

Mediating Peace with Climate Change



Pacific Resolutions

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A central focus of this report is the need for cooperation at all levels in addressing climate change impacts in peace mediation. In that spirit, we encourage readers to use and share the content of this report for non-commercial purposes.

Pacific Resolutions is a small mediation and conflict resolution firm that specializes in helping governments, international agencies, corporations, civil society organizations, and Indigenous and other communities in finding mutually acceptable and constructive ways to resolve their differences and build new relationships.

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The Pacific Resolutions team is most often contracted to assist parties in navigating through intense conflicts to transformative results. Most of our work is in the natural resource sector with an emphasis on transboundary waters in the international context. Climate change has become a major focus in our mediation and facilitation work as everyone, friends and adversaries, attempts to rise to the challenge that it poses to all of us.

Mediating Peace with Climate Change

INTEGRATING MITIGATION AND ADAPTATION STRATEGIES
INTO PEACE PROCESSES



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ACRONYMS APPEARING IN THIS REPORT

CSM	Climate Security Mechanism
CSO	Civil Society Organization
DDPD	Doha Document for Peace in Darfur
DPPA	Department of Political and Peacebuilding Affairs
DRC	Democratic Republic of the Congo
EAC	energy attribute certificate
EPP	Energy Peace Partners
ESG	Environmental, Social and Governance
FA	Final Agreement to End the Armed Conflict and Build a Stable Lasting Peace (Colombia)
GHG	greenhouse gas
IDMC	Internal Displacement Monitoring Centre
IFC	International Finance Corporation
IFI	International Finance Institution
IPCC	Intergovernmental Panel on Climate Change
ITMO	internationally transferable mitigation outcome
JEM	Justice and Equality Movement (Sudan)
LTS	Long-term Strategy
NAP	national adaptation plan
NDC	Nationally Determined Contribution
NDNA	New Decade New Approach (Northern Ireland)
PDA	Peace and Development Advisor
PPA	power purchase agreement
P-REC	Peace Renewable Energy Credit
RHI	Renewable Heat Incentive (Northern Ireland)
SLM	Sudan Liberation Movement
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
UNSCAP	United Nations Secretariat Climate Action Plan

Preface

Preparation of this report would not have been possible without the feedback and guidance from interviewees and UN staff directly involved in the project. Many of these organizations and individuals have dedicated themselves to mediating peace and finding new ways to navigate obstacles to sustainable peace, most recently including climate change.

Some have recently published ground-breaking work focused on the nexus of climate change and conflict to orient practitioners at every level towards strategies for making peace in a climate-changing world. Notable among these publications are:

- “Shifting power. Transitioning to Renewable Energy in United Nations Peace Operations.” (Henry L. Stimson Center and Energy Peace Partners, 2021)
- “Making Peace with the Climate: Conflict Resolution in a Climate-changing World.” (European Institute of Peace; Adelphi, Climate Diplomacy, 2020)
- “A Green Blue Deal for the Middle East.” (EcoPeace Middle East, 2020)
- “10 Insights on Climate Impacts and Peace: A summary of what we know.” (adelphi research and Potsdam Institute for Climate Impact Research, 2020)
- “A Matter of Survival—Report of the Global High-Level Panel on Water and Peace.” (2017).

We have attempted to reflect the progress made by these efforts while also contributing to further development of relevant mediation strategies to increase the capacity of practitioners in the field to recognize and create opportunities to integrate climate change mitigation and adaptation into peace processes, thereby both strengthening the agreements achieved and reinforcing global commitments to respond to climate change effectively.

Report Highlights

Climate change is changing the world of peace mediation and conflict prevention.

It is doing so in three important ways:

- 1 It is a new leverage point for cooperation.** Adversaries entrenched in conflict have a new and common problem—one they cannot ignore for long. If they collaborate, they may avoid the worst consequences and enjoy the benefits of the low carbon investments and economy that is emerging around the world. If they choose to avoid addressing climate change, the severity of its impacts and costs will likely increase for all of them.
- 2 It is a source of future instability and uncertainty.** Peace agreements and conflict prevention strategies that are not well informed by the potential impacts of climate change may be destined to be dislocated by them. Ignore them at your peril.
- 3 Mitigation and adaptation can cause conflict.** Mitigating climate change and adapting to impacts that cannot be avoided is challenging and fraught with uncertainty and risk. Even well-designed strategies will generate unforeseen tensions and conflicts. These strategies require conflict management components to peacefully navigate these unanticipated outcomes.

Fortunately, the UN and other international organizations and many individual member states have elevated climate change to the top of their political agendas, where it clearly belongs until the objective of arresting global warming below 2.0 degrees Celsius—ideally at 1.5 degrees—above pre-industrial levels is achieved.

This report builds on the recognition that climate change is a risk multiplier and destabilizing force, particularly in the most vulnerable regions of the world. And it is getting much worse at a pace we are unable to predict in a timely manner, which is why global leaders, including the UN Secretary-General, are calling for immediate and substantial action. It is in this spirit that this report proposes a two-pronged approach to integrating climate change mitigation and adaptation strategies (“climate action”) into conflict prevention and peace mediation processes (“peace processes”):

- Strengthen the enabling environment for peace processes to address climate action.
- Integrate climate action into the assessment, process design, negotiation and implementation phases of peace processes.

Summary of recommended actions for strengthening the enabling environment:

- 1** Expand the mandates and strengthen the multi-agency leadership and coordination of organizations including the UN Executive Office of the Security General Climate Action Team and the Climate Security Mechanism to provide leadership, high level analysis and support for integration of climate action into peace processes.

- 2 Modify existing mandates and ensure new mandates of UN and other international organizations' special field missions include integration of climate action into peace processes.
- 3 Expand climate action capacity within the Department of Political and Peacebuilding Affairs Mediation Standby Team for immediate deployment to assist with peace processes that are underway or just getting started.
- 4 Engage global actors in developing a coalition of support for integration of climate action into peace processes. This coalition can become a hub for creating networks, galvanizing political support and creating potential economic and financing links in support of peace processes.
- 5 Align political, civil society, finance and private sector actors in support of integration of climate action into peace processes at the regional level.

The windows of opportunity to intervene and expedite climate-sensitive peace agreements open and close, often unexpectedly, and timing can be the most important determinant of success. High-level interventions from the Secretary-General, senior UN officials, and other global leaders periodically capitalize on these opportunities, pushing adversaries to abandon their historical grievances and seriously consider new and mutually beneficial relations. This kind of leadership, while obviously risky, will likely be an essential ingredient in helping the world to successfully navigate the climate crisis.

Summary of actions required for integration of climate action into peace processes:

Effective climate action involves the private sector, international finance institutions and civil society organizations in leadership roles while engaging new financial resources and markets. This may appear unconventional in the context of conventional peace processes. Effectively engaging these parties and these financial resources and markets may be the most challenging shift that practitioners supporting peace processes need to facilitate in order to integrate climate action into the processes they support. This requires:

- 1 Recognizing that solutions develop through track 1, 2 and 3 processes at multiple scales over time and that current peace processes can be adapted or designed to facilitate positive synergy and reinforcement between these processes.
- 2 Assessments that identify the relevant climate impact pathways, the mitigation options and the adaptation potential, building upon the Nationally Determined Contributions and the National Adaptation Plans that are likely under development within the countries involved.
- 3 Innovations in process design that enable effective engagement of these unconventional actors and financial resources and markets.
- 4 Negotiation of mitigation strategies and adaptation plans that are effectively linked to the resolution of broader peace and stability issues and the agreements to resolve and peacefully manage them.
- 5 Implementation mechanisms that are designed to anticipate and address unexpected conflict-generating outcomes arising from mitigation and adaptation.



PURPOSE OF THIS REPORT

Recognizing climate change as a risk multiplier and powerful source of future insecurity, this report provides practical suggestions for integrating climate change into preventative diplomacy and peace mediation to enhance the prospects for cooperation and peace while contributing to mitigation and adaptation strategies that are instrumental to future stability. This report is a contribution to the Department of Political and Peacebuilding Affairs (DPPA) ongoing efforts to respond to the opportunity and need to address climate change in peace mediation and conflict prevention processes.

The adverse effects of climate change on the emergence and escalation of conflict are well recognized among policy makers, as evidenced by recent Security Council debates and outcomes.¹ However, much less is understood about how to address climate change in the context of peace mediation and conflict prevention.

Mediation takes place in an ever-evolving environment, and climate change is an issue that frequently affects how peace agreements are negotiated and whether they are sustained. Although impacts often associated with climate change—including desertification, water shortages, natural resource depletion, infrastructure destruction and forced human displacement—are not new, their unpredictability, intensity and frequency complicate the work of mediators and conflict prevention practitioners.

PART 1

Climate Change and Conflict

The United Nations is facing a growing and daunting threat to global peace and stability. Climate change is no longer an abstract concern or a threat far off in the future. It is a real and present danger to the lives of millions of people today and to everyone on the planet in the foreseeable future.

The impacts of climate change are escalating and already contributing to multiple conflict dynamics. These impacts pale in comparison to what to expect if global efforts to mitigate and adapt are unsuccessful. The UN and other international and domestic actors dedicated to peace and security are fully engaged in managing the current slate of conflicts, and the growing impacts of climate change will add significantly to that burden.

Mediating peace and preventing conflict is more challenging when the underlying environmental and natural resource context changes dramatically. To prevent conflict escalation and create sustainable peace, climate change needs to be addressed in both prevention and peacebuilding efforts. It cannot be an afterthought.

Fortunately, the UN and many other international actors have recognized this need globally, regionally and locally. The UN did so in 2018 by establishing the Climate Security Mechanism (CSM) to meet the need for integrated analysis and action planning sensitive to the dynamic relationship between climate change and conflict.

This report strengthens these efforts by providing conflict prevention practitioners and peace mediators with tools and information links to support their efforts in integrating climate change mitigation and adaptation into Peace Mediation and Conflict Prevention—“peace processes.”

1.1 CLIMATE CHANGE IMPACTS

The impacts of climate change are magnifying everywhere. Weather events such as heatwaves and violent storms are becoming more frequent and extreme. Sea levels are steadily rising, fed by melting ice in both hemispheres. Ocean acidification due to increasing CO₂ concentrations hampers species growth, development, calcification and survival throughout the marine ecosystem.²

To prevent conflict escalation and create sustainable peace, climate change needs to be addressed in both prevention and peacebuilding efforts. It cannot be an afterthought.

Ecosystem changes driven by climate change are occurring both on land and in freshwater lakes, rivers and aquifers. Deserts are becoming uninhabitable as heat and aridity increase; permafrost is deteriorating releasing more greenhouse gases and transforming arctic ecosystems. Accompanying these changes are biodiversity losses, species translocations, invasions and pest infiltrations.

Impacts such as the above on natural systems are triggering escalating harm to human systems.³ Loss of forests, grasslands and wildlife, depleted fish stocks, water shortages, desertification, crop failure, increased risk of vector-borne diseases such as malaria and dengue fever, destruction and degradation of infrastructure and other economic, social and cultural assets—all these have consequences for people’s livelihoods and well-being. While there is no direct relationship between climate change and conflict, evidence from

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around the world testifies that the climate change related erosion of livelihoods and well-being increases the risk of insecurity and violent conflict. These impacts do not affect people equally and are particularly destabilizing in already fragile and disadvantaged regions and communities such as least developed countries, small island developing states and dryland regions. Communities dependent on agriculture and coastal livelihoods are disproportionately affected, and some Indigenous communities also face higher risk when the natural world that underpins local livelihoods deteriorates.⁴ Climate change impacts not only compound economic inequality between countries but also deepen the social gender, income and other inequalities that are root causes of persisting conflicts.

Insufficient capacity of states and regions to adapt to the negative impacts of climate change undermines stability,⁵ and conflict and instability further impair the capacity of states and communities to cope and adapt to climate change.⁶ The resulting feedback loop holds dire consequences where 70 per cent of the most climate-vulnerable countries belong to the most fragile quartile of countries and another 27 per cent fall within the second most fragile quartile.⁷ The gravity of the risk facing such countries was cogently noted by the Intergovernmental Panel on Climate Change (IPCC) in 2018: “Without increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will surpass 1.5 degrees Celsius in the following decades, leading to irreversible loss of the most fragile ecosystems, and crisis after crisis for the most vulnerable people and societies.”⁸

CLIMATE CHANGE CASE STUDIES⁹

The relationship between climate change and conflict is shaped by local circumstances and so plays out very differently in different countries. What the case studies referenced below generally have in common are factors such as social upheaval and displacement, security threats, impoverishment, and impaired or absent adaptive capacity. The case studies were produced by Peace and Development Advisors (PDAs) and other field-based advisors. They were commissioned by the UN Development Programme (UNDP) Oslo Governance Centre through the UNDP-DPPA Joint Programme on Building National Capacities for Conflict Prevention.

