

Preventing a Warming War: Protection of the Environment and Reducing Climate Conflict Risk as a Challenge of International Law

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Abstract

Global warming poses serious risks to the environment, communities, and international peace and security. Significant concerns have been raised that, in the case of climate policy failures, the world may enter a *Warming War*, threatening the future viability of the planet and its life-sustaining ecosystems. While the regime of treaties and agreements governing climate change acknowledges the science and threats posed by global warming, it is not well positioned to constrain the securitization of climate change. A function of international law is to prevent armed conflict by resolving disputes through the judicial application of principles and norms governing relations between States. However, to date, it has been ineffective in addressing the impacts of climate change on armed conflict, because the treaties applicable to climate change fail to provide preventative, enforcement, and dispute resolution mechanisms. It is time for international law to establish judicial bodies with jurisdiction for conflict resolution and response capacities in the pre-phase to a *Warming War*. The challenge is to develop soft security measures to avoid climate conflict risks turning violent and becoming a hard security issue, attracting the use of force by the United Nations Security Council (UNSC). The establishment of an International Court for the Environment (ICE) is proposed as an entity that could enforce legally binding norms and resolve climate-induced disputes, opening an avenue for stakeholders to bring climate loss and damage cases to court. Aside from the reduction of greenhouse gases (GHG) to limit global warming, and the establishment of new legal regimes, alternative actions can be undertaken to protect the environment and communities, by mitigating climate-related risks. There is growing discourse surrounding climate change as a *threat multiplier*, exacerbating existing vulnerabilities. In the pre-phase to conflict, there is an urgent need to identify these vulnerabilities and their levels of influence on the compound effects of climate and conflict risks.

A. Introduction

Climate change caused by the release of GHG has serious effects on water, forests, farmland, and biodiversity, as well as on oceans, coasts, polar regions, and other eco-zones.¹ Increasing uncertainties and risks arise from storms, droughts, and other weather extremes that are manifested as natural disasters.² Through its multiple effects, climate change is threatening human livelihoods and life on earth, exacerbating vulnerabilities and increasing the risk of insecurity and violent conflict, especially in developing States.³ These impacts of climate change confront the planet with the possibility of a *Warming War*.⁴ On this basis, both international law and the UNSC need to interpret climate change as an issue of international peace and security.⁵ Doing so may contribute to preventing conflict that is aggravated by the issues presented by climate change, such as the competition for natural resources and migration due to the forced displacement of individuals affected by environmental degradation. This paper considers how climate change is presenting risks to international peace and security and the current capability of international law and the UNSC to address this. It then explores how existing law and policy mechanisms can be improved as well as novel approaches that can address climate change's security risks at an international level.

It is outside the scope of this article to discuss the efforts that can be undertaken in the domestic sphere through law and policy to prevent climate-induced conflict. Instead, it discusses the mechanisms available through

¹ Intergovernmental Panel on Climate Change (IPCC) – Working Group II, 'AR 5 Climate Change 2014 – Impacts, Adaptation, and Vulnerability' (2014), available at <https://www.ipcc.ch/report/ar5/wg2/> (last visited 5 February 2020) [IPCC – Working Group II, AR5 Climate Change 2014].

² IPCC, 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation' (2012), available at https://www.ipcc.ch/site/assets/uploads/2018/03/SREX_Full_Report-1.pdf (last visited 5 February 2020).

³ German Advisory Council on Global Change (WBGU), 'World in Transition: Climate Change as a Security Risk' (2007), available at https://www.wbgu.de/fileadmin/user_upload/wbgu/publikationen/hauptgutachten/hg2007/pdf/wbgu_hg2007_engl.pdf (last visited 5 February 2020).

⁴ See generally, K. Davies & T. Riddell, 'The Warming War: How Climate Change is Creating Threats to International Peace and Security', 30 *Georgetown Environmental Law Review* (2017) 1, 47.

⁵ *Climate Change and its Possible Security Implications: Report of the Secretary-General*, UN Doc A/64/350, 11 September 2009; see Art. 39 of the *Charter of the United Nations*, 26 June 1945, 1 UNTS XVI [UN-Charter], noting that the use of *international peace and security* is intended to fall within the scope of this article.

international law and the UNSC that can be utilized to resolve climate-induced conflict. In this regard, deterrents, such as the implementation of sanctions and trade embargoes, are outside the scope of this paper. For the purpose of this paper, we follow the UN International Law Commission's (ILC) definition of armed conflict developed as a result of its analytical work on the effects of armed conflict on treaties, being "[...] a situation in which there is resort to armed force between States or protracted resort to armed force between governmental authorities and organized armed groups".⁶ The International Law Association has elaborated on this definition by introducing two qualifying factors for armed conflict, being "[t]he existence of [...] armed groups" that are "[e]ngag[ing] in fighting of some intensity".⁷ Further, the first definition of environmentally-displaced people refers to persons

"[...] who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life".⁸

To outline how the international legal system can respond in the pre-phase and other phases of imminent armed conflict (which are interconnected as conflict-affected States are more inclined to relapse in conflict), this paper firstly gives insight into the climate-conflict nexus by demonstrating to what degree climate change is becoming a driver of conflict to threaten international peace and security, potentially leading to a *Warming War*.⁹ Secondly, the paper discusses the role of international law in preventing armed conflict, and gives a brief background of the treaties and agreements governing climate change and existing enforcement mechanisms.

⁶ *Report of the International Law Commission to the Sixty-Third Session*, UN Doc A/66/10, 26 April - 3 June and 4 July - 12 August 2011, 175, para. 100, Art. 2 (b); for commentary on the definition's genesis, see *ILC Report of the Commission to the General Assembly to the Sixtieth Session, Yearbook of the International Law Commission* (2008), Vol. II, Part Two, 47; see further *Prosecutor v. Duško Tadić aka "Dule"*, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, IT-94-1-AR72, 2 October 1995, para. 70.

⁷ International Law Association, 'Final Report on the Meaning of Armed Conflict in International Law' (2010), available at www.rulac.org/assets/downloads/ILA_report_armed_conflict_2010.pdf (last visited 5 February 2020).

⁸ E. El-Hinnawi, *Environmental Refugees* (1985), UNEP, 4.

⁹ See generally, Davies & Riddell, *supra* note 4, 47.

After concluding that the existing instruments of international law cannot effectively deal with climate change as a threat to international security, the paper provides recommendations to strengthen existing legal and policy mechanisms as well as for the creation of novel mechanisms to prevent the occurrence of climate-induced armed conflict, and thus protect the environment from its damages. It recommends that the UNSC formally recognizes climate change as a threat to international peace and security to provide stronger mechanisms that mitigate climate induced or exacerbated conflict.¹⁰ Further, it suggests that the UNSC uses its Chapter VII powers to influence the enforcement of environmental obligations where their breach may induce conflict. With a view towards the peaceful settlement of disputes,¹¹ this paper suggests the creation of an International Court for the Environment (ICE) as a forum for States to resolve climate-related disputes. Overall, the paper recommends that both the international legal system and the UNSC take greater action to recognize climate change as a security threat and ensure that there are adequate mechanisms in place to diffuse climate-induced disputes before they escalate into armed conflict.

