1 Introduction

In recent years, rapid growth in practice and scholarship at the intersection of environment, conflict, and peace has given rise to the new field of environmental peacebuilding (Ide et al., 2021). Much of the work and research has focused on the environmental dimensions of conflict, peace, and peacebuilding. At the same time, interest has grown in the conflict, peace, and peacebuilding dimensions of environmental programming, often in the rubric of conflict-sensitive conservation (e.g., Hammill et al., 2009; Nadiruzzaman et al., 2022; Woomer, 2018).

To date, however, most of the literature on conflict-sensitive conservation has been qualitative, anecdotal, and prescriptive.

This book breaks new ground on conflict-sensitive conservation, presenting both quantitative and qualitative evidence from a recent independent evaluation of interventions[1] supported by the Global Environment Facility (GEF) in fragile and conflict-affected states (GEF Independent Evaluation Office [IEO], 2020). This evidence—gathered through the analysis of thousands of GEF-supported projects—highlights the importance for conservation organizations and funders, considering the fragile and conflict-affected context in which they often operate and the risks to project success when they ignore that context.

As a leading funder globally of environmental programming, the GEF has supported more than 4,000 projects around the world, including in many conflict-affected and fragile situations. Moreover, given the longevity of GEF programming (more than 25 years) and the quality of data around GEF programming, the GEF provides an ideal opportunity to consider the effects of conflict and fragility on conservation outcomes and evaluate approaches to conflict-sensitive conservation.

The evaluation underpinning this book assessed GEF projects and programs in fragile and conflict-affected situations to determine whether and how GEF-funded interventions are conflict sensitive and the implications thereof.

This book introduces two new typologies drawn directly from the analysis of GEF-supported interventions. First, the book presents a typology of the ways by which fragility and conflict affect GEF-supported conservation projects. Analysis of the broader literature highlights, however, that this typology is relevant far beyond the GEF context. Second, the book presents a typology of conflict-sensitive approaches. Again, this typology grew organically out of the collection of

DOI: 10.4324/9781003351399-2

approaches adopted by GEF-supported interventions, but it reflects approaches in the broader literature on conflict-sensitive conservation programming.

The book draws upon analyses at three levels of programming:

1. across the GEF portfolio;
2. across interventions since 2002 in seven situations affected by conflict and fragility (Afghanistan, the Albertine Rift, the Balkans, Cambodia, Colombia, Lebanon, and Mali); and
3. from projects in each of the seven situations.

Using a mixed-methods approach, the book considers four key questions:

1. Does a conflict or fragile context affect the outcomes of GEF-supported projects?
2. To what extent do GEF-supported projects take into consideration the conflict or fragile context in their design and implementation?
3. Does consideration of the conflict or fragile context (or the failure to consider it) affect project outcomes?
4. What conflict-sensitive measures could the GEF, agencies, and partners adopt to improve the performance and outcomes of GEF-supported interventions?

This chapter provides a quick review of the linkages between environment, conflict, and peace. It then considers how environmental interventions can interact with conflict and fragility and briefly surveys the rise and evolution of conflict-sensitive conservation initiatives. It considers the broader policy context in which conflict-sensitive conservation has evolved, with a focus on multilateral environmental agreements and the 2030 Sustainable Development Goals. The chapter briefly discusses developments in evaluating efforts at the intersection of environment, conflict, and peace and concludes with a road map to the book.

Regarding the terminology used in this book, policies, guidance, and analyses on conflict-sensitive programming variously address "conflict-affected," "fragile," and "violent" "situations" and "countries." Conflict-affected and fragile situations have many dimensions, with a diverse range of articulations related to conflict and fragility. The evaluation and this book follow well-established framings and definitions for the key terms, presented in Box 1.1.

Linkages Among Environment, Fragility, and Conflict

A large and growing body of academic and practitioner literature establishes the diverse connections between the environment and peace, conflict, and security (e.g., Ahmadnia et al., 2022; Conservation International [CI], 2017; Dresse et al., 2019; Hammill et al., 2009; Ide, 2020; Ide et al., 2021; Johnson et al., 2021; Krampe et al., 2021; Rüttinger et al., 2015; UNEP, 2009; UN OCHA, 2009). This literature addresses the relationship across the conflict life cycle, including the environmental causes of conflict, environmental impacts of armed conflict, financing and environmental drivers of conflict, environmental factors in the negotiation

Box 1.1 Definitions of Key Terms

For purposes of this analysis, we use the following definitions of the key terms unless otherwise indicated:

Conflict-affected refers to contexts that are experiencing or have experienced **armed conflict**, which is "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar year" (UCDP, n.d.).

Major armed conflict is an armed conflict in which at least 1,000 battle deaths occurred overall (Harbom & Wallensteen, 2008).

Fragility is "the combination of exposure to risk and insufficient coping capacity of the state, system and/or communities to manage, absorb or mitigate those risks. Fragility can lead to negative outcomes including violence, the breakdown of institutions, displacement, humanitarian crises or other emergencies" (OECD, 2016).

Conflict sensitivity refers to "the capacity of an organization to: (i) understand the context in which it operates; (ii) understand the interaction between the organization's interventions and the context; and (iii) act upon these understandings to avoid negative impacts (do no harm) and maximize positive impacts" (United Nations Children's Fund, 2020).

State refers to a United Nations member state.

Situation refers to a location and may include a state, a subnational area, an area that includes portions of two or more states, or an area that includes multiple states.

and conclusion of peace agreements ending conflict, and environmental dimensions of post-conflict peacebuilding (see Figure 1.1). It also addresses the potential for the conflict context to affect the successful realization of environmental initiatives (Bruch et al., 2019). In any year from 1946 to 2008, at least 40 percent of all intrastate conflicts were linked to natural resources, and in some years, the share was as high as 65 percent (Rustad & Binningsbø, 2010). Conflicts that are linked to natural resources are more likely to relapse than other conflicts, and they do so twice as quickly; this is particularly true for conflicts related to the allocation of land and high-value natural resources, such as minerals, oil, and gas (Rustad & Binningsbø, 2010).

Conflict and fragility are widespread, and they have been worsening. With increased internal armed conflict and the proliferation of non-state armed groups, the world is experiencing its highest rate of violent conflicts in 30 years (Armed Conflict Location & Event Data Project, 2018; World Bank Group, 2020). Morrow (2018) found that "about 20 percent of conflict-affected GEF recipient countries

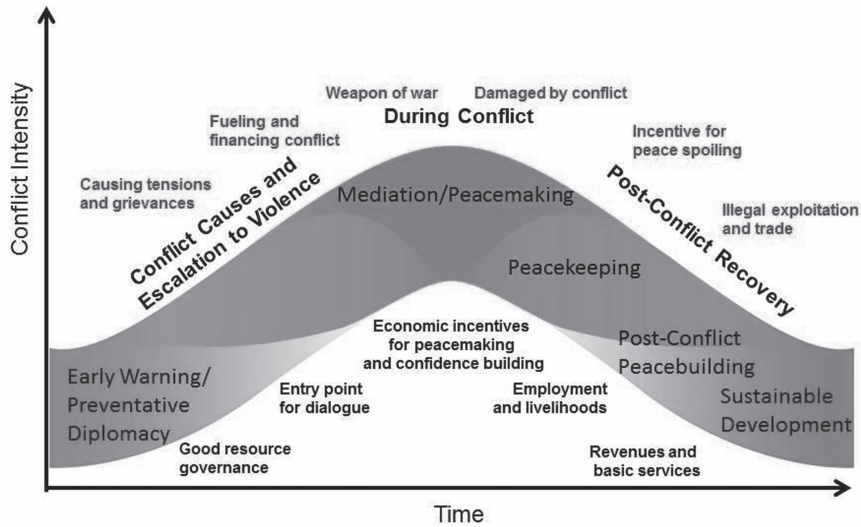

Figure 1.1 Environmental Risks and Opportunities Across the Conflict Life Cycle

experienced more than 20 years of conflict including Turkey, Pakistan, Ethiopia, Uganda and the Russian Federation." Fragility—like conflict—is often persistent and pernicious, with almost 30 states experiencing chronic fragility in the past decade (OECD, 2018). The World Bank has projected that "by 2030, more than half of the world's extreme poor will live in countries characterized by fragility, conflict, and violence" (World Bank Group, 2020, p. 2).

Competition for valuable or scarce natural resources can be a contributing cause of conflict. Competition for control over valuable natural resources and their benefits can lead to reduced economic, political, and social performance; this is known as the "resource curse" (e.g., Auty, 1993; Collier & Venables, 2011; Karl, 1997; Ross, 2004, 2015). Many have also argued that competition over scarce natural resources, such as land and water, can drive conflict (e.g., Elliott, 1991; Gleick, 1993; Homer-Dixon, 1994; Westing, 1986). Serious pollution and other burdens resulting from natural resource extraction and processing can also drive conflict. For example, in Bougainville, Papua New Guinea, a combination of the lack of benefit sharing and severe water pollution from the Panguna gold and copper mine drove a secessionist movement that escalated to civil war (Regan, 2017).

