Connecting Conflict, Climate Change and Ecological Crisis

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1 INTRODUCTION

1.1 CONTEXT

In addition to the Covid-19 pandemic, the world has long been facing two unprecedented major global crises — climate change (climate crisis) and biodiversity loss and environmental degradation (ecological crisis) — in relation to nature.[1] There have been many UN-led efforts made over the past several decades to address these crises and minimise their negative impacts. After the UN Earth Summit in Rio de Janeiro in June 1992, UN's *Convention on Biological Diversity* (CBD), *United Nations Framework Convention on Climate Change* (UNFCCC), and *United Nations Convention to Combat Desertification* (UNCCD) were adopted by the nations to address biodiversity loss, climate change, and desertification and land degradation, respectively.

Many follow up protocols, agreements, strategies, and action plans have been formulated under these three conventions. Regarding climate change, the most well-known one is the *Paris Agreement* agreed upon in 2015 to reduce net carbon emission to zero to limit global temperature rise below 2°C by the end of this century, and to make an effort to limit by 1.5°C. Under the CBD, two 10-year-long biodiversity action plans were formulated in 2001 and 2010. Later this year in Kunming, China, the Post-2020 Global Biodiversity Framework[2] is expected to be approved during the Conference of the Parties (COP) to the CBD, along with the Vision 2050: 'Living in harmony with nature'. The concepts and approaches associated with climate change and conservation have evolved over the years; some of those discussed in this working paper are described in **Box 1**.

Addressing the existential societal challenges, like climate and ecological crises, however, is no longer the responsibilities of the UN, national governments or organisations working in the environment sector. All sectors and entities — irrespective of their visions and primary purposes of their foundation and operation — should mainstream climate and ecological crises into their founding philosophy, guiding principles, organisational policies, and operational frameworks. This should be done not only as a responsible organisation joining global efforts, but also for organisational sustainability. We have already been seeing within the Foreign, Commonwealth & Development Office of the Government of the UK (FCDO), and other donors, an increasing trend of making links between conflict & stabilisation and climate & environment. But it is early thinking for FCDO and the aid sector more broadly.

By exploring this relatively unexplored area, we i) can have a better understanding of the 'conflict-climate change-ecological crisis nexus'; ii) can add value to its work; iii) meets its social and ecological responsibilities; and iv) support the MEL sector to better respond to global crises.

With this paper, we explore how to mainstream the climate and ecological concerns into our conflict-related work.

1.2 PURPOSE AND OUTLINE OF THE DOCUMENT

The present working paper is Itad's first attempt to capture the current trends in knowledge and thinking to connect between conflict and climate & ecological crises.

This document was prepared by identifying and consulting key studies and documents in relation to conflict & stabilisation and climate & ecological crises. It starts with giving an overview of the relationships and synergies among conflict and climate & ecological crises. It then discusses the role of ecosystem-based approaches or nature-based solutions (NbS) to overcome societal challenges, such as climate change adaptation and mitigation, biodiversity loss, and environmental degradation. This report then explores how UK's climate change, biodiversity and conflict mitigation mandates and policies converge as an opportunity to make similar convergence in Itad's work. It then identifies several relevant planning, implementation and M&E frameworks that may be useful to integrate climate and conservation actions

into conflict mitigation and humanitarian work in fragile and conflict-affected states. Finally, the working paper briefly showcases how conflict and climate & ecological crises can be attended to in a project.

Box 1. Some concepts discussed in this working paper[3]

Adaptation In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects.

Biodiversity Biodiversity — short for biological diversity — means the diversity of life in all its forms — the diversity of species, of genetic variations within one species, and of ecosystems.*

Climate Change According to the UNFCCC "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

Conservation The protection, care, management, and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.*

Ecosystem Services The benefits people obtain from ecosystems. These include provisioning services, such as food and water; regulating services, such as flood and disease control; cultural services, such as spiritual, recreational, and cultural benefits; and supporting services, such as nutrient cycling that maintain the conditions for life on Earth.*

Loss and Damage Research has taken Loss and Damage (capitalized letters) to refer to political debate under the UNFCCC, which is to 'address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.' Lowercase letters (losses and damages) have been taken to refer broadly to harm from (observed) impacts and (projected) risks.

Mitigation (in climate change) A human intervention to reduce emissions or enhance the sinks of greenhouse gases. In climate policy, mitigation measures are technologies, processes or practices that contribute to mitigation, for example, renewable energy technologies, waste minimization processes, and public transport commuting practices.

Resilience The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation.

Restoration Recovery of the structure, function and processes of the original ecosystem.*

*IUCN (2020)

2 CONFLICT-CLIMATE CHANGE-ECOLOGICAL CRISIS NEXUS

The multifaceted relationship between conflict & stability and climate & ecological crises has long been recognised[4] and recent studies have sufficiently shown that climate change has been causing conflict and instability. The UK/DFID-funded the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme supported the Overseas Development Institute (ODI) to scan social media, blog, grey literature, and peer-reviewed articles to compile the current understanding on climate change, conflict, and security. The project produced three reports[5, 6, 7] based on the information made available during April 2018–March 2019. The sub-sections 2.1–2.3 are essentially based upon these reports.

2.1 CLIMATE CHANGE AND CONFLICT & STABILITY

A review[8] of econometric research on climate change and intra-state conflict (e.g., civil war, communal violence, and riots) found limited strong direct link between climate change and conflict. Climate change, however, may act as a 'threat multiplier' — potentially exacerbating conflict drivers through three main pathways: (i) climatic conditions may reduce income leading to conflict by decreasing the opportunity cost for rebellion; (ii) climate-induced economic decline may exacerbate actual, as well as perceived, economic and political inequalities leading to conflict; and (iii) climate-induced displacement may lead to conflict in receiving areas for competition over resources, ethnic tensions, or distrust. Although climate may currently play a minor role compared to other factors instigating conflict, it does impact individual and inter-group violence.[9] And, as climate change effects become more severe, these conditions would exacerbate. In 2020, International Committee of the Red Cross (ICRC)'s research[10] in southern Iraq, northern Mali and the Central African Republic showed how climate change disproportionately affected regions with long-lasting conflicts because of the limited adaptive capacity of their people, systems, and institutions, which are already burdened with the severity of conflicts.

