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The Dark Side of Environmental Peacebuilding

Abstract:

Environmental peacebuilding refers to efforts aimed at building more peaceful relations through environmental cooperation, natural resource management, climate change adaptation and disaster risk reduction. It is an emerging research field with the potential to integrate various lines of environmental security research. Environmental peacebuilding practices have also been widely applied by conservation, development and peacebuilding practitioners, including those working at the grass-roots level in local communities. While its positive effects are considerable, environmental peacebuilding can also have adverse effects. This dark side of environmental peacebuilding has received little attention and remains under-researched. Based on evidence from a broad set of cases located in various world regions, I discuss these adverse effects within six categories (the “six Ds”): depoliticisation, displacement, discrimination, deterioration into conflict, delegitimisation of the state, and degradation of the environment. Only with sufficient consideration of these adverse effects, their interactions and the associated risk factors will environmental peacebuilding be able to fully develop its potential to simultaneously address environmental problems and threats to peace.

Key words: climate change; conflict; peacemaking; political ecology; natural resources; security

1. The Rise of Environmental Peacebuilding

Environmental peacebuilding is an emerging field of both practice and research. As concerns about the interlinkages between environmental stress, resource scarcity, and violent conflict grew after the end of the Cold War, several decision makers came to conclude that addressing environmental issues is indispensable in peacebuilding processes. Then Finish President Tarja Halonen stated in 2005, for instance: “Natural resources need to be addressed systematically and effectively in peacebuilding efforts at all levels” (Upla & Brown, 2015: 18). Concerns accelerated with climate change being discussed as a security issue, particularly since 2007 (McDonald, 2018). UN Secretary-General António Guterres thus emphasised the importance of environmental matters for peacebuilding: “Many conflicts are triggered, exacerbated or prolonged by competition over scarce natural resources; climate change will only make the situation worse. That is why protecting our

environment is critical to the founding goals of the United Nations to prevent war and sustain peace” (UNEP, 2017).

Support for environmental peacebuilding did not stop at the rhetorical level. Already in the 1980s, heads of state aimed to utilise environmental cooperation as a path to more peaceful relations, for instance in the context of the Israeli-Jordanian Picnic Table Talks (Haddadin, 2002) or the Trifino Plan in Central America (Miranda, Slowing Umaña, & Raudales, 2010).

In the United Nations (UN) system, the UN Environment Programme (UNEP) has been a pioneer in this regard. Among others, it has supported the integration of environmental issues into peacebuilding efforts in more than twenty post-conflict societies (Conca & Wallance, 2012), most recently in Colombia (2017), Iraq (2019) and Sudan (2018). Other UN agencies have followed straight. The United Nations Interagency Rehabilitation Programme (UNIRP), for example, sponsored projects that helped female ex-combatants in Nepal to gain land rights and hence sustainable livelihoods as part of a joint initiative with UNEP, the UN Development Programme, UN Women and the UN Peacebuilding Support Office (2013). Environmental issues are now a key aspect of UN peacebuilding missions as well (Krampe & Gignoux, 2018; Maertens, 2019).

Simultaneously, international NGOs (in cooperation with local communities) have explicitly addressed environmental issues in their peacebuilding efforts. Particularly prominent in this regard is the work of EcoPeace Middle East, which aims to promote peace between Israelis, Jordanians and Palestinians by facilitating transnational water cooperation since the early 2000s (Djernaes, Jorgensen, & Koch-Ya’ari, 2015). Meanwhile, International Alert has been at the forefront of integrating work on development, resilience to climate change, and peacebuilding (Vivekananda, Schilling, & Smith, 2014). Numerous other NGOs are using similar approaches nowadays (Burt & Keiru, 2011; Nail, 2018).

This rise of practical relevance has been matched by a growing number of academic studies on environmental peacebuilding. In the early 1990s, scholarly interest in resource scarcity and environmental degradation as causes of conflict grew (Homer-Dixon, 1994). But as this research was overly focused on conflict outcomes, it was accused of producing overly simplistic if not deterministic conclusions (Peluso & Watts, 2001). Conca and Dabelko (2002: 220) hence developed the environmental peacebuilding approach as a tool to draw analytical attention to the complex intersections of environmental change and peace, with the latter being understood as a “continuum ranging from the absence of violent conflict to the unimaginability of violent conflict”. Early studies indeed found that environmental change can offer opportunities for

both peace and conflict, depending among others on structural context factors and political agency (Martin, 2005).

