/sudan/climate-data-projections>.

⁹ UN Economic and Social Commission for Western Asia (UNESCWA), “Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR)”, *Arab Climate Change Assessment Report*, 2017, 121–125; Ethan D. Coffel, Bruce Keith, Corey Lesk, et al., “Future Hot and Dry Years Worsen Nile Basin Water Scarcity despite Projected Precipitation Increases”, *Earth's Future* 7, no 8 (2019): 967, <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2019EF001247>.

Even if climate models indicate that rainfall averages in Sudan will increase, it is rather climate variability that will determine the impact on production and livelihoods. Modelling by the International Food Policy Research Institute (IFPRI) shows that potential gains from increased precipitation are completely reversed by its variability.¹⁰ Crop yields under climate variability are much lower than under a baseline no-climate change scenario.

Floods and droughts lead to displacement and internal migration, usually short-term in the case of floods and more protracted in the case of droughts, with uprootedness, loss of assets and the risk of intercommunal tension.¹¹ At the household and community levels in Sudan, extensive flooding results in serious disease outbreaks that deepen household deprivation.¹² Studies show an increase in malaria morbidity and mortality associated with higher rainfall, humidity and river levels.¹³

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The gendered impacts of these trends are readily apparent. Rural households are increasingly female-headed as men engage in rural–urban

¹⁰ Khalid Siddiq, Davit Stepanyan, Manfred Wiebelt, et al., “Climate Change and Agriculture in the Sudan”.

¹¹ Jan Selby and Gabrielle Daoust, “Rapid Evidence Assessment on the Impacts of Climate Change on Migration Patterns”, Foreign, Commonwealth and Development Office, UK, 2021, <https://www.gov.uk/research-for-development-outputs/rapid-evidence-assessment-on-the-impacts-of-climate-change-on-migration-patterns>.

¹² UNOCHA, “Humanitarian Needs Overview: Sudan (2021)”, https://reliefweb.int/sites/reliefweb.int/files/resources/SDN_2021HNO.pdf.

¹³ Hamid H. Hussien, “Malaria’s Association with Climatic Variables and an Epidemic Early Warning System Using Historical data from Gezira State, Sudan”, *Helixyon* 5, no 3, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6434068/>.

circular migration, leaving women with the double burden of reproductive and productive roles.

In conclusion, present and future climate change impacts and manifestations in Sudan are closely linked to the increasing variability and unpredictability of the climate, resulting in extreme weather events, both in the form of floods and droughts. Given Sudan's dependence on agriculture, such extreme events will have profound impacts, at the macro level as well as on vulnerable households and communities. From a climate security perspective, it is non-linearity and uncertainty rather than steady and linear trends that must be the point of departure for policy and planning.

Conflict–Climate Interaction in Sudan

A range of factors mediate the two-way interaction between conflict and climate change. On the one hand, conflict weakens a society's adaptive capacity and deepens its vulnerability. On the other, climate change may enhance factors that contribute to increasing tension and conflict.¹⁴ This risks a vicious circle where a disintegrating society loses its ability to counter and resolve conflicts. A plethora of such mediating factors are present in Sudan.

Economic Contraction

Sudan was mired in economic contraction, contributing to food insecurity and livelihood loss at the time of the 2019 revolution. After the secession of South Sudan in 2011, Sudan had been unable to replace oil as the main export earner and transition into a diversified economy. This failure led to a rapid drop in GDP per capita, growing indebtedness and increasing food and fuel prices. Extreme poverty grew from 25% to 90% between 2014 and 2020, particularly affecting the urban population.¹⁵

¹⁴ Elizabeth Gilmore, Halvard Buhaug, and Helen Adams, "What Next for Climate Security?"

¹⁵ UN/UNITAMS, "Sudan: Common Country Assessment 2021".

The transitional government began economic reforms, successfully negotiating debt relief, growing tax revenue and removing the costly fuel subsidies, a measure to be cushioned by the Family Support Project, funded by the World Bank.¹⁶ After the coup in October 2021, economic reforms came to a halt and the Family Support Project was suspended. Food prices increased again in 2022 as a result of the Russian attack on Ukraine, and surged further with the outbreak of fighting in Sudan in April 2023.¹⁷ Towards the end of 2023, the price of wheat was 250% above the five-year average.¹⁸ As of mid-2024, nearly 26 million people faced acute food insecurity.¹⁹

Although flooding, possibly climate-related, has contributed to food insecurity, the main factors are clearly related to domestic and global market instability and to the direct result of armed conflict.