Disasters: A study on 129 countries showed that, after disasters, transnational terrorism increased with a lag, but domestic terrorism did not increase.[11] Another study, however, showed that Typhoon Bopha (2012) and Typhoon Haiyan (2013) weakened the New People's Army in the Philippines due to increased government and international presence limiting rebel recruitment, loss of territorial control, and negative effects on the supply lines and organisation structure of the rebel groups.[12] Drying of Lake Chad had contributed to economic challenges and social tensions, which led Boko Haram insurgence in Nigeria to successfully recruit youths as fighters, a research concluded.[13]

Literature also revealed that disasters themselves do not create conflict, but may accelerate conditions and dynamics already present or developing; and disaster-related policies may influence conflict processes and dynamics.[14] Another study, however, showed that Typhoon Haiyan (2013) and El Niño drought (2016) caused climate-induced social conflict in the Philippines.[15]

Displacement: While the climate-conflict-refugee nexus is often discussed in academic literature, the evidence of this nexus is limited. Securitisation of migration could be one of the reasons for such biased interest.[16] A study compared social, economic and climate data and violence in East Africa over several decades and concluded that, economic performance, population growth and political stability play significantly more important roles than climatic factors, when 'total numbers of displaced people' were considered.[17] Another research, which analysed bilateral refugee flow data for 157 countries during 2006–2015, found that climatic conditions increased the likelihood of asylum seeking by affecting the drought severity.[18]

Livelihoods: Conflicts negatively affect climate-dependent livelihoods, for example, by influencing household decision-making in agricultural communities.[19] Experience from Colombia showed that reduction of uncertainty in post-conflict communities is crucial for farming communities to enhance local agricultural productivity. A research on the link between water variability and conflict in climate

vulnerable regions shows the importance of hydropolitics in addressing potential conflict over shared waters.[20]

Mitigation: The REDD+ mean Reducing Emissions from Deforestation and forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks. It is a process facilitated by the UNFCCC that supports countries' efforts to reduce greenhouse gas emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks.[21] Studies showed that, although the REDD+ does carry conflict risks from land tenure, people's representation, and benefit sharing,[22, 23] it also bears 'transformative potential' in terms of conflict resolution.[24] It was recommended that REDD+ projects should allow context-sensitive analysis and substantial cross-policy cooperation to mitigate potential conflicts.[25]

***Green economy potential*:** In Mexico, it was shown that state and private actors could use the 'green economy' as a 'pacification device' to counter insurgence, since the establishment of a wind farm led to suppression of violence and social divisions, and legitimised economic opportunities like mining and land concessions.[26]

2.2 Environmental degradation and conflict & stability

Environmental degradation and dry weather remain a big threat to the food security and stability in Sahel region in Africa. In 2018, the FAO reported deterioration of agro-pastoral lands in Mauritania, Mali, Senegal, and coastal countries due to increase in migration of pastoralists to forage-rich areas.[27]

In Nepal, despite being one of the most climate vulnerable countries in the world, increasing reports of **conflict over forest and water resources** was attributed to 'poorly defined resource tenure and poor governance, particularly in relation to the changing pattern of local livelihoods and shifting political regimes.'[28] A participatory action research on 79 case studies in Bangladesh and Nepal showed that m**any natural resource-related conflicts could be resolved through enhanced cooperation**, participatory dialogue, external facilitation, flexible responses to context, and recognition of the needs of the disadvantaged stakeholders.[29] To fully recognise the risks associated with natural resources and conflict, it is c**rucial to realise the interactions between natural resource governance structures at the local, subnational and international levels.**[30]

The devastating impacts of armed conflicts on environment and biodiversity have been widely documented from around the world.[31] A study was conducted on Nepal, Sri Lanka, Ivory Coast, and Peru, which suffered from armed conflicts over the last two decades.[32] This research found forest destruction took place at an alarming rate as soon as the conflicts were over.

2.3 Interaction among multiple security risks

Sometimes multiple security risks related to climate change, natural resource conflicts, livelihood insecurity, and social tensions interplay, as was seen in the Lake Chad region.[33] In 2018, The UN Security Council (UNSC) Resolution 2423 asked the Government of Mali and the UN to recognise and take action against the devastating effects of climate change, natural calamities, and ecological degradation on the stability of Mali. However, in understanding the relationship between climate change and conflict, an expanding pool of research is **highlighting the importance of socio-political and historical factors over environmental ones.**[34]

Hence, the way we link a security risk with climate change does not always give us the whole picture. Water insecurities, for example, are often presented as a climate-induced vulnerability that needs to build community resilience as the solution.[35] But, a study on South Asia argued that such focus overlooks the ways water insecurities are produced, reproduced, and experienced by populations within specific contexts of socio-economy, politics, and policy.

Similarly, **the current narratives of human security and climate security have been challenged since both focus on humans and overlook ecosystem as a whole** and the rights of the future generations over it.[36] **The advocates of 'ecological security' argue that such a notion offers opportunities to think beyond traditional security concerns.**

2.4 Synergies among conflict, and climate & ecological crises

To further understand the links and patterns between conflict & stability and climate & ecological crises, we look at synergies of their characteristics. Climate crisis (climate change and variability) and ecological crisis (environmental degradation and biodiversity loss) show some similarities with conflicts. **Table 1** captures some such synergies in a number of aspects, namely pace, impact, and relationships with economy, history, politics, justice, and global governance.

Table 1. Synergies among conflict, and climate & ecological crises in terms of pace, economy, history, politics, rights & justice, global governance, and impacts at local to global levels.

Issues	Pace	Economy	History, Politics, Rights / Justice, Global governance	Impact
Conflict	▪ Slow, long-term, conflicts/ instability/ violence ▪ Sudden, short-duration, intense conflicts/ instability/ violence	▪ Economic relationship between fighting states/fractions ▪ Control over/use of natural resources (e.g., oil, minerals, water, timber, and wildlife) to fund conflict ▪ Role of legal/ illegal arms industry	▪ Historical relationship among fighting nations ▪ Role of domestic, regional & global politics in civil war/ rebellion/ violence/ genocide ▪ Deprivation/ injustice leading to rebellion ▪ UN Security Council	Short & long-term impacts on — on local, regional, and global scales — people's lives, social cohesion, instability, insecurity, politics, economy, displacement, cross-generational aspects, environment, biodiversity, etc.
Climate Crisis	▪ Slow-onset processes/ stresses (e.g., drought/ desertification, sea level rise, coastal erosion, and salinity intrusion) are results of climate change ▪ Sudden-onset events/ extreme events (e.g., cyclones/	▪ Economic activities and growth (e.g., industrialisation, energy, transportation) widely based on fossil fuel use, leading to carbon emissions, thus to global warming ▪ Economic concerns are	▪ Historical contributions of developed nations to causing climate change ▪ Global climate politics (e.g., developed vs least developed countries; among individual nations; negotiation bloc)	▪ Short & long-term negative impacts on — on local, regional, and global scales — lives, livelihoods, food security, water security, social security, human health, economy, internal displacement,

Issues	Pace	Economy	History, Politics, Rights / Justice, Global governance	Impact
	hurricanes, floods, storm surges, heat/ cold waves, and wildfire) aggravated by climate change	delaying developed countries' actions to rapidly reduce carbon emissions under the *Paris Agreement* ▪ Fossil fuel industries' lobby	influences climate crisis mitigating ▪ Compensation for climate-induced losses and damages in poorer nations is sidelined by developed nations ▪ UNFCCC	ecosystem services, disaster risk management, non-economic losses and damages, etc.
Ecological Crisis	▪ Gradual exploitation of natural resources; unsustainable management of ecosystems; pollution ▪ Sudden biodiversity loss due to natural disasters (e.g., tsunami, cyclones, and wildfire) or man-made crisis (e.g., refugee crisis and war)	▪ Driven by economic growth ▪ Overexploitation of natural resource to meet national to global business and demands ▪ Land use change (e.g., agriculture, industrialisation, urbanisation, energy production, river management, and road communication)	▪ Significant destruction of ecosystems/ biodiversity over the last 50 years ▪ Used to be considered as a national responsibility; now a global concern ▪ National policies deprioritise ecological conservation ▪ Corruption related to biodiverse land and aquatic ecosystems management ▪ Rights of local and indigenous people undermined ▪ UN CBD	▪ Short & long-term impacts on — often at local scale — rural livelihoods, ecosystem services, disaster risk reduction, national economy, heritage and culture, urban biodiversity, etc.