BANGLADESH

Climate change threatens to destabilize the current peace and stability in Bangladesh and exacerbate pre-existing social, economic and political vulnerabilities. The geography of the country makes it particularly susceptible to extreme impacts of climate change including increased and more intense storms, cyclones, droughts and floods. Its dense population, which is highly dependent on rain-fed subsistence agriculture, and weak adaptive capacity will ensure climate impacts affect millions of people. For example, by 2050, the number of people displaced by climate change in Bangladesh is expected to reach 13.3 million.

CARIBBEAN

Low-elevation coastal zones containing significant portions of the population, and therefore infrastructure, are impacted by intensifying storms, stronger winds, ocean surges and other climate changes that can destroy the socio-economic fabric of the Caribbean Islands. Although the Caribbean is one of the world's most advanced regions in developing normative, strategic, programmatic and policy frameworks for climate change mitigation and adaptation, vulnerable people and communities including youth and women are being forced to engage in criminal activities that undermine security, including in the achievement of climate change mitigation and adaptation strategies. Climate change impacts and security threats are likely to interact with and amplify each other, requiring comprehensive risk management planning.

CHAD

Escalation of violent conflict between farmers and livestock herders in Chad overwhelmed traditional, local conflict resolution mechanisms, forcing the government to declare a state of emergency in two eastern provinces in 2019. Transhumance (moving livestock seasonally from one grazing ground to another) is widely practised and recognized as an important source of development, but violent clashes with sedentary farmers are increasing as a result of climate change. It was not until 2017 that the Security Council recognized that climate change was impacting peace and security in the region, calling for adequate risk assessments and risk management strategies.¹⁰

GUATEMALA

Guatemala is among the 15 countries worldwide most affected by climate change. Fifty per cent of the territory's bioclimatic conditions are expected to change by 2050, affecting 90 per cent of the country by 2080. The capacity for climate change mitigation and adaption is limited by dominant and contrasting interests such as unequal access to land and unsecure land tenure, resource extraction and organized crime that are increasingly woven into the country's social, political and economic fabric. The social conflicts fuelled by inequality, exclusion and marginalization are increasing in number and severity and weakening human rights, democratic governance, and human development. The opposite is also true—that human rights abuses and weak democratic governance feed conflict.

JORDAN

Jordan is the second most water-scarce country in the world.^{11 12} The annual per capita water availability has declined from 3,600 m³/year in 1946 to 45.6m³/capita/year in 2017, far below the threshold of 500m³/capita/year that indicates severe water scarcity.¹³ This has negative implications for drinking water availability and Jordan's long-term ability to supply water for irrigation. The groundwater level in the main aquifers continues to drop at an average rate of two metres per year.^{14 15} Jordan is forecast to be the first in the world to "run out" of water.¹⁶ Water scarcity in Jordan is exacerbated by climate change and presents security and human development risks such as constrained agricultural and economic growth, and increased food insecurity and desertification. Groundwater sources are being extracted at rates greater than can be replenished. Pressures due to climate change are likely to increase and will have implications for socio-economic and political stability.

NIGERIA

Climate change has been identified as a main structural driver of conflict in Nigeria's north-east region, leading to desertification, drought and the contraction of Lake Chad to less than 10 per cent of its area in 1963.¹⁷ The shrinking of Lake Chad is at the core of the problems and crises experienced throughout the greater Sahel region. Insurgency proliferates at proportions unprecedented since the civil war of 1967-1970, with an estimated 27,000 dead and more than 2.4 million displaced. If done successfully, restoring the waters of Lake Chad is seen as one option contributing to resolve the conflict system surrounding Lake Chad.

MALDIVES

The Maldives is a nation of 1,190 islands clustered into 26 atolls spread across 90,000 km in the Indian Ocean. Over 80 per cent of the land area of the Maldives is less than one metre above sea level. The scale of the potential impact of rising sea levels due to climate change is an imminent and undeniable threat. The effect is already present as beaches are eroding, killing coral reefs and reducing fish stocks, and sea water contaminates fresh water sources. Migration and displacement have security implications contributing to tensions and conflict over limited resources.

1.2 MEDIATION IN A CLIMATE-CHANGING WORLD

Climate change is arguably the greatest danger to peace and security that the world has ever faced. It is a risk-multiplier in regions where natural resources are scarce and poorly managed, governance systems are weak or absent, livelihood alternatives are limited, and communities suffer recurrent and escalating climate pressures and shocks leading to dislocation of large numbers of people, civil unrest, poverty and increased conflict.¹⁸

Climate change is becoming a persistent force that exacerbates the instability of the most war-torn and the vulnerable countries and regions. As noted by Miroslav Jenca, UN Assistant Secretary-General for Europe, Central Asia and the Americas,

“The failure to consider the growing impacts of climate change will undermine our efforts at conflict prevention, peacemaking and sustaining peace, and risk trapping vulnerable countries in a vicious cycle of climate disaster and conflict.”¹⁹

Even relatively stable and prosperous countries are increasingly experiencing impacts that can contribute to volatility and conflict. The numbers of people displaced by climate change in the future will eclipse that of recent events²⁰ such as refugee displacement from the Syrian crisis that some researchers believe was partially triggered by climate change impacts. Recent research from the Norwegian Refugee Council’s Internal Displacement Monitoring Centre (IDMC) states that the number of people displaced due to climate change has overtaken those displaced by conflict.²¹

In addition to magnifying risks, climate change can also create new opportunities in the prevention and resolution of conflict. As climate change issues become more acute and pervasive, shifting the focus from political debate to technical inquiry and encouraging a narrative of shared challenges creates an entry point for parties in conflict to become partners in finding solutions to common problems. New relationships fostered by cooperation unlock the potential to create practical interdependencies and mutual benefits, and as trust and confidence builds over time, so can stability and peace.

Addressing climate change in conflict prevention and peace mediation efforts produces mutually reinforcing benefits such as the following:

- A healthy natural environment improves the chances for sustainable and lasting peace. Addressing climate change in many circumstances will be instrumental to addressing the root causes of violence and ensuring the sustainability of diplomatic efforts and peace agreements.
- At the same time, the resolution of conflict stabilizes governance systems, in turn facilitating the activation of climate mitigation and adaptation strategies that allow states and communities to build resilience.

As climate change issues become more acute and pervasive, shifting the focus from political debate to technical inquiry and encouraging a narrative of shared challenges creates an entry point for parties in conflict to become partners in finding solutions to common problems.

- Successfully mitigating and adapting to climate change requires unprecedented levels of cooperation to support more peaceful and just relationships among communities and nations.

1.3 THE GLOBAL DIRECTIVE TO COOPERATE ON COMBATting CLIMATE CHANGE

The 2015 Paris Agreement is unprecedented in committing nations around the world to a common cause and multilateral process in their shared effort to combat climate change and adapt to its impacts. The parent treaty, the United Nations Framework Convention on Climate Change (UNFCCC), has near universal membership among UN member states. The Paris Agreement is a legally binding international treaty with the aim of keeping the global average temperature rise to well below two degrees Celsius above pre-industrial levels and pursuing efforts to limit it to 1.5 degrees Celsius. The stabilization of greenhouse gas emissions in the atmosphere is intended to allow natural systems to adapt in a timeframe that would prevent ecological system collapse. Given the importance of a healthy environment for peace and security, and that the 191 signatories include nearly all member states, the Paris Agreement may be the most significant climate-triggered conflict prevention agreement to date.

The Intergovernmental Panel on Climate Change (IPCC) concluded that by 2050 the world must achieve net-zero emissions ('carbon neutrality') and accelerate reduction in concentrations of greenhouse gases in the atmosphere in order to stabilize global temperatures over time. Achieving this target requires a drastic rethinking and redesign of our energy, food and infrastructure systems. Net-zero commitments are being made around the world by both state and commercial actors.

The world is on track for warming by about 2.7 to 3.1 degrees Celsius, with irreversible and disastrous consequences to ecological systems and all of humankind. In light of that reality, the United Nations Secretary-General has warned that "An existential climate crisis has profound implications for peace and security."

For signatory countries, climate change adaptation and mitigation strategies involve implementation of binding commitments articulated most recently as part of the Paris Agreement as Nationally Determined Contributions (NDCs). Although ongoing updates are being made, the sum of the current NDCs is not sufficient to limit global warming below 2.0 degrees Celsius. The world is on track for warming by about 2.7 to 3.1 degrees Celsius,²² with irreversible and disastrous consequences to ecological systems and all of humankind. In light of that reality, the United Nations Secretary-General has warned that "An existential climate crisis has profound implications for peace and security."²³

The United Nations' global membership and mandate to address the most critical issues confronting humanity position it to galvanize the needed actions, multilateral agreements and partnerships among adversaries and allies alike to implement the necessary strategies to achieve the Paris Agreement objective and strengthen the resilience of communities

worldwide to the impacts of climate change. As climate change is forecast to accelerate in the years to come, the United Nations, its member states and the rest of the world will be faced with managing the ever-greater impacts and risks to peace and security. If we wait, or our efforts are insufficient, we face higher risks, less time to deal with them, intensified and prolonged conflict and greater human suffering.

The authority and mandate needed by the UN to take appropriate action resides in various parts of the UN Charter including Article 39: "The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security."²⁴ The time is now to recognize that climate change is a threat to global peace as contemplated in Article 39 and to mobilize all of the capacity of the UN to successfully address the situation.

PART 2

The Imperative, the Opportunity

2.1 THE IMPERATIVE: ADDRESSING CLIMATE RISK TO PEACE AND SECURITY

The scope and scale of climate-related security risks are very likely to be underestimated. These risks are unprecedented and difficult to comprehend given the complexity and challenges in identifying the ways climate change contributes to conflict and insecurity in an interconnected world. We do know that climate-related security risks are already visible and, significant as they are at present, are likely to be dwarfed in the future.

In light of the accelerating effects of climate change on peace and security, the UN and other multilateral agencies are increasingly recognizing the need to address climate change in their conflict prevention and peace-building efforts, including through the use of good offices and mediation.

Greenhouse gas emissions (GHGs) and global mean temperatures continue to rise. Many impacts from historic emissions have not yet materialized but will inevitably occur because they are already locked in due to the lag effect—the world will still warm for several decades to come because of GHGs already accumulated in the atmosphere.²⁵ The resulting effects aren't experienced immediately and are difficult to predict. For example, coral bleaching could lead to entire countries seeing their fishing grounds deteriorate without much warning.²⁶ It may be some time before the systems that are affected—whether food, energy, institutional, financial, etc.—translate to fragility and conflict.

In light of the accelerating effects of climate change on peace and security, the UN and other multilateral agencies are increasingly recognizing the need to address climate change in their conflict prevention and peace-building efforts, including through the use of good offices and mediation. Failure to apply a climate change lens in a circumstance that requires it will likely undermine the sustainability of whatever peace has been achieved in the medium to long term, recognizing that long-term sustainability is a prerequisite for lasting peace.

TRANSHUMANCE IN WEST AFRICA AND THE SAHEL

The Sahel is a transitional zone between the arid Sahara Desert to the north and the belt of humid savannas to the south. It stretches from Senegal to Sudan. Historically, the relationship between transhumant herders and sedentary farmers has been largely symbiotic.²⁷ Herders and their animals would return to pasturelands in the south after farmers had harvested their crops, consuming leftover vegetative matter and fertilizing the land, a practice welcomed by farmers.

Now climate change is altering the distance and timing of the herders' movements, threatening this mutually beneficial relationship. In Chad, for example, transhumance movements to reach southern sub-tropical regions during the dry season have shifted 200 kilometres south, often occurring before farmers have harvested their crops. Climate change is forcing herders to spend more time overall in these southern regions, which are also more densely populated by sedentary farmers, increasing the likelihood of an interface between land uses that are increasingly at odds with one another.

As human populations in the region increase, more arable land is likely to be converted to food crops. And as the climate continues to warm, herders will need to continue to change their seasonal migration routes, there will be greater competition over scarce water and land resources, and the potential for violent clashes will become real wherever they go. It is easy to see how this pattern can eventually become untenable.