Climate change is widely considered to be a conflict risk multiplier and conflict accelerator (e.g., Center for Naval Analyses Corporation [CNA] Military Advisory Board, 2007; CNA, 2014; CI, 2017; GEF Scientific and Technology Advisory Panel [STAP], 2018; National Research Council, 2013; Nordås & Gleditsch, 2007). Climate change degrades natural capital and livelihood assets, damages infrastructure, weakens food security, threatens lives, and can drive migration (Adger et al., 2015; Matthew et al., 2022; Rigaud et al., 2018; Rüttinger et al., 2015; UN OCHA, 2009). As such, climate change can increase fragility and aggravate tensions (Faller

et al., 2022; Rüttinger et al., 2015; UN OCHA, 2009). Moreover, increases in temperature have been shown to measurably increase both interpersonal conflict and intergroup conflict (Burke et al., 2015). The World Bank estimated that "under the pessimistic reference scenario, . . . the number of climate migrants could reach more than 143 million by 2050" (Rigaud et al., 2018, p. 110). There is also evidence that climate change may interact with and amplify the negative effects of conflict. Somalia, for example, has experienced a "double exposure" to both climate-induced environmental impacts and protracted conflict, which together have caused the displacement of over 2.6 million people within the country and further entrenched drivers of conflict (Krampe, 2019). Similarly, in Gaza, analyses have highlighted how predicted changes in climate risks can exacerbate the effects of conflict (Margolis, 2020; Mason et al., 2011).

Recognizing that poor environmental governance and fragility can underpin grievances, conflict prevention increasingly focuses on improving environmental governance and social resilience. Research has shown that the risk of conflict relapse in countries with good governance drops rapidly after conflict, while countries characterized by poor governance are substantially more vulnerable to conflict relapse (Hegre & Nygård, 2015). A World Bank background paper (Walter, 2010), noted:

> Of the 103 countries that experienced some form of civil war between 1945–2009 (from minor to major conflict), only 44 avoided a subsequent return to civil war. That means that 57 percent of all countries that suffered from one civil war during this time period experienced at least one conflict thereafter. This confirms what Collier and Sambanis (2002) have called the "conflict trap;" once a country experiences one civil war, it is significantly more likely to experience additional episodes of violence. (p. 1)

Efforts to prevent conflicts related to natural resources often emphasize transparency (e.g., the Extractive Industries Transparency Initiative; Epremian et al., 2016; Sovacool et al., 2016), equity (e.g., benefit sharing; Binningsbø & Rustad, 2012), and other good governance principles. In resilience-based framings, environmental governance, sustainable livelihoods, institutional capacity, and strong community relationships all contribute to the social resilience that can prevent conflict (Rüttinger et al., 2015; UNEP, 2014).

Armed conflict causes environmental damage and degradation through three main pathways: targeting, coping strategies, and the breakdown of environmental governance. Targeting of the environment includes, for example, scorched-earth tactics (such as poisoning wells or leveling forests to remove cover); the use of particular weapons; and the release of chemicals and waste from the bombing of industrial sites and infrastructure, creating environmental hotspots (e.g., Austin & Bruch, 2000; Certini et al., 2013; Westing & Pfeiffer, 1972; Zierler, 2011). Examples include the devastating impacts of the use of Agent Orange on plant and animal life during the Vietnam War (Westing, 1971, 1976; Zierler, 2011) and the widely documented increase in animal poaching that occurs in times of war (Daskin & Pringle, 2018). During conflict, people often liquidate natural assets, flee to camps

or other settlements, and otherwise adopt new strategies to cope—all of which have environmental implications (e.g., UNEP, 2009). Conflicts also disrupt state institutions, policy coordination, and social relationships between resource users, undermining environmental governance and leading to a proliferation of illegal and criminal exploitation of natural resources and the loss of land tenure security (Bruch et al., 2016; UNEP, 2009).

Natural resources often provide financing necessary to sustain conflict; these resources are known as "conflict resources" (Humphreys, 2005; Ide et al., 2021). Since 1990, at least 35 major armed conflicts[2] have been financed in part through the extraction, trade, or illicit taxation of conflict resources ranging from diamonds and gold to timber and charcoal, to bananas and coca (Bruch et al., 2019).

Conflict resources and other natural resource dynamics can transform the conflict narrative. Rather than being a civilian object protected by international law, conflict resources become a military objective that might be attacked, seized, or destroyed to deprive the other side of financing (Bannon & Collier, 2003; Le Billon, 2013; Ross, 2004). Moreover, once conflict resources take root in a conflict economy, it can be difficult to control extraction of and trade in these resources, even after the conflict has ended.

Peace negotiations and the resulting peace agreements increasingly have incorporated provisions related to natural resources and the environment more broadly. Historically, less than one in six peace agreements addressed natural resources or the environment (Blundell & Harwell, 2016). From 1989 to 2004, this share rose to just over one half of peace agreements (Mason et al., 2016). Since 2005, all major peace agreements contain such provisions (and often multiple provisions). For four primary reasons, parties to a peace agreement choose to decide to include provisions related to natural resources and the environment (Dawes, 2016):

1. Grievances over natural resources were a contributing cause of conflict (as in Nepal, Sierra Leone, and Sudan).
2. Natural resource revenues helped finance conflict (as in Angola, Cambodia, and Liberia).
3. Natural resources were damaged by the conflict (as in Darfur and the Democratic Republic of the Congo).
4. The environment can be used collaboratively to build confidence and trust.

After conflict, the environment and natural resources underpin the four broad peacebuilding objectives. In a series of reports on peacebuilding in the immediate aftermath of conflict, the UN Secretary-General has emphasized these four core areas: establishing security, delivering basic services, restoring the economy and livelihoods, and rebuilding governance and inclusive political processes (e.g., 2009, 2010, 2012, 2014). Each of these post-conflict peacebuilding objectives relies on natural resources and the environment, and sound environmental management can improve post-conflict peacebuilding, while ignoring the environment can undermine post-conflict peacebuilding efforts (e.g., Bruch et al., 2016; Jensen &

Lonergan, 2012; Lujala & Rustad, 2012; Unruh & Williams, 2013; Weinthal et al., 2014; Young & Goldman, 2015).

Environmental Interventions, Conflict, and Fragility

Environmental interventions can interact with conflict and fragility in three ways: (a) the intervention can be negatively affected by conflict and fragility; (b) the intervention can inadvertently worsen conflict and fragility; and (c) the intervention may help address the drivers, dynamics, and impacts of conflict and build peace. In other words, a project can both be affected by and affect the conflict situation. This book highlights the fact that the first two dynamics can occur when conflict- and fragility-related risks are not managed effectively and, by contrast, that applying a conflict-sensitive lens in project design and implementation can support the third dynamic.

Conflict and fragility can present challenges to projects through several pathways, for example, through security threats to staff, difficulty with hiring, and challenges to accessing resources and areas (Conflict Sensitivity Consortium, 2012; GEF STAP, 2018; Morrow, 2018).[3] Conflict may directly threaten those working on a project. This occurred during the implementation of a GEF project in Cambodia, Developing an Integrated Protected Area System for the Cardamom Mountains,[4] when poachers murdered two park rangers (GEF, 2007), injured a local villager, and pillaged a ranger substation in the Phnom Aural Wildlife Sanctuary project area, a former Khmer Rouge stronghold (FFI, 2005; GEF, 2007). Short of such tragic outcomes, interventions in conflict-affected areas may have difficulty hiring staff, as was the case a sustainable land management project in Afghanistan that eventually had to be cancelled because of issues with staff recruitments and other "challenging security conditions" (GEF, 2010).[5] As with humanitarian efforts, environmental programming can legitimize certain groups or leaders by partnering with them, shift local markets with an influx of resources, and effectively replace governance functions or structures (UNDP, 2016). Moreover, impacts of conflict on the environment can directly affect a project's implementation, and they can more broadly affect the environmental benefits that such projects may seek to achieve. (Table 1.1 lists the projects referenced in Chapter 1.)

Conflict can make it unsafe to try to access project sites. During the implementation of a forest biodiversity project in the Albertine Rift,[6] project staff were unable to collect data on project indicators because of the presence of armed groups in the area (GEF IEO, 2015). In such circumstances, some projects may also choose or be forced to move their project sites entirely, such as was the case for a project in Mali's Gourma region,[7] where military operations forced project relocation and project staff fled the site and took refuge in southern Mali or neighboring countries (World Bank, 2013). Institutional weakness during times of conflict may also affect project implementation, especially where the cooperation of the government is a necessary component of project activities. A project in the Inner Niger Delta in Mali[8] faced nearly 40 months of delays and economic inefficiencies because the

Table 1.1 GEF-Supported Projects Referenced in This Chapter

Project ID	*Project Name*	*Region*	*Dates*
1086	Developing an Integrated Protected Area System for the Cardamom Mountains	Cambodia	2001–2007
1152	Biodiversity Conservation and Participatory Sustainable Management of Natural Resources in the Inner Niger Delta and its Transition Areas, Mopti Region	Mali	2003–2013
1253	Gourma Biodiversity Conservation Project	Mali	2001–2013
3220	Capacity Building for Sustainable Land Management	Afghanistan	2007–2010
3772	CBSP Forest and Nature Conservation Project	Democratic Republic of the Congo	2008–2015

project team could not reach an agreement with the National Investment Agency for Local Communities when conflict broke out in Mali in 2012 (GEF IEO, 2014).