The emerging research field of climate change and conflict, which emerged in the mid-2000s, initially drew strongly on earlier environmental conflict approaches (Nordås & Gleditsch, 2007), hence facing very similar criticisms (Selby & Hoffmann, 2014). Environmental peacebuilding remained less influential, but still flourished since around 2010 in the face of increasing demand for academic knowledge on natural resource management in post-civil war societies (Bruch, Muffett, & Nichols, 2016).¹ Recent insights that climate-conflict research is sampling on the dependent variable, which might lead to biased results and knowledge gaps on peaceful adaptation (Adams, Ide, Barnett, & Detges, 2018), has underscored the importance of environmental peacebuilding research. This is matched by an increasing interest of critical environmental security scholarship in environmental peacebuilding (e.g., Le Billon & Duffy, 2018). Consequentially, the number of statistical analyses (Barquet, Lujala, & Rød, 2014; Ide & Detges, 2018), case studies (Huda & Ali, 2018; Krampe & Gignoux, 2018) and review papers (Dresse, Fischhendler, Nielsen, & Zikos, 2019; Ide, 2019) on the topic is rapidly increasing. In late 2019, the recently founded Environmental Peacebuilding Association hold its first general conference with more than 240 attendees from around 40 countries.

Environmental peacebuilding is thus a broad and growing field of research, but also of practice. The term refers to at least five broad sets of (mutually non-exclusive) practices. The first set incorporates efforts to prevent or mediate environment-related conflicts, for instance about scarce water resources or the impacts of and revenues from mining (Adano, Dietz, Witsenburg, & Zaal, 2012; Bebbington & Williams, 2008). The second set relates to the management of natural resources and other environmental issues in (often post-civil war) peacebuilding processes. This includes, among others, providing agricultural land or employment to former combatants as part of the reintegration processes, restoring water-related infrastructure to address grievances and support livelihoods, and reducing illegal resource extraction that might finances further violence (Bruch, et al., 2016).

The third set of practices connects to concerns about climate security. It includes efforts to reduce grievances and incentives for violence by adapting to climate change and building resilient livelihoods, especially in areas of (potential) political instability (Vivekananda, et al., 2014), and to integrate climate change concerns into peacebuilding (Matthew, 2014). Disaster risk reduction (DRR) and post-disaster reconstruction also constitute environmental peacebuilding practices as

¹ This demand has been led by UNEP, which also financially invested in the respective research.

long as they (1) aim to address existing conflict dynamics or to promote positive forms of peace such as community cohesion and (2) are related to the environment.² This is the fourth set of environmental peacebuilding practices (Peters, Holloway, & Peters, 2019), sometimes also discussed in the context of disaster diplomacy (Kelman, 2012).

The fifth set (often referred to as environmental peacemaking) conceives shared environmental challenges as (hardly securitised) incentives for joint problem-solving, which in turn can facilitate better intergroup relations. Water and conservation issues, for instance, often provide relatively easy entry points for cooperation between adversaries. Such cooperation can in turn demonstrate the potential of positive-sum interactions, support processes of trust building, and facilitate further integration (Ide, 2019), including in illiberal and violent contexts (Castro, 2018).

Certainly, environmental peacebuilding – both as field of academic research and as a practice – has considerable positive impacts. I describe those in further details in the subsequent section of this paper. Yet, environmental peacebuilding efforts can also have negative (side-)effects on peace, development or the environment. This is what I call here the dark side of environmental peacebuilding. This dark side is less frequently emphasised (perhaps even recognised) by scholars and practitioners, especially when there are also considerable positive effects of environmental peacebuilding for at least one constituency. The third section of this study is the first effort to comprehensively spell out this dark side of environmental peacebuilding within six categories (“the six Ds”): depoliticisation, displacement, discrimination, deterioration into conflict, delegitimisation of the state, and degradation of the environment.

The intention behind discussing these negative (side) effects is not to advise against conducting environmental peacebuilding projects or using environmental peacebuilding tools (to the contrary). Rather, I seek to facilitate critical research on and thorough reflection about environmental peacebuilding in order to make further practices more inclusive, efficient and sustainable.