[prepared by the author]

Understanding these synergies can help us to see where there are commonalities and opportunities to bring these concerns and sectors together, and perhaps the most promising opportunity, is through the concept of Nature-Based Solutions (NbS), described in the next section.

3 NATURE, NATURE-BASED SOLUTIONS (NBS), AND SOCIETAL CHALLENGES

3.1 NATURE AND NBS

We are facing many societal challenges (**Figure 1**), such as climate change, environmental degradation, and biodiversity loss, all of which can fuel and exacerbate drivers of conflict, potentially developing new tensions that did not exist before. Given our indispensable dependence on nature and natural resources to sustain our existence and development, it is logical as well as practical to look into nature for solutions to these challenges.

Nature-based solutions (NbS) are an established concept that could be useful to how we consider responses to conflict. They use natural and modified ecosystems and their processes to address our societal problems, like the climate crisis and ecological crisis we have been discussing in this working paper.

Figure 1: Nature-based solutions (NbS) is an umbrella concept of ecosystem-related approaches, which addresses societal challenges, such as climate change adaptation and mitigation, disaster risk reduction, social and economic development, human health, food security, water security, and environmental degradation and biodiversity loss. (IUCN, 2020)

IUCN defines NbS as "actions to protect, sustainably manage and restore natural and modified ecosystems in ways that address societal challenges effectively and adaptively, to provide both human well-being and biodiversity benefits."[37] The NbS is an umbrella concept bringing together a range of ecosystem-based approaches (**Figure 1**). Some major approaches used in NbS are listed in **Table 2**. In addition to protection, sustainable management, and restoration of existing ecosystems, expansion or creation of new ecosystems in new areas is also crucial, such as mangrove afforestation on newly accreted land along the estuary. While an NbS option should address one or more societal challenges, a combination of several NbS might be needed to meet the demand of a location.

3.2 BENEFITS OF NBS

NbS interventions offer different direct and indirect social, economic and environmental benefits, such as enhanced food availability, improved water security, poverty alleviation, livelihoods diversification, employment generation, reduced disaster risks, improved environmental conditions, and reduced rate of biodiversity loss, and hence can potentially contribute to the mitigation of some drivers of conflict, depending on the context. In many cases, one NbS can provide us with multiple benefits. For example, mangroves not only protect assets and lives from cyclones and storm-surges, but also capture carbon from atmosphere, shelter biodiversity, offer livelihoods to local people, be part of the culture and heritage of a nation, and support recreation through tourism.

Table 2. Examples of major ecosystem-based approaches followed in NbS.[38]

Major ecosystem-based approaches used in NbS	Examples
Ecosystem protection	Area-based conservation approaches, including protected area management
Issue-specific ecosystem-based actions	Ecosystem-based adaptation (EbA), Ecosystem-based mitigation (EbM), Climate adaptation services, Ecosystem-based disaster risk reduction (Eco-DRR)
Infrastructure-related actions	Natural infrastructure, Green infrastructure
Ecosystem-based management	Integrated coastal zone management, Integrated water resources management
Ecosystem restoration	Ecological restoration, Ecological engineering, and Forest landscape restoration (FLR)

In terms of adapting to climate change, the annual coastal flood protection benefits from world's mangroves, for instance, have been estimated to be more than US$ 65 billion.[39] If these mangroves were lost, an additional 15 million people would be flooded annually. Combining NbS with grey solutions enhances longevity of the infrastructure and reduces maintenance costs, especially under climate change which is intensifying natural calamities.

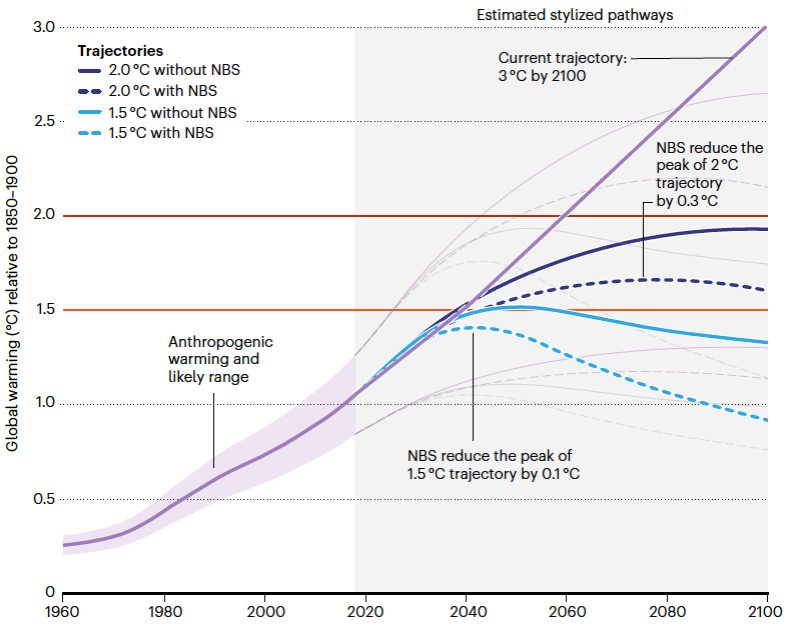

Figure 2: Nature-based Solutions (NbS) may reduce the global temperature and suppress warming beyond 2100, provided the solutions are designed with ambition and for longevity. (Girardin *et al.*, 2021)

Regrading mitigation benefits, management of terrestrial ecosystems and improvements in agricultural practices can provide around 30% of CO_2 removal we need by 2030 to keep the global temperature increase below 2°C.[40] The world has nearly a billion hectares of land to create new forests to capture 200 gigatonnes of carbon,[41] which may also help to limit global warming to 1.5°C by 2050, studies report.[42] A recent analysis showed that NbS can supress global warming beyond 2021, only if we design and implement ambitious NbS programme aiming for longevity (**Figure 2**).[43] But, NbS should not be considered as an alternative to decarbonising our economy with zero-carbon solutions. We should remember that there is no other way out but to reduce our dependency on fossil fuels to address climate change.

3.3 Effectiveness of NbS

In terms of effectiveness, NbS, such as slope revegetation and wetland protection or creation were reported to be more effective to address freshwater flooding than engineered solutions (e.g., check dam, artificial water storage alternatives, and buffer tanks).[44] Regarding cost-effectiveness, coastal defense projects in the USA showed that NbS, like protected salt-marshes and mangroves, were 2 to 5 times cheaper than engineered actions at low-wave heights and increased water depths.[45]

3.4 Challenges with NbS

NbS interventions take time to deliver their full benefits — like a plantation takes time to get mature to sequester sufficient carbon or to reduce high-speed wind — which is an inherent limitation. Therefore, designing long-term, ambitious NbS programmes are vital. Given the increasing frequency and intensity of natural calamities under a changing climate, NbS alone may not be sufficient to protect lives and assets in vulnerable locations, a mix of grey and NbS might be needed.

In terms of our gaps in NbS knowledge and understanding, there is limited evidence of NbS effectiveness in the Global South,[46] which in turn slows down policy and practice change at country levels. Misconceptions about what is 'true' NbS[47] and the difference between NbS and nature-driven activities[48] or nature-inspired activities[49] or environment-friendly activities or biodiversity conservation or community development,[50] further inhibit progress.