Resource Scarcity and Abundance

Competition between herders and farmers over land and water is generally viewed as among the root causes of intercommunal tension in Sudan. Traditionally, competing interests were resolved through customary mechanisms. Tension over resources worsened when the pre-2019 state claimed legal status over land that was already under a system of communal and customary tenure. This move led to an ambiguous dual legal system.²⁰ The judiciary and administrative powers of traditional

¹⁶ World Bank, “Sudan Family Support Project” Project Document, 2020, <https://www.worldbank.org/en/news/loans-credits/2020/10/08/sudan-family-support-project>.

¹⁷ Caroline Delgado, “Food Systems and Geopolitics”, *SIPRI Yearbook* (Oxford University Press 2024), 146–149, www.sipriyearbook.org.

¹⁸ FEWS NET, “Expanding Conflict and Displacement Drive Even Higher Needs during the Harvest”, *Food Security Outlook Update – Sudan*, December 2023, <https://fews.net/east-africa/sudan/food-security-outlook-update/december-2023>.

¹⁹ UNOCHA, “Sudan Humanitarian Update”, 1 October, 2024, <https://www.unocha.org/publications/report/sudan/sudan-humanitarian-update-1-october-2024>.

²⁰ Khalid Ali El Amin, “The State, Land and Conflicts in the Sudan”, *International Journal of Peace and Conflict Studies* 3, no 1 (June 2016),

<http://journals.rcmss.com/index.php/ijpcs/article/view/143/120>;

Hussein Gari, “Land Tenure and Conflict in Sudan”, August, 2018,

https://www.academia.edu/37223635/Land_Tenure_and_Conflict_in_Sudan.

authorities were abolished by the state, constraining their ability to regulate access to land. Some high-yielding land, irrigated from the Nile, was awarded to foreign investors, notably from the Gulf states, contributing to the grievances that preceded the 2019 revolution.²¹

Provisions for resolving land conflicts featured prominently in the Juba Peace Agreement and the Constitutional Document, including legislative arrangements, reparation and compensation for lands expropriated.²²

“Climate-related factors may have influenced competition over land and water but fundamental structural factors are more prominent causes of conflict.”

More recently, the seizure of land for goldmining has contributed a new element to conflicts over resources, leading to killings and extensive displacement.²³ The RSF is heavily invested in gold mining, supported by the UAE, whose stake is considered to be a main reason for the Gulf country’s involvement in the current conflict.²⁴

²¹ Peter Schwartzstein, “One of Africa’s Most Fertile Lands Is Struggling to Feed Its Own People”, *Bloomsbury*, 2 April 2019, <https://www.bloomberg.com/features/2019-sudan-nile-land-farming/?srnd=businessweek-v2>.

²² Zaid Al-Ali, “The Juba Agreement for Peace in Sudan. Summary and Analysis” Institute for Democracy and Electoral Assistance (IDEA), Stockholm, 2021, <https://www.idea.int/sites/default/files/publications/the-juba-agreement-for-peace-in-sudan-en.pdf>. Juba Agreement for Peace in Sudan between the Transition Government of Sudan and the Parties to the Peace Process.

²³ UN Security Council, “Situation in the Sudan and the Activities of the United Nations Integrated Transition Assistance Mission in the Sudan”, Report of the Secretary-General (S/2021/766), 5 April 2012, <https://reliefweb.int/report/sudan/situation-sUN Sudan-and-activities-united-nations-integrated-transition-assistance-mission>.

²⁴ John Prendergast and Antony Lake, “The UAE’s Secret War in Sudan: How International Pressure can Stop the Genocidal Violence”, *Foreign Affairs*, 31 July 2024, <https://www.foreignaffairs.com/sudan/uaes-secret-war-sudan>.

Climate-related factors may have influenced competition over land and water but fundamental structural factors related to ambiguous land tenure, seizure of land for commercial purposes and foreign interests in Sudan's natural resources are more prominent causes of conflict.

Displacement and Migration

When the conflict in Darfur was settled in the early 2000s, many of the displaced returned to their homes. More recently, a new surge of both climate and conflict-related internal displacement has been taking place. Droughts lead farmers to extend cultivated land while pastoralists seek new grazing land and migratory routes, all resulting in increasing tension.²⁵

Displacement due to sudden onset events such as floods results in short-term and temporary movements and an early return of the flood-affected to home areas for recovery and reconstruction.²⁶ However, recurring floods and repeated displacement lead to a gradual exhaustion of household resources, making it more difficult to recover, and resulting in more protracted displacement when the displaced see little option for return and have to integrate and transform into non-agricultural livelihoods.