2. The Benefits of Environmental Peacebuilding

Environmental peacebuilding has considerable benefits and advantages. Precisely because of this, it has grown so popular in recent years. As a concept, it illustrates the deep intertwinement of environmental change and security in the Anthropocene (Chandler, 2019). At the same time, environmental peacebuilding challenges the conflict-centred ontologies and determinist connotations shared by parts of the environmental (and now climate) conflict discourse for quite

² For instance, preserving mangrove forests as a buffer to floods and storms or addressing damages from natural hazards vs. better education to facilitate evacuation or reconstruction after man-made hazards.

some time (Peluso & Watts, 2001). It does so by highlighting that the scarcity (or abundance) of natural resources is often produced by specific political ecologies, and that environmental change can also catalyse peaceful adaptation and increased solidarity rather than facilitate violence (Barnett, 2018). By extension, it emphasises the agency and capacity of locals for meaningful conflict resolution and environmental protection rather than reproducing Orientalist images of the global south as incompetent and violent (Ide, 2016; Verhoeven, 2014). As a consequence, environmental peacebuilding is also more acceptable to many developing states when compared with concepts such as environmental security or climate conflicts (Conca & Dabelko, 2002).

From an academic perspective, environmental peacebuilding research opens the burgeoning field of peacebuilding research for the discussion of environmental issues, which have so far only been marginally considered (Krampe, 2017). The environmental peacebuilding approach also helps to address sampling on the dependent variable biases in climate-conflict research (Adams, et al., 2018) and brings concepts like peaceful adaptation or conflict-sensitive DRR to the fore of environmental security research (Barnett, 2018; Peters, et al., 2019). In a related manner, environmental peacebuilding is a boundary object that facilitates interdisciplinary cooperation between political scientists, geographers, sociologists, criminologists, law scholars and environmental scientists, among others (Swain & Öjendal, 2018).

Environmental peacebuilding as a practice encourages environmental conflict resolution and integrates environmental management issues into peacebuilding missions. This is highly relevant given the importance of ecosystem services for livelihoods (especially in post-conflict contexts), the amount of stress armed conflict puts on the environment, and the low capacity of many post-conflict societies to adapt to climate change (Daskin & Pringle, 2018; Schilling, et al., 2017). Conflict-sensitive adaptation to climate change and DRR can protect local ecosystems, advance human development, address the grievances and livelihood insecurities that contribute to armed violence, and help integrate climate-related issues into peacebuilding (Matthew, 2014). Environmental peacebuilding also enables positive-sum cooperation and trust building between former adversaries on the communal, state and international level. Simultaneously, improved natural resource management and environmental cooperation can improve the environmental situation (Ali, 2007; Ide, 2019).

In the western highlands of Guatemala, for instance, joint efforts by communities and NGOs to adapt to climate change and to establish a protected area improved local water management, natural resource conservation, the livelihoods of the (often poor) populations, and trust between various communities heavily affected (and divided) by the civil war (Hellin, Ratner, Meizen-Dick, & Lopez-Ridaura, 2018). Village-level water cooperation in Yemen limits groundwater exploitation,

increases resilience to droughts, and manages socio-environmental conflicts (Lichtenthaler, 2014). UNEP's program to rehabilitate the Iraqi marshlands between 2004 and 2008 enabled internally displaced persons to return and provided valuable livelihood opportunities to populations in a post-conflict setting (Aoki, Al-Lami, & Kugaprasatham, 2011). Climate change adaptation projects have contributed to the preservation of local ecosystems, livelihoods and political stability in Bangladesh, Nepal and (to a lesser extent) Palestine (Schilling, et al., 2017). And cross-case studies find that international water cooperation (Ide & Detges, 2018) and the inclusion of land reform provisions into post-civil war agreements (Keels & Mason, 2019) increase the prospects for peace.

In the best case, environmental peacebuilding hence enables scholars and practitioners to address two interrelated core challenges of the 21st century simultaneously: violent conflict and adverse environmental change (with positive effects on human development).

3. The Dark Side of Environmental Peacebuilding

There is a dark side of environmental peacebuilding, however, which becomes manifest by the intended and non-intended, adverse side-effects of environmental peacebuilding. In this section, I discuss this dark side within six categories, which one might also call the “six Ds”: depoliticisation, displacement, discrimination, deterioration into conflict, delegitimisation of the state, and degradation of the environment. This is not to say that environmental peacebuilding inevitably has such adverse effects, nor that each environmental peacebuilding practice is characterised by one or more of these six Ds, nor that the existence of a dark side implies that no positive effects on peace or the environment exist. Rather, it is to illustrate by empirical examples how environmental peacebuilding can affect environmental protection, conflict resolution and socio-economic development in a negative way.

