Rethinking Sudan's Environment and Conflict Nexus: Naming, Blaming, and Claiming

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Introduction

Sudan faces a compounded crisis: a deadly blend of conflict and economic hardship that intersects with climate change, environmental degradation, governance breakdown, and vicious cycles of conflict.[1] This environmental degradation and ecological mismanagement have exacerbated resource scarcities and public health hazards, fueling social grievances in a country already beset by civil wars and political turmoil since its independence.[2] Yet dominant positivist approaches to policy analysis, with their emphasis on linear stages, technical rationality, and objective problem-solving, often fail to capture the contested, socially constructed, and power-laden nature of environmental issues in fragile contexts like Sudan.[3] By treating problems as neutral facts awaiting solutions, they obscure the role of narrative, legitimacy, and agency in shaping which issues are recognized, whose voices are heard, and how conflicts evolve. Hence, in moving past the dominance of prevailing positivist approaches, this analysis employs an interdisciplinary lens rooted in the sociology of social problems to interrogate how Sudan's environmental crises have been framed or ignored over time, including any justifications; and how this framing has shaped policy action (or inaction) and conflict dynamics.[4]

The dynamics of environmental grievances in Sudan are not simply technical challenges; they are embedded in broader struggles over narratives, priorities, power, legitimacy, and justice. The suppression of local claims has transformed ecological issues into catalysts that create deeper crises, as unresolved grievances accumulate and resurface in violence. In this sense, interpretatively, this demonstrates that environmental policy cannot be separated from broader questions of governance: who defines problems, who bears responsibility, and who gains or loses in their resolution. Understanding this nexus is essential for designing interventions that, beyond treating symptoms, can address the underlying structures that perpetuate vulnerability, exclusion, and disputes. This paper traces the historical and institutional trajectory of Sudan's environment conflict crisis through four phases: (1) marginalization and disregard (pre-1990s), when environmental issues were

ignored or suppressed; (2) official recognition and internationalization (1990s-2000s), when Sudan's environmental problems belatedly received official recognition due to global contexts (often due to conflict linkages); (3) environmental integration into policy (2000s-2018), when the regime began incorporating environmental considerations in laws and treaties, though mainly in form rather than substance; and (4) post-revolution reframing (2019-present), when Sudan's popular uprising opened space to redefine environmental issues within a justice and peace narrative, until the new conflict emerged. These stages reflect not linear progress but cycles of recognition without resolution. Each stage reveals blocked attempts to transform grievances into claims, showing how authoritarianism and conflict repeatedly reset environmental governance.

Across these stages, the paper highlights critical episodes that expose failures in claims made regarding environmental justice, from toxic and nontoxic waste dumping and pesticide scandals to climate discourses and communities' struggles for redress. Drawing on Sudanese newspaper investigations, NGO reports, and studies, the analysis shows how these issues were repeatedly brought to light by claimants only to be met with issue reframing, denial, repression, confinement, or authorities' inaction. We argue in this paper that for environmental policy to be effective, it must be designed in response to communities' legitimate grievances and demands, rather than framed in ways that delegitimize their suffering or avoid their mobilization. The cases presented underscore how power asymmetries and secrecy have systematically blocked accountability. Using this framework, the paper demonstrates how governance failures at each stage prevented ecological crises from driving policy reform, instead allowing them to become catalysts of instability and violence. Ultimately, in analyzing the societal conditions under which environmental issues emerged as social concerns and tracing their transformation into public action, the paper illuminates the conflictual and demand-driven dynamics that shape the production of public policy.

Theoretical Framework: Naming, Blaming, and Claiming Environmental Problems

Addressing Sudan's crises requires understanding how certain conditions, such as environmental degradation, are socially recognized and addressed as public problems. The sociology of social problems offers a valuable interpretive framework for integrating the demands dimension and conflicts in policy production, particularly in the context of the naming, blaming, and claiming sequence.[5] *Naming* refers to identifying and defining a condition as harmful or unjust, and how advocates mobilize to obtain name recognition for the problem. *Blaming* entails attributing responsibility for that harm to specific actors or systemic failures. *Claiming* involves asserting entitlement to a remedy or change – essentially pressing claims for justice or redress to authorities or in public forums. According to this model, an issue must pass through these stages to catalyze policy action.