The International Law Commission has a mandate to codify and progressively develop international law, e.g. with the aim of Protection of the Environment in relation to Armed Conflict (PErAC). The role of the ILC is to develop international law through topical studies. This paper's recommendations are designed to complement its work in relation to the protection of the environment in the context of armed conflict. Its work has involved reviewing applicable laws protecting the environment in the lead up to, during, and the aftermath of armed conflict and the formulation of draft principles to clarify and fill lacunas in the law.¹²

¹⁰ UN-Charter, *supra* note 5, Art. 39.

¹¹ *Ibid.*, Art. 1.

¹² See for example, *Report of the Drafting Committee of the International Law Commission to the Sixty-Sixth Session, Protection of the Environment in Relation to Armed Conflict: Text of the Draft Introductory Provisions and Draft Principles Provisionally Adopted so far by the Drafting Committee*, UN Doc. A/CN.4/L.870, 22 July 2015; *Report of the Drafting Committee of the International Law Commission to the Sixty-Eight Session, Protection of the Environment in Relation to Armed Conflicts: Text of the Draft Principles Provisionally Adopted During the Present Session by the Drafting Committee*, UN Doc. A/CN.4/L.876, 3 August 2016. On the Effects of Armed Conflicts on Treaties, GA Res. 66/99, UN Doc. A/RES/66/99, 9 December 2011.

B. Climate Change as a Driver of Conflict

I. Climate Change as a Risk Multiplier

Climate change is characterized as a risk multiplier, connected with other risk factors through multiple linkages from local to global levels. It imposes stress on natural resources such as water, food, and energy, and threatens the functioning of critical infrastructures and supply networks, provoking production losses, price increases, and financial crises. In the most affected regional hot spots, climate change and local environmental degradation can contribute to poverty and hunger while undermining human security, social living conditions, and political stability. It can aggravate migration movements and conflict situations.¹³

Numerous studies have examined empirical relationships between climate change and conflict.¹⁴ Some have found significant climate-conflict linkages,¹⁵ while others describe weak and ambiguous links.¹⁶ Particularly critical is the situation in fragile and failing States with social fragmentation and inadequate governance. Climate change can exacerbate pre-existing vulnerabilities experienced by individuals and communities. It can increase competition for food and water security, threaten human health and well-being, and increase the likelihood of extreme weather events and disasters.¹⁷

¹³ J. Scheffran & A. Battaglini, 'Climate and Conflicts – The Security Risks of Global Warming', 11 *Regional Environmental Change* (2011) 1 Supplement, 27.

¹⁴ J. Scheffran *et al.*, 'Climate Change and Violent Conflict', 336 *Science* (2012) 6083, 869; S. M. Hsiang, M. Burke & E. Miguel, 'Quantifying the Influence of Climate on Human Conflict', 341 *Science* (2013) 6151, 1212; N. von Uexkull *et al.* (eds), 'Civil Conflict Sensitivity to Growing-Season Drought', 113 *Proceedings of the National Academy of Sciences of the United States of America* (2016) 44, 12391; C. Adams *et al.* (eds), 'Sampling Bias in Climate-Conflict Research', 8 *Nature Climate Change* (2018) 3, 200; K. J. Mach *et al.* (eds), 'Climate as a Risk Factor for Armed Conflict', 571 *Nature* (2019) 7764, 193.

¹⁵ See for example, M. B. Burke *et al.* (eds), 'Warming Increases the Risk of Civil War in Africa', 106 *Proceedings of the National Academy of Sciences of the United States of America* (2009) 49, 20670; J.F. Maystadt, & O. Ecker, 'Extreme Weather and Civil War: Does Drought Fuel Conflict in Somalia through Livestock Price Shocks?' 96 *American Journal of Agricultural Economics* (2014) 4, 1157.

¹⁶ E.g. H. Buhaug, 'Climate not to Blame for African Civil Wars', 107 *Proceedings of the National Academy of Sciences of the United States of America* (2011) 38, 16477; M. Couttenier & R. Soubeyran, 'Drought and Civil War In Sub-Saharan Africa', 124 *The Economic Journal* (2014) 575, 201.

¹⁷ Davies & Riddell, *supra* note 4, 47.

The environmental and security scholar Thomas Homer-Dixon has described the competition for resources and the mass migration that can occur as a result of climate change as drivers of conflict; for instance, if resource abundant territory becomes sparse, and stable governments deteriorate under increasing domestic pressures.¹⁸ Scheffran *et al.* found that “[...] countries with low human development are particularly vulnerable to the coupling of natural disasters and armed conflict [...]”, and argue that effective institutions and governance mechanisms are important to prevent climate-induced conflicts.¹⁹

“[S]ince 2008, an average of 26.4 million persons [per year, globally,] [...] have been forcibly displaced by floods, windstorms, earthquakes or droughts.”²⁰ As the territorial integrity of some States is threatened (e.g. due to rising sea levels),²¹ increasing migration levels, competition for available resources, and ethnic tensions are occurring and predicted to escalate.²² The additional competition, pressure, and value placed on accessing shared resources can affect the ability of States and create new challenges for the international system to address the climate-conflict nexus.²³ In this way, climate change can be seen as a threat multiplier, driving the likelihood of conflict, including violent conflict.²⁴

A synopsis of empirical studies found that there are violent conflicts associated with climate change, especially in regions with large population growth, low levels of development, low economic growth, a moderate level

¹⁸ T. F. Homer-Dixon, ‘Terror in the Weather Forecast’ (2007), available at <http://www.nytimes.com/2007/04/24/opinion/24homer-dixon.html> (last visited 05 February 2020).

¹⁹ J. Scheffran *et al.* (eds), ‘Disentangling the Climate-conflict Nexus: Empirical and Theoretical Assessment of Vulnerabilities and Pathways’, 4 *Review of European Studies* (2012) 5, 1.

²⁰ European Parliamentary Research Service, ‘The Concept of ‘Climate Refugee’: Towards a Possible Definition’ (2018), 1, available at [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS_BRI\(2018\)621893_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/621893/EPRS_BRI(2018)621893_EN.pdf) (last visited 12 March 2020).

²¹ At its 71st session, in 2019, the ILC included the topic ‘Sea-Level Rise in Relation to International Law’ in its programme of work, ILC, *Annual Report of the International Law Commission to the Seventy-First Session, Sea-level Rise in Relation to International Law*, UN Doc. A/74/10, 29 April - 7 June and 8 July - 9 August 2019, 329 - 339, paras. 202 - 262.

²² V. Koubi, ‘Exploring the Relationship Between Climate Change and Violent Conflict’, 16 *Chinese Journal of Population Resources and Environment* (2018) 3, 197, 198.

²³ *Climate Change and its Possible Security Implications: Report of the Secretary-General*, *supra* note 5.

²⁴ P. Huntjens & K. Nachbar, ‘Climate Change as a Threat Multiplier for Human Disaster and Conflict: Policy and Governance Recommendations for Advancing Climate Security’, The Hague Institute for Global Justice, Working Paper 9, May 2015, 1; T. F. Homer-Dixon, *Environment, Scarcity and Violence* (1999).

of democracy, political instability, and pre-existing tensions in the immediate vicinity.²⁵ Whether climate change induces or exacerbates violent conflicts depends on the political and socio-economic conditions.