There are other compounding factors. Farmers have been settling in areas designated as pastureland, but nothing has been done to discourage them from doing so. Corruption and the proliferation of small arms heighten the intractability of the herder-farmer conflict. Investing in livestock avoids scrutiny and can be a convenient way to store sometimes ill-gotten wealth. Herders arm themselves to protect this investment, and both herders and farmers fuel arms trafficking, especially across borders, further undermining the authority of traditional leaders.

Clearly demarcating watering holes, travel corridors and pastureland as well as designing and enforcing pastoral codes²⁸ and land use measures can be effective adaptation measures in an increasingly resource-constrained region. Early warning systems are important innovations in conflict prevention and can help to track the patterns of the herders and alert farmers to initiate conflict prevention work when the intersection between them is imminent. But currently this tool is reactive rather than forecasting where herder migration routes will be.²⁹ In this region, climate change is severely testing existing mechanisms for peaceful dispute resolution and conflict prevention.³⁰

Conflict arising from transhumance is clearly compounded by climate change. Even though transhumance issues have been experienced for some time, but not necessarily as a climate change issue on the ground, peacemaking in the context of transhumance will be served by a climate change lens if herders and farmers in West Africa and the Sahel are to coexist in a climate warming world where this region will be a climate change hotspot.

2.1.2 CLOSING THE GAP: “CLIMATE CHANGE IS MOVING FASTER THAN WE ARE”—SECRETARY-GENERAL GUTERRES

The pace at which the impacts of climate change are effectively addressed in peace agreements and conflict prevention needs to accelerate significantly if the objectives of the Paris Agreement are to be achieved.

Despite the mounting evidence of the magnitude of climate change risks and the imperative to take them into account when negotiating peace agreements, only six known peace agreements explicitly reference climate change (see Part 3 for summaries and analysis). Implicitly, climate change-related issues (water shortages, natural resource scarcity, etc.) are more commonly addressed³² but perhaps not to their full extent. In either case, these deficiencies have implications for addressing climate change post-conflict.

ADAPTATION AND MITIGATION STRATEGIES³¹

Well-planned and adequately resourced adaptation and mitigation strategies provide essential tools for speeding up lagging global efforts to address climate change impacts and reduce GHG emissions and sequester carbon.

Adaptation strategies include options for responding to changes in natural and managed ecosystems (e.g., ecosystem-based adaptation, ecosystem restoration and avoided degradation and deforestation, biodiversity management, sustainable aquaculture, and local knowledge and traditional knowledge), the risks of sea level rise (e.g., coastal defence and hardening, migration) and the risks to health, livelihoods, food, water and economic growth, especially in rural landscapes (e.g., efficient irrigation, social safety nets, disaster risk management, risk spreading and sharing, and community-based adaptation) and urban areas (e.g., resilient infrastructure, sustainable land use and planning and sustainable water management).

Mitigation strategies reduce emissions across all of society's main sectors including buildings, cities, industries, appliances, transport, energy and agriculture and other land use (e.g., by phasing out coal in the energy sector, increasing the amount of energy produced from renewable sources, electrifying transport and reducing the carbon footprint of the food we consume) and reduce the amount of energy human society uses (e.g., by improving energy efficiency in buildings and reducing consumption of energy-intensive and GHG intensive products through behavioural and lifestyle changes.). They also include reducing concentrations of GHGs in the atmosphere by protecting and restoring ecosystems as carbon sinks and capturing CO₂ and converting it to useable products including hydrocarbons or storing it.

Effective mediation can play a significant role in addressing these shortcomings. Mediators may need to overcome a variety of challenges in addressing climate change with parties in conflict:

- The experience and challenges of climate change in peace mediation or conflict prevention are relatively new. As a result, it demands a different approach based in innovation and unconventional thinking. It can't be expected that there will be an abundance of lessons learned to rely upon or draw from.
- Climate change has been in the UN discourse for decades and is now becoming mainstreamed throughout the UN agencies. This requires coordination and integration and considerable leadership throughout. In the absence of coordinated leadership in all the areas necessary, the full potential of interventions will not be realized.
- Climate change is cross-cutting and therefore has implications for virtually every UN agency. There are emerging inter-agency mechanisms, most obviously the UN's Climate Security Mechanism (CSM), which is developing a common UN framework for assessing climate-related security risks. The coordination role it will play and how widely the approach will be used is unclear.
- Climate change impacts typically constrain or degrade natural resources, reducing their quality and quantity. The end result (e.g., increased water shortages, reductions in arable land) is a 'decrease in the size of the pie' with which to build agreement. Leveraging these challenges for shared problem-solving creates space for cooperation and confidence-building that can lead to 'win-win' outcomes.
- Mediators have a specific set of skills and therefore climate change may seem out of scope, but having a basic understanding will allow mediators to do one of the things they do best—finding novel opportunities for dialogue and solutions to unblock seemingly intractable disputes.
- The ability to locate and deploy vital technical expertise to advise mediators may not be readily apparent, particularly within the UN system. Currently there is only one climate advisor, who is currently deployed in field missions in Somalia. The CSM joint programme (DPPA-UNDP-UNEP) provides technical support including through embedded expertise within institutional structures (climate security advisors are being deployed in regional organizations and Special Political Missions). Partnerships may also provide a means of filling this gap, but they need to be fostered.
- The priority of peace operations is rightly on saving lives, mitigating crises, and achieving mission mandates. Addressing a need for short-term financial resources and resolution of secondary issues that go beyond core priorities are likely to strain peace processes. Given the protracted nature of modern conflicts and the fact that short-term missions usually end up remaining for more than a decade,³³ looking to the future prerequisites for sustained peace requires an understanding of the underlying challenges to stability.

The pace at which the impacts of climate change are effectively addressed in peace agreements and conflict prevention needs to accelerate significantly.

- The timeframe for addressing climate change issues is long-term and requires mediators to look decades ahead and not just at immediate security concerns. That reality, coupled with pressure to get it done (and the limitations on international community support and investment) places mediators at risk of cutting corners. Addressing the problem in addition to the symptoms will require the tools and time necessary to do the job well.
- Although climate change is a scientific reality, addressing climate change is inherently a political task.³⁴ Politicization of the issues is nothing new to mediators, but the dedication and sound political analyses needed to successfully navigate matters of political sensitivity should not be overlooked.
- Strategies to address climate change will not inherently yield positive results, and transitioning towards low-carbon and climate-resilient pathways carries its own risks. It is important to consider and plan for unintended and unanticipated side-effects by putting systems in place to manage emerging issues. More pressure on natural resources, reducing local land access, mismanagement of resources or creating incentives for corruption can all be a direct source of risk predicated on developmental interventions in mitigation and adaptation.³⁵ However, the opportunities for mutual benefits/positive externalities should also not be overlooked.
- Mitigation and adaptation imperatives and associated strategies can themselves become a source of conflict as the distribution of resources and environmental services shifts, creating winners and losers, new opportunities and lost livelihoods. These strategies need the support of conflict management and prevention expertise.
- How climate change may manifest in the future is uncertain, so it's important to build flexibility into agreements. Better quality climate data and projections will increasingly become more available, so accounting for the evolving nature of those projections in design and implementation is needed. Failure to account for future climate impacts, and the consequent sustainability of future livelihoods, can undermine the effectiveness of agreements.³⁶

2.2 THE OPPORTUNITY: LEVERAGING CLIMATE ACTION FOR PEACE

Integrating climate risks into peace processes is not just an imperative; it also creates opportunities for lasting peace agreements and preventative diplomacy. These opportunities can be wide-ranging in their scope and impact. Given the chance, the peace dividends that manifest from forward-looking and comprehensive arrangements can promote interdependencies that leverage the comparative advantages of the parties that achieve ends such as sustainable and just economies that reduce or eliminate conflict stressors.

2.2.1 SIMILARITIES BETWEEN CLIMATE CHANGE COOPERATION AND CONVENTIONAL WATER DIPLOMACY

Cooperatively managing competing interests over scarce resources within and outside territorial borders is not a new experience. There is a long tradition of cooperative water

2.0°C VS. 1.5°C: HALF A DEGREE OF WARMING MAKES A BIG DIFFERENCE

As noted in section 1.3 above, although the Paris Agreement calls for the increase in global temperature to be limited to no more than 1.5°C above pre-industrial levels, the world is currently on track for warming up of from 2.7°C to 3.1°C above those levels. A degree of temperature may seem relatively minuscule in day-to-day existence, but the consequences of failing to come close to meeting the Paris targets become fully apparent on reviewing the projections of the likely results of an increase of even half a degree (2°C compared to 1.5°C global warming):³⁷

- Risks from droughts and precipitation deficits will be higher, as will risks from heavy precipitation events such as runoff and floods in several northern hemisphere high-latitude and/or high-elevation regions, eastern Asia and eastern North America.
- Global mean sea level rise will be 0.46 rather than 0.40 metres in 2100, exposing 79 million more people to flooding³⁸ and reducing the opportunity for human and ecological adaptation to rising sea levels.
- Coral reefs will be nearly entirely lost (99%) vs 70-90% gone. There will be extensive dead zones in the earth's oceans.
- The global annual marine fisheries catch will be reduced by three million tons with a two-degree rise compared to 1.5 million tons with a 1.5 degree rise. Ocean temperature and acidity will also be higher, increasing the risks to marine biodiversity, fisheries and ecosystems.
- Species loss and extinction, and other impacts on biodiversity and ecosystems, will be two to three times worse, and more of these services to humans will be lost forever.
- Net reductions in yields of maize, rice, wheat and other cereal crops will be 7% vs. 3%, resulting in greater food insecurity, particularly in sub-Saharan Africa, Southeast Asia and Central and South America.
- The proportion of the world's population exposed to climate change-induced water stress will be considerably higher (varies by region).
- GDP losses will be 0.5% vs 0.3% by 2100. The proportion of people both exposed to and susceptible to poverty will be higher, with middle income countries (Africa, Southeast Asia, India, Brazil, Mexico) affected the most.
- Most adaptation needs will be greater (for ecosystems, food and health systems) although limits to adaptive capacities exist at 1.5°C of global warming.
- Global populations exposed to severe heat at least once every five years will be 37% vs. 14%.
- The number of sea-ice-free arctic summers will increase to once every 10 years vs. once every 100 years. This can lead to more heat being absorbed, with concomitant consequences for winter weather in the northern hemisphere.

management that reconciles various competing interests by employing constructive responses that integrate water and related resources such as energy.³⁹ Upstream hydropower dams can help control downstream flooding and stabilize waterflows to improve downstream hydropower or navigation or irrigation while offering users downstream inexpensive electricity imports (demand for which is growing given climate commitments to renewable energy and growing populations). The alternative of building dams downstream is often not feasible or as efficient and may involve unnecessary losses of water to evaporation due to downstream climatic conditions.

Not only are there significant opportunities to cooperatively manage shared water resources to the mutual benefit of disparate actors, but the process of managing shared resources can also help build trust among adversaries, leading to peace dividends. Conflict over water resources varies; impacts to the quantity, flow regime and quality of available water may be caused by dams and other diversions, pollution, climate change, population

Of the almost 2,000 water management challenges that manifested between 1990 and 2008 in over 280 transboundary river basins shared by two or more countries, twice as many were cooperatively resolved than were mired in conflict.

growth and increased demand. However, of the almost 2,000 water management challenges that manifested between 1990 and 2008 in over 280 transboundary river basins shared by two or more countries, twice as many were cooperatively resolved than were mired in conflict.⁴⁰ The peace potential around water at the transboundary level has seen more cooperation than conflict.⁴¹

These experiences and their capacity to create and strengthen interdependencies, thereby preventing future conflict, remain relevant. In fact, even greater cooperation will be needed across transboundary river basins as climate change is expected to increase pressure on water quality and quantity and alter flow regimes as extreme events like droughts and floods become more frequent and severe, as sea levels rise and saltwater infiltrates coastal aquifers, or as toxins concentrate in drying rivers.⁴² The Global High-Level Panel on Water and Peace is reinforcing further water diplomacy and transboundary water cooperation and strengthening the capacity to leverage water for peace, stability and conflict prevention.⁴³

Central Asia is a case in point. At the request of the Central Asian states, the UN established the UN Regional Centre for Preventative Diplomacy for Central Asia. Water diplomacy is one of the three priorities in the Centre's mandate because it is recognized as a potential trigger for conflict. The Central Asian states inherited an integrated and coordinated transboundary water management system developed during the Soviet era. The dissolution of the Soviet Union and the establishment of the five independent States of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan eliminated the centralized management control that made the system work.