The outbreak of fighting between the Sudanese Armed Forces and RSF in April 2023 has led to a dramatic increase in forced displacement, exacerbated by recurrent floods. An estimated 10.9 million people are now internally displaced within Sudan, of whom 8.1 million were displaced after 15 April 2023.²⁷

²⁵ Hussein Gari, "Land Tenure and Conflict in Sudan", August 2018, https://www.academia.edu/37223635/Land_Tenure_and_Conflict_in_Sudan.

²⁶ Jan Selby and Gabrielle Daoust, "Rapid Evidence Assessment on the Impacts of Climate Change on Migration Patterns".

²⁷ UNOCHA, 2024. "Humanitarian Update", 1 October 2024, <https://www.unocha.org/publications/report/sudan/sudan-humanitarian-update-1-october-2024>.

The Quality of Governance

A state's ability to prevent and manage shocks and stresses affecting its population is directly related to the efficacy of its institutions.²⁸ The quality of governance is thus a fundamental dimension of states' adaptive capacity, whether in relation to climate change or other stresses.²⁹

Sudan's long history of natural disasters and emergencies and international humanitarian aid have yielded extensive knowledge and experience in emergency response at the technical level. But its institutions, including its security apparatus, have also been used to suppress dissent, violate the rights of citizens and fuel internal strife.³⁰ The number of internally displaced persons (IDP) even before April 2023 is a tragic testament to the failure of Sudan's institutions to protect its citizens.

The transitional government had the ambition to reform and build institutions that would address inequities and vulnerabilities, and give space to civil society. Reforms had to include empowered local government, which is critical to the state's ability to prevent and respond to crises, and to mediate and help resolve local conflicts. Not much in this regard was achieved during the brief transitional interlude. The absence of security and services resulted in distrust in government, particularly among the rural population and IDPs.

Opening and Closing – The Window of Climate Discourse in Sudan

Even if the pre-2019 government had not seen climate change as a priority, it had played an active role in chairing the G77 group during the

²⁸ UNESCWA, "Climate, Peace and Security in the Arab Region", *Trends and Impacts in Conflict Settings* no 7, 2023.

²⁹ Robin Mearns and Andrew Norton, "Equity and Vulnerability in a Warming World" In *Social Dimensions of Climate Change* (World Bank, 2010), 1–46

³⁰ Willow Berridge, Justin Lynch, Raga Makawi, and Alex de Waal, "Sudan's Unfinished Democracy: The Promise and Betrayal of a People's Revolution" (London: Hurst & Company, 2022).

Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) in 2009 or COP 15. It had also complied with its obligations under the UNFCCC, including submissions of its National Communications in 2003 and 2013, the National Adaptation Programme of Action (NAPA) in 2007 and National Adaptation Plan (NAP) in 2016.

The first State of the Environment of Sudan report, published in October 2020, noted that the pre-2019 government had paid little attention to climate change in its plans for economic development and natural resource governance.³¹ As an example, the government had failed to maintain meteorological records over two decades and allowed the recording stations and data to deteriorate.

“Sudanese civil society has been actively engaged in environmental and climate change issues.”

The transitional government re-established an empowered Higher Council for Environment and Natural Resources (HCENR) in 2020, chaired by the prime minister and with members from government, research, private sector and civil society. The HCENR is tasked to lead on all matters related to the environment and climate change.

Sudanese civil society has been actively engaged in environmental and climate change issues, with women’s and youth groups taking the lead. The Sudanese Environment Conservation Society (SECS) notably conducted an analysis of the Juba Peace Agreement from an environmental and natural resource perspective.³² Recommendations were made to sharpen the Agreement into a practical tool for addressing environmental concerns as contributions to peace.

³¹ Republic of Sudan and UN Environment Programme (UNEP), “Sudan: First State of the Environment and Outlook Report”, <https://www.unep.org/resources/report/sudan-first-state-environment-outlook-report-2020>.

³² SECS, “The Environment & Natural Resources in the Peace Agreements”, *Report by National Team of Consultants: Executive Summary* (Khartoum, 2021)

Another important actor is the Sudanese Professionals Association (SPA), which played a central role in the revolution.³³ The SPA included an Environmental Professionals Association, which developed a model environmental law and proposed stronger tools for enforcement and prosecution.³⁴ The Institute of Environmental Studies (IES) at Khartoum University was involved in international climate-related research collaboration, including a project on urban climate resilience in Sudan.³⁵

“... women face an increased occurrence of droughts, water scarcity and loss of livelihoods.”