II. Identifying and Addressing Vulnerabilities

The relationship between climatic change and conflict dynamics is complex and connected through multiple linkages and pathways.²⁶ While legal mechanisms are important in addressing armed conflict, the best way to prevent climate-conflict linkages is to mitigate climate change in the first instance. Decoupling armed conflict from climatic effects depends on both vulnerability to climate change and vulnerability to conflict. Vulnerability can be broken down into three factors: exposure and sensitivity to climate-related events and adaptive capacity.²⁷ Using vulnerability indicators provides a geographical representation of countries that are facing the vulnerability to either, or both, climate change and violent conflict, specific to each region.²⁸ The question is whether the combined vulnerability to disaster and conflict exceeds adaptive and coping capacity.

“A comparison of the number of deaths from natural disasters, and battle-related deaths [per capita in the past,] [...] reveals that both are highest in countries with a low human development index [...].”²⁹ Many of these countries are home to the world’s poorest people, who already experience increased threats to their lives and health that undermine human development. “If climate change adds to these risks and vulnerabilities, it can increase humanitarian crises and aggravate

²⁵ Scheffran *et al.* (eds), ‘Disentangling the Climate-Conflict Nexus: Empirical and Theoretical Assessment of Vulnerabilities and Pathways’, *supra* note 19; T. Ide *et al.* (eds), ‘The Climate-Conflict Nexus: Pathways, Regional Links, and Case Studies’, in H. G. Brauch *et al.* (eds), *Handbook on Sustainability Transition and Sustainable Peace* (2016), 285; A. Detges, ‘Climate and Conflict: Reviewing the Statistical Evidence: A Summary for Policymakers’ (2017), available at <https://www.adelphi.de/en/publication/climate-and-conflict-reviewing-statistical-evidence> (last visited 5 February 2020).

²⁶ Scheffran *et al.* (eds), ‘Disentangling the Climate-Conflict Nexus: Empirical and Theoretical Assessment of Vulnerabilities and Pathways’, *supra* note 19, 8.

²⁷ IPCC – Working Group II, ‘AR4 Climate Change 2007 – Impacts, Adaptation, and Vulnerability’ (2007), available at https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg2_full_report.pdf (last visited 5 February 2020).

²⁸ IPCC – Working Group II, ‘AR5 Climate Change 2014’, *supra* note 1.

²⁹ Scheffran *et al.* (eds), ‘Disentangling the Climate-Conflict Nexus: Empirical and Theoretical Assessment of Vulnerabilities and Pathways’, *supra* note 19, 8.

existing conflicts without directly causing them.”³⁰ The double vulnerability to violence and environmental hazard is leading to compound effects where “[...] environmental change [...] can [...] make societies more vulnerable to [...] violence [which] [...] in turn can make societies more vulnerable to environmental change, leading to a trap from which escape is difficult”.³¹ In the most affected regions, compounding risks affect the erosion of social order and State failure, aggravate violent conflicts, and lead to a “[...] spiral of violence that further dissolves societal structures.”³²

The possible linkages between climate variability and climate change on the one hand, and the risk of violent conflict on the other, are studied in a large body of literature. These studies are diverse, often adopting different research designs, datasets, and methods, resulting in divergent findings.³³ As agreed in an expert assessment,³⁴ climate has historically affected armed conflict. Climate change will increase the future risks of conflict, but with large uncertainties and low ranking of climate as an influential conflict driver due to many possible causal mechanisms.³⁵ While climate variability and change are estimated to have substantially increased risk across five percent of conflicts to date, this estimate is predicted to increase to an average probability across experts of 13 percent for a two degree Celsius warming, and to 26 percent average increase under a scenario of four degrees warming.³⁶ Four drivers were ranked as particularly influential for conflict risk to date. These are: low socio-economic development, low capabilities of the State, intergroup inequality (for example, ethnic differences across groups), and recent history of violent conflict. The causal factor identified as most sensitive to the risk of conflict was economic shocks. Long-term economic development and stability is often dependent on the provision of natural resources. These, in turn, are affected by climate-related hazards such as floods, droughts, heat waves, or cyclones and their impact on

³⁰ *Ibid.*

³¹ J. Scheffran, T. Ide & J. Schilling, ‘Violent Climate or Climate of Violence? Concepts and Relations With Focus on Kenya and Sudan’, 18 *The International Journal of Human Rights* (2014) 3, 369, 375.

³² *Ibid.*, 369.

³³ H. Buhaug, ‘Climate-Conflict Research: Some Reflections on the Way Forward’, 6 *Wiley Interdisciplinary Reviews Climate Change* (2015) 3, 269; Mach *et al.* (eds), *supra* note 14, 193.

³⁴ Mach *et al.* (eds), *supra* note 14, 193.

³⁵ *Ibid.*

³⁶ *Ibid.*, 194.

agricultural productivity including food prices.³⁷ The consequences of climate-related economic shocks, which could heighten conflict risks, are highly variable and depend on affected areas and timing, affected sectors and groups, and political will and response capacity.

It is estimated that climate-related conflict risk can be reduced with a 67 percent average probability across experts through investments addressing known drivers, which drops to 57 percent for a four degree Celsius warming scenario with its more severe climate change effects.³⁸ Common factors determine both climate and armed conflict vulnerability. Approaches to addressing these vulnerabilities can also be similar. In the case of climate change these approaches are referred to as *adaptation* and in the case of armed conflict, *conflict risk reduction*. The advancement of human security and sustainable development will progress when interlinked and supported by governance. Adaptation options can support key aspects of livelihood security for nations and communities, such as food and economic security. Therefore climate adaptation should be recognised and integrated into measures designed to maintain peace and security, for example, mediation to prevent conflict, peacekeeping activities, aid delivered post-conflict, and reconstruction post conflict.³⁹

Exposure and sensitivity to climate extremes present risks to human life. These include risks to income, well-being, health, infrastructure, migration, and security. These all affect social stability and conflict. Sensitivity depends on factors such as agriculture and land degradation, low income and development, low education levels and health problems, the concentration of poverty and communities in areas at risk.⁴⁰ To reduce vulnerability and increase survival rates, it is important to limit adverse social consequences and encourage all modes of cooperation. For example, this can be accomplished through approaches such as disaster risk reduction, sustainable development, and strengthening resilience, and institutional and governance capacities. Conflict-sensitive adaptation and peacebuilding are essential to achieve conflict risk reduction in fragile contexts.⁴¹

³⁷ *Ibid.*, 195.

³⁸ *Ibid.*, 196.

³⁹ *Ibid.*, 196.

⁴⁰ J.W. Busby, T.G. Smith & N. Krishnan, 'Climate Security Vulnerability in Africa Mapping 3.0', 43 *Political Geography* (2014), 51.

⁴¹ S. Mitra, J. Vivekananda, 'Compounding Risk - Disasters, Fragility and Conflict' (2015), available at https://www.international-alert.org/sites/default/files/ClimateChange_DisastersFragilityConflict_EN_2015.pdf (last visited 5 February 2020).