Environmental interventions can aggravate tensions or conflict. If unaware of ongoing tensions and conflict dynamics, an organization designing and implementing an intervention can inadvertently exacerbate existing grievances or perceptions of injustice. For example, a planned hydroelectric dam project in Santa Rita, Guatemala, funded through the United Nations Framework Convention on Climate Change's Clean Development Mechanism, would have threatened neighboring Mayan communities' access to water, food, and sacred sites. With the legacy of the Guatemalan Civil War, a project that threatened their existence, and the lack of free, prior, and informed consent, disputes over the project escalated to violence, resulting in seven deaths and the eventual cancellation of the project (Filzmoser & Brasier, 2017; Neslen, 2015).

Environmental projects may restrict access to land, forests, and other natural resources, generating grievances. This is frequently the case in wildlife-related projects, where recovering wildlife populations expand and infringe on neighboring communities (IUCN, 2016). In East Africa, tens of thousands of Maasai were evicted from their ancestral lands to create Serengeti National Park and other national parks (Mittal & Fraser, 2018). Estimates indicate that 70 percent of Africa's rural population "has been hurt by the conservation policies of colonial powers and independent governments" (Veit & Benson, 2004). Conservation efforts across Africa have marginalized many (Hsiao, 2018, 2020). Human-wildlife conflict continues: In the areas surrounding Kenya's Tsavo East National Park, for instance, ranchers lost an estimated $290 for every lion attack (Patterson et al., 2004).

Environmental and natural resource projects can also introduce new burdens or result in inequitable distribution of benefits and burdens (Hammill et al., 2009; Rights and Resources Initiative, 2015). Where people have little trust in authorities, the perception of these injustices may worsen tensions. Conservation projects can also inadvertently facilitate violence when park guards are militarized, particularly in

areas already affected by armed conflict or where protected areas are located on lands historically occupied by indigenous peoples (Duffy et al., 2019). In Cameroon, for example, park eco-guards, who were recruited, trained, paid, and outfitted in Lobéké National Park by a conservation nongovernmental organization, were reported in 2015 to be conducting violent nighttime raids in which they looted and beat villagers in neighboring Baka communities (see, e.g., Lang, 2017; Vidal, 2016, 2020).

Even where benefits and burdens are shared equitably, conservation projects can backfire. In the Mikeno sector of Virunga National Park in the eastern Democratic Republic of the Congo (DRC), community members who were compensated for helping to build walls to prevent buffaloes from raiding crops became targets of armed groups who looted their homes for food and money (Crawford & Bernstein, 2008).

In the DRC, efforts to empower park rangers to address poaching backfired. When the rebel M23 militia forces started using the Virunga National Park (home to the eastern mountain gorilla) as a base, the local park rangers were outgunned and outmaneuvered. A conservation group sought to address this by providing them with military-grade automatic weapons and training them in both military techniques and anti-poaching strategies (Rice, 2006). The rangers received extra pay for the risks in confronting the rebels. After the training was completed and the rangers returned to their park, though, the government stopped providing this extra pay, according to interviews with subject matter experts. Some of these rangers were then recruited by the M23 and helped M23 take over park tourism, which in turn helped to fund their efforts in the ongoing conflict (Jones, 2012).

In addition to risks, a fragile or conflict-affected context can present opportunities. Environmental projects can use their intervention as an opportunity for peacebuilding. One example of this took place in the Emerald Triangle, a forested area that encompasses land along the borders of Cambodia, Laos, and Thailand. The biodiverse area has faced various threats, particularly from illegal wildlife trade and habitat fragmentation, challenges that require substantial transboundary cooperation to address. Such cooperation was historically difficult because of tension and conflict over contested state borders in that area. The International Tropical Timber Organization initiated a project in the area to improve biodiversity conservation in the transboundary region and strengthen cooperation between the three governments (Suisseya, 2012). Project documents noted improved conservation and collaboration outcomes (ITTO, 2010). While promoting cooperation between combatting groups, these types of conflict-sensitive interventions also have the potential to improve the outcomes and sustainability of the intervention itself.

Growing Attention to Conflict Sensitivity

Organizations around the world have begun to address the linkages between their interventions and the conflict dynamics in which they operate. These include a broad range of environment and development interventions. The efforts to address the linkages include adopting conflict-related policies and guidelines; instituting conflict analysis processes; integrating conflict-related measures into project

design and implementation; adapting monitoring, evaluation, and learning protocols; instituting conflict-related training and allocating staff time to implementing changes; and developing relevant resources and guidance related to conflict sensitivity.

Conflict sensitivity first emerged in humanitarian assistance as a way of helping actors achieve positive outcomes and understand the unintended consequences of aid (ITTO, 2010). In the 1994 Rwandan genocide, genocidaires exploited humanitarian relief to launch attacks, and development agencies aggravated tensions between social groups by recruiting primarily Tutsi local staff (ITTO, 2010). After this, international development agencies acknowledged that aid is not necessarily neutral, and they started developing, implementing, and revising approaches to be more conflict sensitive.

The growth of conflict sensitivity in the humanitarian and development sectors, coupled with the growing recognition of the linkages between environment, conflict, and peace, led to the development of conflict-sensitive environmental programming. The first major guide on the topic was the 2009 International Institute for Sustainable Development publication, *Conflict-Sensitive Conservation: Practitioners' Manual* (Hammill et al., 2009). The Wildlife Conservation Society, Conservation International (CI, 2017), and other environmental organizations have adopted toolkits, protocols, and guides for operating in fragile and conflict-affected settings. United Nations agencies adopted a series of guidelines on conflict-sensitive environmental programming (UNFTPA, 2012a; UNDG, 2013) and guidance on preventing and managing conflict related to natural resources (UNFTPA, 2012b, 2012c, 2012d, 2012e). The United States Agency for International Development (USAID) adopted a series of guidance notes (USAID, 2004, 2005, 2014, 2015), and the UK Department for International Development (DfID)[9] produced *Back to Basics: A Compilation of Best Practices in Design, Monitoring & Evaluation in Fragile and Conflict-Affected Environments* to highlight best practices throughout a development program's cycle (Corlazzoli & White, 2013).

Conflict analysis is the prevalent tool—and an important first step—for conflict-sensitive programming. It can be undertaken at the institutional, program, and project levels, and it explores the connections between a given institution's interventions and the conflict context in which it operates. Many institutions have developed their own conflict analysis processes and procedures to reflect their particular programming areas and modalities (e.g., CI, 2017; Food and Agriculture Organization of the United Nations [FAO], 2019; UNICEF, 2016; USAID, 2012a, 2012b). The findings from the conflict analysis guide organizations in adapting their design and implementation to the particular context in which they operate.

International organizations and bilateral aid agencies have adopted a variety of measures to operationalize the policies and toolkits on conflict-sensitive programming. The FAO, Organization of American States, and others have trained staff and partners on conflict sensitivity tools and processes (e.g., CI, 2017; FAO, 2012; Soto, 2016). Others have appointed a focal point person for conflict sensitivity or created a task force to streamline relevant initiatives, such as the Organisation for Economic Co-operation and Development, Development Assistance Committee

(OECD DAC) Task Force on Conflict, Peace, and Development Co-Operation (OECD, 2000). Beyond operationalizing conflict sensitivity within their own programs, many organizations share lessons learned, as exemplified by the Nigeria Stability and Reconciliation Programme's *Lessons Learned: Conflict and Gender Sensitive Programming in Fragile and Conflict Affected Contexts* (NSRP, 2017), or develop broader guidance, as the International Institute for Sustainable Development and Conservation International have done (CI, 2017; Hammill et al., 2009).

Multilateral Environmental Agreements and Conflict

Within the environmental context, multilateral environmental agreements (MEAs) provide substantial policy guidance. While the objectives of an MEA generally focus on conservation and sustainable development, some MEAs include provisions on armed conflict. Moreover, the respective Conferences of the Parties (COPs) have adopted conflict-related resolutions and implemented peace-related projects.