In 2021, the HCENR submitted an updated and more specific NDC (nationally determined contribution to reduce emissions), noting that women face an increased occurrence of droughts, water scarcity and loss of livelihoods, requiring that women’s empowerment and gender mainstreaming would be the approach in all future interventions.³⁶

The NDC invoked the political transformation, noting that “the awareness of climate change among policymakers had shifted from a

³³ Mohamed El Agati, Omar Samir, Abdel Moneim Sayed Ahmed, and Zeinab Srour, “Sudanese Professionals Association: Structure, Evolution, Roles and Coalitions – Challenges and Future Prospects”, *Arab Reform Initiative*, Research Paper, 9 November 2021, https://www.arab-reform.net/wp-content/uploads/pdf/Arab_Reform_Initiative_en_sudanese-professionals-association-structure-evolution-roles-and-coalitions-challenges-and-future-prospects_20466.pdf?ver=539e4bb90bc920d593ad838a56a86506.

³⁴ Josepha Wessels, “The Role of the Sudanese Professionals Association in the Revolution of 2019 towards Development and Social Change”, In *Strategic Communication Management for Development and Social Change* (Springer, 14 December 2023), 143–159; Representative of the Environmental Professionals Association, Personal Communication, Khartoum, January 2022.

³⁵ Malmö University Research, “Resilience in Urban Sudan”, 2022, <https://storymaps.arcgis.com/stories/7245d8739ec34d4ea4cdfa56d8fb94f4>.

³⁶ Republic of the Sudan, “First Nationally Determined Contribution under the Paris Agreement”. Updated October 2021.

topic mostly associated with future risk to present-day threats involving enormous social and economic stakes.”

A 2020 submission by the HCENR to the Green Climate Fund (GCF) established under the UNFCCC critiqued earlier adaptation plans.³⁷ Those plans failed to include all climate zones, nor did they assess mid- and long-term climate impacts and risks. Stakeholder engagement had not been inclusive, as small-scale farmers, civil society and women’s participation was low.

“There is less analysis of climate security and potential impacts on Sudan’s social dynamics [in Sudan’s climate related submissions and applications].”

The new proposal was meant to design climate scenarios for all Sudanese states, develop participatory monitoring and evaluation, and improve coordination and implementation capacity at both national and state levels. As of late 2024, however, only three Sudanese projects had received funding from the GCF, at a total of US\$44.6 million.³⁸

Sudan’s submissions and applications have focused on some obvious sectors – agriculture, water, the coast and public health. There is less analysis of climate security and potential impacts on Sudan’s social dynamics. With the discursive energy that resulted from the political transition, and with the support of the United Nations, this was beginning to change, to the benefit of Sudan’s acknowledgement of climate risk. But when the transition process was interrupted by violence, Sudanese organisations and individuals naturally entered into crisis mode,

³⁷ Green Climate Fund, “Readiness Proposal: Adaptation Planning Support for Sudan through FAO 2020”, <https://www.greenclimate.fund/document/adaptation-planning-support-sudan-through-fao>.

³⁸ Green Climate Fund, “Republic of the Sudan”, 2024, <https://www.greenclimate.fund/countries/sudan>.

turning to the immediate and urgent. Many Sudanese professionals have now left the country and gone into exile, a number of them in the Gulf.

In her address to the UN Environmental Assembly in March 2024, the Sudanese government representative reported on the devastating environmental effects of the ongoing war.³⁹ She noted that environmental institutions had been destroyed and the Crop Genetic Resources Center vandalised. And “the war has hindered the implementation of environmental projects, especially climate change adaptation projects, natural reserves and biodiversity projects.”

Conclusion

Sudan is one of a number of countries in conflict that are highly exposed and vulnerable to the impacts of climate change. They have very limited adaptive capacity, including the ability to protect their populations who suffer from the double effects of violence and extreme weather events, often resulting in displacement upon displacement. Sudan stands out, however, by being ready to use the political and discursive space that opened with the non-violent revolution of 2019 to develop climate policy, build institutions and conduct research. With active involvement of civil society and professional groups, Sudan registered significant and internationally recognised achievements in addressing its climate challenge. The outbreak of war in April 2023, however, has brought the reform process to a standstill, seen extreme violations of international human rights and humanitarian law, and caused renewed and massive forced displacement. The Sudan case demonstrates that in addressing the impacts of climate change in some of the most exposed and vulnerable countries in the world there is an urgent need to prioritise conflict resolution, accountability of belligerent parties and their supporters, and respect for international law. ♦

³⁹ Republic of the Sudan, Higher Council of the Environment and Natural Resources, “Speech at the at the Sixth Session of the United Nations Environment Assembly”, 4 March 2024, <https://hccenr.gov.sd/en/?p=554>

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