Research Brief:
Conflict, Climate Change and Environmental Degradation

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This month's Research Brief contributes to the policy dialogue on climate change and environmental degradation (ED) and their relationship to armed conflict and other forms of violence. *Climate change* is primarily caused by humans releasing greenhouse gases into the atmosphere, while *environmental degradation* can be caused by anthropogenic (e.g., deforestation and climate change-related droughts), natural factors (e.g., certain hazards like earthquakes and regular extreme weather seasons) or, in some cases, an interplay of both. This brief focuses on **manmade environmental degradation** and its connection to organised violence in fragile contexts, exploring how natural resources, ED, and conflict interact. The few examples included here are intended to inform the programme and policy development framework offered at the end of the Brief.

Destruction of Habitat. Armed conflict can destroy vital ecosystems when these habitats form the battleground for violence. The civil war in Sudan destroyed the Sudd Wetlands, leading to the displacement of people, overuse of resources, and decreased livelihoods for fishing and pastoralist communities. Those who remained fought bitterly over the dwindling resources - fighting made all the more violent by the proliferation of arms that the civil war had ushered in.

Pollution. Polluted water sources challenge multiple dimensions of human security, including those that link directly to the emergence and continuity of armed conflict. In the Democratic Republic of Congo (DRC), conflict conditions are inextricably tied to exploiting minerals such as tantalum, tungsten and tin. Rebel groups and militias seize, operate and control many mining sites, using the proceeds to fuel their operations. The use of chemicals and heavy machinery for mining releases pollutants into nearby water sources that are toxic for life-sustaining aquatic food supplies and render the water unsuitable for human use. This has caused a rise in competition for resources, displacement, destruction of local economies, the spread of water-borne diseases, and habitat destruction, all contributing to instability and unrest.

Water scarcity. Access to water has figured into conflicts throughout human history – e.g., poisoning wells upon retreat so enemy soldiers could not sustain themselves in the territory. In contemporary Syria, climate change has caused a long-term drought, damaging agricultural livelihoods and access to clean water. In cities, the increasing population has made it harder for waste and water management systems to cope, driving up the cost of water and making it unaffordable for many people. Over the past three decades, armed groups have weaponised water, damaging water supply structures and contributing to the displacement of millions of people, further destabilising the country in the wake of political conflict.

Oil. Oil and gas facilities are destroyed to gain leverage and control over rival territories. This tactic was vividly demonstrated in the First Persian Gulf War when Iraq set fire to more than 700 oil wells in Kuwait. Recently, Islamic State (IS) fighters in Libya have targeted these infrastructures to gain power. In a country where oil accounts for roughly 95% of export revenues, this can force negotiations or acquiescence. The environmental consequences are enormous, impacting air quality, vegetation, wildlife, and water quality in freshwater and coastal habitats. In addition, the destruction of these infrastructures leads to job loss, reduced production and export capabilities, and economic instability, all of which threaten human security.

Deforestation. Post-Peace Accord deforestation in Colombia demonstrates the complexities of addressing the relationship between armed actors and ED. The 2016 Accord with the Revolutionary Armed Forces of Colombia (FARC, by its Spanish acronym) was meant to begin a new era of peace in the country. Before the Accord, the FARC had control or a significant presence in many rural areas, taxing extractive activities. After demobilisation, however, these taxes were removed, potentiating illegal mining and logging operations, including those done by dissidents and other non-state armed groups, displaced families, and existing communities. This foregrounds the importance of considering power vacuums in environmental resource management that could occur if conflict actors restructure.

In fragile contexts, traditionally marginalised populations, such as women, youth, and the elderly, are often more severely affected by the consequences of ED. For instance, humanitarian aid agencies in countries of the Middle East and North Africa have reported that women and girls are at higher risk of sexual assault and violence due to their need to travel long distances to access water. However, in some cases, the migration of men out of these communities can create new opportunities for women, who then have more influence in making decisions to address ED and physical insecurity.

The examples here are by no means an exhaustive list of either the forms of ED that occur or the manner in which they are woven into the tapestry of the sociopolitical and economic violence in a given setting. Natural resources can be a contributing factor, a target or tool, or a weapon of war. These dynamics can shift over time and exert a differential effect on distinct actor groups. It is thus the urgent demand on the analyst, programme designer and policymaker to develop a contextualised understanding of the role of natural resources, climate change and ED in the dynamics of armed conflict.