As sovereign nations, the Central Asian states continue to cooperate, recognizing that they each have nationally determined objectives for water utilization and that reconciling these objectives with their neighbours can be challenging. The Centre has responded to requests for assistance by providing platforms for dialogue, facilitating negotiations on a

potential regional convention, and engaging in collaborative work on early warning systems, deglaciation and other priority issues identified by the Central Asian states. This ongoing collaboration, supported by multilateral agencies like the Centre and the United Nations Economic Commission for Europe (UNECE), enables the Central Asian states to navigate through challenging issues and create new modalities for cooperation.

Similar efforts have been ongoing in the Nile basin, which is a transboundary basin with very diverse ecological, hydrological and cultural conditions. The Nile Basin Initiative and negotiation of a draft Cooperative Framework Agreement, including procedures for data- and information-sharing, have been important focal points for constructive dialogue. But many challenging issues remain unresolved, and these are being exacerbated by anticipated changes in climate. The construction of the Grand Ethiopian Renaissance Dam and the filling of the reservoir cause grave concerns in Egypt and Sudan. Negotiations have yet to yield positive results, notwithstanding the mutually beneficial possibilities. Many nations around the world, particularly in Africa, are providing or offering their assistance (the Democratic Republic of Congo chairs the African Union in 2021), including the United Nations. And all likely share the hope that the parties currently locked in conflict will soon transcend their differences, pursue mutually beneficial relations and share in the benefits of the cooperation that has been the dominant characteristic of transboundary water management for thousands of years.

2.2.2 FINANCING A LOW CARBON ECONOMY OF PEACE: GLOBAL RESOURCES AND FINANCE MARKETS

Water being essential to both environmental and economic well-being, the correlation to security risks is clear and the benefits for cooperation straightforward. However, low-carbon development such as renewable energy projects that have economic and social advantages for people in marginalized positions is a more complex proposition requiring careful analysis. Low-carbon, resilient development requires key transitions in energy, transport, settlement and food systems. It also requires significant investment. These solutions are most urgently needed in developing countries, where the investment gap is deepest, and people are most disproportionately impacted by the climate crisis.⁴⁴

The economics of peace-building and conflict prevention in the context of climate change is itself an entry point for cooperation. Combined with the trillions of dollars available (and growing) for investment in environmentally and socially responsible development and wealth generation,⁴⁵ and the growing private sector interest in making an impact that benefits the environment and society (in addition to profit), this creates an opportunity unmatched in history to bring financial resources dedicated to climate change mitigation and adaptation to bear in fragile regions. Despite challenges in de-risking climate adaptation and mitigation financing (particularly in fragile

Climate change is the biggest challenge ever faced, but there is the opportunity to take part in the largest market the world has ever seen [...] the challenges are clear, the opportunities are equally as clear – what needs to be summoned is the creativity to make it happen.

—JOHN KERRY, US DEPARTMENT OF STATE

and crisis-affected countries), there are project developers willing to invest in the toughest places to do business in the world.⁴⁶

Moreover, creating the links needed to achieve a resilient economy that increases the well-being of citizens by creating meaningful enterprise also reduces many of the stressors that incite conflict. A peace agreement typically includes disarmament, a new governance structure and security sector reform, but little thought or future planning goes into addressing climate change impacts and/or environmental degradation or natural resource management. A healthy environment and access to natural resources, fair and equitable distribution of wealth and power, diverse involvement of all actors regardless of age, gender, status, ethnicity or religion are the foundations of a just and sustainable economy that creates lasting peace and resiliency.

Yet the economic links today are weak, and few projects address climate-conflict links. Peace and conflict actors are not only unfamiliar with climate finance pools, but these resources are also ill-suited to benefit climate and conflict fragile states. Creating access to climate change-focused and unconventional funding streams can generate more value for recipients and investors alike. To access the kinds of finance pools that dwarf those that exist in the conventional world of peacemaking, climate change needs to be proactively featured by mediators, and ways to adapt the finance mechanisms that support projects with broader mediation goals need to be identified. There is a significant role for the UN to build these links globally.

“Climate change is the biggest challenge ever faced, but there is the opportunity to take part in the largest market the world has ever seen [...] the challenges are clear, the opportunities are equally as clear – what needs to be summoned is the creativity to make it happen,” John Kerry, United States Department of State.⁴⁷

2.3 PARTNERS IN MAKING PEACE WITH CLIMATE CHANGE

The likelihood of peace-making success depends in large part on developing successful partnerships with others that have greater experience or credibility in a particular regional context. Transformative results are seldom immediate, and building an effective presence requires patience and persistence.⁴⁸ Similarly, long-term planning and development of the portfolio of activities required must be doable by the people and authorities in the locations that are the focus of the peace-building initiative, even if they require international, technical and political support.

Developing the political alignment and support needed to prevent climate change from escalating conflicts while enabling vulnerable countries to build their resilience and prosperity requires unprecedented levels of collaboration within the international community. The UN is already working with other multilateral actors like the African Union to mobilize this political will. And the partnerships need to go well beyond multilateral agencies

to include groups with substantial expertise and resources to bring to the table, including international finance institutions (IFIs), civil society organizations, academia and the private sector.

The purpose of a peace process is fundamentally to prevent or end violent conflict and create sustainable peace. The parties to the conflict need to own the outcomes and be accountable to them. UN agencies can work with constituencies and act as a platform that establishes valuable links and galvanizes necessary relationships, helping to mobilize resources, build capacity and generate ideas, but they aren't permanent fixtures on the scene, whereas their regional partners often are.

As described in section 2.2.2 above, the private sector has significant resources to bear to finance climate change mitigation and adaptation. Mediators need to be aware of the opportunities and also the challenges arising from the presence and participation of private sector actors within peace processes.

International finance institutions include the African Development Bank, Asian Development Bank, Inter-American Development Bank, World Bank and others. The World Bank Group, which is already the largest multilateral provider of climate finance for developing countries, recently announced it will be aligning its financing flows with the goals of the Paris Agreement. The Group's new Climate Change Action Plan will direct the bank's climate financing to support adaptation and resilience, a greater focus on greenhouse gas emissions reduction, the preparation and implementation of NDCs and Long-Term Strategies (LTSs), and support for transformative investments in key systems (food, energy, transport), among other things.⁴⁹ For example, the Rockefeller Foundation, with the International Finance Corporation (IFC) and other partners, will be investing \$1 billion in the next decade to end energy poverty guided by the principles of justice, equity and inclusion so it reaches the people who need it most.

Civil society organizations were once identified as outliers or misfits born out of discontent and defying authoritarian regimes. More recently, mobilized civil society is sometimes called the "third sector" (after government and commerce) and CSOs are considered bellwethers, leaders in things to come. These groups include a wide array of organizations representing a diversity of interests. They raise awareness, deliver services the other two sectors do not, give power to the marginalized, and promote transparency. CSOs are less constrained than their counterparts and have the power to influence policymakers and businesses.

Their presence and authority on the ground in the regions of concern are often direct and tangible. In the Middle East, CSOs like EcoPeace have during the past 26 years designed community-based programming that includes educational programming and research across borders to illustrate how a particular type of cooperation can mutually benefit

Developing the political alignment and support needed to prevent climate change from escalating conflicts while enabling vulnerable countries to build their resilience and prosperity requires unprecedented levels of collaboration within the international community.

long-standing conflict parties. Two CSOs are highlighted in Part 3 of this report for the work they are doing on peace and climate change.

At the local or regional level, there is also an opportunity and a need to ensure peace processes are inclusive. Women, youth and minorities are all affected in distinct ways and engaging these interests often opens new solution spaces and reveals sources of knowledge and implementation capacity that garner greater opportunities for addressing climate change effects and resilient outcomes. For example, women are often the first providers of food and crucial services for the preservation of resources and biodiversity.

Also noteworthy of mention in this context, the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat is an administrative body responsible for assisting countries in supporting the global response to the threat of climate change. The nationally determined contributions (NDCs) of each country are a central element for implementing the Paris Agreement. NDCs communicate a country's contribution to meeting the goals of the Paris Agreement.⁵⁰ The national adaptation plan (NAP) process can help to identify NDC adaptation goals and translate them into action. NDCs and NAPs are complementary processes that should ideally be aligned with one another to strengthen national climate change adaptation. Numerous bodies and programmes operate under the UNFCCC to support adaptation-related activities, including providing technical support. For available resources, please see page 9 of the NAP overview: <https://unfccc.int/documents/40549>. Furthermore, each country nominates a focal point for their NDCs. Focal points can be reached at: <https://unfccc.int/process/parties-non-party-stakeholders/parties/national-focal-point>.

In order to play an effective role, mediators need to convene the parties and engage other actors relevant to the issues that need to be resolved in order to reach a sustainable agreement. The effective engagement of relevant parties in a process they can trust is integral to the architecture of effective process design, as detailed in Part 3 of this report. Innovation and partnership born of the need to address climate change in peace processes may offer a turning point in a conflict scenario that is destined for increased instability and escalation in violence and human suffering as a result of intensifying impacts of climate change.

PART 3

A Framework for Action

Integrating climate change mitigation and adaptation strategies into Peace Mediation and Conflict Prevention—“peace processes”—is clearly essential given the trajectory of climate change impacts and the consequences of these impacts for the stability and peaceful relations the global community aspires to. The UN and other multilateral agencies have the greatest reach and responsibility afforded to them to respond to conflict and crises; it is both an imperative and an opportunity for all of them to integrate climate change into their conflict prevention and mediation interventions where applicable.

The question is how to achieve this in the context of peace processes. The approach proposed below is to integrate consideration of climate change into the normal sequence of steps or stages involved in peace processes while also enhancing the enabling environment by galvanizing and guiding the global network of actors that are capable of expanding the capacity of peace processes to address climate change.

3.1 CONCEPTUAL FRAMEWORK AND THINKING ABOUT RECENT EXPERIENCE

Conceptually, a variety of dimensions and lenses can be considered in order to identify potential entry points for integrating climate change into peace processes while leveraging opportunities to stimulate and consolidate cooperation among real and potential adversaries. These dimensions and lenses may be summarized as follows:

DIMENSIONS:

- 1 Spatial scale:** conflict arises and can be prevented and resolved at regional, local and national scales. It is at these same scales where climate change impacts and mitigation and adaptation options manifest.
- 2 Type of intervention:** conflict prevention or peace mediation or peace implementation.
- 3 Process and institutional status:** tracks 1, 2 and 3.
 - *Track 1:* formal processes engaging representatives of conflicting parties or state governments
 - *Track 2:* informal processes engaging and led by these same parties with participation from civil society organizations, affected stakeholders and the private sector
 - *Track 3:* informal processes driven by non-state actors such as civil society organizations, private foundations and the private sector.

These dimensions can be visualized as a three-dimensional matrix of “solution spaces” wherein peace processes can be implemented (Figure 1). Each of these solution spaces can be examined through a variety of lenses.

LENSES:

- 1 Cooperation incentives.** Which climate issues are potential “triggers for conflict or cooperation”—i.e. most conducive to leveraging cooperation and engaging real or potential adversaries in a constructive manner?
- 2 Process interrelationships.** How do the processes to address climate adaptation and mitigation options in one track relate to or potentially influence opportunities or initiatives in another? For example, a track 3 process led by civil society organizations may address options contemplated in a track 1 peace agreement, or a track 1 peace agreement may formalize solutions that have been explored and demonstrated in a track 2 or 3 process.
- 3 Emergence of solutions over time.** How are potential solutions developing through the different tracks over time? As illustrated below in the Sahel Darfur example, solutions emerge over time through the processes and results in these different tracks. This evolution can be mapped in a way that enables practitioners to position peace processes to maximize the chances of productive results.
- 4 Inclusion of marginalized groups.** How are women, youth, minorities, elders and other stakeholders affected and involved or marginalized? And how can inclusion of these often marginalized and victimized groups strengthen the peace and mobilize implementation actions on climate change adaptation and mitigation?