3.1 Depoliticization

Environmental peacebuilding practice (and sometimes also research) frequently conceives environmental issues as cross-border and low politics issues. As such, they are well-suited to initiate positive-sum cooperation between (former) adversaries that creates trust and understanding. In order to avoid resistance by the parties involved, such cooperation often prefers scientific and technical approaches over addressing political causes of and disputes behind environmental problems (Aggestam & Sundell, 2016; Ide & Tubi, 2019). Similarly, technical solutions are frequently utilised to address resource conflicts (for instance, providing more water via dams) or

the destructive potential of climate-related hazards (e.g., improve seeds to resist droughts and building structures to withstand storms) (Mason, 2014; Mehta, 2011).

But such an approach is not free of problems. There usually is politics behind the seemingly neutral or objective environmental problem and the technical solution proposed by scientific evidence. Political ecology has long pointed out that environmental change is deeply embedded into longstanding cleavages, unequal power relations and persistent welfare gaps (Peluso & Watts, 2001). Similarly, vulnerability to natural hazards and resource scarcity is often a product of pre-existing societal structures that remain unaddressed by technical solutions (Wisner, Blaikie, Cannon, & Davis 2004). Such cleavages, power relations and socio-economic structures become invisible when environmental peacebuilding emphasises the low politics, neutral and positive-sum character of shared environmental problems. At times, the former are deliberately removed from the agenda to provide a productive space for pushing projects forward. This process of highlighting a technical and scientific vis-à-vis a political agenda is termed depoliticization and makes it harder to address the underlying drivers of grievances and human insecurity (Aggestam & Sundell, 2016).

For example, several projects aim to employ mutually beneficial cooperation on shared water resources as a peacebuilding tool between Israelis and Palestinians. While such cooperation often has positive effects on the local level, it can also direct attention away from the persistence of structural inequalities that are far more important for the water problems many Palestinians face, such as the Israeli occupation of the West Bank and the contested distribution of regional water resources (Fischhendler & Tenenboim-Weinblatt, 2019; Mason, Zeitoun, & Mimi, 2014). Alatout (2006) even argues that by de-territorialising water as a transboundary and human security issue, environmental peacebuilding projects marginalise Palestinian conceptions about water as deeply intertwined with territorial control and national sovereignty. Heavily contested questions are therefore framed in unpolitical and win-win terms, hence leading to resistance in Palestine (a form of deterioration into conflict) and an inability to touch upon more fundamental drivers of conflict and environmental stress (in turn increasing the risk for environmental degradation).

Also, after the devastating floods in Pakistan in 2010, international donors and local NGOs were quick in delivering aid and reconstruction funds. More important from an environmental peacebuilding perspective, they also aimed to increase resilience towards future disasters, among others with the goal of preventing the recruitment of (potential) disaster victims by Islamist rebels. The support provided was largely financial or technical in nature (e.g., improved reconstruction materials, advice of how to build safer homes, new formal regulations) but did not address underlying political reasons for vulnerability. These included a clientelism, high wealth inequality and debt ratios, and a lack of (benevolent) state presence. Consequently, overall vulnerability

remained high. Together with the unequal distribution of resilience-building resources (a form of discrimination) as well as the reactive and often passive DRR approach of the Pakistani state, this remained an important source of grievances (Ahmed, 2013; Kurosaki, 2017), with potential follow-up effects on conflict risks and state legitimacy.

3.2 Displacement

Especially large-scale environmental cooperation and management projects often require vast amounts of land. If these are established in the context of environmental peacebuilding processes, the latter could contribute to the displacement of local inhabitants. Especially dams (Kirchherr, Ahrenshop, & Charles, 2019) and natural reserves (McLean & Straede, 2003) have long been socially contested (see also deterioration into conflict) and criticised for displacing people without their consent and/or without sufficient compensation. Involuntary migration, in turn, can have a range of negative impacts, including loss of livelihoods, disruption of social and cultural relations, obstruction of human and economic development, social conflicts, and environmental degradation (Rajan, 2018).