In authoritarian and conflict-affected settings, the process of naming–blaming–claiming is often complicated. Social mobilization is limited when raising an issue to gain recognition as a first step toward turning it into a public problem. Further, practical policy issues

constrain an issue's transformation into a legitimate claim against the state, highlighting the crucial roles of cause entrepreneurs and claimants in addressing social problems. Governments may suppress information to advance their own narrative (blocking the establishment of the name), deflect or criminalize criticism (trying to inhibit blame), and repress dissent (silencing claims). Sudan under the thirty-year rule of Omar al-Bashir (1989-2019) exemplified these dynamics, as will be shown. Tracing how grievances are or are not named, attributed, and claimed sheds light on why Sudan's ecological crises rarely translate into reforms and instead accumulate as sources of instability and violence. Furthermore, it informs how Sudan's environmental issues were constructed or deconstructed as problems by cause entrepreneurs and claimants at different times, and how that both influenced policy responses or the lack thereof, leading to disputes.

Crucially, naming, blaming, and claiming are not purely sequential or one-off events; they form an iterative cycle intertwined with political opportunity structures. Figure 1 below presents a conceptual diagram of how climate change and environmental injustices can fuel conflict in a vicious cycle, mediated by the naming–blaming–claiming process. Communities experiencing resource scarcity or abundance may name these as injustices and blame either the state or other actors. [6] They can then claim remedies, such as demanding government intervention, compensation, or policy change, if there is enough mobilization and the possibility of people joining this injustice and expressing themselves. If claims are heeded, policies may mitigate the harm, easing tensions.

If, on the other hand, claims are denied or repressed, grievances deepen, trust in authorities erodes, and aggrieved groups may resort to protest or even violence, contributing to conflict. Conflict itself further undermines governance and often worsens environmental harm (for instance, via displacement), concentrating pressure on fragile lands or situations in which armed groups exploit resources, which can further feed a new cycle of degradation and social strain. In Sudan, decades of marginalization have meant that environmental grievances have rarely been effectively claimed; instead, they have accumulated until they manifest in conflicts or crises. Figure 1 illustrates these linkages: climate change and environmental degradation exacerbate resource scarcity and pollution (environmental injustice), which in turn fuel social unrest and conflict. Weak or unjust governance (policy failures) fuels this vicious cycle, while effective reform claims could break the loop. The naming–blaming–claiming process represents how communities articulate grievances, while unsuccessful claims lead back to the renewed naming of grievances as crises deepen.

In the following sections, this framework is applied to Sudan's historical experience. Each phase of Sudan's modern history is examined to determine whether and how environmental issues were named, who was blamed or scapegoated, and what claims were made or denied. This analysis will reveal patterns of claim-making failure – moments when Sudanese communities or advocates raised alarms about environmental injustices but were thwarted by the government's failure to address them and the structural and political obstacles. Understanding these failures is key to rethinking policy analysis: it shows that purely technical or top-down policies will not succeed unless they address underlying power and justice issues. In other words, effective climate policy in Sudan must enable

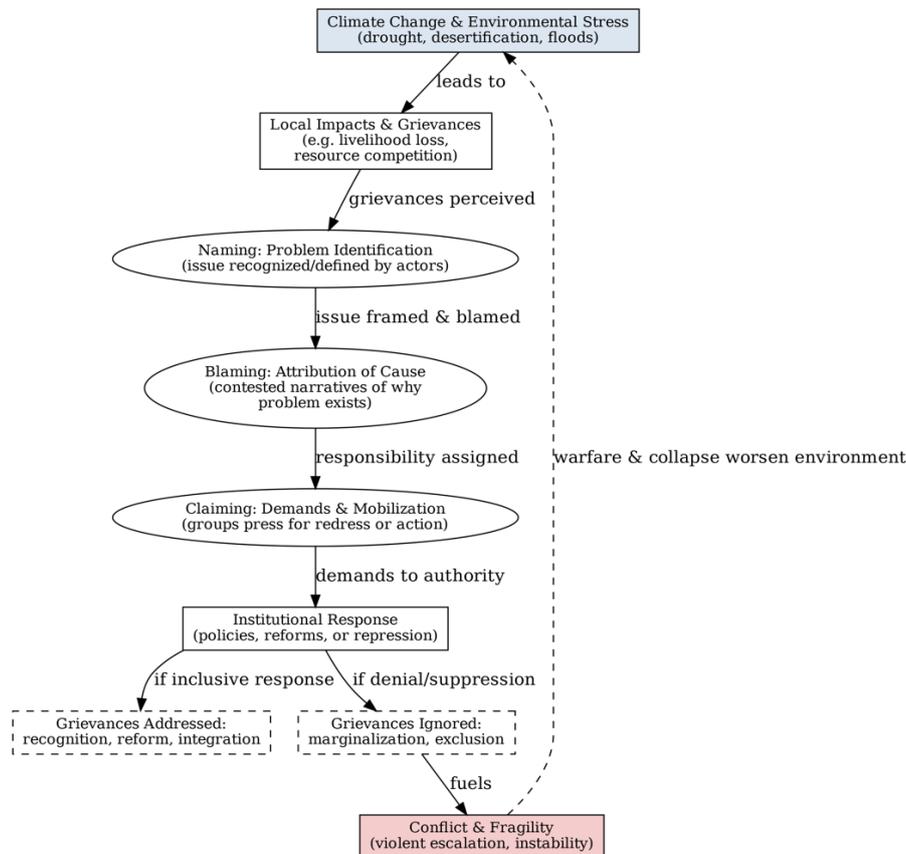marginalized groups to be heard and must hold perpetrators accountable, breaking the destructive cycle.