Some MEAs have specific provisions on armed conflict. Under the 1972 World Heritage Convention, natural heritage that is threatened by the outbreak or threat of an armed conflict can be included in the "list of World Heritage in Danger," a list of property for which major operations are necessary and for which assistance has been requested (UNESCO, 1972, art. 11(4)). The preamble of the Convention on Biological Diversity provides that "ultimately, the conservation and sustainable use of biological diversity will strengthen friendly relations among States and contribute to peace for humankind" (1993, para. 22). Some MEAs specifically provide that they do not apply during armed conflict[10] or that their application may be suspended by State Parties.[11]

Regardless of whether an MEA has provisions explicitly addressing armed conflict, the COPs often have to address the effects of armed conflict, fragility, and violence on achieving the objectives of the convention. COPs have adopted a range of resolutions, plans, and other measures that recognize the risks and opportunities related to armed conflict. Examples include the Convention on Biological Diversity;[12] the Ramsar Convention on Wetlands of International Importance, especially as Waterfowl Habitat;[13] the World Heritage Convention;[14] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).[15] In addition, COP reports include comments by countries and others experiencing challenges of meeting MEA commitments because of conflict.[16]

Some MEA Secretariats have developed significant initiatives related to peace and conflict. For example, the Secretariat of the UN Convention to Combat Desertification (UNCCD) has launched three major initiatives. In 2007, UNCCD and the African Union launched the Great Green Wall Initiative. By planting trees, restoring degraded land across the Sahel, sequestering carbon, and creating millions of green jobs, the initiative seeks to address resource-driven conflict and migration.[17] In 2016, UNCCD also helped launch, and serves as the secretariat for, the Initiative on Sustainability, Stability and Security, an intergovernmental effort to address the root causes of instability in Africa, focusing on migration and conflict-related

degradation of natural resources.[18] The 3S Initiative seeks to create 2 million green jobs for vulnerable groups through investment in restoration and sustainable land management, strengthening access to land and tenure rights in fragile areas, and preventing displacement by improving preparedness and early warning systems for drought and other natural disasters (UNCCD, 2018). And in 2020, UNCCD and the Korea Forest Service launched the Peace Forest Initiative to support post-conflict peacebuilding through cooperation and development of forest-related livelihoods (UNCCD, 2020).

The Convention on Biological Diversity (CBD) launched the Peace and Biodiversity Dialogue Initiative in 2015.[19] This effort highlighted the value of peace parks both in conserving biodiversity and fostering conditions that help alleviate conflict. It sought to strengthen transboundary management systems and the establishment of regional networks, one of the objectives of CBD COP Decision VII/28 (Goal 1.3).[20] More broadly, this initiative supported efforts to prevent and resolve tensions, including those over access to natural resources, and promoted the resolution of armed conflict and post-conflict reconciliation. Among its many activities, the initiative prepared and delivered a massive open online course (MOOC) on "Peace Park Management and Development," in which more than 1,000 people enrolled.[21]

In addition to MEAs, key global environmental declarations have long emphasized the importance of peace to environmental protection and sustainable development and decried the destructive impacts of war. Paragraph 6 of the preamble to 1972 Stockholm Declaration on the Human Environment emphasizes the "three basic goals of mankind—protection of the human environment, peace and worldwide economic development" and in Principle 26 calls for the "elimination and complete destruction of" nuclear weapons and other weapons of mass destruction (UN, 1972). Principle 24 of the 1992 Rio Declaration on Environment and Development declares warfare to be "inherently destructive of sustainable development" (UN, 1992). The 2002 Johannesburg Declaration pledges, under Principle 19, to place particular focus on fighting conditions that pose severe threats to sustainable development, including armed conflict, terrorism, and foreign occupation, among others (UN, 2002). The 2012 Rio Declaration ("The Future We Want") reaffirmed "the importance of freedom, peace and security" and emphasized the need to devote specific attention to countries in situations of conflict (UN, 2012, paras. 8 and 32).

The Sustainable Development Goals, Conflict, and Peace

The 2030 Agenda for Sustainable Development emphasizes the central role of peace to the achievement of the Sustainable Development Goals (SDGs): "There can be no sustainable development without peace and no peace without sustainable development" (UN, 2015, preamble). SDG 16 seeks to "promote peaceful and inclusive societies for sustainable development." This is considered a cross-cutting goal, underpinning and reinforcing all the other SDGs (UNDESA, 2019).

To understand the nature and scope of the relationship between the SDGs and peace and conflict, the research team analyzed each target for the 17 SDGs—a

total of 169 targets. For each target, the team considered whether (a) environmental peacebuilding activities advance the specific target and (b) activities undertaken to achieve the target advance environmental peacebuilding. In the analysis, the team referred to the literature on and practice of environmental peacebuilding. A conservative view of environmental peacebuilding was adopted, focusing on violent conflicts. It was recognized that education and health care are important factors in peoples' ability to govern and manage natural resources and the environment in a way that supports peace, but this research focused on more direct links and recognized partial contributions. For instance, SDG 1 seeks to "end poverty in all its forms everywhere." Environmental peacebuilding might not tackle all the forms of poverty nor does it do so everywhere, but it does help to generate sustainable livelihoods and helps to end poverty in specific ways and specific places. The results are shown in Figure 1.2.

Each SDG is affected by environmental peacebuilding, and every SDG affects the outcomes of environmental peacebuilding. The strongest links (100 percent in both directions) are with Goal 6 (water and sanitation) and Goal 13 (climate change and its impacts). The weakest linkages are with Goal 3 (healthy lives and well-being), which still has a 22 percent relevance in both directions. Eight of the 17 SDGs have at least a 70 percent synergy with environmental peacebuilding.

The vast majority of linkages between SDGs and environmental peacebuilding are mutually reinforcing, but in two instances, SDG targets could negatively affect peace and stability, depending on how they are implemented. For example, target 12.c is "Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions." However, raising the price of gasoline needs to be done with sensitivity because doing so has prompted riots and instability in a range of countries, including Egypt (Middle East Eye, 2019), Iran (Fassihi, 2019), Mexico (Godoy, 2017), Venezuela (Helman, 2014), and Nigeria (Parker, 2012). Target 17.11 is "Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020" (UN, 2015). Although this is often important to peacebuilding, a political priority on rapid, large-scale extraction of natural resources can lead to land grabbing for commercial agriculture (Dell'Angelo et al., 2017; FAO, 2016; Ndi, 2017), conflicts with local communities over forests (e.g., Altman et al., 2012; Lamb et al., 2009), and conflicts with small-scale miners (e.g., Katz-Lavigne, 2019). These potential tensions between specific measures to advance sustainable development and overall peace highlight the importance of including peace in the conceptualization of sustainable development.

Monitoring and Evaluating Interventions at the Intersection of Environment, Conflict, and Peace

Monitoring and evaluating interventions at the intersection of environment, conflict, and peace are challenging for many reasons (McClain et al., 2022; Morales-Muñoz et al., 2021).

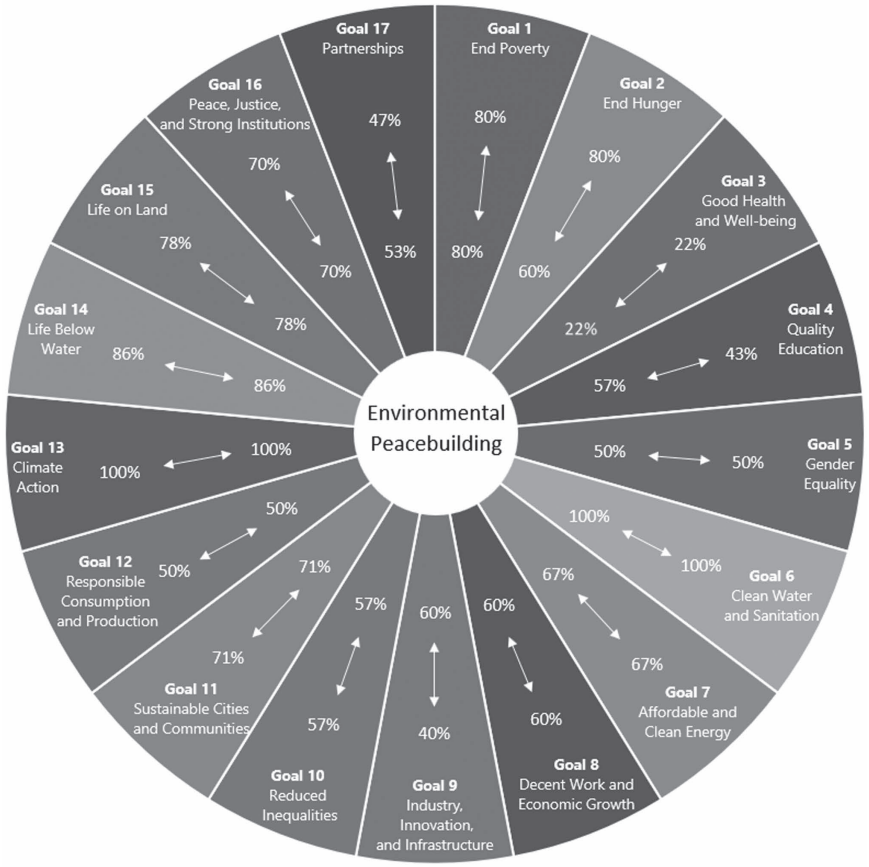

Figure 1.2 Linkages Between the Sustainable Development Goals and Environmental Peacebuilding

Source: GEF IEO, 2020

Note: This figure shows the percentage of the targets for a particular Sustainable Development Goal that affects environmental peacebuilding (inner ring of percentages) and the percentage of targets for that goal that are affected by environmental peacebuilding activities (outer ring of percentages).