Cooperation along the Mekong River to share data, coordinate water policies and establish the respective institutions, for example, continued during high political tensions and has contributed to regional integration since the 1990s (Jacobs, 2002). Recently, cooperation has intensified, for instance with Thailand supporting the construction of hydroenergy dams in Laos (some of which can be used for flood control as well), while Laos exports a share of the energy generated to Thailand.³ While one might wonder whether such joint hydroenergy development fits the scope of my argument, it represents the management of environmental issues across (international) political divides with potential peace-enhancing effects, and is hence frequently conceived as environmental peacebuilding (for example: Scheumann & Shamaly, 2016; Swain, 2016). However, three of these Lao-Thai projects alone – Xayaburi (2018), Houay Ho (1998) and Nam Mang 3 (2005) – caused the displacement of around 9,000 people, many of which did not receive adequate compensation. Scholars also report negative environmental impacts, a decline of state legitimacy among the affected citizens, and a higher vulnerability of the displaced people to experience livelihood insecurity and discrimination (Matthews, 2012).

The Great Limpopo Transfrontier Park, a transboundary conservation area between Mozambique, South Africa and Zimbabwe, was explicitly established in 2001 as an environmental peacebuilding

³ Hydroenergy cooperation usually occurs based on bi- or mini-lateral agreements and not under the Mekong River Commission (the successor of the Mekong Committee) which provided a framework for earlier data sharing and policy coordination.

project and supported by the Peace Parks Foundation. Yet, the managing authorities pushed for local communities residing inside the park's borders to relocate, or used the establishment of the park as a reason for enforcing longstanding eviction plans. The main reasons for this are concerns about poaching, ecosystem destruction, and negative impacts on tourism (van Amerom & Büscher, 2005). Given that local communities have been living in these areas for decades and were crucial in sustaining local biodiversity, such displacement might also result in local conflicts and a degradation of the environment.

Smaller and less space-consuming environmental peacebuilding practices can displace people as well, although the link is more indirect. Urban gardens to increase food insecurity and community cohesion after armed conflicts (Nail, 2018) and the upgrading of water networks in certain neighbourhoods as parts of peacebuilding operations (Cain, 2014), for example, could make the respective areas more attractive to higher-income groups, and hence facilitate gentrification.⁴

3.3 Discrimination

Environmental peacebuilding practices can trigger discrimination along ethnic, social or gender categories. Usually, such discrimination relates to the question of who benefits from and who is negatively affected by environmental peacebuilding (again illustrating that the dark side of environmental peacebuilding often co-exists with significant benefits from some groups). This is well in line with political ecology approaches claiming that environmental interventions often reproduce existing socio-economic hierarchies and divisions (Lunstrum, 2014).

The Cordillera del Cóndor peace park, for instance, was established in 1998 to facilitate demilitarisation and trust building between Ecuador and Peru (Conca, Carius, & Dabelko, 2005). The park overlaps with the territories of but was established without the consultation of local indigenous people. As a result, these people lost (legal) access to areas where they have collected food, wood and medical plants for decades due to the conservation regime established by the park (Ali, 2019). In other words: The discrimination of indigenous populations by the state fuelled local resistance (as well as delegitimisation of the state) and reduced livelihood security.

Similarly, with financial support from the European Union and the government, local communities in the Vietnamese commune of Yen Khe started working together in 2001 to improve local water supply systems. The project served to increase resilience to drought, avoid local water conflicts, and improve livelihoods of the (largely agricultural) population. However, once a piped water

⁴ One might conceive gentrification as a form of (socio-economic, but often also ethnic) discrimination.

system was established, the richest households in the commune utilised their economic power and political influence to illegally (yet with impunity) tap water from the pipes before it reached public tanks (Funder, et al., 2012). The environmental peacebuilding project hence accelerated discrimination along class lines between those who could disproportionately benefit by illegally tapping water and those who could not.

There might be substantive gender impacts of environmental peacebuilding practices as well. As has been discussed above, hydroenergy schemes in the Mekong Region have resulted in displacement and loss of livelihoods. Men were sometimes able to capture the livelihood- and development-related opportunities of dam projects, for instance when working in the construction or tourism sectors. Many traditional “women tasks” such as conducting small-scale agriculture on river banks and fetching water, by contrast, were negatively affected. This also eroded the significant environmental knowledge women have built up over generations. Women also had fewer opportunities to participate in consultation meetings, among others because they were involved in household duties or because only the (presumably male) household head was invited (Hill, Thuy, Storey, & Vongphosy, 2017).

Similarly, agricultural development schemes and natural resource-related projects in post-civil war settings often address primarily young men and former (male) combatants, whose grievances are considered a high risk to peace and stability. As a result, women end up with lower access to agricultural inputs and training, fewer income opportunities, and a higher dependence on men (Chaney, 2016; Zuckerman & Greenberg, 2004). Positive exceptions that are explicitly designed for female ex-combatants exist, however (e.g., UNEP, et al., 2013).