Regarding governance, conflict over NbS sites due to land tenure and related instability, effective community participation, and unequitable benefit-sharing from NbS could potentially exacerbate or create tensions, so doing harm. Inadequate management and sustainability, an absence of regular monitoring and evaluation, and inadequate adaptive actions can prevent sustainable NbS benefits. Inadequate policy and political commitments also constrain scaling up of NbS. Finally, climate finance is a big challenge altogether as developed countries are yet to provide the $100 billion promised; and within this funding, 21% is for adaptation which is where NbS would typically be funded from (although NbS also has mitigation potential).[51] These financial constraints restrict the scaling up of proven NbS.

To overcome most of the above challenges, a number of guidelines and standards have been proposed, which is discussed in Section 6 and have the potential to help conflict advisors to better engage with NbS concepts.

Before we discuss those, however, we reflect below on specific countries of interest to the UK (Section 4) and policies coming out of the UK which are relevant here (Section 5).

4 Climate Mitigation Opportunities for Countries of UK Interest

In recent years, NbS has been receiving increasing global attention. The UN Climate Action Summit held in September 2019, for example, had NbS as a major action track.[52] The 26th COP of the UNFCCC, to be held in Glasgow in November 2021, has included NbS as a core agenda item, which is being strongly pursued by the UK as hosts of COP26 (see Section 5 for further discussion). Held in late April, US President Joe Biden's 'Leaders Summit on Climate' was the first important climate meeting of 2021 that discussed NbS as an important climate action. The Global Commission on Adaptation (GCA) identified NbS as one of its eight intervention tracks.[53] Large global evidence-gathering initiatives on climate change and biodiversity

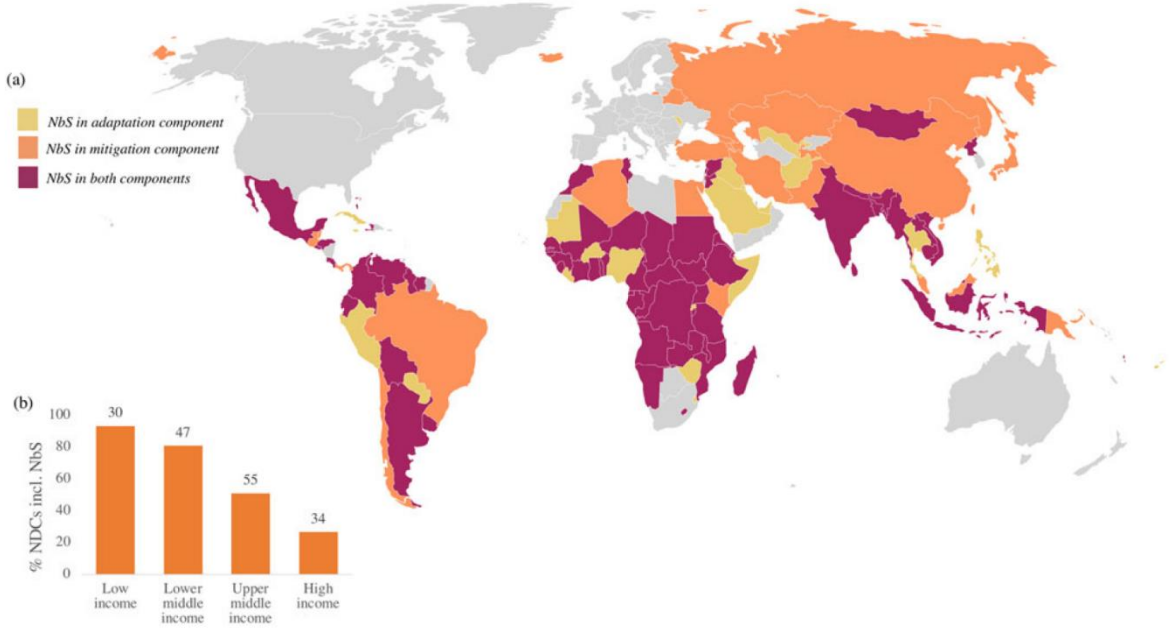

Figure 3: (a) Global distribution of parties to UNFCCC, which included NbS in adaptation and/or mitigation components in respective NDCs in 2015. (b) Percentage of NDCs from nations from different income groups that include NbS in adaptation components (numbers above bars are number of nations). (Seddon *et al.*, 2020)

conservation, namely the Intergovernmental Panel on Climate Change (IPCC)'s Climate Change and Land Report[54] and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)'s global assessment on biodiversity report[55], respectively, endorsed NbS. International financing institutions, such as The World Bank[56] and Asian Development Bank (ADB)[57] also incorporate NbS in their projects on disaster risk management, climate resilience, and infrastructure development.

In 2015, most of the 197 parties to the UNFCCC submitted their Nationally Determined Contributions (NDCs) where they declared their targets to reduce greenhouse gas emission by 2030, which are subjected to review every five years. A recent study showed that about 62% (104 countries) of the 168 parties included NbS as climate action measures.[58] Of these 104 countries, 27 identified NbS only as mitigation measure, and 77 countries both as adaptation and mitigation measures. This analysis further showed that most of the low- and lower-middle-income countries included NbS in their NDCs (**Figure 3b**) — many of them are Commonwealth countries or countries of UK interest.

5 UK's Climate Change, Biodiversity, and Conflict Mitigation Mandates

5.1 Climate Change

Between 1990 and 2019, the UK achieved some important milestones in terms of climate action, and the country has tried to position itself as a climate change leader among the developed nations.[59] However, questions remain – if not over the commitment to addressing climate change – then the coherence of a UK climate change strategy. Nevertheless, progress has been made in the UK regarding renewable energy, climate mitigation, the fossil fuel sector, climate finance, NbS, and green employments, which are listed below:

- The world's largest offshore wind energy producer.
- The first major economy to make it a legal obligation to reach net-zero carbon emissions by 2050.
- Announced the end of the sale of new petrol and diesel cars in the UK by 2030.
- Committed to end direct government support for the fossil fuel energy sector overseas.
- Promised to provide the developing nations with £11.6 billion over the next five years to fight climate change.
- Of this allocation, at least £3 billion will be for nature and NbS.
- Promised to make climate-related disclosures mandatory across the economy by 2025, with most requirements coming in by 2023.
- The low-carbon sector and supply chain now provides more than 460,000 jobs. It will be up to 2 million green jobs by 2030.

Box 2. Four goals nations need to achieve at the COP26[60]

1. Secure global net zero by mid-century and keep 1.5 degrees within reach

Countries are being asked to come forward with ambitious 2030 emission reduction targets (NDCs) that align with reaching net zero by the middle of the century. To deliver on these stretching targets, countries will need to accelerate the phase out of coal, encourage investment in renewables, curtail deforestation, and speed up the switch to electric vehicles

2. Adapt to protect communities and natural habitats

The climate is already changing and it will continue to change even as we reduce emissions, with devastating effects. At COP26, countries need to work together to enable and encourage countries affected by climate change to protect and restore ecosystems, build defences, put warning systems in place and make infrastructure and agriculture more resilient to avoid loss of homes, livelihoods and lives

3. Mobilise finance

To realise the first two goals, the developed countries must deliver on their promise to raise at least US$100 billion in climate finance per year. International financial institutions must play their part. All stakeholders need to work towards unleashing the trillions in private and public sector finance required to secure global net zero

4. Work together to deliver

At COP26, countries must finalise the *Paris Rulebook* (the rules needed to implement the *Paris Agreement*). They have to turn their ambitions into action by accelerating collaboration between governments, businesses, and civil society to deliver on climate goals faster

Every year, the 197 parties to the UNFCCC (196 countries and the EU) meet in a COP to discuss and decide on climate change actions. The COP26 will be held in Glasgow, UK during 1–12 November 2021 with the UK as the conference president. The major goals of this meeting are summarised in **Box 2**.