Environmental peacebuilding is a new and evolving field. Consequently, the underlying theories of change are underdeveloped and often rely on specific experiences. They have rarely been tested in a range of contexts to know the circumstances under which the theories of change work and the circumstances under which they do not (McClain et al., 2022). Moreover, there are many theories of change and project developers often do not clearly state which theory of change they are using or they combine the theories of change.

Monitoring and evaluation are also complicated by the need to track three key dynamics: environmental change, changes in peace and conflict, and causal links between environmental changes and peace/conflict changes. Tracking

environmental change is fairly well understood. There are tools, albeit imperfect, for tracking changes in peace and conflict. It can be particularly challenging, though, to link changes in peace and conflict to the environmental changes observed.

In addition to these challenges that are particular to environmental peacebuilding interventions, other challenges are shared with monitoring and evaluating environmental, development, and humanitarian programs more generally. These include, for example, the long timelines necessary to observe the ultimate outcomes of an intervention and a multiplicity of actors, which can complicate attribution.

The evaluation underpinning this book emphasized the OECD DAC evaluation criteria, particularly relevance, effectiveness, efficiency, and sustainability. Toward that end, it considered whether the conflict-affected or fragile context had an impact on the project's relevance, effectiveness, efficiency, and sustainability. It did not test the theories of change.

Structure of the Book

The book is divided into three parts.

Part I broadly examines GEF programming in fragile and conflict-affected situations. This part has five chapters. Chapter 1 is an introductory chapter that discusses the linkages between environmental programming, conflict, and peace, as well as the emergence of conflict-sensitive programming. It also examines the broader context, considering how MEAs and the SDGs address conflict. Chapter 2 surveys GEF-supported interventions in fragile and conflict-affected situations. Chapter 3 highlights the effects of conflict and fragility on the relevance, effectiveness, efficiency, and sustainability of GEF projects, noting the key pathways by which conflict and fragility affect projects. Chapter 4 examines the various ways that GEF projects are seeking to be more conflict sensitive. Chapter 5 considers conflict-sensitive programming across the project life cycle and notes key cross-cutting issues.

Part II collects case studies of GEF programming in fragile and conflict-affected situations. This part includes four chapters covering seven specific geographies. Chapter 6 covers Africa and includes case studies from Mali and the Albertine Rift. Chapter 7 covers Asia and includes Afghanistan and Cambodia. Chapter 8 covers Latin America and includes Colombia. And Chapter 9 covers the Mediterranean with experiences from the Balkans and Lebanon.

Part III, the last chapter of the book, presents lessons and recommendations for improving conflict sensitivity in environmental projects.

Notes

1 For purposes of this book, "intervention" includes a range of efforts from individual projects to broader programs.
2 That is, conflicts with at least 1,000 battle deaths.
3 A fuller typology of the ways that conflict and fragility can affect conservation projects is found in Chapter 3.
4 Project 1086

5 Project 3220
6 Project 3772
7 Project 1253
8 Project 1152
9 DfID is now known as the Foreign, Commonwealth and Development Office.
10 For example, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, www.basel.int, art. 4(5)(a); 1973/78 International Convention for the Prevention of Pollution from Ships (MARPOL), www.imo.org/en/about/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx, art. 3(3).
11 For example, 1954 Convention for the Prevention of Pollution of the Sea by Oil (OILPOL), art. XIX(1).
12 www.cbd.int/convention/; Decision 14/8, annex IV, para. 5(g); Decision XI/2, para. 27; Decision XI/3, Strategic Goal D, Target 14; Decision X/35, para. 10(a); Decision X/42, para. 24; Decision VII/5, Priority 3.1; Decision VII/27, Action 2.3.3; Decision V/23, Activity 8 (c); Decision VII/2, Activity 8(c); Addis Ababa Principles; Whakatane Mechanism
13 www.ramsar.org/; Draft Resolution 18.19, para. 52; Resolution XII/6, para. 10; Resolution XI/12, ann. 1; Resolution X/19, paras. 33 and 231; Resolution X/3; Resolution VIII/31, para. 5; Resolution VIII/36, para. 12
14 https://whc.unesco.org/en/convention/; e.g., 42 COM 7 (Emergency Situations Resulting from Conflicts)
15 https://cites.org/eng; e.g., Conf. 17.4; Conf. 10.10
16 For example, Ramsar COP 9, paras. 48 (Nepal) and 67 (DRC); Ramsar COP 6, para. 71 (Angola); Basel COP 14 Bureau, para 5; Basel COP 8, VI, para. 44; COP 7, VIII, para. 180; Minamata COP 2, I.B, para. 16 and V.D., para. 75; Stockholm COP 8, V.C, para. 94 and D.
17 www.unccd.int/actions/great-green-wall-initiative
18 www.unccd.int/actions/sustainability-stability-security-3s-initiative
19 www.cbd.int/peace/about/objectives/
20 www.cbd.int/doc/decisions/cop-07/cop-07-dec-28-en.pdf
21 www.learningfornature.org/en/courses/peace-park-development-and-management/

References

Adger, W. N., Pulhin, J. M., Barnett, J., Dabelko, G. D., Hovelsrud, G. K., Levy, M., Oswald Spring, U., & Vogel, C. H. (2015). Human security. In *Climate change 2014: Impacts, adaptation, and vulnerability* (pp. 755–791). Cambridge University Press.

Ahmadnia, S., Christien, A. M., Spencer, P., Hart, T., & De Araujo Barbarosa, C. C. (2022). *Defueling conflict: Environment and natural resource management as a pathway to peace*. World Bank.

Altman, S., Nichols, S. S., & Woods, J. (2012). Leveraging high-value natural resources to restore the rule of law: The role of the Liberia forest initiative in Liberia's transition to stability. In P. Lujala & S. Aas Rustad (Eds.), *High-value natural resources and post-conflict peacebuilding* (pp. 337–365). Taylor & Francis.

Armed Conflict Location & Event Data Project. (2018, December 21). *While overall violence has declined in 2018, conflict is spreading* [press release]. https://acleddata.com/2018/12/21/press-release-while-overall-violence-has-declined-in-2018-conflict-is-spreading/

Austin, J. E., & Bruch, C. E. (Eds.). (2000). *The environmental consequences of war: Legal, economic, and scientific perspectives*. Cambridge University Press.

Auty, R. M. (1993). *Sustaining development in mineral economies: The resource curse thesis*. Routledge.

Bannon, I., & Collier, P. (Eds.). (2003). *Natural resources and violent conflict: Options and actions*. World Bank.

Binningsbø, H. M., & Rustad, S. A. (2012). Sharing the wealth: A pathway to peace or a trail to nowhere? *Conflict Management and Peace Science*, *29*(5), 547–566.

Blundell, A. G., & Harwell, E. E. (2016). How do peace agreements treat natural resources? *Forest Trends*. https://www.forest-trends.org/wpcontent/uploads/imported/peace-agreement_natural-resources_formatted_final_1-19-16- pdf.pdf

Bruch, C., Jensen, D., Nakayama, M., & Unruh, J. (2019). The changing nature of conflict, peacebuilding, and environmental cooperation. *Environmental Law Reporter*, *49*(2), 10134–10154. https://www.elr.info/articles/elr-articles/changing-nature-conflict-peacebuilding-and-environmental-cooperation

Bruch, C., Slobodian, L., Nichols, S. S., & Muffett, C. (2016). Facilitating peace or fueling conflict? Lessons in post-conflict governance and natural resource management. In C. Bruch, C. Muffett, & S. S. Nichols (Eds.), *Governance, natural resources, and post-conflict peacebuilding* (pp. 953–1040). Routledge.

Burke, M., Hsiang, S. M., & Miguel, E. (2015). Climate and conflict. *Annual Review of Economics*, *7*, 577–617. https://doi.org/10.1146/annurev-economics-080614-115430

Center for Naval Analysis Corporation. (2014). *National security and the accelerating risks of climate change*. Center for Naval Analysis Corporation.

Center for Naval Analysis Corporation Military Advisory Board. (2007). *National security and the threat of climate change*. Center for Naval Analysis Corporation.

Certini, G., Scalenghe, R., & Woods, W. I. (2013). The impact of warfare on the soil environment. *Earth-Science Reviews*, *127*, 1–15. https://doi.org/10.1016/j.earscirev.2013.08.009

Collier, P., & Sambanis, N. (2002). Understanding civil war: A new agenda. *Journal of Conflict Resolution*, *46*(1), 3–12.