Figure 1: The conceptual nexus between climate change, environmental injustice, and conflict, mapped through the naming–blaming–claiming process.

Phase I – Marginalization and Disregard (pre-1990s)

In the decades before the 1990s, Sudan's environmental problems were marginalized in official policy and ignored in national discourse, even as ecological stresses mounted. Post-independence governments and the British colonial administration before them focused on big modernization projects, such as irrigation schemes or oil exploration, often with little regard for environmental impacts on local populations.[7] Although Sudan's agreement to the 1968 African Convention on the Conservation of Nature and Natural Resources represented a crucial early commitment to environmental governance, widespread ecological degradation – such as desertification in the Sahel, deforestation, soil erosion, and pollution – remained largely absent from political discourse. When severe droughts and famines hit in the 1970s and 1980s, including the notable 1984-85 famine in western Sudan, the dominant framing was the humanitarian crises or ethnic conflict, not the climate or environment. The lack of effective environmental regulations and monitoring coupled with the inability of affected and marginalized communities to organize or voice concerns amidst military rule and civil war. Weak social networks and limited union presence further hindered advocacy and accountability for environmental protection.

This era also coincided with a global surge in toxic waste dumping in developing countries, which Africa's weak states struggled to repel.[8] In 1988, a notorious incident saw Italian companies dump hazardous waste in Niger, paying a local farmer a pittance to use his land.[9] During the late 1980s, reports from Sudanese sources suggested that, also around this time, unscrupulous actors may have exploited the country's chaos to bring in banned chemicals.[10] A press investigation alleged that a politician had arranged to import a large stock of expired European pesticides in the late 1980s and had them dumped in different towns, with deadly consequences (a claim examined further in the next section).[11] If true, this would exemplify how a marginalized periphery, rural Sudan, became a dumping ground during a period of state disregard, with no public outcry at the time because the issue was hidden and communities lacked claimants.

Indeed, although it was established in 1975 to promote environmental protection through public participation, the Sudanese Environment Conservation Society seemed to lack the capacity to effectively mobilize the public or exert significant influence to prevent or respond to hazardous incidents. Throughout this phase, Sudan lacked any institutional framework for environmental governance. There was virtually no environmental impact assessment process, and no transparency on pollutants. The discourse on the environment was nonexistent in policy circles until the late 1990s, when Sudan joined international climate treaties.

Phase II – Official Recognition and Internationalization (1990s-2000)

The 1990s marked a turning point, during which Sudan began to officially recognize environmental issues and engage with the international community on environmental governance. Following the 1989 coup that brought Omar al-Bashir to power, Sudan initially continued to prioritize internal security and Islamist political restructuring. Nevertheless, perhaps pressured by the global environmental context and the oil production expansion, the regime took steps that signaled a new acknowledgment of ecological problems. A key development was the establishment of the Higher Council for Environment and Natural Resources in 1991.[12] This central government body was tasked with coordinating efforts to develop natural resources and improve livelihoods – effectively Sudan's first high-level institutional mechanism devoted to the environment. Its creation indicates that environmental degradation was finally being named within government circles as a policy concern, at least rhetorically, in line with global discourse after the 1992 Rio de Janeiro Earth Summit.

Sudan also moved to integrate itself into international environmental frameworks during this decade. The government signed and ratified major multilateral environmental agreements that emerged from the Earth Summit. Notably, Sudan signed the Convention on Biological Diversity in 1992 (ratified in 1995), acceded to the UN Framework Convention on Climate Change and the UN Convention to Combat Desertification in 1994, and acceded to the Kyoto Protocol. By the mid-1990s, environmental issues had become internationalized in Sudan's policy profile, meaning the impetus for action came mainly from the international context and aid-linked requirements. In 1995, the Sudanese

government went further by creating a full-fledged Ministry of Environment and Tourism, elevating environmental management to the cabinet level. This period saw environmental protection enter formal agendas, often driven by the desire to access technical and financial assistance, such as funds from the Global Environment Facility for biodiversity projects.