III. Case Studies of Climate Change as a Driver of Conflict

Several case studies have suggested climate change as a driver of conflict; in particular, the events during the Arab Spring and the Civil War in Syria. Droughts and heatwaves in different parts of the world have resulted in the loss of wheat harvests, causing wheat prices to inflate. In Egypt, the government did not continue to subsidize the price of wheat, thus the price of bread tripled and widespread protests ensued.⁴² The droughts in Syria exacerbated the vulnerabilities of the local population and placed increasing political pressure on a system with poor institutional capacity and governance. The increased competition for water and agriculture increased economic losses in rural areas and resulted in large-scale migration to semi-urban areas.⁴³ The drought could have been one of several contributing factors to migration and violence but does not explain why neighboring countries, such as Jordan, did not experience civil war. It is more likely that the policies of the Assad government were highly influential in the escalation of the conflict in Syria. This demonstrates how important the role of good, or poor, governance is to determine whether climate change causes conflict, or rather, contributes to it. Ultimately, the combination of all factors resulted in the civil war.⁴⁴

The African continent is particularly vulnerable to both conflict and climate change. It is strongly affected by environmental problems (lack of water, soil erosion, desertification, deforestation of rainforests), exacerbated by climate change. Millions of people are moving to cities and neighboring countries, resulting in social problems and conflicts.⁴⁵ In the Horn of Africa, a combination of factors (war, oppression, hunger, drought) have destabilized the political situation, leading to forced displacement, violent conflict, and external intervention. This became evident in the Darfur conflict, which was called the 'first climate war'. This is because nomadic and peasant peoples were under pressure from the expansion of arid zones, even though the failed policies of the Sudanese government and the exploitation of oil resources had a direct

⁴² T. Sternberg, 'Chinese Drought, Bread and the Arab Spring', 34 *Applied Geography* (2012), 519, 520.

⁴³ *Ibid.*

⁴⁴ On the controversial discussion see: C.P. Kelley *et al.* (eds), 'Climate Change in the Fertile Crescent and Implications of the Recent Syrian Drought' 112 *Proceedings of the National Academy of Sciences of the United States of America* (2015) 11, 3241; J. Selby *et al.* (eds), 'Climate Change and the Syrian Civil War Revisited', 60 *Political Geography* (2017), 232.

⁴⁵ D. Ionesco, D. Mokhnacheva & F. Gemenne, *The Atlas of Environmental Migration* (2017).

bearing on the escalation of that conflict.⁴⁶ In 2017, the UNSC specifically recognized climate change as a contributing factor to the instability in the Lake Chad region.⁴⁷ The G7 identified the climate-induced conflict in Lake Chad to be potentially linked with a threat to international peace and security, given the connections between the drought, food insecurity, and the ability of Boko Haram to utilize these vulnerabilities to recruit local members.⁴⁸

Another vulnerable region is South Asia, with its high population density and exposure to extreme climatic events and the impacts of rising sea level. For example, Bangladesh is extremely vulnerable to flood risks in river and coastal zones. With rising sea levels and an increase in hurricanes and floods as a result of global warming, millions of people are at risk.⁴⁹ Related social and economic upheavals, along with compound threats to human security, can trigger or exacerbate conflicts. These include conflicts within neighboring nations, such as India, where millions of people have migrated from Bangladesh.

The above case studies are indicative of the role of climate change as a driver of conflict and as a threat to international peace and security. They demonstrate that assumptions about simple causal relations cannot be justified. Rather, a complex climate-conflict nexus, affected by multiple stressors, is more likely to be the case. The following section describes recent progress recognizing the correlation between climate and conflict.

IV. Addressing and Recognizing the Security Risks of Climate Change

The international community has widely recognized climate change as a driver of conflict and security risks. Former UN Secretary General Ban Ki-moon stated, in 2007, that “[...] [the] scarcity of food and water [will be] transforming

⁴⁶ Scheffran, Ide & Schilling, ‘Violent Climate or Climate of Violence? Concepts and Relations With Focus on Kenya and Sudan’, *supra* note 31.

⁴⁷ SC Res. 2349, UN Doc S/RES/2349 (2017), 31 March 2017.

⁴⁸ *Ibid.*; see the G7 commissioned report, C. Nagarajan *et al.* (eds), ‘Climate-Fragility Profile: Lake Chad Basin’ (2018), available at https://www.adelphi.de/en/system/files/mediathek/bilder/Lake%20Chad%20Climate-Fragility%20Profile%20-%20adelphi_0.pdf (last visited 5 February 2020).

⁴⁹ Bangladesh Institute of International and Strategic Studies and Saferworld, ‘Climate Change and Security in Bangladesh — A Case Study’ (2009), available at <https://www.saferworld.org.uk/resources/publications/404-climate-change-and-security-in-bangladesh> (last visited 5 February 2020); R. Brouwer *et al.* (eds), ‘Socioeconomic Vulnerability and Adaptation to Environmental Risk: A Case Study of Climate Change and Flooding in Bangladesh’, 27 *Risk Analysis* (2007) 2, 313.

peaceful competition into violence and [...] droughts [will be] sparking massive human migrations, polarizing societies and weakening the ability of countries to resolve conflicts peacefully.”⁵⁰ In 2018, the UN Deputy Secretary General Amina Mohammed implored the UNSC to recognize climate change as a threat to international peace and security. She stated that:

“[t]he impacts of climate change go well beyond the strictly environmental. Climate change is inextricably linked to some of the most pressing security challenges of our time. It is no coincidence that the countries most vulnerable to climate change are often those most vulnerable to conflict and fragility.”⁵¹

Several States have made submissions to the UNSC that support this view. For instance, Samoa has argued that climate change is “[...] a threat to territorial integrity, security and sovereignty.”⁵² Malaysia has asserted that “[...] if left unchecked, climate change could [...] be the greatest threat multiplier endangering global security.”⁵³

The US Department of Defense recognized climate change as a threat to national security, stating, in 2014, that:

“[...] it can significantly add to the challenges of global instability, hunger, poverty and conflict. Food and water shortages, pandemic disease, disputes over refugees and resources, more severe natural disasters – all place additional burdens on economies, societies, and institutions around the world.”⁵⁴

⁵⁰ United Nations, ‘Security Council Holds First-Ever Debate on Impact of Climate Change on Peace, Security, Hearing over 50 Speakers’ (2007), available at <https://www.un.org/press/en/2007/sc9000.doc.htm> (last visited 5 February 2020).

⁵¹ United Nations, ‘Impacts of Climate Change Go Well Beyond ‘the Strictly Environmental’, Deputy Secretary-General Tells Security Council Debate’ (2018), available at <https://www.un.org/press/en/2018/dsgsm1195.doc.htm> (last visited 5 February 2020).

⁵² UNSC, *Maintenance of International Peace and Security*, UN Doc S/PV.7499, 30 July 2015, 5.

⁵³ *Ibid.*, 18.

⁵⁴ United States Department of Defense, ‘2014 Climate Change Adaptation Roadmap’ (2014), available at https://www.acq.osd.mil/eie/Downloads/CCARprint_wForward_e.pdf (last visited 5 February 2020).