Collier, P., & Venables, A. J. (Eds.). (2011). *Plundered nations? Successes and failures in natural resource extraction*. Palgrave Macmillan.

Conflict Sensitivity Consortium. (2012). *How to guide to conflict sensitivity*. https://www.conflictsensitivityhub.net/wp-content/uploads/2020/09/6602_HowToGuide_CSF_WEB_3.pdf

Conservation International. (2017). *Environmental peacebuilding training manual*. https://sites.google.com/a/conservation.org/peace/home/training

Convention on Biological Diversity. (1993). https://www.cbd.int/convention/text/

Corlazzoli, V., & White, J. (2013). *Back to the basics: A compilation of best practices in design, monitoring & evaluation in fragile and conflict-affected environments*. Department for International Development. https://www.coordinationtoolkit.org/wp-content/uploads/DFID-Back-to-Basics.pdf

Crawford, A., & Bernstein, J. (2008). *MEAs, conservation and conflict: A case study of Virunga National Park, DRC*. International Institute for Sustainable Development. https://www.iisd.org/pdf/2008/meas_cons_conf_virunga.pdf

Daskin, J. H., & Pringle, R. M. (2018). Warfare and wildlife declines in Africa's protected areas. *Nature*, *553*, 328–332. https://doi.org/10.1038/nature25194

Dawes, M. A. (2016). Considerations for determining when to include natural resources in peace agreements ending internal armed conflicts. In C. Bruch, C. Muffett, & S. S. Nichols (Eds.), *Governance, natural resources, and post-conflict peacebuilding* (pp. 121–146). Routledge.

Dell'Angelo, J., D'Odorico, P., & Rulli, M. C. (2017). Threats to sustainable development posed by land and water grabbing. *Current Opinion in Environmental Sustainability*, *26–27*, 120–128. https://doi.org/10.1016/j.cosust.2017.07.007

Dresse, A., Fishendler, I., Østergaard Nielsen, J., & Zikos, D. (2019). Environmental peacebuilding: Towards a theoretical framework. *Cooperation and Conflict*, *54*(1), 99–119. https://doi.org/10.1177/0010836718808331

Duffy, R., Massé, F., Smidt, E., Marijnen, E., Büscher, B., Verweijen, J., Ramutsindela, M., Simlai, T., Joanny, L., & Lunstrum, E. (2019). Why we must question the militarisation of conservation. *Biological Conservation*, *232*, 66–73. https://www.sciencedirect.com/science/article/pii/S0006320718313454

Elliott, M. (1991, May). Water wars. *Geographical Magazine*, 28–30.

Epremian, L., Lujala, P., & Bruch, C. (2016). High-value natural resources revenues and transparency: Accounting for revenues and peace. In *Oxford research encyclopedia of politics*. Oxford University Press.

Faller, J., Smith, E., Gadnert, A., Smith, D., Hegazi, F., Staudenmann, J. A., Alvarado Cóbar, J. F., Kim, K., Dabelko, G., Barnhoorn, A., Krampe, F., Salas Alfaro, E., Bell, N., McAllister, C., Broek, E., Michel, D., Eklöw, K., Remling, E., Faller, J., . . . Maalim, H. (2022). *Environment of peace: Security in a new era of risk*. Stockholm International Peace Research Institute. https://www.sipri.org/publications/2022/other-publications/environment-peace-security-new-era-risk

Fassihi, F. (2019, November 16). Protests incited by gas price hike grip Iran. *New York Times*. https://www.nytimes.com/2019/11/16/world/middleeast/irangas-price.html

Fauna and Flora International. (2005, September 30). *Murder of rangers highlights threat to Cambodia's forests*. https://groups.google.com/forum/#!topic/ar-news/vbADHOcKlO8

Filzmozer, E., & Brasier, P.-J. (2017, November 30). Closing a (violent) chapter: Santa Rita hydro dam project officially cancelled. *Carbon Market Watch*. https://carbonmarketwatch.org/2017/11/30/closing-violent-chapter-santa-rita-hydro-damproject-officially-cancelled/

Food and Agriculture Organization of the United Nations. (2012). *Collaborative conflict management for enhanced national forest programmes (NFPS): Training manual*. https://www.fao.org/3/a-i3101e.pdf

Food and Agriculture Organization of the United Nations. (2016). *State of the world's forests 2016—forests and agriculture: Land-use challenges and opportunities*. https://www.fao.org/publications/sofo/2016/en

Food and Agriculture Organization of the United Nations. (2019). *Guide to context analysis informing FAO decision-making: Approaches to working in fragile and conflict-affected contexts*. https://reliefweb.int/report/world/guide-context-analysis-informing-fao-decision-makingapproaches-working-fragile-and

GEF. (2007). *Final evaluation of the Cardamom Mountains protected forest and wildlife sanctuaries project* [Project 1086]. https://erc.undp.org/evaluation/documents/download/1553

GEF. (2010). *Agency notification on dropped/cancelled project* [Capacity building for sustainable land management in Afghanistan, Project 3220].

GEF Independent Evaluation Office. (2014). *Terminal evaluation review*. [Biodiversity conservation and participatory sustainable management of natural resources in the Inner Niger Delta and its transition areas, Mopti Region, Project 1152]. https://www.gefieo.org/data-ratings/projects/project-id-1152

GEF Independent Evaluation Office. (2015). *Implementation completion and results report* [CBSP forest and nature conservation project, Project 3772]. https://www.gefieo.org/data-ratings/projects/project-id-3772

GEF Independent Evaluation Office. (2020). *Evaluation of GEF support in fragile and conflict-affected situations (2020)*. https://www.gefieo.org/evaluations/fragility-2020

GEF Scientific and Technical Advisory Panel. (2018). *Environmental security: Dimensions and priorities*. https://www.thegef.org/sites/default/files/publications/52103%20STAP%20Report_WEB.pdf

Gleick, P. H. (1993). Water and conflict: Fresh water resources and international security. *International Security*, *18*(1), 79–112.

Godoy, E. (2017, January 11). Looting and unrest spread in Mexico over gas price hike. *Inter Press Service*. https://www.ipsnews.net/2017/01/looting-and-unrestspread-in-mexico-over-gas-price-hike/

Hammill, A., Crawford, A., Craig, R., Malpas, R., & Matthew, R. (2009). *Conflict-sensitive conservation: Practitioners' manual*. International Institute for Sustainable Development. https://www.iisd.org/system/files/publications/csc_manual.pdf

Harbom, L., & Wallensteen, P. (2008). Appendix 2A: Patterns of major armed conflicts, 1998–2007. In *SIPRI yearbook 2008: Armaments, disarmament and international security* (pp. 72–83). https://www.sipri.org/sites/default/files/YB08%20072%2002A.pdf

Hegre, H., & Nygård, H. M. (2015). Governance and conflict relapse. *Journal of Conflict Resolution*, *59*(6), 984–1016. https://doi.org/10.1177/0022002713520591

Helman, C. (2014, February 20). Cheap gasoline: Why Venezuela is doomed to collapse. *Forbes*. https://www.forbes.com/sites/christopherhelman/2014/02/20/cheap-gasoline-why-venezuelais-doomed-to-collapse/#48f6853136ba

Homer-Dixon, T. F. (1994). Environmental scarcities and violent conflict: Evidence from cases. *International Security*, *19*(1), 5–40.

Hsiao, E. (2018). *Protecting places for nature, people, and peace: A critical socio-legal review of transboundary protected areas* [Dissertation, University of British Colombia]. https://doi.org/10.14288/1.0372793

Hsiao, E. (Y.-L.) (2020). Protecting protected areas in Bello: Learning from institutional design and conflict resilience in the Greater Virunga and Kidepo Landscapes. *Goettingen Journal of International Law*, *10*, 67–110. https://doi.org/10.3249/1868-1581-10-1-hsiao

Humphreys, M. (2005). Natural resources, conflict, and conflict resolution: Uncovering the mechanisms. *Journal of Conflict Resolution*, *49*(4), 508–537. https://doi.org/10.1177/0022002705277545

Ide, T. (2020). The dark side of environmental peacebuilding. *World Development*, *127*(1), 1–9. https://doi.org/10.1016/j.worlddev.2019.104777

Ide, T., Bruch, C., Carius, A., Conca, K., Dabelko, G. D., Matthew, R., & Weinthal, E. (2021). The past and future(s) of environmental peacebuilding. *International Affairs*, *97*(1), 1–16. https://doi.org/10.1093/ia/iiaa177

International Tropical Timber Organization. (2010). *Completion report: Management of the emerald triangle protected forests complex to promote cooperation for trans-boundary biodiversity conservation between Thailand, Cambodia and Laos (phase II)*. International Tropical Timber Organization.

International Union for the Conservation of Nature. (2016). Standard on involuntary resettlement and access restrictions. *Environmental & Social Management System* (Version 2.0). https://www.iucn.org/sites/dev/files/iucn_esms_standard_inv_resettlement_access_restrictio ns.pdf

Jensen, D., & Lonergan, S. (Eds.). (2012). *Assessing and restoring natural resources in post-conflict peacebuilding*. Taylor & Francis.