However, this phase also coincided with the ascendance of Sudan's oil industry, which introduced new layers of ecological harm. Oil extraction, transportation, and refining generated widespread concerns over water contamination and the dumping of industrial waste. Local ecologists, including the Sudanese Environment Conservation Society, repeatedly criticized the government and industry operators for failing to conduct environmental impact assessments or publish findings transparently.[13] Communities living near oil fields reported that polluted water sources were causing illness, livestock deaths, and crop failures. However, these grievances rarely translated into effective policy change. The main reasons were the absence of sustained mobilization and the lack of strong "cause entrepreneurs" willing or able to elevate these claims to the national or international agenda. In authoritarian Sudan, where civil society was systematically curtailed, such localized complaints were easily dismissed or suppressed, leaving affected communities with no effective path from naming harm to blaming responsible actors and ultimately to claiming accountability or redress.

During the 1990s, Sudan's environmental narrative also intersected with its ongoing conflicts in the eyes of international observers. Darfur's crisis, which would explode onto the global consciousness in the early 2000s, was foreshadowed by reports of ecological stress. In fact, by the late 1990s, senior UN officials had begun to highlight how drought, desertification, and resource competition were laying the groundwork for conflict in Darfur and other regions. While the Sudanese government was reluctant to blame its policies for such conflicts – preferring to attribute them to tribal rebels or external meddling – a global narrative was emerging that blamed environmental degradation as a contributor to conflict. Inside Sudan, however, the regime's tight control meant there was little open public debate; environmental claims were mainly limited to compliant NGOs working on donor-funded projects and, to some extent, academia.

Phase III – Environmental Issue Integration into Policy (2000s-2018)

In the 2000s, Sudan's environmental issues began moving from obscurity to some partial recognition, both domestically and internationally. Two main forces drove this shift: internal crises that exposed the ecological dimensions of dispute – most notably Darfur – and external pressures from global policy and advocacy circles. However, the framing of these issues remained highly selective and politically charged, and meaningful claims by affected communities were still severely constrained. The turning point was the Darfur conflict, which erupted in 2003 and quickly became the world's worst humanitarian crisis of the early 2000s. Beyond political and ethnic explanations, environmental degradation — especially drought and desertification — was highlighted as a key stressor. UN Secretary-General Ban Ki-moon's 2007 op-ed famously described Darfur as an "ecological crisis,

arising at least in part from climate change."[14] This narrative, which portrayed Darfur as the "first climate change conflict," linked decades of declining rainfall (a 15-30% decline annually) and the southward advance of the Sahara (nearly one mile per year) to violent competition between Arab pastoralists and non-Arab farmers.[15] By naming Darfur's violence as partly climate-driven, global policymakers and media began to internationalize Sudan's ecological crisis. Previously, peripheral issues such as desertification, water scarcity, and deforestation were added to the conflict-risk agenda. Although Khartoum initially resisted this framing, by the late 2000s, its official climate reports acknowledged the link between climate change and security.

This period also exposed Sudan to international scrutiny over hazardous waste. Although Sudan had ratified the Basel Convention in 1994, domestic enforcement remained weak. In 2005, Greece attempted to export thousands of tons of treated waste to Sudan. The deal, quietly negotiated, only collapsed after Greek NGOs and media exposed it, sparking protests in Athens.[16] The Sudanese government, notably, neither named the import of foreign sludge as a problem nor held anyone accountable. Instead, the plan was halted by external naming and shaming rather than domestic claim-making – highlighting Sudanese civil society's limited capacity under authoritarian rule.

International agencies also played an increasingly important role. In 2007, the UN Environment Programme conducted landmark post-conflict environmental assessments, which linked desertification, deforestation, and water scarcity to Sudan's instability.[17] These reports subtly blamed weak governance and skewed policies but stopped short of demanding accountability. Khartoum, while formally engaging in environmental initiatives, continued to prioritize regime survival over ecological or human security. By the late 2000s, Sudan had ratified major treaties, adopted national climate adaptation plans, and passed environmental impact assessment laws. On paper, the integration of environmental concerns into public policy appeared genuine. In practice, however, these measures rarely translated into enforcement, and ecological injustices multiplied. Among the most damning cases was the pesticide graveyard in Hasahisa, exposed in 2014 by an independent report that revealed that large volumes of banned pesticides had been dumped, saturating soil and groundwater and devastating local health: villagers experienced waves of cancers, child deaths, and livestock die-offs.[18] For decades, authorities ignored or actively suppressed the evidence. Students who attempted to investigate were detained, research data was confiscated.[19] The exposé was a rare moment of naming and blaming: publicly accusing state actors of environmental crimes and cover-ups and demanding compensation.[20] Nevertheless, despite the scandal, no officials were prosecuted, and remediation was minimal. The case revealed how institutions systematically blocked the claiming stage, preventing communities from achieving justice.