This includes possible effects on the military, which is involved in humanitarian operations, disaster and coastal protection, and is required to adapt to new tasks, changes in operational practices, and supply problems. A number of measures for reducing climate security risks were suggested in the 2015 G7 report, *A New Climate for Peace*.⁵⁵ Commenting on this report, former US Secretary of State John Kerry described climate change as “[...] a serious threat to global security” and welcomed its recommendations.⁵⁶ According to a 2019 US Department of Defense report, more than two-thirds of the military’s operationally critical installations are threatened by climate change.⁵⁷

A new level of integrated climate security assessments and strategies on high level international diplomatic and security policy agendas has been established with the Planetary Security Initiative (PSI), launched by the Dutch Ministry of Foreign Affairs in 2015. To catalyze action in affected contexts, the PSI “[...] sets out best practice, strategic entry points and new approaches to reducing climate-related risks to conflict and stability, thus promoting sustainable peace in a changing climate.”⁵⁸ Major objectives to enhance political awareness of, and involvement in, the climate-security nexus are: building an inclusive community that is multi-lateral, multi-sectoral, and multi-disciplinary, and creating a regular structural platform for global cooperation.⁵⁹

Some examples of European progress in the governance of the climate-conflict nexus include:

- At the 3rd PSI conference, held on December 12-13, 2017, the *Hague Declaration on Planetary Security*⁶⁰ was agreed, with the aim of creating

⁵⁵ L. Rüttinger *et al.* (eds), ‘A New Climate for Peace: Taking Action on Climate and Fragility Risks’ (2015), available at <https://www.adelphi.de/en/publication/new-climate-peace---taking-action-climate-and-fragility-risks> (last visited 5 February 2020).

⁵⁶ J. Kerry, Press Statement on ‘G-7 Commissioned Report on Climate and Fragility Risks’ (2015), available at <https://2009-2017.state.gov/secretary/remarks/2015/06/244105.htm> (last visited 5 February 2020).

⁵⁷ Office of the Under Secretary of Defense for Acquisition and Sustainment, ‘Report on Effects of a Changing Climate to the Department of Defense’ (2019), available at <https://media.defense.gov/2019/Jan/29/2002084200/-1/-1/1/CLIMATE-CHANGE-REPORT-2019.PDF> (last visited 5 February 2020).

⁵⁸ For this and the following entries see Planetary Security Initiative, available at <https://www.planetarysecurityinitiative.org> (last visited 5 February 2020).

⁵⁹ *Ibid.*

⁶⁰ See Planetary Security Initiative, ‘The Hague Declaration on Planetary Security’ (2017), available at <https://www.planetarysecurityinitiative.org/signees> (last visited 5 February 2020).

an institutional home for climate security and coordinating migration and climate change responses, strengthening urban resilience, and conducting risk assessments. Additionally, developing sustainable and conflict-sensitive strategies in hot spots, such as Lake Chad, Mali, and Iraq, was identified as a priority.

- On February 26, 2018, the EU Foreign Affairs Council aimed for mainstreaming the climate-security nexus in policy dialogue, conflict prevention, development and humanitarian action, and disaster risk strategies, including frameworks of the G7 and the UNSC to develop effective responses across policy areas.⁶¹ It was identified that climate projects in developing countries need to become more conflict sensitive.
- On June 22, 2018, the EU High Representative for Foreign and Security Policy, Federica Mogherini, initiated a high-level event. She proposed further action to elevate the climate-security nexus to the highest political level in national, regional, and multilateral fora, maximizing political and diplomatic efforts to support the Paris Agreements' implementation, and improving reporting and early warning systems in the most exposed countries and regions.⁶² She highlighted the need for particular foci being placed on prevention for resilience building, women as agents of change, and action on the ground.
- Also in June 2018, the report *Europe's responsibility to prepare*, developed by the Center for Climate and Security (Washington, DC) and the Clingendael Institute (The Hague), suggested scaling responses to the climate threat across EU bodies. The report highlighted the need to

⁶¹ See Planetary Security Initiative, 'EU Takes the Lead in Climate Security' (2018), available at <https://www.planetarysecurityinitiative.org/news/eu-takes-lead-climate-security> (last visited 5 February 2020).

⁶² European Union External Action Service, 'Mogherini at the High-Level Event "Climate, Peace and Security: Time for Action"' (2018), available at https://eeas.europa.eu/topics/climate-environment-energy/47168/mogherini-high-level-event-climate-peace-and-security-time-action_en (last visited 5 February 2020).

routinely and rapidly incorporate these threats into EU institutions at senior levels alongside *traditional* security issues.⁶³

- In early 2019, the EU Foreign/Defense Ministers identified climate change as a global threat and threat multiplier. They called for action on early warning and geopolitical analysis, capabilities to respond to weather-related disasters, situational risks assessments, and the identification of resource and carbon footprints of military activities.⁶⁴
- On May 16, 2019, the EU Foreign Affairs Council addressed climate-security issues in highly vulnerable areas in the Sahel (e.g. in Mali and Lake Chad). Defense Ministers in the Council discussed joining forces on a European defense policy strategy on climate security and related issues, such as resource stress and disputes, population growth, humanitarian disasters, and migration. Specific measures could include intelligence on conflict risks and root causes, the protection of key infrastructure, border protection and disaster relief, as well as innovation of technology and materials.⁶⁵
- A culmination of activities was the *Berlin Climate and Security Conference* on June 4, 2019 in the German Foreign Ministry, which called for climate prevention and adaptation as an issue for the UNSC. A Call for Action suggested more risk-informed planning based on a Global Risk and Foresight Assessment, enhanced capacity for action, and improved operational responses on climate and security aligned with sustainable development, security, and peacebuilding in all UN programs.⁶⁶

⁶³ S. Fetzek & L. van Scheik, 'Europe's Responsibility to Prepare: Managing Climate Security Risks in a Changing World' (2018), available at <https://climateandsecurity.org/euresponsibilitytoprepare> (last visited 5 February 2020).

⁶⁴ European Union External Action Service, 'EU's Call to Raise Global Ambition on Climate Change' (2019), available at https://eeas.europa.eu/diplomatic-network/foreign-affairs-council/58210/eus-call-raise-global-ambition-climate-change_en (last visited 5 February 2020).

⁶⁵ Planetary Security Initiative, 'EU Security Community Considers Climate Security' (2019), available at <https://www.planetarysecurityinitiative.org/news/eu-security-community-considers-climate-security> (last visited 5 February 2020).

⁶⁶ Berlin Climate and Security Conference, 'Berlin Call for Action' (2019), available at <https://berlin-climate-security-conference.de/callforaction> (last visited 5 February 2020).

The above examples describe the recent momentum recognizing the climate-conflict nexus. The following section investigates one aspect of addressing the nexus, centered on legal approaches through international law.

C. The Function of Law to Prevent Conflicts

The previous sections of this paper have presented the links between climate change and conflict, building the evidence that, as temperatures rise, the likelihood of global conflicts will increase. Given that numerous States and the respective military organs already accept the climate-security nexus, the remainder of this paper will investigate if international law is *fit for purpose* to manage the threats of global warming while maintaining peace and security, and what are some of the legal options worthy of consideration moving forward. It will consider the strengthening of a range of existing legal and policy mechanisms, along with the establishment of a new dispute resolution mechanism that specializes in disputes linked to environmental laws.