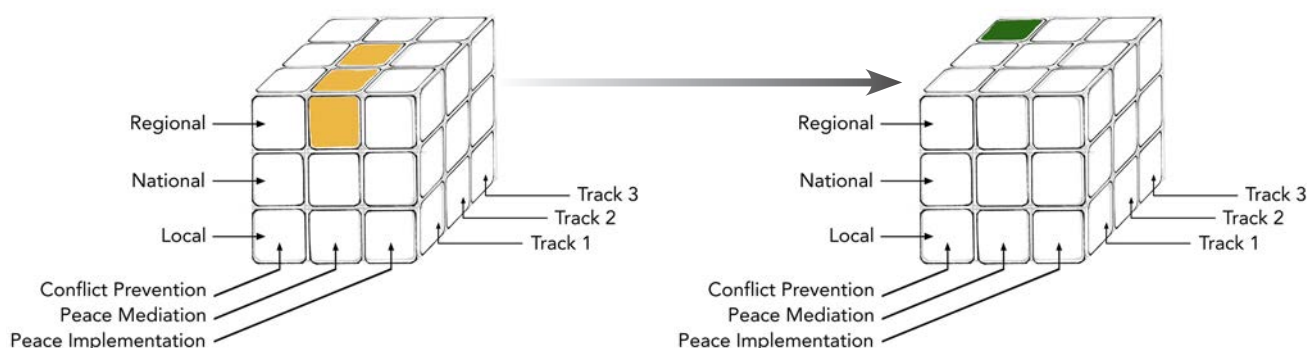


FIGURE 1. Solution Spaces

Opportunities to constructively engage relevant parties and other actors shift between geographic scales and tracks over-time. The results of collaboration and negotiation in these different “solution spaces” can reinforce each other.

Examination of peace processes that address climate change issues in the same and different geographic locations reveals how practitioners can apply this conceptual framework to work with the parties to assess the context and design and implement peace processes successfully. The analysis provided in the case studies below is intended to stimulate thinking and consideration of the potential links and synergies between peace processes and their results in these different solution spaces.

The degree to which climate change is addressed in the results of the peace processes is also assessed from a substantive perspective including:

- mandating action to address climate change
- defining strategic direction with respect to mitigation and/or adaptation, and
- establishing institutional arrangements with the mandate and resources to implement climate change mitigation or adaptation.

The results of these processes can also be analysed in terms of whether they involve:

- mutual gain
- reciprocal risk reduction, and
- other transactions that incentivize the parties to reach agreements and sustain them.

The following sections analyse agreements from peace mediation and other conflict prevention processes in order to reveal how climate change has been addressed generally and, in some locations, how processes in different tracks have advanced the degree to which climate change is addressed over time.

3.1.1 THE SAHEL AND DARFUR: ADDRESSING HERDER-FARMER CONFLICT

Examination of the agreements and related initiatives in track 1, 2 and 3 peace processes involving Darfur reveals a progression in the degree to which elements of climate change adaptation and mitigation are addressed through different tracks.

As described in Part 2 of this report and documented in many case studies, long-standing mutually beneficial and cooperative relationships between herders and farmers in the Sahel region break down in the face of climate stresses that force herders to migrate to new places or at different times, creating impacts on farmers who may also be shifting or expanding their patterns of land use. Other sources of stress such as extremist groups, organized crime, corruption and small arms distribution exacerbate the conflicts that emerge.

Two decades ago, the rains in southern Sudan began to fail, with average precipitation declining by 40 per cent since the early 1980s.⁵¹ These climatic trends have had significant consequences for small-holder farmers relying on rain-fed production and for nomadic pastoralists. Desertification and drought have eroded the availability of natural resources to support livelihoods and the peaceful coexistence of these two groups in the region.⁵² Pastoral groups were forced to migrate south to find food and water, encroaching on the cropland of the farmers. Hostilities between the two groups continued for decades. In 2003, this conflict escalated when it became intermingled with rebel groups' struggle against the economic and political marginalization of Darfur by the central Sudanese government in Khartoum. This led to armed conflict carried out by the local Justice and Equality Movement (JEM) and the Sudan Liberation Movement (SLM).

Darfur is considered by some researchers to be "the first climate change conflict", with drought and desertification undermining the availability of natural resources essential for survival.⁵³ As noted by *Climate Diplomacy*, "The Darfur case is illustrative of how conflicts may develop when societies are unable to adapt to the consequences of climatic changes with peaceful means."⁵⁴

Darfur is considered by some researchers to be "the first climate change conflict", with drought and desertification undermining the availability of natural resources essential for survival.

“The Doha Document for Peace in Darfur (DDPD) was finalized at the All Darfur Stakeholders Conference in May 2011, in Doha, Qatar. On July 14, the Government of Sudan and the Liberation and Justice Movement signed a protocol agreement committing themselves to the Document, which [became] the framework for the comprehensive peace process in Darfur. The DDPD [was] the culmination of two and half years of negotiations, dialogue and consultations with the major parties to the Darfur conflict, all relevant stakeholders and international partners”⁵⁵ (tracks 1 and 2 peace mediation). (Doha Document for Peace in Darfur (DDPD), 31 May 2011)⁵⁶

The United Nations Environment Programme (UNEP) and the state government of North Darfur are collaboratively implementing the Wadi El Ku Catchment Management project. Through this project, water infrastructure and governance systems are now making it possible for the citizens of North Darfur’s Wadi El Ku basin to sustain their livelihoods.⁵⁷ Bitter divisions are starting to dissolve 50 miles (80 kilometres) north of El Fasher along the Wadi El Ku, where the next phase of the project is taking place (track 2 conflict prevention).⁵⁸

The progress being made at this subnational scale in Darfur was paralleled by ongoing peace negotiation and preventative diplomacy at a national scale, culminating in the 2020 Juba Agreement.

The Juba Peace Agreement paves the way for armed and unarmed opposition groups in Sudan to join the transitional government, dramatically expanding representation of the country’s peripheries during the interim period before elections.

The Juba Peace Agreement is highly complex. It is a compendium of individual agreements (the 10 “Titles”) that were signed in August 2020 and brought together as a single agreement on October 3, 2020. The negotiations that led to the adoption of the Juba Agreement were mediated by the Republic of South Sudan.

Climate change is included in Title 1 (Agreement on National Issues), Title 2 (Chapter 6 – Development of the Nomads and Herders Sector in the Darfur Region Protocol) and Title 3 (Chapter 3 – Political Issues Agreement, Environmental Issues). The signatories to Title 1 are the transitional government of Sudan and the signatory parties to the Juba Agreement. The signatories to Title 2 are the transitional government of Sudan and the Darfur Parties to Peace. The signatories to Title 3 are the transitional government of Sudan and the Sudan People’s Liberation Movement–North / Sudan Revolutionary Front.

Under Title 1 the parties establish a mandate to address climate change as one of many environmental issues requiring attention. Under Title 2, Chapter 6 directly deals with the Darfur conflict between nomads and herders through a protocol for the development of the nomads and herders sector in the Darfur region. The parties agreed to establish a commission for the development of the nomads and herders sector, work with local authorities and civil administrations to organize the movement of nomads, open routes and regulate relations between farmers and herders. Under Title 3, Chapter 3, the Environmental Issues sub-section addresses environmental degradation and the impacts of climate change. The

parties agreed to establish policies and implementation mechanisms to care for the environment and remedy the impact of past policies that led to environmental degradation and climate change. They agreed to improve infrastructure and developmental structures and secure funding and modern technology to overcome the impacts of climate change. Finally, they agreed to take environment and climate change issues into consideration in all policies, plans, programs, and projects necessary for implementation in the final peace process and building sustainable peace.

Looking backwards at the various agreements and track 1, 2 and 3 peace processes related to them, there is a progressive shift in the degree to which climate change mitigation and adaptation are addressed as mainstream elements of the agreements. The Juba agreements provide a mandate, institutional arrangements and strategic direction for climate change adaptation in Darfur based on reciprocal risk reduction and mutual gain, while nine years earlier the DDPD did not even mention climate change, notwithstanding the fact that the conflict it addressed is known as the first climate change conflict. Mediation teams can scan the full range of concurrent and past track 1, 2 and 3 processes to identify the steps being taken to make these shifts happen and position the parties to contribute to the progression in a manner that is relevant to their particular context.

3.1.2 THE SAHEL AND NIGERIA: ADDRESSING HERDER-FARMER CONFLICT

Similar conflicts between grazers (herders) and farmers have transpired in the State of Kaduna in northern Nigeria, where conflict prevention and peace mediation efforts culminated in the Nigeria Kafanchan Peace Declaration between Grazers and Farmers on March 23, 2016.⁵⁹

Violent conflict between nomadic herders and sedentary agrarian communities in Nigeria represents one of the country's key security challenges. While tensions between sedentary farmers and herders have existed for decades, in recent years violent conflict has escalated.⁶⁰ Environmental changes have been identified as one of the main drivers of the violence, since climate change and the drying of northern Nigeria is forcing the herders to move southwards, into lush but more densely populated tropical forest lands.⁶¹ Environmental and climate change issues figured heavily during the peace processes and were used as an entry point for the negotiations.

Recognizing that competition and access to water is a potentially destabilizing force, the agreement recommends the development of a land-use plan that strategically identifies and places water points for livestock. This is intended to promote shared management of the resource, mark livestock corridors and stock routes, identify areas under grazers and farmers ownership, and create cattle resting areas and grazing reserves. The adaptation strategy is to develop a land use plan for the area to manage the interface between herders and farmers. The parties concluded that "a clear land-use plan decreases potential for conflicts by placing water points away from sensitive zones and enabling risk-free movement for grazers."⁶²

This agreement provides a mandate to address climate adaptation as a cornerstone of peace and future conflict prevention and the strategy for achieving this outcome, but it does not pay close attention to the institutional relationships needed to make this happen.

3.1.3 COLOMBIA: THE FINAL AGREEMENT TO END THE ARMED CONFLICT AND BUILD A STABLE AND LASTING PEACE

The Colombian Final Agreement to End the Armed Conflict and Build a Stable and Lasting Peace (FA) was signed in November 2016 between the federal government of Colombia and the FARC-EP, a violent non-state actor that had been engaged in armed conflict with the government since the mid-1960s.⁶³ The FA's commitment to address climate change (page 25 of the FA) is to include climate change adaptation measures as a criterion for a National Irrigation and Drainage Plan (the Plan). This commitment created a mandate for government staff to include climate change adaptation measures as a component in the Plan,⁶⁴ which was released in April 2020.

Two important lessons may be drawn from this case study by those mediating peace agreements. The first lesson is that *even brief, seemingly high-level commitments in peace agreements to adapt to climate change impacts can serve as valuable steppingstones towards more tangible measures*. These tangible measures include direct implementation efforts

An important lesson may be drawn from this case study: even brief, seemingly high-level commitments in peace agreements to adapt to climate change impacts can serve as valuable steppingstones towards more tangible measures.

(such as the Plan) as well as contributions by third parties, such as foreign investors and development banks. For instance, the peace conditions that are arising from the execution of the FA are facilitating support from the United States Agency for International Development (USAID) to Colombia to mitigate the impacts of climate change. Among other initiatives, USAID is working with Colombians to reduce deforestation and thereby protect biodiversity (by way of the generation and sale of carbon credits in return for forest conservation) and to improve the availability of affordable renewable energy (by reducing renewable energy costs to power schools and clinics across rural Colombia).⁶⁵

While USAID was involved in Colombia prior to the FA, its post-FA efforts illustrate the deep and intricate symbiosis between climate change adaptation and mitigation commitments with peace-building. When these commitments are included in peace agreements, the peace dividends that result in turn encourage global entities to participate in and contribute to adaptation and mitigation projects. While robust, detailed adaptation commitments are obviously preferable to those that merely create a mandate for the development of detailed commitments, the Colombian example illustrates that mandate creation by way of a peace agreement can be instrumental to the eventual manifestation of adaptation and mitigation projects.⁶⁶

The second lesson that may be drawn from this case study by those mediating peace agreements is that *peace agreements can function as powerful tools for providing strategic direction for adaptation or mitigation initiatives*. In Colombia, the FA's focus on adaptation in the context of rural and agricultural development pointed the way for Colombia's civil

service to include adaptation as a key component of the National Irrigation and Drainage Plan. Without the FA serving as a compass in this manner, the Plan may not have included adaptation measures, or at least not included them as prominently.

The aspects of the Plan related to climate change adaptation focus on irrigation and water conservation measures in anticipation of more frequent and prolonged periods of drought. The climate change adaptation objectives entail:

- Promoting and implementing alternative irrigation solutions to prevent and reduce the effects of drought and frost, as well as more efficiently consume water and reduce emissions
- Four technological solutions to enhance family farming irrigation:
 - sourcing subterranean water, primarily in areas that have high potential for solar or wind energy and have a regulated surface or underground water source
 - water harvesting (collecting and storing rainwater)
 - hydraulic infrastructure to pump water from surface water resources to the development site, and
 - hydraulic infrastructure to pump water from harvested resources to the development site.