The construction of the Chinese-financed Merowe Dam, completed in 2009, also revealed Sudan's vulnerability to environmental exploitation. While the displacement of 50,000 residents had long been criticized, a graver allegation surfaced in 2015 when the former head of Sudan's Atomic Energy Commission claimed that dozens of containers of nuclear waste had been secretly imported and buried near the dam site.[21] His account directly blamed collusion between Sudanese authorities and foreign actors.[22] Rather than

investigate transparently, parliament and the Ministry of Justice issued denials, declaring "the absence of radioactive substances."[23] Nevertheless, independent reports suggested otherwise: in 2010, local gold miners near Merowe had unearthed hundreds of sealed barrels, many later suffering cancers and skin diseases. The Merowe case epitomized the regime's pattern: even when insiders exposed wrongdoing, the state responded with cover-ups, denials, and suppression of claimants. Similarly, in eastern Sudan, parliaments revealed pesticide graves and toxic waste dumps only after local communities suffered serious health effects.[24] These belated acknowledgments underscore the reactive, rather than preventive, nature of Sudanese environmental governance.

By the end of this period, Sudan had an impressive portfolio of environmental policies and treaty commitments, including ratification of the Paris Agreement in 2017. However, implementation was hollow. Scandals – from pesticides to radioactive waste – demonstrated that Sudan's institutions had failed to move beyond tokenistic recognition. Communities were aware of the harms but lacked the political space to mobilize effective claims. The gap between naming and blaming by external actors and the absence of domestic claiming reveal the core weakness of this stage: Sudan's authoritarian regime systematically blocked pathways to accountability. These unaddressed grievances fed into the broader discontent that culminated in the 2018-2019 uprising, where slogans of "Freedom, Peace, and Justice" implicitly encompassed decades of environmental neglect and abuse.

Phase IV – Post-revolution Reframing (2019-present)

Sudan's 2019 revolution, which brought down Omar al-Bashir's three-decade rule, opened a rare political space to reframe the country's climate and conflict challenges before the still ongoing and horrific 2023 war.[25] The transitional government, in office from 2019 to 2021, sought to align with the revolutionary ethos of accountability, justice, and reform. For the first time, environmental protection was articulated not simply as an external obligation to satisfy donors, but as an integral component of peacebuilding and sustainable development. Prime Minister Hamdok, drawing on his background as a development technocrat, emphasized that Sudan's new path must prioritize long-neglected issues such as ecological degradation and resource mismanagement, echoing the revolution's core demands for freedom, peace, and justice.

One milestone of this discursive shift was the launch of Sudan's first-ever "State of the Environment and Outlook Report" in 2020, under the theme "Environment for Peace and Sustainable Development."[26] The report explicitly linked environmental well-being with the broader pursuit of national stability, acknowledging decades of neglect. It identified persistent crises – desertification, deforestation, pesticide contamination, industrial waste, and the militarization of resource exploitation – that previous regimes had denied or concealed. In doing so, the transitional government effectively "named" what had long been unnamable under authoritarian rule: that environmental breakdown was not a marginal concern but a central threat to livelihoods, peace, and governance.

However, translating this reframing into blaming and claiming proved far more difficult. Mobilization around environmental justice remained weak, in part because Sudan still lacked strong cause entrepreneurs who could bridge local grievances with national policy agendas. While the revolution allowed communities, advocates, activists, and journalists more freedom to expose environmental abuses – such as cyanide in gold mining or toxic waste dumping – the transitional government lacked the institutional stability to transform these grievances into policy. Some tentative steps were taken: the Minister of Justice proposed reopening files on environmental crimes from the Bashir era. At the same time, grassroots protests succeeded in halting some hazardous mining operations. A symbolic turning point occurred in early 2020, when the Ministry of Health publicly announced the discovery of illegally dumped radioactive waste near Omdurman.[27] Unlike past cover-ups, officials admitted to the problem, even acknowledging allegations that China had buried waste during construction of the Merowe Dam. This acknowledgment suggested a willingness, however limited, to confront perpetrators and assign responsibility.