Johnson, M. F., Rodriguez, L. A., & Quijano-Hoyos, M. (2021). Intrastate environmental peacebuilding: A review of the literature. *World Development*, *137*(1), 10510. https://doi.org/10.1016/j.worlddev.2020.105150

Jones, P. (2012, October 19). Congolese rebels cash in on gorilla tourism to fund insurgency. *The Guardian*. https://www.theguardian.com/world/2012/oct/19/congo-rebels-gorilla-tour-insurgency

Karl, T. L. (1997). *The paradox of plenty: Oil booms and petro-states*. University of California Press.

Katz-Lavigne, S. (2019). Artisanal copper mining and conflict at the intersection of property rights and corporate strategies in the Democratic Republic of Congo. *Extractive Industries and Society*, *6*(2), 399–406. https://doi.org/10.1016/j.exis.2018.12.001

Krampe, F. (2019). Climate change, peacebuilding and sustaining peace. *SIPRI Policy Brief*. https://www.sipri.org/sites/default/files/2019-06/pb_1906_ccr_peacebuilding_2.pdf

Krampe, F., Hegazi, F., & VanDeveer, S. (2021). Sustaining peace through better resource governance: Three potential mechanisms for better environmental peacebuilding. *World Development*, *144*, 105508. https://doi.org/10.1016/j.worlddev.2021.105508

Lamb, J. N., Moore, K. M., & Smith, R. (2009). Pursuing community forestry in Liberia. *Environmental Policy and Governance*, *19*(5), 296–308.

Lang, C. (2017, January 26). Leaked WWF report on the Baka in Cameroon: "Many cases of abuse and human rights violations are reported by the communities". *Conservation Watch*. https://medium.com/conservationwatch/leaked-wwf-report-on-the-baka-in-cameroon-many-cases-of-abuse-and-human-rights-violations-are-2682ca9bf975

Le Billon, P. (2013). *Fuelling war: Natural resources and armed conflicts*. Routledge.

Lujala, P., & Rustad, S. A. (Eds.). (2012). *High-value natural resources and post-conflict peacebuilding*. Taylor & Francis.

Margolis, E. (2020). Climate change is going to hit Palestine particularly hard. *The New Republic*. https://newrepublic.com/article/157914/climate-change-going-hit-palestine-particularly-hard

Mason, M., Zeitoun, M., & El Sheikh, R. (2011). Conflict and social vulnerability to climate change: Lessons from Gaza. *Climate and Development*, *3*(4), 285–297.

Mason, S. J. A., Sguaitamatti, D. A., & Ramirez Gröbli, M. D. (2016). Stepping stones to peace? Natural resource provisions in peace agreements. In C. Bruch, C. Muffett, & S. S. Nichols (Eds.), *Governance, natural resources, and post-conflict peacebuilding* (pp. 71–119). Routledge.

Matthew, R., Hsiao, E. (Y.-L.), LeBillon, P., & Saintz, G. (2022). Species on the move: Environmental change, displacement and conservation. *Annals of the American Association of Geographers*, *112*(3), 654–663. https://doi.org/10.1080/24694452.2021.1999200

McClain, S., Talla, P., & Bruch, C. (2022). Monitoring, evaluation, & learning: Approaches for building resilience and sustaining peace. In *Ecosystem for peace—a compendium of ideas* (pp. 160–161). https://www.ecosystemforpeace.org/compendium/monitoring-evaluation-learning-approaches-for-building-resilience-and-sustaining-peace

Middle East Eye. (2019, October 4). *Egypt lowers fuel prices following wave of protests*. https://www.middleeasteye.net/news/egypt-lowers-fuel-prices-following-spatprotests

Mittal, A., & Fraser, E. (2018). *Losing the Serengeti: The Maasai land that was to run forever*. The Oakland Institute. https://www.oaklandinstitute.org/tanzania-safari-businesses-maasai-losing-serengeti

Morales-Muñoz, H., Löhr, K., Bonatti, M., Eufemia, L., & Sieber, S. (2021). Assessing impacts of environmental peacebuilding in Caquetá, Colombia: A multistakeholder perspective. *International Affairs*, *97*(1), 179–199. https://doi.org/10.1093/ia/iiaa175

Morrow, N. (2018). *Armed conflict and environmental protection: Global Environment Facility insights for security and sustainability* [unpublished report].

Nadiruzzaman, M., Scheffran, J., Shelwy, H. J., & Key, S. (2022). Conflict-sensitive climate change adaptation: A review. *Sustainability*, *14*(13), 8060. https://doi.org/10.3390/su14138060

National Research Council. (2013). *Climate and social stress: Implications for security analysis*. National Academies Press.

Ndi, F. A. (2017). Land grabbing, land contestation, and the struggle for economic gain: Insights from Nguti Village, South West Cameroon. *SAGE Open*, *7*(1). https://doi.org/10.1177/2158244016682997

Neslen, A. (2015, March 26). 'Green' dam linked to killings of six Indigenous people in Guatemala. *The Guardian*. https://www.theguardian.com/environment/2015/mar/26/santa-rita-green-dam-killingsindigenous-people-guatemala

Nigeria Stability and Reconciliation Program. (2017). *Lessons learned: Gender and conflict sensitive programming in fragile and conflict affected contexts*.

Nordås, R., & Gleditsch, N. P. (2007). Climate change and conflict. *Political Geography*, *26*(6), 627–638.

Organisation of Economic Co-operation and Development. (2016). *States of fragility 2016: Understanding violence*. https://www.oecd-ilibrary.org/sites/9789264267213-5-en/index.html?itemId=/content/component/9789264267213-5-en

Organisation of Economic Co-operation and Development. (2018). *States of fragility 2018*. https://doi.org/10.1787/9789264302075-en

Organisation of Economic Co-operation and Development Development Assistance Committee. (2000). *Informal DAC task force on conflict, peace and development co-operation*. https://one.oecd.org/document/DCD(2000)20/En/pdf

Parker, G. (2012, January 17). Nigeria: Fuel protests and Islamic violence challenge President Goodluck Jonathan. *The World*. https://theworld.org/stories/2012-01-17/nigeria-fuel-protests-and-islamic-violence-challenge-president-goodluck-jonathan

Patterson, B. D., Kasiki, S., Selempo, E., & Kays, R. (2004). Livestock predation by lions (Panthera leo) and other carnivores on ranches neighboring Tsavo National Parks, Kenya. *Biological Conservation*, *119*(4), 507–516.

Regan, A. J. (2017). Bougainville: Origins of the conflict, and debating the future of large-scale Mining. In C. Filer & P.-Y. Le Meur (Eds.), *Large-scale mines and local-level politics* (pp. 353–414). ANU Press.

Rice, X. (2006, December 21). Elite rangers take on rebels to end the slaughter of Congo's hippos. *The Guardian*. https://www.theguardian.com/environment/2006/dec/22/congo.conservationandendangeredspecies

Rigaud, K. K., de Sherbinin, A., Jones, B., Bergmann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., & Midgley, A. (2018). *Groundswell: Preparing for internal climate migration*. World Bank. https://openknowledge.worldbank.org/handle/10986/29461

Rights and Resources Initiative. (2015). *Protected areas and the land rights of Indigenous peoples and local communities: Current issues and future agenda*. http://rightsandresources.org/wp-content/uploads/RRIReport_Protected-Areas-and-LandRights_web.pdf

Ross, M. L. (2004). How do natural resources influence civil war? Evidence from thirteen cases. *International Organization*, *58*(1), 35–67.

Ross, M. L. (2015). What have we learned about the resource curse? *Annual Review of Political Science*, *18*, 239–259. https://doi.org/10.1146/annurev-polisci-052213-040359

Rustad, S. A., & Binningsbø, H. M. (2010). *Rapid recurrence: Natural resources, armed conflict, and peace* (Working Paper). Centre for the Study of Civil War.

Rüttinger, L., Smith, D., Stang, G., Tänzler, D., & Vivekananda, J. (2015). *A new climate for peace: Taking action on climate and fragility risks*. Adelphi Research. https://www.newclimateforpeace.org/#report-top

Soto, Y. (2016). *The role of the Organization of American States in conflict-affected states in the Americas*. International IDEA. https://www.idea.int/publications/catalogue/role-organization-american-states-conflict-affected-states-americas

Sovacool, B. K., Walter, G., Van de Graaf, T., & Andrews, N. (2016). Energy governance, transnational rules, and the resource curse: Exploring the effectiveness of the Extractive Industries Transparency Initiative (EITI). *World Development*, *83*, 179–192. https://doi.org/10.1016/j.worlddev.2016.01.021

Suisseya, K. M. (2012). *Case study: The Emerald triangle forest complex*. University of Vermont.