The Plan also defines the governmental processes to be used to manage the design and facilitate the financing of these irrigation solutions. The inclusion of these measures in the Plan fulfills the commitment of the FA, but it is still too early to evaluate the effectiveness of the Plan's implementation. What is clear, however, is that the execution of the FA helped ensure that the Colombian government's climate change adaptation efforts included considerable attention to rural and agricultural contexts. The agreement by FA negotiators to specifically target rural areas and agricultural activities for climate change adaptation projects demonstrates the link between responding to climate change and building peaceful relations. Rural and agricultural communities were often settings for the violence that precipitated the FA; they are home to the people who will disproportionately experience the physical effects of climate change; and as critical resources like water become increasingly scarce and valuable, they are the communities that may be at the greatest risk of the re-emergence of conflict.

3.1.4 ISRAELI, JORDANIAN AND PALESTINIAN WATER & ENERGY NEXUS SOLUTIONS⁶⁷

The Eastern Mediterranean is predicted to be a hotspot in the climate crisis, with large parts of the Middle East becoming unlivable for the summer period by the end of the century. In the Levant, it is expected that temperatures in summer months will increase by 50 per cent while rainfall diminishes by up to 40 per cent by the end of the century. The Middle East is already the planet's most water-scarce region, where even basic domestic drinking water needs are often not met. Water sources are being continually overdrawn, threatening the sustainability of future water resources.

As one of the final status issues, water resource development solutions have been undermined by the political stalemate that has persisted for decades in the region. This is notwithstanding the progress reflected in the declaration of principles for co-operation among the core parties on water-related matters and new and additional water resources.⁶⁸ These principles set the stage for potential solutions that have not been cultivated in formal peace processes since the track 1 process broke down. However, progress has been made in track 3, creating new opportunities by design in track 1 and 2.

A “Green Blue Deal for the Middle East” developed by EcoPeace seeks to address the challenges posed by climate change that further threaten national security interests in the region. The threats include water, food and energy insecurity, civil unrest and uprisings, migration and possibly more failed states. EcoPeace is proposing an approach that emphasizes the importance of water and water scarcity and promotes trust-building and cooperation as a first step in a solution to advancing Israeli-Palestinian and broader Middle East peace issues.⁶⁹

Building on decades of community-based (track 3) programming in Jordan, Israel and the Palestinian territories, the report outlines that the water equity and allocation challenge in Israel and Palestine is not only urgent but the most solvable and the least controversial of final status issues. The recommendations leverage the comparative advantages each country has. Bringing these parties together results in sustainable regional interdependencies that offer benefits to all three sides (economic, environmental, and geopolitical) and the creation of incentives for continued cooperation. Israel and Palestine would produce desalinated water and sell it to Jordan, while Jordan sells Palestine and Israel renewable energy generated using the substantial solar power potential in Jordan.

In the prefeasibility study, “Israel would meet its Paris climate commitments to increasing renewable energy capacity, at cheapest cost, and see regional cooperation strengthened; Jordan would achieve water security at cheapest cost through the purchase of Israeli and Palestinian desalinated water and become a major exporter of clean energy, to not only power Mediterranean desalination plants, but also sell enough solar energy to supply a substantial part of total regional energy consumption; and Palestine, in addition to becoming a water exporter to Jordan and perhaps the Negev in Israel, would become more independent from Israel to meet its water and energy needs while shifting energy supply from diesel to solar.”^{70 71}

New mindsets and technologies are changing the prospects for peace. Whereas the Oslo Accord of the mid-1990s created winners and losers over the allocation of water resources, and water continues as an intensifying source of conflict, today advancements in water technologies and innovation present the opportunity for Palestinians to obtain their rights to natural water sources without reducing water availability for Israelis. Furthermore, the creation of water markets would optimize water management between Israel and Palestine (with even greater efficiencies if Jordan is included).

New mindsets and technologies are changing the prospects for peace. Whereas water continues as an intensifying source of conflict, today advancements in water technologies and innovation present the opportunity for Palestinians to obtain their rights to natural water sources without reducing water availability for Israelis.

Aspects of the Green Blue Deal are already being activated in track 1 because of efforts in tracks 2 and 3. Palestine's Green New Deal initiative strives to mitigate climate-change-related impacts in the absence of a peace agreement with Israel. Advancing a track 2 dialogue has received assistance from large, internationally well-known figures and actors and aims to move forward the agenda of addressing climate change resilience in the vulnerable Middle East region, with water and energy receiving top priority. The concept of the Water & Energy Nexus can attract USD \$2 billion in solar and wind investment. And, for the first time, the Israeli Ministry of Energy published a long-term strategic plan (track 1) that includes emission reduction targets and outlines the roadmap, milestones and constraints to achieve a low-carbon energy economy by 2050 where most of the clean energy is solar. Israel has several policy measures and projects on the way that carry the promise of energy transformation in the future. The recent violence and deteriorating political situation in the region highlight the fact that just managing the Arab/Israeli conflict in the absence of a roadmap on how to solve the conflict has once again failed.⁷²

Synergies happen not by chance but by design, and solutions need to be relevant to decision-makers and show mutual benefit.⁷³ Political will may be the most important element and the most difficult to measure or promote. The practitioners at EcoPeace attest that the essential ingredient needed to create top-down political will is a long-term investment in bottom-up community-based environment, climate education and public engagement programs. It is imperative that it also make economic sense based on research and the ability to attract private sector investment is highly beneficial. It needs to be recognized that the time it takes to resolve conflicts can be decades; long-term planning and investments commitments need to align.

3.1.5 NORTHERN IRELAND: NEW DECADE, NEW APPROACH AGREEMENT⁷⁴

The Renewable Heat Incentive (RHI) scheme was a climate change adaptation and mitigation strategy that caused significant political conflict in Northern Ireland, ultimately resulting in the collapse of the Northern Ireland Executive⁷⁵ and the subsequent dissolution of the Northern Ireland Assembly.⁷⁶ The RHI was set up to encourage citizens and businesses in Northern Ireland to switch from fossil fuels to renewable sources; however, lack of subsidy spending controls resulted in massive overspending of public finances. In January 2020, after having been suspended for almost three years, the parties reconvened the government on the basis of the New Decade New Approach (NDNA) Agreement.

As a means of de-escalation over the scandal surrounding the RHI, a commitment to close the RHI scheme and bring forward an alternative is part of the NDNA agreement. The development of the NDNA Agreement grew to address many important issues, such as investment and reform in public services, and both short- and long-term economic and social challenges. As well as committing to closing the RHI and replacing it with a scheme that effectively cuts carbon emissions, the NDNA tackles climate change head on with strategies to address the immediate and longer-term impacts of climate change. These include the development of climate change legislation, a new energy strategy, and a transition to a low-carbon society, and a review of the government's carbon emission reduction strategy.

3.1.6 BRIDGING TO THE PRIVATE SECTOR IN TRACK 3

The private sector is increasingly concerned with the environmental, social and governance (ESG) implications of development. These concerns are expressed through corporate ESG commitments that include investments in climate mitigation and adaptation strategies. The fundamental shift to renewable energy sources and the explosion in carbon markets has created new entry points for private sector organizations and enterprises to engage in peace-building based on climate change mitigation and adaptation opportunities in keeping with achieving their ESG objectives.

RENEWABLE ENERGY

Between 2009 and 2020, \$2.6 trillion was invested globally in renewable energy capacity alone—more than triple the amount invested in the previous decade.⁷⁷ The UN can play a pivotal role in de-risking investment opportunity so this money flows to places it would otherwise not do so by using its own footprint to create a more conducive investment environment.

UN peace operations and field missions are deployed in many fragile settings where energy poverty is the norm. UN sites are often the largest power producer and consumer in the area, relying on imported diesel to power their operations, where local diesel supply chains often overlap with the war economy. Commercial renewable energy developers typically require contractual arrangements with anchor client energy off takers that guarantee the price of power and the duration over which power will be supplied. This contracted cash flow enhances the economic viability of renewable energy projects and allows developers to finance and construct new projects. There are emerging examples of renewable energy project developers in fragile country contexts that are leveraging power purchase agreements (PPAs) with UN mission anchor clients in order to deliver power to local communities.⁷⁸

The joint work of Energy Peace Partners (EPP) and the Stimson Center, through their Powering Peace initiative, is encouraging the United Nations to innovate in a way that leverages climate and finance solutions to support peace in places affected by violent conflict. In January 2021, Powering Peace published *Shifting Power: Transitioning to Renewable Energy in United Nations Peace Operations*, which offered an overview of policies and practices around energy in UN field missions, in the context of ambitious UN Secretariat Climate Action Plan (UNSCAP) targets to source 40% of electricity from renewable sources by 2025 and 80% by 2030. It documented lessons from the field, provided recommendations for system-level change that would enable the UN to meet these goals and argued UN missions renewable energy transitions introduce long-lasting clean energy into fragile, energy-poor settings that can create new entry points for peace-building and conflict resolution.⁷⁹

The report was launched at an event⁸⁰ co-hosted by the governments of Norway and the United Arab Emirates and represented the highest-level UN event to focus on the climate solution of renewable energy in UN field missions. It was the first event to provide high-level stakeholders—from the UN Secretariat, UN field missions and UN member states

(which provide political, financial and logistical support to field missions)—a forum in which to share perspectives on the issue of accelerating renewable energy transitions in UN field missions. Senior leaders of the UN missions in Somalia and the Democratic Republic of the Congo (DRC) made a compelling case for taking a more proactive approach to adopting renewable energy in the field. UN member states expressed broad political support for the notion of the United Nations leading by example on climate change by accelerating renewable energy transitions in UN field missions. There was consensus among stakeholders that renewable energy provides a new entry point for UN field operations to fulfill their responsibility toward host nations, including for conflict resolution, conflict prevention and peace-building.

Separately, EPP observed that the global renewable energy revolution has not been equitable, with communities in the most fragile countries losing out on its myriad benefits. EPP also recognized that despite the increasing links between climate change and conflict, there is a gap between the respective efforts of the climate change community, which tends to be academically- and policy-oriented, and peace-building practitioners. Hence EPP established a team of peace-building and renewable energy experts in order to demonstrate that renewable energy, as the world's preferred climate solution, provides new entry points for peace-building and stabilization. EPP's efforts are premised on the findings that 1) there is a strong overlap among countries at risk of conflict, highly climate-vulnerable and with high levels of energy poverty/low levels of electrification; and 2) renewable energy represents the majority of global climate finance, more than \$300 billion annually, but only a fraction of this reaches poorly electrified, fragile states.

To address this gap in renewable energy investment in fragile, climate vulnerable and poorly electrified settings, EPP developed a new financing mechanism—the Peace Renewable Energy Credit (P-REC). The P-REC adapts and extends the billion-dollar international market in energy attribute certificates (EACs)—tradeable environmental attributes that represent renewable energy usage claims for each megawatt hour of renewable power produced—to fragile states. In 2020, Microsoft purchased the first-ever P-RECs from an off-grid solar plant built by a local solar project developer in Goma, DRC. The P-REC purchase unlocked a new stream of private sector funding to support a transformative streetlight project in an insecure neighborhood, while allowing Microsoft to meet corporate sustainability and climate equity goals. The streetlights have made the neighbourhood safer and more secure at night, increasing the hours of storefronts and spurring the development of more businesses while reducing pollution and carbon emissions. The culture of the neighbourhood has been transformed, creating a new sense of community and other positive outcomes that can support durable peace.⁸¹

EPP's work provides an early example of a new approach to thinking about climate change and conflict, and—from a practitioner perspective—the opportunities for linking climate solutions with peace-building. As the world's leading recipient of climate investment, renewable energy offers a practical entry point for peace and development. While the impacts

The global renewable energy revolution has not been equitable, with communities in the most fragile countries losing out on its myriad benefits

of climate change on conflict-affected communities remain complex and context-specific, considering renewable energy through a conflict prevention and peace-building lens expands the toolkit that UN mediators have at their disposal.⁸²

CARBON MARKETS

Carbon markets are real, they are big, and they are in demand.⁸³ There are two kinds of markets for carbon credits—compliance and voluntary markets. In a compliance market, markets for carbon credits are created by the need to comply within a regulatory framework (these can be within regional, national or international carbon reduction regimes). Actors buy and sell carbon credits to comply with the cap or limit imposed on their emissions, also known as cap-and-trade. Voluntary markets function outside of compliance markets and enable businesses, CSOs, governments and individuals to voluntarily offset their emissions by purchasing carbon credits.⁸⁴

There is evidence that carbon credits that deliver additional sustainable development benefits such as providing clean water, activating human rights, and supporting disarmament fetch a premium in the market. Yet in the places that would derive the greatest benefit from these ‘social kickers,’ investment is hampered by risk and uncertainty. Certainty

in the context of a conflict situation might appear to be a contradiction in terms, however, much consideration and innovation is beginning to take place in order to create the supporting conditions necessary to ‘de-risk’ investment that benefits the environment and society as a whole. The scale of private sector investment that can be brought to bear dwarfs any public funding available.⁸⁵

Much consideration and innovation is beginning to take place in order to create the supporting conditions necessary to ‘de-risk’ investment that benefits the environment and society as a whole. The scale of private sector investment that can be brought to bear dwarfs any public funding available.