Still, the transitional experiment was short-lived. The October 2021 coup dismantled civilian leadership, and the outbreak of full-scale war between military factions in 2023 created new environmental emergencies: urban destruction in Khartoum, toxic contamination, and further militarization of gold resources. Gains made from 2019 to 2021 were rolled back, and the fragile claiming process collapsed under renewed authoritarian violence.

Nevertheless, the post-revolution period left a lasting imprint on the policy discourse. The vocabulary of environmental justice entered Sudanese politics for the first time, supported by international initiatives, and was embedded in climate security, such as a UN Environment Programme initiative that supported resilience-building.[28] Civil society actors, from resistance committees to community groups in mining zones and marginalized regions, increasingly framed their demands in environmental terms. This marks a crucial departure from the past: even if institutional reforms remain elusive, Sudanese society is now more aware, mobilized, and vocal about environmental rights than ever before.

Since April 2023, Sudan has descended into chaos, with war consuming nearly every aspect of public life. Oversight and accountability have disappeared, leaving environmental governance effectively dismantled. In this vacuum, resource exploitation has intensified. Government-linked actors, private companies, and armed militias scramble for gold, land, timber, and other assets with little regard for environmental or human costs.[29] The unchecked spread of artisanal mining, deforestation for fuel, and toxic waste dumping illustrates the scale of this deterioration. This raises a critical question: Does war alone kill people, or does the destruction of the environment and the scramble for resources deepen the lethality of conflict? In Sudan, the answer might tragically be that environmental tampering – whether through the poisoning of water by mercury and cyanide, the militarization of gold mines, or the burning of farmlands – has become a weapon of war and a survival strategy for competing actors.[30]

From the lens of the sociology of social problems, the current war has effectively erased the fragile gains of the post-revolution period. Problems once named, such as toxic waste and

land degradation, are again silenced under conditions of violence. Blame is diffused as every faction participates in resource plunder, while the process of claiming is nearly impossible in the absence of functioning state institutions. What remains, however, is the mobilized awareness seeded during the revolution: resistance committees, civil society, and diaspora networks continue to document and protest environmental violations, even amid violence. The war, therefore, represents not just a political or humanitarian crisis, but the collapse of Sudan's already fragile environmental governance into a state of ecological anomie – a condition in which norms regulating the environment have disintegrated. Rebuilding Sudan will thus require not only silencing the guns but also restoring the basic social and institutional foundations that allow environmental accountability to exist. Any future government will confront a citizenry that sees ecological protection not as a technical afterthought but as a justice issue linked to the unfinished promises of the revolution.

Failures of Environmental Claim-Making and Paths Toward Justice

It can be argued that Sudan's environmental problems are deeply intertwined with its conflicts, as tensions over shared natural resources have both fueled violence and caused damage to them. Notably, desertification has contributed to the war in Darfur by causing hardship for pastoralist communities, while vulnerability to drought is exacerbated by social and developmental issues like prioritizing large-scale agriculture over quality and insufficient reliable water sources. Across these four phases of Sudan's modern history, a consistent theme is the failure of environmental claim-making under conditions of authoritarianism and conflict. Time and again, Sudanese communities experienced severe environmental harm – whether gradual (climate stress, pollution) or acute (toxic disasters) – and struggled to convert their grievances into effective claims on the state. Either the state ignored them (the marginalization phase), acknowledged issues only superficially (the internationalization phase), or actively covered up and repressed demands (the integration phase). Only in the post-revolution phase did a window open for serious claim-making, and even that has been jeopardized by a return to violence. This critical pattern underlines that Sudan's climate and conflict crises are not merely policy technical failures; they are deeply political failures tied to questions of voice, accountability, and equity. Policy interventions must move beyond treating ecological harm as a mere backdrop to conflict. They must enable marginalized communities to name harms, assign responsibility fairly, and make claims without repression – otherwise, environmental crises will continue to fuel instability.

What have been the consequences of these claim-making failures? First, environmental injustices have intensified. The communities of Hasahisa, for example, have endured over 30 years of poisonous exposure with minimal assistance or acknowledgment - a stark environmental injustice inflicted on a largely poor, rural population. Generations in Darfur and Kordofan have seen their livelihoods eroded by desertification without sufficient adaptation support, contributing to intercommunal strife. Second, grievances have accumulated and fed into broader fault lines of conflict. In Darfur, Arabs and non-Arabs have clashed not just due to racial narratives but because scarcity of water and pasture land

have made old agreements untenable, and the state has failed as an arbiter. In the oil fields of South Sudan (formerly Sudan pre-2011), the unchecked pollution by Khartoum-aligned companies fueled local anger that merged with the political rebellion for independence. The blame vacuum – or the absence of accountable parties – often led victims to blame whichever authority was in reach, sometimes scapegoating ethnic rivals or local officials when central powers were untouchable. This misdirection of blame can exacerbate social fragmentation.