The UK's climate pledges and these goals highlight the importance of nature and investing in it as a means of adapting to climate change as well as attaining global net zero.

5.2 Biodiversity

Commissioned by the UK Government, the independent *The Dasgupta Review* was published in February 2021.[61] This more than 600-page report gives evidence of the dire condition of our biodiversity (ecological crisis), identifies the root causes behind it, the consequences of this crisis, and suggests major pathways to reverse the situation through transformative change.

The most significant 'headline messages' from this review noted that, although our economies, livelihoods, and well-being depend on nature, we have collectively failed to harness nature sustainably and our demands for ecosystem goods and services overwhelmingly exceed nature's capacity to supply those to us. For example, between 1992 and 2014 globally, produced capital per person increased by 200%, human capital per person increased by about 13%, but natural capital stock per person decreased by about 40%. As a result, we are jeopardising our, as well as future generations', prosperity. Currently, the species extinction rates are around 100 to 1,000 times higher than the baseline rates. In terms of ecosystem loss, for example, about 90% of world's wetlands had been lost over the last 300 years and about 35% since 1970.[62]

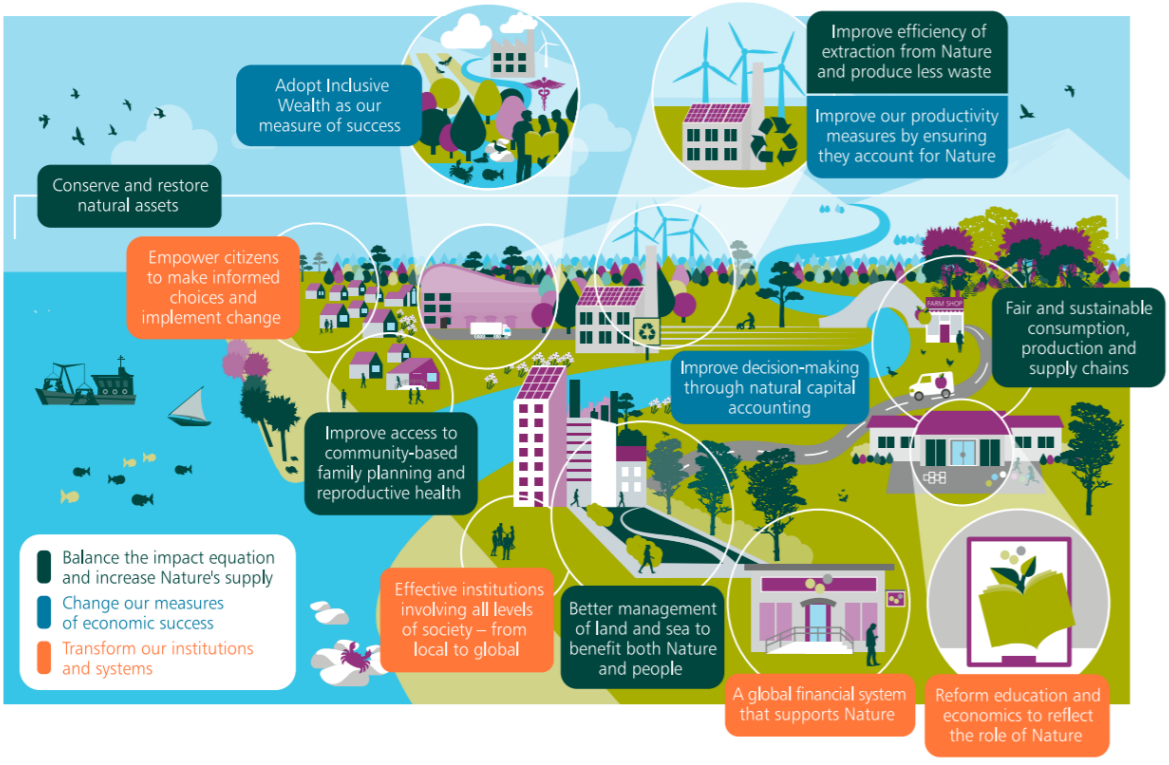

Figure 4: Options for change as summarised in Dasgupta (2021, p. 488).

Deep-rooted, widespread institutional failure is the reason behind the current ecological crisis. The cost of damage to nature caused by our subsidised activities was estimated conservatively to be US$4–6 trillion per year. It is now crucial to recognise the fact that our economies are not external to nature, rather embedded within nature. It is also important to change the way we think, act and measure our success. We, therefore, need transformative change for us and our future generations.

To achieve such transformation, the review urges to work towards three broad transitions:[63]

Demand & Supply: Ensure that our demands on nature do not exceed its supply, and that we increase nature's supply relative to its current level.

Measuring Success: Change our measures of economic success to guide us on a more sustainable path.

Institutions & Systems: Transform our institutions and systems — in particular our finance and education systems — to enable these changes and sustain them for future generations.

Figure 4 summarises the possible actions we are supposed to take along the three pathways mentioned above.

5.3 Conflict and security

The UK's ***National Security Strategy and Strategic Defence and Security Review*** of 2015 recognised climate change as one of the biggest long-term global challenges.[64] While the review identified climate change increasingly a risk to the UK, it envisaged that the full effects of climate change on UK's national security was more likely to be seen after 2035. The review also noted that climate-induced resource scarcity, natural calamities, and extreme weather events would lead to water and food insecurity, energy crises, health insecurity, political instability, conflicts, and migration.

The review noted that the UK set up the International Climate Fund (ICF) to provide £3.87 billion (April 2011−March 2016) to help the poorest population to adapt to climate change and achieve green growth. The country continued taking actions for climate change mitigation domestically, by taking active lead in the UNFCCC processes, and by contributing to achieving the Sustainable Development Goals (SDGs), where climate action, resilience, and biodiversity conservation have sufficiently been articulated.

As a part of promoting prosperity overseas, the UK pledged to increase its efforts to build mutually beneficial, long-term, sustainable relationships with developing and emerging economies and support their reforms to stimulate economic growth. The country also promised to invest in climate change mitigation and resilience programmes and harness significant trade and economic opportunities in helping drive low carbon transition around the world.

The UK's ***National Security Risk Assessment 2015*** identified 'Major Natural Hazards Events that need a national response' (e.g., severe flooding) as a Tier 1 risk, while 'Weather and Other Natural Hazards' (e.g., severe heatwaves or cold weather) and 'Environmental Events' (e.g., animal diseases or severe air pollution) as Tier 3 risk.[65]

Priorities identified in the 2015's *Strategic Defence and Security Review* and *UK aid: tackling global challenges in the national interest*[66] guide the design and implementation of the **Conflict, Stability and Security Fund (CSSF)**. A review of recent annual reports of the CSSF showcased a couple of examples of biodiversity conservation in conflict-affected regions. The CSSF and ICF[67], for example, were supporting the Colombian Government to address the illegal deforestation accompanied by land-grabbing, clearing land for illicit crops, extensive cattle herding, and illegal gold mining. The specific interventions of an integrated programme include ambitious targets to reduce deforestation, support Colombian security and justice agencies to tackle environmental crime, promote sustainable forest livelihoods and enterprises, and improve land systems and usage rights in conflict-affected regions. The CSSF also funded the Blue Belt programme, which aimed to protect the UK's Overseas Territories' marine biodiversity, including coral reefs.