3.4 Deterioration into conflict

Under certain circumstances, environmental peacebuilding can deteriorate rather than de-escalate conflict situations. Of course, environmental peacebuilding is not the sole or main cause of such conflicts. But if negative effects like depoliticisation, displacement or discrimination coincide with existing grievances, conflicts might accelerate, with negative consequences such as community polarisation or physical violence. This is especially so as environmental peacebuilding often takes place in areas characterised by political instability. Therefore, it is even more important for researchers to identify and for practitioners to engage with conflict sensitivity guidelines similar to those recently developed for DRR (Peters, et al., 2019).

After the end of the civil war in 2002, Sierra Leone drafted ambitious environmental laws. Natural resources (and particularly minerals) had played a role in the onset and continuation of the war

(Ross, 2004), and consequentially, politicians and NGOs from Sierra Leone as well as international donors supported these efforts. But especially the environmental and social standards for mining (and the procedures to verify their fulfilment) set by the National Minerals Agency (NMA) were hard to fulfil for anyone except of large-scale producers. Small-scale miners not only experienced discrimination and a loss of livelihoods due to this integration of resource management into peacebuilding. Disputes over mining rights between large produces (often backed by NMA claims) and small miners (often supported by traditional or informal political networks) also escalated increasingly into armed violence (Johnson, 2019).

Considering the interactions of different scales is also important in this context as peacebuilding at one scale might lead to conflict escalation at another scale. During the late 1970s, for instance, Sudan partnered with Egypt to construct the Jonglei Canal in southern Sudan. The Canal would have increased the amount of water flowing northwards through the Nile, hence realising positive-sum cooperation in a contested river basin. Yet such (technical and hence depoliticising) cooperation on the national level sparked local conflict as the Canal would have drained the Bahr al-Jabal and Bahr az-Zaraf wetlands, which provided rich livelihood opportunities to the local communities. The project was suspended when the Sudan People's Liberation Army (SPLA), backed by local support, attacked the construction site during onset of the civil war in 1984 (Ahmad, 2008). In a similar manner, dam projects in southeast Asia (including in the Mekong Basin) designed to strengthen international cooperation have also faced intense local resistance, mainly due to their negative impacts in terms of displacement and degradation of the environment (Kirchherr, Charles, & Walton, 2016).

3.5 Delegitimisation of the state

Environmental peacebuilding can lead to a delegitimisation of the state via two pathways. The first one is indirect and works essentially via the other five Ds. When the state is (perceived to be) complicit in practices of depoliticisation, displacement, discrimination, deterioration into conflict or degradation of the environment, its legitimacy among citizens decreases. This should be especially true for those groups directly affected by the respective practices. Examples from the cases already discussed in this paper include: protests against state-led dam projects and the associated displacement in the Mekong region (Kirchherr, et al., 2016), reduced trust in Ecuadorian and Peruvian state institutions by indigenous groups that faced discrimination in the Cordillera del Cóndor region (Ali, 2019), and violent contestation of state-led mineral resource management in Sierra Leone (Johnson, 2019).

The second pathway connects environmental peacebuilding and state delegitimation more directly. The literature on DRR and climate change adaptation has critically remarked on a neoliberal hollowing out of the state as critical tasks are increasingly distributed upwards (to international forums and donors) or outwards (to NGOs). In the end, this is supposed to undermine core functions of the state (Jones, Oven, Manyena, & Aryal, 2014). The degree of this hollowing out is certainly contested given that even “weak” states can remain rather strong in terms of environmental, disaster and security management (Johnson, 2019; Zeccola, 2011). But citizens’ perceptions that local/international environmental peacebuilding practices are more committed to and/or successful in providing valued public goods than state institutions can still undermine the (perceived) legitimacy of the latter.

As part of the post-conflict peacebuilding and rehabilitation process in Timor-Leste, for example, well-funded aid organisations provided water pumps to local communities to address freshwater shortages. Because the communities lacked the skills to maintain the pumps as well as fuel to run them, they turned to the United Nations Transitional Administration in East Timor (UNTAET, the de-facto Timorese state between 1999 and 2002) for assistance. As no support was forthcoming due to the financial constraints and different strategic priorities by UNTAET, dissatisfaction with the transitional administration grew remarkably. This also raised the risk of renewed conflict escalation in the politically fragile country (Krampe & Gignoux, 2018).