The international legal system strives to maintain international peace and security by bringing about the settlement of international disputes by peaceful means.⁶⁷ As such, the international legal system has a number of fora in which States can resolve disputes diplomatically and without resorting to armed conflict. For example, States can make declarations to the International Court of Justice (ICJ) to resolve disputes.⁶⁸ Many multilateral treaties also provide a dispute settlement mechanism for States to seek remedies in cases of breaches of international legal obligations.⁶⁹ Further, in becoming a party to the UN, States agree to accept and enforce decisions made by the UNSC,⁷⁰ which has the power to settle disputes through a range of peaceful means,⁷¹ as well as the power to resolve threats to international peace and security through coercive, and non-coercive, measures.⁷²

While the ICJ and UNSC possess the ability to resolve disputes through legal and political means respectively, their powers have limited applicability

⁶⁷ UN-Charter, *supra* note 5, Art. 1.

⁶⁸ *Statute of the International Court of Justice*, 26 June 1945, 33 UNTS 993, Art. 36.

⁶⁹ See for example *United Nations Convention on the Law of the Sea*, 10 December 1982, 1833 UNTS 397 Part XV; *Marrakesh Agreement Establishing the World Trade Organisation*, 15 April 1994, 1869 UNTS 3, Annex II.

⁷⁰ UN-Charter, *supra* note 5, Art. 25.

⁷¹ *Ibid.*, Art. 33.

⁷² *Ibid.*, Art. 39; for instance, by utilising its powers in Articles 41 and 42 of the UN Charter.

to climate change. Importantly, they do not extend to enforcing the body of legal principles and norms governing climate change, as encapsulated in the *United Nations Framework Convention on Climate Change* (UNFCCC) and subsequent decisions of its Conference of the Parties (termed the International Climate Change Regime in this paper). The ICJ does not have jurisdiction to resolve disputes arising under the International Climate Change Regime, nor has the UNSC exercised its powers under article 39 of the UN Charter to recognize climate change as a threat to international peace and security. This is problematic because the International Climate Change Regime is lacking an effective dispute resolution mechanism,⁷³ and its principles and norms do not extend to climate change's adverse effects on international peace and security. How can the gap between conflict and dispute resolution, in the sphere of international peace and security on the one hand, and climate change's role in inducing and exacerbating conflict on the other hand, be bridged? This is an important consideration for international law to effectively address, with the objective of preventing climate-induced conflict.

I. The International Climate Change Regime

The *UNFCCC* was the first international treaty that realized the essential need for climate change mitigation through the reduction of GHG emissions.⁷⁴ The *UNFCCC* introduced general principles to guide the development of the International Climate Change Regime. Amongst these general principles is the precautionary principle that reasons against a lack of scientific certainty preventing action in the face of irreversible damage.⁷⁵ A further general principle is the principle of common but differentiated responsibilities and respective capabilities which acknowledges the disparity between developed States who have enjoyed the process of industrialization and developing States for their respective contributions of GHG emissions and economic capacities to respond

⁷³ Only three States, the Netherlands, the Solomon Islands and Tuvalu have accepted the ICJ's compulsory jurisdiction pursuant to Art. 14 of the UNFCCC; see United Nations Treaty Collection, *Status of the United Nations Framework Convention on Climate Change*, available at https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=IND&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=_en (last visited 5 February 2020).

⁷⁴ *United Nations Framework Convention on Climate Change*, 9 May 1992, 1771 UNTS 107.

⁷⁵ *Ibid.*, 170, Art 3.3.

to climate change.⁷⁶ These principles, along with the *Kyoto Protocol*,⁷⁷ have created objectives for States to reduce their GHG emissions over a number of years. The various commitments made in the subsequent *Copenhagen Accord*⁷⁸ have enabled climate finance to flow from international mechanisms down to developing States to mitigate GHG's and adapt to rising temperatures. These agreements are narrow in scope, focusing on capacity building, technology transfer, and finance for mitigation and adaptation measures, and do not deal directly with climate change as a threat to international peace and security.⁷⁹

In 2015, the *Paris Agreement* was signed by 195 of the 197 State Parties to the *UNFCCC*,⁸⁰ and by 2019, 185 States have become party to it.⁸¹ The *Agreement* aims to strengthen efforts to mitigate GHG emissions and increase adaptation measures by scaling up finance, technology transfer and capacity building.⁸² Notably, the *Paris Agreement* takes a bigger step than previous environmental instruments by explicitly recognizing that climate change is associated with “[...] loss and damage [...]”. Article 8 acknowledges “[...] the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change [...]”.⁸³ However, it further goes on

⁷⁶ *Ibid.*, 170, Art 4; for for a detailed analysis of this principle, see L.Rajamani, ‘Ambition and Differentiation in the 2015 Paris Agreement: Interpretive Possibilities and Underlying Politics’, 65 *International and Comparative Law Quarterly* (2016) 2, 493 and L. Rajamani, ‘The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime’, 9 *Review of European Community and International Environmental Law* (2002) 2, 120.

⁷⁷ *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, 2303 UNTS 162.

⁷⁸ UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its Fifteenth Session, Held in Copenhagen From 7 to 19 December 2009 – Addendum – Part Two: Action Taken by the Conference of the Parties at its Fifteenth Session*, UN Doc FCCC/CP/2009/11/Add.1, 30 March 2010, 4.

⁷⁹ Davies & Riddell, *supra* note 4, 58.

⁸⁰ UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its Twenty-First Session, Held in Paris from 30 November to 13 December 2015 – Addendum – Part Two: Action Taken by the Conference of the Parties at its Twenty-First Session*, UN Doc FCCC/CP/2015/10/Add.1, 29 January 2016, 2 [UNFCCC, Conference of the Parties, Report of the Conference of the Parties on its Twenty-First Session].

⁸¹ United Nations Treaty Collection, ‘Status of the Paris Agreement’, available at https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-7-d&chapter=27&clang=_en (last visited 5 February 2020); noting the United States of America’s withdrawal in 2017.

⁸² See for example, *Paris Agreement*, 12 December 2015, Art. 4, Art. 7, UNTS 54113.

⁸³ *Ibid.*, Art. 8.

to state that the *Paris Agreement* “[...] does not involve or provide a basis for any liability or compensation.”⁸⁴ This means that the *Agreement* cannot assist in establishing legal causation in legal action concerning climate change, nor does it provide any mechanism or remedy for States to resolve disputes if affected by another State’s breach of obligations. An additional limitation is the legally non-binding nature of the *Paris Agreement*, making it politically vulnerable, as can be evidenced by the US government’s withdrawal from the Agreement and its previous commitments to reducing GHG emissions.⁸⁵

Both the *UNFCCC* and the *Paris Agreement* were drafted as texts that do not include provisions related to armed conflict. While these texts do not contain procedural provisions that suspend or uphold their obligations during armed conflict, given that they aim to protect a common good, it could be assumed that they apply during and after armed conflict. This view would be in line with the ILC’s *Draft Articles on the Effects of Armed Conflict on Treaties* (as discussed in section C. III. 1).⁸⁶

Although the International Climate Change Regime has expanded in recent years, two important gaps have emerged. First, it has yet to adopt an effective dispute resolution mechanism. Without jurisdiction to redress breaches of international law obligations relating to climate change, there is no concrete way to resolve transboundary conflicts where the underlying driver is climate change. Second, despite its major aim of preventing “dangerous anthropogenic interference”⁸⁷ with the climate system, the word *dangerous* does not address international peace and security considerations in its interpretation, rather its focus is on the science. Broadening the scope of what constitutes a threat to international peace and security and mainstreaming climate change into conflict prevention is necessary to allow the law to be responsive to emerging climate

⁸⁴ UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its Twenty-First Session*, *supra* note 80, 8, para 51.