6 Environmental Frameworks Relevant to Conflict

6.1 Integrating climate change in conflict measurement

Although climate change can influence state stability, current fragility measurements, for example, the Fragile States Index, which include economic, political, social and cohesion elements, do not consider climate impacts.[68] The recently proposed Fragile States Metric System (FSMS)[69] includes an adapted Climate Change Metric System by incorporating a Climate Change Performance Index and would help to measure the climatic factors influencing stability in fragile states.

A new theoretical framework[70] helps to unpack complex diverse drivers of environmental conflicts. It considers how multidimensional types of environmental violence — direct, cultural, structural and ecological — overlaps across historical, political and economic contexts. This also allows us not only to see visible forms of violence, but also to consider 'slow violence', which poses a threat to human and natural systems.

From a practical point of view, a number of tools are available to integrate conflict sensitivity in climate action and vice versa. The project cycle of a climate adaptation project could integrate analyses in all steps often seen in a conflict-stability initiative.[71] While analysing vulnerability to climate change, for example, steps taken to analyse a particular conflict, i.e., conflict profile, conflict causes, conflict actors, and conflict dynamics, could be useful to understand the situation on the ground more comprehensively (**Box 3**). It can also add substantial value to conflict analyses, to consider the role of the environment and climate in current and future conflict dynamics – something which can currently be overlooked – and in doing so equip the conflict analyses to be better able to identify the potential for NbS at the intervention planning phase.

6.2 Tools for measuring ecosystem-based approaches

Since NbS has been evolving as an umbrella concept built on many ecosystem-based approaches, appropriate standards and guidelines are needed to draw the boundaries of NbS and to ensure its effective implementation to address climate change and the ecological crisis. These are also necessary to avoid undue confusions and misinterpretation of the NbS concept.

There are a number of frameworks proposed to measure different aspects of NbS or ecosystem-based approaches, which could be useful to design and take such approaches in a conflict context. Considering the urban context, for example, a framework was proposed to assess the co-benefits as well as costs of NbS within and across ten societal challenge areas.[72] The authors showed that benefits in one challenge area can have co-benefits, costs or neutral effects in other areas, which could be useful for environmental policy and planning. The ten societal change areas can also be used to map conflict dynamics and better integrate a pro-peace analysis into the planning and designing of NbS projects.

Based on systems analysis and backcasting, a dynamic assessment framework was proposed to evaluate the effectiveness of NbS under future climate conditions.[73] It was expected that this framework would help to choose between NbS and conventional options. In May 2021, a new conceptual framework was proposed to measure the transformative change potential of NbS.[74] An analysis of data of 93 NbS interventions in mountainous regions showed that NbS does have potential for transformative change supported by nature's values, knowledge types, community engagement, and nature management practices.

Like the conflict sensitivity tool in **Box 3**, these frameworks can help us better consider how, where and when we can apply NbS in conflict contexts, but also to use the application of these frameworks to stress-test proposed programmes and policies to respond to conflict, helping us understand whether what is proposed will remain viable and relevant in 5−10 years' time, considering expected changes in climatic

and ecological conditions. In turn, this can help inform monitoring, evaluation and learning systems to be both conflict and climate/ecologically sensitive.

Box 3. Example of questions to integrate climate change into conflict analysis (reproduced from Tänzler & Scherer, 2019, p. 12)[75]

Topic	Question to Address
Conflict profile	**How will climate change alter the political, economic and socio-cultural context?** ▪ Are higher temperatures likely to increase competition and conflict in areas with a narrow resource base? ▪ Are more frequent extreme weather events (e.g. droughts, flooding, heat waves) likely to contribute to aggravate long-simmering tensions between various groups (e.g. farmers vs pastoralists) about increasingly scarce resources? Could they lead to social unrest, even conflict? If so, how?
Conflict causes	**Are there sources of tensions between groups that could be exacerbated because of climate change?** ▪ Could climate change impact agricultural production and food markets, leading to volatile food prices? How would this impact marginalised populations such as ingenious communities? Urban/rural populations? ▪ Could changing precipitation patterns lead to improved agricultural production in some areas? ▪ Will climate change negatively impact state legitimacy due to reductions in natural-resource based livelihoods and increased reliance on informal or illicit livelihoods? ▪ Could sea-level rise lead to displaced people, conflicts of land tenure and property rights?
Conflict actors	**How will climate change impact the key actors interests, resources and strategies?** ▪ Are there groups that are or will be disproportionally affected by climate change? How? ▪ Are there groups that will benefit from climate-induced changes? Who is likely to lose out? ▪ How will patterns of relative benefit and deprivation impact the relations between various groups? Could new alliances be formed? ▪ What is the capacity of marginalised groups such as indigenous communities to respond to climate change risks? Are they prepared for changes in need or in need for service delivery?
Conflict dynamics	**How will climate change impact societal patterns and institutional performances?** ▪ Is climate variability likely to give rise to migration (e.g. rural – urban migration)? If so, how well prepared are institutions at the points of departure and arrival to manage population migration induced by climate change? ▪ How might the socio-economic consequences of climate change impact local government functions, the delivery of services, local infrastructure? ▪ How sufficient are funding resources and governance capacities to help vulnerable people to address climate change?

6.3 NbS GUIDELINES

Four guiding principles were proposed so that NbS can provide sustainable benefits to society[76]

1. NbS are not a substitute for the rapid phase out of fossil fuels;
2. NbS involve a wide range of ecosystems on land and in the sea, not just forests;
3. NbS are implemented with the full engagement and consent of Indigenous Peoples and local communities in a way that respects their cultural and ecological rights; and
4. NbS should be explicitly designed to provide measurable benefits for biodiversity.

These guidelines were originally developed in February 2020 by a consortium of 20 UK-based organisations,[77] written as a letter to the President of COP26, to encourage adoption of the guidelines by other Parties to the UNFCCC.

6.4 STANDARDS FOR NbS

In July 2020, IUCN launched the *Global Standard for Nature-based Solutions*, consisting of eight criteria and 28 indicators, to guide design, implementation, and sustainability of NbS (**Figure 5**; **Annex 1**).[78] IUCN has also proposed a self-assessment tool to measure an NbS intervention against the indicators and criteria using a scoring system.

This standard recognises societal challenges being the starting point of identifying an NbS. It is important that the NbS is designed matching the scale of the problem. Net gain in biodiversity and enhanced ecosystem integrity, economic feasibility of the intervention, and ensuring people's participation in decision-making processes are three criteria matching the three pillars of sustainable development — environment, economy, and society, respectively. As the management of an NbS goes beyond a project tenure, adaptive management systems need to be in place to ensure NbS's benefits in the long run. A good NbS experience needs to be mainstreamed and scaled up in similar geographical locations to spread its benefits.