Members of the International Emissions Trading Association have been making inroads with carbon projects in fragile states alongside international finance institutions like the International Finance Corporation and the World Bank. The DRC is among the most vulnerable fragile states. It also has the largest rainforest jungle in the world outside of the Amazon. Reforestation and avoided deforestation are proven means for generating streams of income to support human well-being, environmental health and climate change mitigation in the DRC. The World Bank pioneered this opportunity together with a private company when they purchased carbon credits created through a reforestation project—the Ibi Bateke Sink Plantation project, some 150 kilometres from the Congolese capital Kinshasa.

3.1.7 KEY ELEMENTS OF AGREEMENTS AND PROPOSALS

The agreements and collaborative proposals described above address climate change in varying degrees from establishing a mandate to address climate change, to establishing institutional arrangements to mitigate and or adapt to climate change, to setting or proposing strategic direction for how to mitigate and or adapt to climate change. Some of them also include mutual benefit and/or reciprocal risk reduction. Table 1 summarizes these key elements .

TABLE 1: Key Elements of Agreements and Proposals

		AGREEMENT	MANDATE		STRATEGY	MUTUAL BENEFIT	RECIPROCAL RISK REDUCTION
PM	1	NORTHERN	XXXXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX
PM	1	NIGERIA	XXXXXXXX		XXXXXXXX	XXXXXXXX	XXXXXXXX
PM	1	SUDAN DARFUR					XXXXXXXX
CP	2	WADI PROJECT			XXXXXXXX	XXXXXXXX	XXXXXXXX
PM	1	SUDAN JUBA	XXXXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX	XXXXXXXX
PM	1	COLOMBIA	XXXXXXXX		XXXXXXXX		
PI	2	IRRIGATION			XXXXXXXX	XXXXXXXX	XXXXXXXX
PM	1	JOINT WATER			XXXXXXXX	XXXXXXXX	XXXXXXXX
CP	3	GREEN BLUE			XXXXXXXX	XXXXXXXX	XXXXXXXX
CP	3	ENERGY PEACE PARTNERS			XXXXXXXX	XXXXXXXX	XXXXXXXX
CP	3	DRC CARBON OFFSET PROJECT			XXXXXXXX	XXXXXXXX	

PM = Peace Mediation; CP = Conflict Prevention; PI = Peace Implementation

3.2 ENHANCING THE ENABLING ENVIRONMENT

Though climate change is obviously a global problem, mitigation and adaptation opportunities are regionally/country specific. Global actors have a strong interest in supporting successful development and implementation of mitigation and adaptation strategies because it is the sum total of all of these efforts that can achieve the Paris Agreement goal of arresting climate warming at 1.5 degrees Celsius, while adapting to the impacts that cannot be avoided. The low carbon economies and net zero carbon balance required by 2050 necessitate massive investment and development opportunities that the International Energy Agency estimates would generate significant growth in global GDP.⁸⁶ And the ultimate benefit for the global community is clearly averting the catastrophic impacts on human societies, peace, stability and ecosystems that will occur if the Paris goal is not achieved.

As illustrated in the examples described above, peace and conflict prevention agreements that include adaptation or mitigation strategies, or both, need to address the scale at which the impacts and opportunities manifest themselves and the directly affected parties are capable of devising and executing those strategies. This may be within a country or involve multiple countries or regions such as West Africa or the Middle East. Climate change mitigation and adaptation strategy development at these scales, whether in a conflict prevention or peace mediation context, will benefit from strong support from interested global political actors dedicated to climate action, including UN and other multilateral agencies like the African Union, UN member states, international finance institutions, multinational corporations and commercial and civil society organizations and foundations. UN agen-

cies as well as other non-UN organizations are already playing a role in convening many of these actors to galvanize global action on climate change, and additional steps can be taken to engage this network in support of peace processes.

In addition to facilitating geopolitical alignment these new and strengthened linkages and relationships can engage substantial and innovative climate financing resources and markets including carbon markets that will foster success and higher achievements in peace processes.

3.3 GLOBAL SCALE/HEADQUARTERS ACTION PLAN

We recommend the following actions for headquarters level consideration in the UN and other multilateral organizations to strengthen the enabling environment for integration of climate change mitigation and adaptation strategies into peace processes:

- 1 Expand the mandates and strengthen the multi-agency leadership and coordination of organizations including the UN Executive Office of the Secretary-General Climate Action Team and the Climate Security Mechanism to provide leadership and support for integration of climate change mitigation and adaptation strategies into peace processes. Key objectives for the new organization would be to:
 - a) provide leadership and coordination support to bring UN agencies together to integrate climate change mitigation and adaptation strategies into peace processes
 - b) galvanize the political and financial support from UN member states that are actively promoting climate change mitigation and adaptation strategy development and implementation
 - c) engage and facilitate partnerships with global actors with resources to invest in climate solutions including IFIs, multinational corporations, relevant CSOs and foundations
 - d) assess Security Council resolutions from a climate change perspective
 - e) consider instructing the UN Special Representatives and Special Envoys of the Secretary-General to include, as appropriate, specific issues of climate change in their reports to the Secretary-General and into their briefings to the Security Council
 - f) deliver training for senior staff from UN missions and partner organizations to build regional capacity to deliver peace processes that integrate climate change adaptation and mitigation
 - g) undertake flagship projects that demonstrate how climate change mitigation and adaptation strategies can be addressed in peace processes where the associated mediation team, the parties, the responsible agencies and other relevant actors are supportive, and include in such projects the tasks of prevention of water disasters and experience gained from responses to past water disasters,

- h) create cooperation frameworks with agencies that understand climate change effects to provide accessible climate information to mediators, mediation teams and conflict prevention practitioners responsible for peace processes, and
 - i) support UN Country Teams in undertaking climate risk and vulnerability analyses, including analyses on the role of local non-state actors and civil society in the creation of conditions for climate mitigation and adaptation and for the strengthening of development and peace.
- 2 Modify existing mandates and ensure new mandates of UN special field missions include integration of climate change mitigation and adaptation strategies consideration as part of peace processes.
 - 3 Expand climate action capacity within the Department of Political and Peacebuilding Affairs Mediation Standby Team for immediate deployment to assist with peace processes that are underway or just getting started.
 - 4 Engage global actors in developing a coalition of support for integration of climate change into peace processes. This coalition can become a hub for creating networks, galvanizing political support and creating potential economic and financing links in support of peace processes.

ARTICLE 6 OF THE PARIS AGREEMENT

There *will* be an international price on carbon once the provision of Article 6 of the Paris Agreement is implemented. This will help countries unleash new investment and innovation opportunities through new mechanisms for emissions trading and climate finance funds. We know that mitigating climate change will require global cooperation. One of the mechanisms to institutionalize this is Article 6.2, which lays out the provisions to facilitate cross-border transfers of mitigation outcomes. These provisions will facilitate the transfer of emission reduction units, known as 'internationally transferable mitigation outcomes' (ITMOs) across international borders.

Around 50 per cent of countries' Nationally Determined Contributions (NDCs) refer to access to an international carbon market. A larger market for carbon pricing will allow countries to meet their mitigation commitments and increase their climate ambition, at lower cost than purely domestic efforts.

While fragile states with low carbon footprints may not have either the capacity or the incentive to aggressively pursue mitigation to reduce their domestic GHG emissions, they may have the potential to trade carbon credits as ITMOs or in other carbon-trading markets with much larger emitters, generating long-term streams of income to address their peace and development issues.

It is critical that robust carbon accounting rules and measures are developed, especially from the perspective of critics and businesses, so markets run smoothly and with high integrity. As the 'rules' emerge, businesses respond, and investment flows.

The windows of opportunity to intervene and expedite climate-sensitive peace agreements open and close, often unexpectedly, and timing can be the most important determinant of success. High-level interventions from the Secretary-General and senior UN officials can capitalize on these opportunities when supported by sound analyses and the determination to move adversaries towards peace that is regularly expressed by the Secretary-General. Climate change is creating more of these kinds of opportunities, and the Secretary-General and his executive staff are increasingly stepping up to push parties to abandon their historical grievances and seriously consider new and mutually beneficial relations. This kind of leadership, while obviously risky, will likely be an essential ingredient in helping the world to successfully navigate the climate crisis.

3.4 REGIONAL/MISSION SCALE ACTION PLAN

Depending on which region or country is the location for a potential peace process, different member states, regional organizations, international finance institutions, multinational corporations and commercial and civil society organizations and foundations will have an interest or mandate to play an active role in helping to set the stage for success in the process. Responsible political officers or members of a mediation team who are endeavouring to initiate a peace process that could include climate change mitigation and adaptation strategies need to consider the following questions and undertake some or all of the following actions if they have not done so already:

- 1 Who are the active member states and regional organizations in the region/country?
 - a) Engage the ambassadors and other relevant representatives of these member states and regional organizations to secure their support for advancing climate change mitigation and adaptation strategies as part of peace or conflict prevention processes.
- 2 What programs relevant to climate change mitigation and adaptation are IFIs implementing in this region/country?
 - a) Contact IFIs to determine their level of interest and capacity to support the process.
- 3 How can multinational corporations and international commercial organizations with an expressed interest in climate change mitigation and adaptation in this region be involved or support the process?
 - a) Engage relevant multinational corporations and international commercial organizations to explore the potential modalities of their involvement where they can participate in commercial transactions and investments that reinforce the arrangements embedded in the peace agreement (e.g., investment in solar energy generation in Jordan to export to desalinization facilities in Gaza, and investment in energy generation in Somalia and DRC).
- 4 What global or regional CSOs and foundations with a climate change orientation are active in the region or country and how would/could they support the process?

a) Engage relevant CSOs and foundations to determine the extent of their support and to explore the potential modalities of their involvement, recognizing that the role and function of CSOs and foundations are very different and that, in some cases, foundations finance CSOs.

5 Consider hosting a climate change awareness workshop for representatives of the parties as well as external actors with an interest in supporting the process to raise awareness among the parties regarding the potential benefits and synergies associated with prioritizing climate change mitigation and adaptation within the process and to facilitate new relationships between state and nonstate actors that may be instrumental to success.

Some or all of the actions listed above can be undertaken as part of the peace process preparation and assessment phase as set out below if implementing the process is already underway.

3.5 IMPLEMENTING PEACE PROCESSES WITH CLIMATE CHANGE MITIGATION AND ADAPTATION IN SCOPE

A fundamental characteristic of peace processes is the requirement for potential parties to agreements to come together and set their differences aside in favour of developing agreements based on common purpose, shared benefits and avoided costs. These parties may be adversaries, unlikely partners or friendly neighbours; collaboration and negotiation are still required to develop agreements.

In order to be effective, collaboration and negotiation processes normally progress through a sequential series of steps or stages including

- assessing the circumstances and the potential and desirability of a negotiated outcome
- designing the process
- building an agreement, and
- implementing and monitoring and adjusting the agreement.

Each stage in the process significantly benefits from impartial mediation, facilitation and technical support in order to progress towards agreements, sustained cooperation and mutually beneficial relationships and outcomes.

In peace processes, these new relationships and outcomes can include mitigating climate change while helping communities adapt to the changing circumstances caused by climate change, increasing their resilience, and consolidating the peace between them. The UN and many other multilateral agencies and countries that have a track record for mediating peace agreements and preventing conflict are well positioned to provide mediation, facilitation and technical support to help integrate climate change mitigation and adaptation strategy development into peace processes where the parties are prepared to do so.

It must be recognized that the urgency of addressing human rights abuse, crimes against

humanity and cessation of military conflict can eclipse the need to address climate change within peace mediation processes notwithstanding the potential impact on precipitating and escalating further conflict. This points to the advantages of multitrack approaches and the need to consider all options in process design as highlighted below.