3.6 Degradation of the environment

Addressing peace and conflict issues through environmental cooperation can result in environmental degradation. Especially in acute conflict and post-civil war settings, short-time horizons and acute livelihood pressures might facilitate such developments. Also, the necessity to provide win-win situations as entry points for trust building and to avoid resource-related tensions might make it hard to address structural or distributional issues (see the discussion of depoliticization above). One of the earliest formulations of the concept already cautioned that environmental peacebuilding might be little more than coordinated resource exploitation (Conca, 2001). Similarly, Chandler (2019) warns that building security through resilience is likely to promote further environmental degradation as the current, unsustainable political and economic order remains unchanged. The resulting resource scarcity, especially if amplified by socio-economic discrimination, can cause further conflicts (Peluso & Watts, 2001) and displacement (Koubi, Spilker, Schaffer, & Böhmelt, 2016).

In Yemen, for instance, communities have on various occasions set aside their (violent) disputes to stand together in the face of droughts and threats of water grabbing by the state. But resulting efforts to extend water infrastructure and the pooling of resources to drill deeper wells also paved the way for unsustainable over-extraction of groundwater in several cases (Taher, Bruns, Bamaga, Al-Weshali, & Van Steenberg, 2012). Making agricultural inputs and training available has also been a popular strategy for providing sustainable livelihoods to ex-combatants and thus mitigating their recruitment by violence entrepreneurs, for instance in Liberia (Blattman & Annan, 2016). But the provision of groundwater pumps, fertilisers and pesticides in this context can have severe adverse impacts on the local environment (Tilman, 1999).

Environmental degradation is also an issue when it comes to environmental peacebuilding between states. Internationally supported water cooperation in the Aral Sea basin (also designed to promote more peaceful relations and avoid water conflicts) largely resulted in a coordinated over-extraction of water from the Amu Darya and Syr Darya rivers. Such efforts left underlying drivers of environmental degradation such as water-intensive cotton cultivation unaddressed and even removed them from the agenda (depoliticization) (Weinthal, 2002). In 1990, Costa Rica and Nicaragua designated the Si-A-Paz (“Yes to Peace”) transboundary protected area to the promotion of biodiversity and the cultivation of peace between both states. But during the subsequent two decades, it became clear that the protected area is a key instrument of territorial consolidation (including the displacement and discrimination of local populations, and the depoliticisation of the underlying struggles), thus paving the way for oil extraction with all its harmful environmental effects (Barquet, 2015).

4 Moving Forward

Despite its indisputable conceptual and practical advantages, environmental peacebuilding also has a dark side hardly discussed by researchers and practitioners. This dark side refer to the six Ds, the six adverse effects of environmental peacebuilding: depoliticisation, displacement, discrimination, deterioration into conflict, delegitimisation of the state, and degradation of the environment.

As already indicated by the previous section, these six Ds can interact with and impact each other. Most of these interactions are negative in that they reinforce the adverse effects of environmental peacebuilding. Displacement, for example, can make people vulnerable to discrimination, trigger conflicts between the state and the affected groups, and “clear” territories for further resource exploitation. Similarly, degradation of the environment can affect already discriminated groups more severe, create additional grievances that fuel conflicts, and reduce the legitimacy of the state.

There are only a few positive interactions where the occurrence of one D limits the negative impact of another. Displacement and deterioration into conflict, for example, attract attention by NGOs, media and (foreign) governments, hence making (successful) depoliticisation less likely. Figure 1 provides a preliminary overview about the potential interactions between the negative impacts of environmental peacebuilding.

Impact... ... on → ... of ↓	Depoliticisation	Displacement	Discrimination	Deterioration into Conflict	Delegitimisation of the State	Degradation of the Environment
Depoliticisation		Legitimises displacement	Enables discrimination by making it less visible	Reduces political channels for conflict transformation		Technical solutions do not address root causes of environmental problems
Displacement	Makes political dimensions more visible		Increases vulnerability to discrimination	Creates conflicts about displacement and in receiving areas	Affected populations consider the state less legitimate	Migrants lack ecological knowledge in new locations
Discrimination	Makes depoliticisation harder	Discriminated groups are more vulnerable to displacement		Creates additional grievances	Discriminated populations consider the state less legitimate	Discrimination of certain (e.g., indigenous) forms of environmental knowledge
Deterioration into Conflict	Makes depoliticisation harder	Additional displacement due to insecurity	Intensifies grievances and facilitates discrimination		Conflicts as a challenge to the state	Environmental destruction during conflicts
Delegitimisation of the State			Less cooperation with the state accelerates discrimination	Makes anti-state actions more likely		Complicates environmental management
Degradation of the Environment		Justifies displacement	Affects discriminated groups stronger	Creates additional grievances	Affected groups consider the state less legitimate	

positive impact
 negative impact
 no/unclear impact

Figure 1: Interactions between the six Ds.