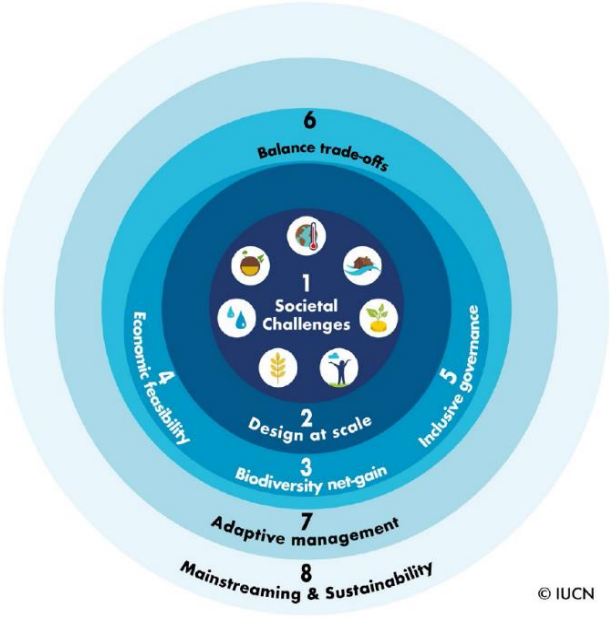

Figure 5: The eight criteria comprising the IUCN Global Standard for NbS. (IUCN, 2020)

Based on the criteria and indicators (**Annex 1**), a self-assessment tool (an excel sheet) has been developed by IUCN as well.[79] The self-assessment follows the process below:

1. First, a specific NbS intervention is selected to be assessed.
2. Each of 28 indicators is scored out of four depending on whether the NbS intervention addresses the indicator strongly, adequately, partially, or insufficiently.
3. The result is then used to calculate the level of adherence to each individual criterion. It also gives a 'strong', 'adequate', 'partial', and 'insufficient' result for scores >75%, 50%–75%, 25%–50% and <25%, respectively.
4. To give each of eight criterion equal weight, these indicator scores are then normalised.

5. After normalisation, the criterion scores are combined to give an overall percentage match for the NbS intervention (see Step 3).
6. It is to note that, if an NbS intervention scores an 'insufficient' rating against any criterion, it does not adhere to the *IUCN Global Standard for NbS*, even if the overall percentage match is higher.
7. The percentage match of the NbS intervention is then used to describe, if this adherence is strong, adequate, or partial.

While this standard does not explicitly highlight conflict, several criteria (e.g., inclusive governance, balanced trade-off, and adaptive management) and their indicators have the opportunity to adopt conflict sensitivity elements and principles, while designing, implementing and evaluating an NbS intervention.

7 Integrating Climate & Ecological Solutions into Conflict Response

Conflict is increasingly recognised in global discourses. Ahead of the UNFCCC's COP26 in November 2021 in Glasgow, the International Committee of the Red Cross (ICRC)[80] urged all concerned to make three clear commitments, which would ensure people suffering from conflict are properly included in climate actions: "i) acknowledge that countries enduring conflict are highly vulnerable to climate risks due to their limited adaptive capacity; ii) live up to the commitment to bolster climate action in countries identified by the UNFCCC as particularly vulnerable to climate change by scaling up support to countries enduring conflict; iii) ensure that this action is adequately supported by fit-for-purpose climate finance."

If we look into different ecological issues and climate change concerns in different phases of armed conflict, we will find different ecological and climate-related challenges. With this in mind, there are a number of ecological and climate solutions that could help overcome those challenges, and a number of options have been suggested in **Table 3** below which can help to think through how ecological and climate solutions can be linked to conflict mitigation in practice.

Table 3. Major climate change and ecological challenges in different phases of armed conflict and possible ecological and climate solutions to address them.

Major Challenges	Ecological Solutions	Climate Solutions
In absence of armed conflict		
▪ Economic activities and growth lead to unsustainable resource exploitation causing resource depletion, biodiversity loss, environmental degradation, pollution, and green-house gas emissions	▪ Policies, laws, rules, strategies, plans, and incentives for ecosystem and biodiversity protection ▪ Protection, restoration and sustainable management of natural and modified (terrestrial, freshwater and marine) ecosystems to ensure ecosystem services ▪ Pollution control through awareness, technology transfer, incentives, and law enforcement ▪ Funding mechanism for ecological conservation	▪ Policies, laws, rules, strategies, plans, and incentives for low-carbon development ▪ Transition to renewable energy options; energy mix ▪ Innovation; technology transfer ▪ Sufficient finance to climate mitigation, adaptation, and loss and damage
During armed conflict/war		
▪ Environmental impacts of conflict depend on the intensity and duration of conflict, spatial scale and delay in resolution	▪ In absence of effective governance, ecosystem protection is difficult in a fragile, conflict-affected region ▪ Indigenous/traditional practices may continue in remote	▪ In absence of effective governance, climate change mitigation is not possible in a fragile, conflict-affected region

Major Challenges	Ecological Solutions	Climate Solutions
▪ It also depends on the natural resources (i.e., oil, minerals, or wildlife) available in the conflict zones and road communication and transportation channels to export/ smuggle those ▪ Destructive conflict also causes land use change and increased emissions	biodiversity-rich areas, which harbour fighting fractions ▪ Reduce illegal wildlife and product trade, that is financing fighting fractions, with regional cooperation to some extent through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	▪ Disaster risk reduction (DRR) is possible to cope with immediate needs of the people ▪ Long-term adaptation intervention is a challenge ▪ Practice NbS in refugee camps as a means of environmental protection and DRR
Post-conflict/war		
▪ Cancelling, reducing, clearing and releasing land after removing /destroying landmines/ ERW	▪ Bring the degraded land under ecosystem restoration and other NbS ▪ Promote environment-friendly agricultural practices (e.g., crop cultivation, animal farming, and fish-farming) ▪ Encourage environment-friendly and natural resource-based off-farm and non-farm livelihood options to revive/ strengthen local economy ▪ Establish new settlement of returning population (see the point on green infrastructure below) ▪ Install integrated water management system	▪ Restore ecosystem with native tree species ▪ Promote low-emission agricultural practices ▪ Facilitate renewable energy systems (e.g., solar farms, wind parks, and micro-hydroelectricity production)
▪ Peace building, social cohesion reestablishment, law and order situation	▪ Establish joint ecosystem restoration projects by formerly fighting fractions or neighbours or neighbouring countries (e.g., Peace Park) ▪ Ensure benefit-sharing mechanisms between them	▪ Promote transboundary cooperation in renewable energy (e.g., solar farms, upstream-downstream cooperation to generate hydroelectricity)
▪ New or amended laws, policies, rules, and plans often focus on fast economic recovery. Such push for urgent actions to rebuild the nation/region often undermines people's needs and rights over land	▪ Use the aspirations of new government or post-conflict administration to commit global biodiversity targets (CBD) ▪ Use conservation actions, with appropriate funding, to rebuild country's image	▪ Use the aspirations of new government or post-conflict administration to commit its climate responsibilities (e.g., NDCs)