Third, and more fundamentally, the lack of responsive claim mechanisms severely eroded trust in governance. When people see their government profiting from or hiding an environmental hazard that is killing them, the social contract is broken. In Sudan, Bashir's regime garnered a reputation for such callousness. From many citizens' perspectives, it prioritized foreign investment and self-enrichment over protecting Sudanese lives and land. This delegitimization played into the revolutionary fervor that ousted the regime.

Therefore, rethinking policy analysis for Sudan's crises means placing justice and accountability at the center. Traditional policy analysis might treat climate adaptation, resource management, and conflict resolution as separate technical tracks. A critical approach insists they are intertwined and that practical solutions must empower those most affected. For Sudan, this entails:

- Elevating local knowledge and participation: Policies must be informed by those on the front lines of environmental change, such as farmers, pastoralists, miners, and villagers near industrial sites. These stakeholders should be involved in designing interventions, ensuring that problems are accurately named and prioritizing human security.
- Institutionalizing transparency and whistleblower protection: The Sudanese state needs mechanisms for environmental monitoring that allow data to flow freely and problems to be reported without fear. Past scandals festered because data was hidden or falsified. Future policy should include community-based environmental audits and independent media access to sites of concern.
- Strengthening legal redress and enforcement: Sudan's legal system must be able to handle environmental claims. That means updating laws to allow class-action suits or community complaints against state and private polluters, and training judges on environmental law. It also means revisiting impunity. For instance, if evidence shows officials or companies dumped radioactive waste, they should be prosecuted, even if years have passed. Transitional justice for environmental crimes could be a novel yet necessary component of Sudan's journey to peace, offering acknowledgment and, perhaps, compensation to communities in Hasahisa and Merowe, among others.
- Integrating environmental and conflict-resolution policies: Peace agreements in Sudan (such as the 2020 Juba Peace Agreement with the rebels) should explicitly address natural resource sharing, land restitution, and climate adaptation in conflict regions. These are not side issues; they are central to preventing the recurrence of violence. International mediators and Sudanese negotiators alike must be educated on the nexus between climate change and conflict so that, for

example, Darfuri nomads and farmers receive support to adapt to a changing ecology as part of reconciliation processes.

- Regional and international cooperation with a justice focus: Sudan should continue engaging with African and global initiatives such as the Bamako Convention and climate funds, but with an emphasis on equity. For instance, Sudan can champion the idea that wealthy countries owe support for climate adaptation. Given the narrative of Darfur as a climate-induced conflict, there is a strong moral case for climate reparations to Sudan. Cracking down on transboundary waste dumping is also an area for regional solidarity, as evidenced by the rejection of "toxic trade" deals like the attempted Greek sludge export. Sudan's post-revolution diplomacy has shown promise in this regard, aligning with African positions on environmental rights.

Applying these principles could help transform the naming–blaming–claiming dynamic. Instead of adversarial denial, the government could welcome naming problems as an opportunity to fix them; rather than seeing blame as politically fatal, officials could accept responsibility and seek solutions; and rather than crushing claims, the state could facilitate their resolution through dialogue, the courts, or policy changes. This is, of course, an ideal; Sudan's current reality of renewed conflict is far from it. However, even as war rages, civil activists are documenting environmental and human rights abuses, laying the groundwork for future accountability. The patterns analyzed in this paper suggest that if Sudan is to escape the trap of climate and conflict crises, it must break the cycle of environmental injustice. This means empowering the people most impacted by environmental harm to have a say in the remedies.

Conclusion

Sudan's intertwined climate and conflict crises demonstrate the critical need to rethink policy analysis in fragile states. A purely technocratic approach is insufficient; what is required is a vital policy analysis that foregrounds social processes and power relations: who gets to define problems, who is held responsible, and whose voices count in policymaking. Using the naming–blaming–claiming framework, this paper dissected how Sudan has historically failed to acknowledge or address environmental grievances, and how those failures fed into violence and instability. From the marginalization era when toxic hazards and climate stress were ignored, to the internationally driven recognition of issues like Darfur's desertification, to the hollow policies of the late Bashir period, and finally the tentative reframing after 2019, Sudan's story is rich with lessons. Above all, it illustrates that environmental crises in conflict zones are not merely about droughts or dumps in isolation – they are about governance and justice.