To be clear, not all environmental peacebuilding practices have one or more of these negative effects, and if so, they may well coexist with positive effects. This points to the very realistic possibility that like most other peacebuilding, environmental and development projects, environmental peacebuilding practices can benefit some while imposing costs on others — they produce winners and losers.

Based on the evidence discussed above, one can formulate hypotheses about certain context factors that make the occurrence of such effects more likely, although their discussion here is necessarily preliminary. At the structural level, pre-existing inequalities and cleavages between various groups

or between a group and the state facilitate the occurrence of one or more of the six Ds. Discrimination and conflict escalation, for example, are likely to take place along these lines, while already marginalised groups are more likely to be among the losers of environmental peacebuilding, for instance by facing displacement. These groups are also more likely to consider the state less legitimate (Ali, 2019; Peluso & Watts, 2001). The political system matters as well. Authoritarian regimes unaccountable to their population face more legitimacy concerns, can repress civil society groups challenging depoliticisation, and have more room of manoeuvre for displacement, discrimination and environmental exploitation (although these effects occur in democracies as well). Corruption is also an issue, in particular when the positive and negative impacts of environmental peacebuilding practices are unequally allocated among different groups (McCarthy, 2004).

At the project level, various risk factors for the occurrence of one or several Ds exist. Space-intensive project designs make the occurrence of conflicts, displacement and environmental degradation more likely, with large-scale dams being the best example for this (Matthews, 2012). The existence of vested business or national security interests is another risk factor. The Jonglei Canal, for example, was considered important by Sudan's and Egypt's security establishments, hence leaving little room for politicisation, conflict-sensitive planning, and environmental impact assessments (Ahmad, 2008). And in many peace parks, conflicts between (powerful) ecotourism actors and local inhabitants occur, thereby raising the prospects for the latter being discriminated or displaced (van Amerom & Büscher, 2005). Further, research on both peacebuilding (Richmond, 2016) and DRR (Jones, et al., 2014) has shown that externally derived, "one size fits all" solutions are likely to facilitate depoliticisation, conflicts (between locals as well as between locals and externals)⁵ and state delegitimisation.

But even in adverse contexts, the dark side of environmental peacebuilding can be mitigated or at least limited. At the very least, the positive impacts of environmental peacebuilding have outweighed its adverse effects in a number of very difficult settings, including the Democratic Republic of the Congo (Burt & Keiru, 2011), Palestine (Ide & Tubi, 2019) and Yemen (Lichtenthaler, 2014). Possible measures to mitigate or limit the occurrence of the six Ds are environmental and social impact assessments, external monitoring (e.g., by international media or donor agencies), national laws against discrimination or (not properly compensated) relocation, inclusive consultation processes, and mainstreaming gender and conflict sensitivity, among others.

⁵ I acknowledge that spatial categories like local, external and international are at least to some degree contingent, subject to change, and in practice often intertwined.

These lists of potential risk factors and countermeasures are preliminary, as are the considerations about the six Ds and their interactions, mostly because little systematic knowledge on the dark side of environmental peacebuilding is available as of yet. Environmental peacebuilding as a research field is rather young and studies have so far largely investigated whether and if so how environmental management can contribute to peacebuilding (Dresse, et al., 2019). Practitioners also do not reflect in great details about the adverse effects of environmental peacebuilding (at least not publicly).

Yet, critical reflection and knowledge generation on the negative effects of environmental peacebuilding is of vital importance. For one, it enables the research field to grow as an integrative approach bringing together scholars working on natural resource management, peacebuilding, environmental conflicts, political ecology, DRR, and climate change adaptation, among others. Perhaps even more important, research on the dark side of environmental peacebuilding is needed to gain a comprehensive understanding of the phenomenon, to identify potential risk factors for sustainability and peace, and to develop good practices that can travel among projects. Only if researchers and practitioners participate in such a shared endeavour will environmental peacebuilding be able to fully develop its potential to simultaneously address environmental problems and threats to peace.

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