Major Challenges	Ecological Solutions	Climate Solutions
and natural resources, lacks transparency and accountability in decision-making, allows large companies driving the policy, encourages/ facilitates corruption, etc.	▪ Formulate pro-conservation policy to bring foreign investments	▪ Formulate national renewable energy policy to discourage fossil fuel exploration ▪ Use climate actions to rebuild country's image in global arena
▪ Enhanced economic activities	▪ Nature-based activities have high economic recover potential by creating new jobs and income generation options ▪ Enhance local livelihoods with on-farm, off-farm and non-farm environment-friendly options	▪ Create environment-friendly green jobs or blue-green jobs involving marine ecosystem as well ▪ Invest in green land-based economic options ▪ Invest in blue economy
• Investing in rebuilding destroyed or new energy system / infrastructure	▪ Raise firewood plantation (biomass) where renewable/ zero-carbon options are not viable/ available	▪ Rebuild energy supply with renewable ones
• Investing in rebuilding destroyed/ new infrastructure (e.g., housing, WATSAN, road communication, ICTs)	▪ Use environment-friendly options ▪ Combine green and grey infrastructure, wherever possible ▪ Use natural barriers to protect newly built infrastructure	▪ Keep in mind changing climate and intense future calamities while building infrastructure ▪ Follow 'building back better' approach

[prepared by the author]

Based on **Table 3**, a number of potential climate and ecological solutions could be incorporated in a range of on-going and planned conflict-stability projects around the globe, without significantly changing the core philosophy, basic design of, and expectations from, these projects. Such incorporation would build on the investments already made by existing conflict-stability interventions on the ground and in the systemic and governance structures in terms of developing capacities, skills, and knowledge of the local people, local government, and other stakeholders, establishing and improving local and national planning and management systems, minimising the conflict and environmental risks, and making natural resources available for use by the local and national government institutions and local people. Such integration of climate and ecological solutions will subsequently enhance the potential outputs, immediate and long-term outcomes, and impact of the existing conflict-stability initiatives.

8 CONCLUDING REMARKS

As *The Dasgupta Review* highlights, we need to change the way we think, they way we act, and the way that we measure success, and this requires more of a focus on how best to consider, and respond to, the intersectionality of the climate & ecological crisis with that of conflict & stabilisation.

This requires new ways of working, where it becomes natural for a conflict advisor to work closely with an ecologist and vice versa, drawing on the available tools from each sector. This can help environmental policies and plans to be more conflict sensitive, and for conflict responses to be more durable in the face of the ecological and climate challenges that we all now face.

As this working paper has highlighted, there are a number of concepts that can help make this bridge, from conflict sensitivity tools aimed at ecological restoration programmes to NbS frameworks that recognize the essentiality of any interventions being beneficial to both planet and people. These tools can help us move away from seeing these two sides of the coin as 'add-ons' to each other, but rather integrated as part of a fully formed process.

By adopting such approaches, we can integrate the analytical and problem-solving capability of a wider range of professions to deliver locally-led and locally-owned interventions that maximise the win-win of addressing the climate & ecological crises whilst also mitigating conflict and promoting stabilisation. Importantly, this can help us to stress test programmes and policies to make sure they are durable in the future and not rendered irrelevant by (often predictable) ecological and climatic conditions.

To help us do this we need conflict advisors to be trained in ecological concepts and for environmentalists to be trained in conflict sensitivity. We need more research and more opportunities to come together and share ideas, resources and skills, and more opportunities to put these into practice, learning and improving as we go.

9 ANNEX 1: EIGHT CRITERIA AND 28 INDICATORS COMPRISE THE IUCN GLOBAL STANDARD FOR NATURE-BASED SOLUTIONS[81]

Criterion 1: NbS effectively address societal challenges

Indicator C- 1.1 The most pressing societal challenge(s) for rights-holders and beneficiaries are prioritised

Indicator C-1.2 The societal challenge(s) addressed are clearly understood and documented

Indicator C-1.3 Human well-being outcomes arising from the NbS are identified, benchmarked and periodically assessed

Criterion 2: Design of NbS is informed by scale

Indicator C-2.1 The design of the NbS recognises and responds to the interactions between the economy, society and ecosystems

Indicator C-2.2 The design of the NbS is integrated with other complementary interventions and seeks synergies across sectors

Indicator C-2.3 The design of the NbS incorporates risk identification and risk management beyond the intervention site

Criterion 3: NbS result in a net gain to biodiversity and ecosystem integrity

Indicator C-3.1 The NbS actions directly respond to evidence-based assessment of the current state of the ecosystem and prevailing drivers of degradation and loss

Indicator C-3.2 Clear and measurable biodiversity conservation outcomes are identified, benchmarked and periodically assessed

Indicator C-3.3 Monitoring includes periodic assessments of unintended adverse consequences on nature arising from the NbS

Indicator C-3.4 Opportunities to enhance ecosystem integrity and connectivity are identified and incorporated into the NbS strategy

Criterion 4: NbS are economically viable

Indicator C-4.1 The direct and indirect benefits and costs associated with the NbS, who pays and who benefits, are identified and documented

Indicator C-4.2 A cost-effectiveness study is provided to support the choice of NbS including the likely impact of any relevant regulations and subsidies

Indicator C-4.3 The effectiveness of the NbS design is justified against available alternative solutions, taking into account any associated externalities

Indicator C-4.4 The NbS design considers a portfolio of resourcing options such as market-based, public sector, voluntary commitments and actions to support regulatory compliance

Criterion 5: NbS are based on inclusive, transparent and empowering governance processes

Indicator C-5.1 A defined and fully agreed upon feedback and grievance resolution mechanism is available to all stakeholders before an NbS intervention is initiated

Indicator C-5.2 Participation is based on mutual respect and equality, regardless of gender, age or social status, and upholds the right of Indigenous Peoples to Free Prior and Informed Consent (FPIC)

Indicator C-5.3 Stakeholders who are directly and indirectly affected by the NbS have been identified and involved in all processes of the NbS intervention

Indicator C-5.4 Decision-making processes document and respond to the rights and interests of all participating and affected stakeholders

Indicator C-5.5 Where the scale of the NbS extends beyond jurisdictional boundaries, mechanisms are established to enable joint decision-making of the stakeholders in the affected jurisdictions

Criterion 6: NbS equitably balance trade-offs between achievement of their primary goal(s) and the continued provision of multiple benefits

Indicator C-6.1 The potential costs and benefits of associated trade-offs of the NbS intervention are explicitly acknowledged and inform safeguards and any appropriate corrective actions

Indicator C-6.2 The rights, usage of and access to land and resources, along with the responsibilities of different stakeholders, are acknowledged and respected

Indicator C-6.3 The established safeguards are periodically reviewed to ensure that mutually-agreed trade-off limits are respected and do not destabilise the entire NbS

Criterion 7: NbS are managed adaptively, based on evidence

Indicator C-7.1 An NbS strategy is established and used as a basis for regular monitoring and evaluation of the intervention

Indicator C-7.2 A monitoring and evaluation plan is developed and implemented throughout the intervention lifecycle

Indicator C-7.3 A framework for iterative learning that enables adaptive management is applied throughout the intervention lifecycle

Criterion 8: NbS are sustainable and mainstreamed within an appropriate jurisdictional context

Indicator C-8.1 The NbS design, implementation and lessons learnt are shared to trigger transformative change

Indicator C-8.2 The NbS informs and enhances facilitating policy and regulation frameworks to support its uptake and mainstreaming

Indicator C-8.3 Where relevant, the NbS contributes to national and global targets for human well-being, climate change, biodiversity and human rights, including the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

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