United Nations. (1972). *Stockholm declaration on the human environment*. https://www.un.org/en/conferences/environment/stockholm1972

United Nations. (1992). *Rio declaration on environment and development*. https://www.un.org/en/conferences/environment/rio1992

United Nations. (2002). *Johannesburg declaration on sustainable development*. https://www.un.org/en/conferences/environment/johannesburg2002

United Nations. (2012). *The future we want*. https://sdgs.un.org/publications/future-we-want-booklet-17561

United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. https://sdgs.un.org/2030agenda

United Nations Children's Fund. (2016). *Guide to conflict analysis*. https://www.unicef.org/documents/unicef-guide-conflict-analysis

United Nations Children's Fund. (2020). *UN conflict sensitivity advanced e-course*. https://agora.unicef.org/course/info.php?id=1288

United Nations Convention to Combat Desertification. (2018). *A rising Africa in a fragile environment: The initiative on sustainability, stability and security*. https://www.unccd.int/sites/default/files/documents/2018-07/3S_brochure_%20ENG%20-web.pdf

United Nations Convention to Combat Desertification. (2020). *UNCCD is ready to welcome countries to the new peace forest initiative*. https://www.unccd.int/newsevents/unccd-ready-welcome-countries-new-peace-forest-initiative

United Nations Department of Social and Economic Affairs. (2019). Sustainable development goal 16: Focus on public institutions. *World Public Sector Report 2019*. https://read.un-ilibrary.org/democracy-and-governance/world-public-sector-report2019_9f6b5dc4-en#page1

United Nations Development Group. (2013). *Natural resource management in transition settings* (UNDG-ECHA guidance note). https://postconflict.unep.ch/publications/UNDG-ECHA_NRM_guidance_Jan2013.pdf

United Nations Development Programme. (2016). *A principled approach to conflict sensitive do no harm programming in the context of Federal Iraq and the Kurdistan region*. https://reliefweb.int/report/iraq/principled-approach-conflict-sensitive-do-no-harm-programming-context-federal-iraq-and

United Nations Educational, Scientific and Cultural Organization. (1972). *Convention concerning the protection of the world cultural and natural heritage*. https://whc.unesco.org/en/conventiontext/

United Nations Environment Programme. (2009). *Integrating environment in post-conflict needs assessment* (UNEP guidance note). https://www.unenvironment.org/resources/report/integrating-environment-post-conflict-needs-assessments-unep-guidance-note

United Nations Environment Programme. (2014). *Relationships and resources: Environmental governance for peacebuilding and resilient livelihoods in Sudan*. https://www.unep.org/resources/report/relationships-and-resources-environmental-governance-peacebuilding-and-resilient

United Nations Interagency Framework Team for Preventive Action. (2012a). *Strengthening capacity for conflict-sensitive natural resource management*. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Capacity.pdf

United Nations Interagency Framework Team for Preventive Action. (2012b). *Land and conflict: Toolkit and guidance for preventing and managing land and natural resources conflicts*. https://www.un.org/en/land-natural-resources-conflict/pdfs/Resource%20Rich%20Economies.pdf

United Nations Interagency Framework Team for Preventive Action. (2012c). *Extractive industries and conflict: Toolkit and guidance for preventing and managing land and natural resources conflicts*. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Extractive.pdf

United Nations Interagency Framework Team for Preventive Action. (2012d). *Renewable resources and conflict: Toolkit and guidance for preventing and managing land and natural resources conflicts*. https://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf

United Nations Interagency Framework Team for Preventive Action. (2012e). *Capacity inventory: Toolkit and guidance for preventing and managing land and natural resources conflicts*. https://www.un.org/en/land-natural-resourcesconflict/pdfs/Capacity%20Inventory.pdf

United Nations Office for the Coordination of Humanitarian Affairs. (2009). *Climate change and humanitarian action: Key emerging trends and challenges*. https://www.unocha.org/publication/policy-briefs-studies/climate-change-and-humanitarian-action-key-emerging-trends-and

United Nations Secretary-General. (2009, June 11). *Report of the secretary-general on peacebuilding in the immediate aftermath of conflict* (A/63/881-S/2009/304). https://www.unrol.org/files/pbf_090611 _sg.pdf

United Nations Secretary-General. (2010, July 16). *Progress report of the Secretary-General on peacebuilding in the immediate aftermath of conflict* (A/64/866-S/2010/386). Reissued on August 19 for technical reasons.

United Nations Secretary-General. (2012, October 8). *Peacebuilding in the aftermath of conflict: Report of the secretary-general* (A/67/499-S/2012/746). https://digitallibrary.un.org/record/740644?ln=en

United Nations Secretary-General. (2014, September 23). *Peacebuilding in the aftermath of conflict: Report of the secretary-general* (A/69/399-S/2014/694). https://digitallibrary.un.org/record/781638?ln=en

Unruh, J., & Williams, R. C. (2013). Land: A foundation for peacebuilding. In J. Unruh & R. C. Williams (Eds.), *Land and post-conflict peacebuilding* (pp. 1–20). Taylor & Francis.

Uppsala Conflict Data Program. (n.d.). *UCDP definitions*. Retrieved September 30, 2020, from https://www.pcr.uu.se/research/ucdp/definitions/#tocjump_8040098873676595_2

US Agency for International Development. (2004). *Minerals & conflict: A toolkit for intervention*. https://www.iisd.org/system/files/publications/envsec_minerals_conflict.pdf

US Agency for International Development. (2005). *Land & conflict: A toolkit for intervention*. https://gsdrc.org/document-library/land-and-conflict-a-toolkit-for-intervention/

US Agency for International Development. (2012a). *Conflict assessment framework, revised* (CAF 2.0). https://pdf.usaid.gov/pdf_docs/pnady739.pdf

US Agency for International Development. (2012b). *Conflict assessment framework: Application guide*. https://pdf.usaid.gov/pdf_docs/PNADY740.pdf

US Agency for International Development. (2014). *Water & conflict: A toolkit for programming*. https://www.usaid.gov/sites/default/files/documents/1866/WaterConflictToolkit.pdf

US Agency for International Development. (2015). *Livelihoods and conflict: A toolkit for intervention*. https://gsdrc.org/document-library/livelihoods-andconflict-a-toolkit-for-intervention/

Veit, P. G., & Benson, C. (2004). *When parks and people collide*. Carnegie Council for Ethics in International Affairs. https://www.carnegiecouncil.org/publications/archive/dialogue/2_11/section_2/4449

Vidal. J. (2016, March 5). WWF accused of facilitating human rights abuses of tribal people in Cameroon. *Buzzfeed News*. https://www.theguardian.com/environment/2016/mar/03/wwf-accused-of-facilitating-humanrights-abuses-of-tribal-people-in-cameroon

Vidal, J. (2020, February 7). Armed ecoguards funded by WWF 'beat up Congo tribespeople.' *The Guardian*. https://www.theguardian.com/globaldevelopment/2020/feb/07/armed-ecoguards-funded-by-wwf-beat-up-congo-tribespeople

Walter, B. F. (2010). *Conflict relapse and the sustainability of post-conflict peace*. World Bank Development Report 2011 Background Paper. https://openknowledge.worldbank.org/bitstream/handle/10986/9069/WDR2011_0008.pdf

Weinthal, E., Troell, J., & Nakayama, M. (Eds.). (2014). *Water and post-conflict peacebuilding*. Taylor & Francis.

Westing, A. H. (1971). Ecological effects of military defoliation on the forests of South Vietnam. *BioScience*, *21*(17), 893–898.

Westing, A. H. (1976). *Ecological consequences of the second Indochina War*. Stockholm International Peace Research Institute.

Westing, A. H. (Ed.). (1986). *Global resources and international conflict: Environmental factors in strategic policy and action*. Oxford University Press.

Westing, A. H., & Pfeiffer, E. W. (1972). The cratering of Indochina. *Scientific American*, *226*(5), 20–29.

Woomer, A. S. (2018). *Conflict-sensitivity and conservation: Evaluating design, implementation & practice* [Dissertation, Kennesaw State University]. https://digitalcommons.kennesaw.edu/incmdoc_etd/18/

World Bank. (2013). *Implementation completion and results report* (TF54199) [Gourma biodiversity conservation project, Project 1253]. https://www.gefieo.org/sites/default/files/documents/projects/tes/1253-terminal-evaluation.pdf

World Bank Group. (2020). *World Bank Group strategy for fragility, conflict, and violence 2020–2025*. https://www.worldbank.org/en/topic/fragilityconflictviolence/publication/world-bank-group-strategy-for-fragility-conflict-and-violence-2020–2025

Young, H., & Goldman, L. (2015). Managing natural resources for livelihoods: Helping post-conflict communities survive and thrive. In H. Young & L. Goldman (Eds.), *Livelihoods, natural resources, and post-conflict peacebuilding* (pp. 1–12). Taylor & Francis.

Zierler, D. (2011). *The Invention of ecocide: Agent orange, Vietnam, and the scientists who changed the way we think about the environment*. University of Georgia Press.