⁸⁵ See United Nations Secretary-General, ‘Statement Attributable to the Spokesman for the Secretary-General on the US Decision to Withdraw from the Paris Agreement’ (2017), available at <https://www.un.org/sg/en/content/sg/statement/2017-06-01/statement-attributable-spokesman-secretary-general-us-decision> (last visited 5 February 2020).

⁸⁶ ‘ILC Draft Articles on the Effects of Armed Conflicts on Treaties’, *Yearbook of the International Law Commission* (2011), Vol. II, Part Two, 107-108; GA Res. 66/99, *supra* note 12; S. Voeneky, ‘A New Shield for the Environment: Peacetime Treaties as Legal Restraints of Wartime Damage’, 9 *Review of European Community and International Environmental Law* (2000) 1, 20.

⁸⁷ J. Scheffran, Preventing Dangerous Climate Change — Adaptive Decision-Making and Cooperative Management in Long-Term Climate Policy, in V. I. Grover (ed.), *Global Warming and Climate Change — Ten Years after Kyoto and Still Counting* (2008), 449-482.

induced security threats. This can either be achieved by options such as the application of existing international environmental obligations, political action through the UNSC, and/or the creation of a specialized dispute settlement body.

II. The ICJ and Existing International Environmental Obligations

The ICJ is the judicial organ of the UN and the primary mechanism to settle international disputes and resolve the interpretation of international law.⁸⁸ Every UN member State is a party to the ICJ Statute, enabling them to consent to its jurisdiction to resolve disputes.⁸⁹ The ICJ's jurisdiction is limited as States must express their consent to its jurisdiction and can declare that certain subject matter claims cannot be heard by the Court.⁹⁰ As the Court's jurisdiction requires the consent of both parties to the dispute, the ICJ does not have absolute compulsory jurisdiction.⁹¹ In addition, consent can be obtained through *forum prorogatum*, in which a State invites another State to accept the jurisdiction of the Court for the purpose of the dispute.⁹² Thus, States in disagreement over the interpretation or application of the International Climate Change Regime could seek the consent of another State to use *forum prorogatum* as a means of eliciting the ICJ's jurisdiction. This could assist in resolving conflicts through peaceful and judicial means and also be a means of preventing armed conflict.⁹³ However, in the context of climate change, the difficulties in commencing contentious proceedings would likely include finding a State willing to accept an invitation to consent to the ICJ's jurisdiction, identifying a substantive obligation to litigate, and leading convincing evidence to satisfy tests of causation and attribution.⁹⁴

If the ICJ has jurisdiction to adjudicate contentious legal questions, it can produce a binding order or judgment with *inter partes* effect. In circumstances where a State commits an internationally wrongful act, being a breach of a

⁸⁸ *Statute of the International Court of Justice*, 26 June 1945, 33 UNTS 993, Art 1.

⁸⁹ UN-Charter, *supra* note 5, Art. 93.

⁹⁰ *Statute of the International Court of Justice*, 26 June 1945, 33 UNTS 993, Art. 36.

⁹¹ *Case of the Monetary Gold Removed from Rome in 1943 (Italy v. France, United Kingdom and United States)*, Judgment, ICJ Reports 1954, 19, 32; *Case Concerning East Timor (Portugal v. Australia)*, Judgment, ICJ Reports 1995, 87, 101, para. 26.

⁹² *Statute of the International Court of Justice*, 26 June 1945, 33 UNTS 993, Art. 36(2).

⁹³ See for example the resolution of border conflict arising from the ICJ's decision in *Temple of Preah Vihear (Cambodia v Thailand)*, Judgment, ICJ Reports 1962, 6, 160.

⁹⁴ See Wewrinke-Singh, M. & Salili, D. H., 'Between Negotiations and Litigation: Vanuatu's Perspective on Loss and Damage From Climate Change' *Climate Policy* (2019) [Forthcoming Special Issue: Loss and Damage After the Paris Agreement], 6-7.

substantive obligation under international law, and that breach results in damage to another State, the offending State will generally be held liable where certain legal tests are satisfied. Relevantly, there must be a breach of an international obligation, termed *a wrongful act*, that is attributable to the offending State,⁹⁵ and a causal link must be established between the wrongful act and the damage suffered.⁹⁶ While these legal tests present barriers to climate litigation before the ICJ, they can potentially be addressed. It is useful to illustrate, by way of a hypothetical, how States may be held responsible for breaching international obligations pertaining to climate change.

In such a hypothetical, it is assumed that States accept the ICJ's jurisdiction to hear disputes arising from the interpretation or application of the *UNFCCC*. A developing State could then commence proceedings against an Annex II State for breaching articles in the *UNFCCC* that are arguably obligatory in nature. Examples of such articles include, article 3(1) which states “[t]he Parties *should* protect the climate system [...] Accordingly the developed country Parties *should* take the lead in combating climate change [...]” (emphasis added).⁹⁷ In terms of attribution, norms of State responsibility hold that, where multiple States act in breach of a norm or principle to the detriment of another State, they are *co-authors* of that internationally wrongful act.⁹⁸ Accordingly, a failure by Annex II Parties to mitigate GHG emissions in line with the *Paris Agreement* could be argued as a breach of the *UNFCCC*'s mandatory obligation in article 3(1) to protect the climate system and take the lead in combatting climate change.

⁹⁵ *Report of the International Law Commission to the Fifty-Third Session, Draft Articles on Responsibility of States for Internationally Wrongful Acts*, UN Doc. A/56/10, 23 April-1 June and 2 July-10 August 2001, 26, Art. 2.

⁹⁶ *Ibid* Art. 31, Art 34, Art 36(1).

⁹⁷ For further discussion, see A. L. Stauss, ‘Climate Change Litigation: Opening the Door to the International Court of Justice’, in W. C. G. Burns & H. M. Osofsky (eds), *Adjudicating Climate Change: State, National and International Approaches* (2009), 334, 353.

⁹⁸ See *Legality of the Use of Force, (Yugoslavia v. Belgium) Provisional Measures*, Order of 2 June 1999, ICJ Reports 1999, 124; *Ibid. (Yugoslavia v. Canada)* 259; *Ibid. (Yugoslavia v. France)*, 363; *Ibid. (Yugoslavia v. Germany)*, 422; *Ibid. (Yugoslavia v. Italy)*, 481; *Ibid. (Yugoslavia v. the Netherlands)*, 542; *Ibid. (Yugoslavia v. Portugal)*, 656; *Ibid. (Yugoslavia v. Spain)*, 761; *Ibid. (Yugoslavia v. United Kingdom)*, 826; *Ibid. (Yugoslavia v. United States)*, 916; see further *Certain Phosphate Lands in Nauru (Nauru v. Australia)*, Judgement, ICJ Reports 1992, 240; for a discussion on joint attribution, see C. Dominicé, ‘Attribution of Conduct to Multiple States and the Implication of a State in the Act of Another State’, in J. Crawford, A. Pellet & S. Olleson (eds), *The Law of International Responsibility* (2010), 281.