The process stages listed above provide a systematic framework for how to position parties to effectively engage in the development of climate change mitigation and adaptation strategies that contribute to conflict prevention and peace mediation. Key tasks and steps that should be considered at each stage in the process are set out below. This guidance is oriented towards the organization that is convening and potentially facilitating or mediating the process. As the process unfolds, the parties themselves need to address these tasks and steps in order to ensure the process is designed and implemented in a manner that is conducive to reconciling their collective interests.

1. PREPARATION AND ASSESSMENT

During the preparation and assessment phase, mediation teams and supporting organizations normally gather information relevant to the scope and design of the process including analysis of the conflict drivers and key issues that may need to be resolved and that may include environmental conditions affected by climate change.

In order for the process to potentially include climate change mitigation and adaptation strategies, some or all of the following tasks need to be completed:

- a) Confirm the status of the Nationally Determined Contributions and the National Adaptation Plans for the country or countries involved. The background information assembled in support of the NDCs and NAPs⁸⁷ will likely inform, but should not limit, the opportunities for mitigation and adaptation strategy development. The relationships between those organizations and individuals that have been involved in NDC and NAP preparation and the parties in a larger peace process need to be understood so that they can be accounted for in process design.
- b) Identify the agencies and organizations that are endeavouring to address impacts of climate change in all tracks currently and in the recent past. While these issues may not be framed as climate change issues by the agencies and organizations involved in managing them, they need to be included in the assessment and inform the peace process design. What mechanisms, protocols or strategies are the agencies or organizations utilizing or proposing to manage the associated

The dynamic interrelationships between peace and the environment are comprehensively documented in the Sudan First State of Environment Outlook Report 2020: Environment and Sustainable Development, which illustrates how environmental changes, including climate change, and development patterns are contributing to conflict while documenting solution paths that prevent these conflicts. The “Bending the Curve” scenario in the report offers a vision for development in Sudan that includes both climate change adaptation and mitigation with positive implications for achieving the sustainable development goals in Sudan in the foreseeable future. The strengthened peace provided by the Juba agreement may create the political and institutional platform that enables this scenario to be realized.

conflicts? How well are they working? What processes are involved and how do the participants relate to the parties in addressing the broader peace-building challenges? The objectives and outputs of these related track 2 or track 3 initiatives may inform the negotiation of mandates, institutional arrangements and strategies. Identifying how the climate issues have been addressed in track 1, 2 and 3 processes over time enables the mediation team to map the progression of solutions and position the peace process within that evolution.

- c) Depending on the extent of information and analyses assembled in support of the NDCs⁸⁸ and NAPs or through other initiatives such as State of the Environment reporting, the following information may need to be gathered either by a competent agency like UNEP or by contract with an appropriate technical consultant. The 2020 State of the Environment report for Sudan is a good example of the kind of information that may already be available. UN country teams as well as regional organizations (some UN missions currently supported by the CSM do so) may also have undertaken climate risk or vulnerability assessments which provide the relevant information.
- d) Review checklists provided by the Climate Security Mechanism and the UNFCCC to ensure the identified information is considered if it exists (checklists are available at <https://dppa.un.org/en/addressing-impact-of-climate-change-peace-and-security>).

State of the Environment information that should be assembled if it is not already available includes:

- i) Identify and assemble relevant background resource information regarding the state of the environment, key natural resources and associated issues—for example, the current state of forests in relation to historical forest cover and the associated implications for water availability.
- ii) Assess how these resources and the state of the environment are already affected by climate change and how they are predicted to be affected by climate change.
- iii) Investigate and clarify the potential linkages between the state of the environment and resources, climate change, and the conflicts that are relevant to peacemaking. In the transhumance circumstances in the Sahel and West Africa these links are relatively clear and well documented; they may be less obvious in other places.

Mitigation

- i) Assess the emission profile of the region/country(ies) and the options for reducing them.
- ii) Assess the current energy systems in the region and the potential renewable energy resources. What trade agreements or relationships and infrastructure would be required for renewables to become more accessible?

- iii) Assess the potential terrestrial and aquatic carbon sinks in the region and the capacity for carbon capture and storage. Do any of the relevant jurisdictions have regulated carbon markets? Who is participating in these markets and developing carbon projects? These actors need to be involved in the process, as they can finance adaptation and mitigation strategies.

Adaptation

- iv) Assess climate impact pathways and associated risks to communities such as increasing water scarcity, flooding and erosion, coastal erosion and sea level rise, extreme heat events, wildfires, desertification, ecosystem degradation and others as applicable. There will likely be initiatives underway to adapt to and manage these impacts that can be built upon or integrated into the process.
- c) Building on the foregoing assessments, undertake political analyses to assess the strength of the linkages between climate change and the issues in dispute and the vulnerability of the region to future instability as a result of climate change. In addition, consider the mitigation and adaptation processes that are underway and how these processes can be linked to or integrated with the peace process (review the case studies referred to above as examples of the kind of analysis that may be available).⁸⁹

2. PROCESS DESIGN AND CONVENING

During the process design and convening phase, mediation teams and supporting organizations normally enable the potential parties to confirm the feasibility and desirability of negotiating agreements and to establish a suitable forum and process for negotiation and collaboration. With respect to development of climate change adaptation and mitigation strategies, and building on what has been revealed through the assessment, the team and parties together need to consider:

- 1 The strength of the links between climate change impacts and the priority issues for resolution, including the vulnerability of the affected communities to future impacts and instability arising from climate change.
- 2 If ending violent conflict is a principal purpose of the peace process, then the mediation team may need to separate engagement of the parties on the associated issues—cease-fire, disarmament, demobilization, reintegration—from engagement of the parties on the broader peace-building issues, which could include climate change mitigation and adaptation. The representatives of the parties may be different for these different streams of negotiations and there may be a need to create multiple streams bringing them together at the appropriate time. A key consideration is how to design the inter-related discussions such that the climate adaptation and mitigation discussion is not unduly constrained by the negotiation of military and related specific conflict issues.

- 3 How the peace process will link to, build upon, or deliver the NDCs and NAPs. Existing processes may be underway to deliver the NDCs and NAPs, and integration of these processes into the peace process will need to be addressed in the peace process design. The key actors involved in the NDCs and NAPs will likely have interests and ideas regarding how these processes are linked or integrated, and those interests and ideas will need to be addressed.
- 4 Engaging relevant international and domestic climate change mitigation and adaptation actors in the process design in order to facilitate their support for and participation in the process in an appropriate manner. As outlined above, these actors include member states with an interest in the location, regional organizations with a climate change and security mandate, international finance institutions, multinational and national corporations and commercial and civil society organizations and foundations.
- 5 How to ensure that the full scope of potential adaptation and mitigation strategies is considered. This potential may not be obvious or well understood by the primary actors, particularly if the political context is highly conflicted. The principal actors in unstable, impoverished or war-torn countries may be entirely focused on immediate conflict reduction issues. They may not be aware or appreciate how and why climate change is important to them. Adaptation may not be a matter of choice but rather an imperative that, if not fully understood, can also limit opportunities—e.g., the benefits associated with engaging in carbon markets and partnering with international organizations and multinational corporations that are prepared and mandated to make investments to support mitigation and adaptation. Given these uncertainties, it is advisable that the scope of potential mitigation and adaptation strategy consideration by the parties be broad—it may be useful to start with awareness building activities. It may also be useful to create an ideas-generating mechanism that is seen as legitimate but is unconstrained by the primary actors—such as a panel of respected experts mandated to develop mitigation and adaptation proposals for consideration by the parties.

3. BUILDING AGREEMENT

Building agreement is the central focus of peace processes, and this is when substantive integration of climate change mitigation and adaptation strategies can occur. Given the technical dimensions of climate change adaptation and mitigation strategies, joint information gathering, analyses and awareness-building may require special attention in this phase and build on the work undertaken during the assessment and process design phases. There may be a wide range of mitigation and adaptation strategies worth considering by the parties that may not be part of the NDCs and NAPs, if these even exist. Therefore, having a robust technical support process that translates technical information into information that all parties can digest may be instrumental to greater success in addressing climate change within the peace process. A clear understanding of climate change may also be helpful for the parties so they can better appreciate what they are facing collectively and how the inevitable impacts may influence their futures.

Potential elements of mitigation strategies (all of which can attract green financing and energy transition investments while potentially engaging carbon markets as sources of financing) may include:

- Fuel-switching within the relevant energy systems from emission-intensive fuels to lower emission fuels and ultimately to renewables. This energy transition is at the core of the recent road map to 1.5 degrees published by the International Energy Agency (referenced in section 3.2 above)
- Investments in transportation infrastructure, buildings, industries and appliances to reduce emissions
- Investment in nature-based solutions to restore ecosystems and absorb CO₂ from the atmosphere while creating a range of environmental services that support healthy communities and potentially reducing vulnerability to storms, desertification and other climate change related impacts. There are significant opportunities in avoided forest degradation and reforestation, and there are progressive organizations dedicated to supporting mitigation of climate change through healthy forest ecosystems.⁹⁰ There are similar opportunities with respect to land use generally.⁹¹
- Sustainable climate-smart agricultural practices
- Development of carbon capture and storage infrastructure for existing or new industrial developments, and
- Direct sequestration of CO₂ for storage or manufacture of fuels and other carbon products.

Investment in these low carbon/green economies will create employment and economic development that may in turn create opportunities for unemployed citizens and youth as well as demobilized soldiers.

Potential elements of adaptation strategies may include:

- Improving water management technology and infrastructure to address climate impacts such as increasing the efficiency of water utilization infrastructure and standards and developing new sources of water through wastewater treatment and desalinization systems and treatment plants
- Engaging displaced populations, unemployed youth and demobilized soldiers in the implementation of mitigation and adaptation strategies where applicable
- Redesign or construction of infrastructure to protect livelihoods—flood control, coastal erosion and inundation
- Establishing mechanisms such as land use plans to manage conflicts between groups that are known to exist and likely to escalate due to climate change impacts, and
- Development of early warning systems that provide advance notice of potential conflict associated with climate-related impacts, e.g., drought forecasts and provision of alternative water sources.

These potential mitigation and adaptation strategies can be packaged to both reduce risk to all parties and create opportunities for mutual gain, two of the main ingredients that sustain peaceful relationships.

4. IMPLEMENTATION AND MONITORING

There are a wide range of uncertainties and complexities associated with climate change mitigation and adaptation strategies, whether they are part of a peace process or not. To a certain extent these can be anticipated and proactively managed through an adaptive management framework that is agreed upon as part of the strategies. Adaptive management frameworks normally include:

- 1 Objectives and indicators that reflect expected outcomes and how they can be measured.
- 2 Monitoring protocols for gathering reliable information on the implementation of mitigation and adaptation strategies and the effectiveness of those strategies as well as unanticipated developments or results. The strategies should be expected to have unintended and unanticipated impacts that need to be addressed.
- 3 Processes for gathering new information relevant to the implementation of the strategies (e.g., technological improvements that can enhance the effectiveness of the strategies, reduce the costs or provide better alternatives).
- 4 Governance arrangements that provide for technical analyses of monitoring information and new information to feed into decision-making processes that can adjust strategies and implementation plans accordingly. These governance arrangements need to maintain the integrity of the overall agreement and be connected to, or be a part of, the overall governance arrangements if mitigation and adaptation strategies are part of a broader conflict prevention or peace agreement.

Conclusion

The imperative and the opportunity to address climate change in peace agreements and conflict prevention processes is both challenging and increasingly urgent. The options for rising to this challenge outlined in this report are not intended to be exhaustive and only provide a starting point and guidance for opportunities and strategies that may be applicable in any particular location. As a result of this rapidly unfolding experience, more refined approaches will be developed. Accelerated action is required now to address the nexus of climate change and conflict while revealing these more refined approaches. This report is aimed at supporting these immediate actions.

Additional steps can be taken to enhance the capacity of peace processes to contribute to climate change mitigation and adaptation that build on the content of this report. These include:

- Engaging peace mediators and other practitioners with climate change activists, scientists and leaders from all sectors in the development and dissemination of innovations that can expand the capacity of peace processes and the communities in fragile and war-torn regions to strengthen peace and increase resilience to climate change.
- Documenting and communicating the ongoing effort to integrate climate change mitigation and adaptation into peace processes, and learning from successes and failures.

APPENDIX A

Interviewees and UN Staff Contributing to This Report

We are deeply indebted to the following persons for their generous contributions of their time and expertise that made the preparation of this report possible.

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