For Sudan to move forward, any future government – hopefully a civilian, democratic one – must internalize these lessons. Policy analysis should be people-centered, asking how proposed climate adaptation plans or environmental regulations will empower communities and redress past harms. It should be historically informed, recognizing the specific injustices that different groups have suffered (such as remembering Hasahisa's sacrifices and Darfur's resource pressures) and incorporating them into reconciliation and

development programs. It should be holistic, bridging silos among environmental ministries, conflict-resolution bodies, and economic planning agencies. In Sudan, a dam project can spark conflict because it fails to account for environmental and social factors. A conflict can spark an environmental disaster through displacement and unmanaged exploitation.

The implications go beyond Sudan. Other fragile states facing climate stress – such as Yemen, Somalia, and Mali, to name a few – exhibit similar dynamics where environmental issues are both causes and casualties of conflict, often with marginalized communities bearing the brunt. For international policymakers and donors, the Sudan case underscores the importance of supporting not only infrastructure and climate projects but also accountability and the capacity of civil society. Without a watchdog function and responsive governance, investments in things like drought resilience may flounder or be captured by elites, exacerbating grievances. Conversely, supporting investigative journalism, legal empowerment, and community dialogues around natural resource management might yield more peace dividends.

Rethinking policy analysis for Sudan's climate and conflict crises means embracing a justice-oriented approach. It means asking not only, "What policies can reduce carbon emissions or adapt agriculture?" but also, "Who gets to shape these policies and who benefits?" It requires acknowledging painful truths about how Sudan arrived at this point: through hazardous waste dumped with impunity, or through pesticides seeping into water. At the same time, officials stayed silent, and climate adaptation was neglected until war erupted. By facing these truths, Sudan and similarly affected nations can begin to craft policies that are not only smart on paper but legitimate and healing in the eyes of their people. The road ahead for Sudan is uncertain, but a critical, people-first policy mindset offers the best hope that naming a problem leads to claiming one's rights and ultimately to real solutions that break the vicious cycle of environmental distress and conflict.

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[1] Abdalftah Hamed, "Sudan's Puzzle: Confronting Climate Change in a War-torn State", Middle East Council on Global Affairs, April 2024, available at https://mecouncil.org/publication/sudans-puzzle-confronting-climate-change-in-a-war-torn-state/; Weam Al Sharif, "Climate Change and Conflict: A Perfect Storm in Sudan's Countryside", Carnegie Endowment for International Peace, 4 June 2024, available at https://carnegieendowment.org/sada/2024/06/climate-change-and-conflict-a-perfect-storm-in-sudans-countryside?lang=en

[2] The Norwegian Institute of International Affairs, Stockholm International Peace Research Institute, "Climate, Peace and Security Fact Sheet Sudan", May 2022, available at https://www.sipri.org/sites

[3] Sudan demonstrates how positivist frameworks obscure the role of narrative, legitimacy, and exclusion in determining which environmental harms are recognized, which are silenced, and which are politicized.

[4] Érik Neveu, "L'analyse des problèmes publics: Un champ d'étude interdisciplinaire au cœur des enjeux sociaux présents" (French), Idées économiques et sociales, Vol. 190(4), 2017, pp. 6-19, available at https://doi.org/10.3917/idee.190.0006 (Neveu, "L'analyse des problèmes publics").

[5] The "naming, blaming, claiming" model was first articulated by Felstiner, Abel, and Sarat in the sociology of law to explain how grievances transform into disputes prior to entering formal legal institutions. While originally applied to legal conflict, this paper adapts the framework to the field of environmental governance and conflict in Sudan. The model is particularly relevant here because many environmental

harms never reach formal policy or judicial arenas. Instead, they are experienced locally, sometimes recognized and attributed, but often suppressed before communities can make effective claims. By tracing these blocked transformations, the framework helps illuminate why ecological crises in Sudan so rarely become drivers of reform and instead accumulate as sources of instability and violence. See William L.F. Felstiner, Richard L. Abel, and Austin Sarat. "The Emergence and Transformation of Disputes: Naming, Blaming, Claiming", *Law & Society Review*, Vol. 15, no. 3-4,1980, pp. 631-54, available at https://doi.org/10.2307/3053505; Neveu, "L'analyse des problèmes publics".

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[25] For the first time, environmental justice entered Sudan's national vocabulary, with officials acknowledging previously silenced issues. Yet the absence of durable institutions and cause entrepreneurs prevented claims from becoming policy. War since 2023 has collapsed accountability, creating an "ecological anomie" in which environmental destruction has become both a consequence and driver of conflict

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