The relationship between competition over access to resources and violence is **complex, multifaceted and contextually nuanced**. What may appear on the surface to be a conflict over resource scarcity may be the mobilisation of natural resources in antagonisms that have long histories of multiplex entanglements. The following considerations are intended to support a **participatory, systems-level approach** to policy and programme development in this domain.

Procedure	Common Challenges in Fragile Contexts	Success Factors
Consider a Whole-of-Government Approach (WoGA). The effects of ED on populations, livelihoods and futures transcend siloed domains of social, political and economic life as they are normally parsed out into government ministries and institutions. A Whole-of-Government Approach coordinates across different branches and levels to achieve a common goal and deliver a more comprehensive solution. It tends to require a lead agency with strong leadership to ensure the development, implementation and accountability of a strategic plan with clearly defined roles and responsibilities in service of a mutually agreed upon comprehensive solution.	A WoGA approach can be challenging to implement in fragile contexts for a variety of reasons, including the following: political instability, limited capacity (financial, technical, institutional, political will), lack of trust, fragmented governance (especially between governing centres and those regions far from those centres), insecurity, poverty, inequality, and unemployment.	The participation of embassies can be critical in facilitating WoGAs in fragile contexts to support analysis, coordination, monitoring, feedback and programme adjustments. Development organisations may also be better positioned to support WoGA when their efforts occur in the shadow of a pre-existing and credible political settlement and transition plan. While a WoGA is not the solution to all ED-conflict concerns, it can be a valuable mechanism for approaching the common issues of fragmented governance and lacking coordination, whose prevalence have often contributed to the grounds of conflict and organised violence to begin with.
Develop a Whole-of-Society Strategic Operating Procedure (WoS SOP). Distinct from the WoGA, a WoS SOP takes a broader approach to problem-solving and is arguably akin to the multi-sector conceptualisations of addressing complex problems. A WoS approach includes not only public authorities, but also individuals, families, communities, intergovernmental organisations, religious institutions, civil society, academia, the media, voluntary associations, the private sector, and industry. Given the complexity of coordinating such broad responses, a Standard Operating Plan (SOP) can help to guide more decentralised decision-making by providing guidelines that support increased efficiency, quality initiatives, and more uniform actions, while reducing miscommunication and accountability issues.	In developing WoS approaches, long-standing divisions and tensions that are the root causes of the current crisis will inevitably play a significant role in shaping the potential of coordination and collaboration. Discrimination, marginalisation, and other forms of inequality and disenfranchisement are often deeply embedded in the institutions and communities that are the key stakeholders in these processes. Systemic challenges likely to confound efforts to develop a concerted, coherent SOP include, but are not limited to, the following: donor focus on shorter-term programming cycles, unpredictable and short-term funding, waves of crises, and political sensitivity.	Research on Global Water, Sanitation, & Hygiene (WASH) policies and programmes has identified several areas of importance for systems level WoS approaches. Most relevant for the development of an SOP include the following: designing adequate institutional arrangements, leadership, and coordination structures; building monitoring frameworks and capabilities for participating actors at all levels; developing multi-year WoS financing strategies; and building trust, regulatory compliance and accountability among participating organisations and institutions.
Focus on water and waste management infrastructure development, maintenance and oversight. All of the elaborated ED dynamics in this brief eventually tie back to water access and quality issues. Water resources management and, closely related, waste management capabilities are vital for relieving the environmental tensions that surface in contexts of organised violence. These can include water resource planning, technical training for institutions charged with the credible management of water resources, scaling of non-violent conflict resolution mechanisms, and integration of climate and disaster-resilient infrastructures and technologies.	Fragile and violence-affected contexts face multiple challenges with regard to designing, implementing and maintaining water and waste management infrastructures. A lack of financial and technical resources may mean that public works projects are a tricky proposition; often, these same constraints have contributed to the disrepair of existing systems. Political instability and insecurity can deter private and international development projects out of concern for worker safety and/or the destruction or seizure of materials. Furthermore, additional environmental challenges such as flooding or drought can make building and maintaining infrastructure difficult.	Focusing on water and waste management infrastructures and governance is a multi-faceted undertaking. In contexts where the agricultural sector is an essential contributor to stabilisation, it can be a productive inroad for mitigating the impact of conflict on food insecurity, poverty, employment and economic growth. Focusing on resilience-building initiatives that are consultative, participatory, and engage all levels of society can contribute to strengthening the social compact. Project visibility and flexibility can support greater momentum and adaptability, respectively.