Assuming loss and damage caused by climate change is considered transboundary environmental harm, it must be established that significant damage has been suffered so that damages are not considered nominal.⁹⁹

Further, importing legal concepts from domestic law, such as joint and several liability or proportionate liability, into causal analysis can account for the lack of individual State responsibility for loss and damage. Generally, joint and several liability applies in circumstances where the acts of two or more parties combine to produce the one loss or damage.¹⁰⁰ Each wrongdoer will be considered entirely liable for that loss or damage and a plaintiff may choose the party to commence proceedings against.¹⁰¹ Proportionate liability differs from joint and several liability in that each wrongdoer will be liable for their proportionate share of a plaintiff's loss.¹⁰² Applying these concepts when determining causation for climate-induced loss or damage (i.e. damage caused by GHG emissions) could both avoid the need to establish individual liability and establish a framework for allocating or apportioning liability on the basis of a State's proportion of GHG emissions.¹⁰³ Where these tests are satisfied, the responsible Annex II Parties must then provide reparations for the damage caused by a wrongful act.¹⁰⁴

While there is potential for the ICJ to decide on issues of climate change obligations and produce binding decisions, it is unlikely that this will occur in the present framework. Currently, only three States have explicitly accepted the ICJ's jurisdiction to resolve disputes arising from the *UNFCCC*.¹⁰⁵ It is unlikely that

⁹⁹ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Reports 2010, 14, 56, para. 101; *Report of the International Law Commission to the Fifty-Third Session, Draft Articles on Prevention of Transboundary Harm from Hazardous Activities*, UN Doc A/56/10, 23 April-1 June and 2 July-10 August 2001, 151-153, Art. 2.

¹⁰⁰ See generally *Thompson v. Australian Capital Television Pty Ltd* (1996), 186 CLR 574 for a common law conception of joint and several liability.

¹⁰¹ See *Bell v. Thompson* (1934), 34 SR (NSW) 431 at 435.

¹⁰² See generally *Hunt Lawyers v. Mitchell Morgan Nominees Pty Ltd* (2013), 247 CLR 613.

¹⁰³ See M. Faure & P. A. Nollkaemper, 'International Liability as an Instrument to Prevent and Compensate for Climate Change', 43 *A Stanford Journal of International Law* (2007), 123 and P. Cullet, 'Liability and Redress for Human-Induced Global Warming: Towards an International Regime', 43 *A Stanford Journal of International Law* (2007), 99 for an in depth analysis of causal frameworks for climate-induced loss and damage.

¹⁰⁴ *Gabcikovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment, ICJ Reports 1997, 78, para. 140.

¹⁰⁵ Only the Netherlands, the Solomon Islands and Tuvalu have accepted the ICJ's compulsory jurisdiction pursuant to art. 14 of the *UNFCCC*; see United Nations Climate Change, *Declarations Status of Ratification of the Convention*, available at <https://unfccc.int/process/the-convention/status-of-ratification> (last visited 21 February 2020).

States will voluntarily accept the ICJ's jurisdiction to resolve disputes premised on substantive obligations in the *UNFCCC*, especially in the current political climate where some developed States have either withdrawn their support¹⁰⁶ and/or will not achieve their target regarding the reduction of emissions.¹⁰⁷ Further, this claim is supported by the fact that the ICJ's special chamber for environmental disputes has not been used in its 13 years of operation. This paper argues that the current framework is inadequate to deal with the threats that climate change pose to international peace and security. States require a dispute resolution mechanism to turn to in cases of climate-induced conflict to resolve conflicts through peaceful and judicial means, to ultimately mitigate the likelihood of climate-induced armed conflict.

III. Legal and Political Options in the Pre-Phase to Conflict

As has been discussed, climate change exacerbates existing vulnerabilities and is a threat to international peace and security as it increases the risk of armed conflict. This section discusses the legal capabilities of the international legal system that are specifically related to environmental protection and whether these are applicable during the pre-phase to armed conflict. The paper then suggests alternative legal and political approaches that can be used to prevent armed conflict, namely using the UNSC's article 41 and 42 powers, enforcement mechanisms in human rights treaties, and the establishment of an ICE.

1. Legal Protections of the Environment in the Pre-Phase to Armed Conflict

Whether international environmental law continues to apply before, during, and after armed conflict has been the subject of both judicial and juridical consideration. In *The Legality of the Threat or Use of Nuclear Weapons*¹⁰⁸, the ICJ refrained from answering this question. Instead, the Court considered whether obligations stemming from international environmental treaties "[...] were intended to be obligations of total restraint during military conflict". The Court opined that, while international environmental treaties cannot prevent a

¹⁰⁶ ICJ, Chambers and Committees, available at <https://www.icj-cij.org/en/chambers-and-committees> (last visited 21 February 2020).

¹⁰⁷ As demonstrated, for example, by the United States' withdrawal from the *Paris Agreement* announced on 1 June 2017 and the critical rhetoric of Brazil's president, Jair Bolsonaro, towards the Agreement and climate change in general.

¹⁰⁸ *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 226.

State from exercising self-defense, a State doing so must “[...] take environmental considerations into account when assessing what is necessary and proportionate [...]”. Decades later, in the *Decision on Armed Activities on the Territory of the Congo*, the ICJ held that States have a duty of vigilance to prevent acts of looting, plundering, and the exploitation of another State’s natural resources.¹⁰⁹ Notably, these judicial opinions do not touch upon whether obligations contained in specific environmental treaties, for instance the *UNFCCC* or the *Paris Agreement*, continue to have force in times of conflict.

Guidance is provided by the ILC’s *Draft Articles on the Effects of Armed Conflict on Treaties*.¹¹⁰ The articles provide a tiered test for determining whether obligations contained in a treaty apply during times of conflict. First, an overarching principle is set out whereby the existence of armed conflict does not in itself terminate or suspend treaty obligations.¹¹¹ Second, if a treaty contains procedural provisions as to whether obligations apply in circumstances of armed conflict, those provisions apply.¹¹² Third, if the given treaty is silent on whether armed conflict suspends or terminates its obligations, then the determination is made by reference to the rules of treaty interpretation, the subject matter of the given treaty, and to the *Draft Articles’* annex.¹¹³

The effect of the *Draft Articles* has been subject to much juridical debate.¹¹⁴ While this debate is outside the scope of this paper, much force can be seen in the argument that its application means that environmental treaties protecting common goods, such as the *UNFCCC* does in relation to the planetary climate,¹¹⁵ remain in force during armed conflict because they contain obligations owed to

¹⁰⁹ *Decision on Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Judgment, ICJ Reports 2005, 168, 252, para. 246.

¹¹⁰ GA Res. 66/99, UN Doc. A/RES/66/99, 9 December 2011.

¹¹¹ *Ibid* Art. 3.

¹¹² *Ibid* Art. 4.

¹¹³ *Ibid* Art. 5, Art. 6 and Art. 7; Annex; the reference to the rules of treaty interpretation in this article is inferred to be a reference to the *Vienna Convention on the Laws of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980); the annex sets out a list of treaties that are assumed to have force in circumstances of armed conflict. Notably, it includes “[t]reaties relating to the international protection of the environment”.

¹¹⁴ A. Loets, ‘An Old Debate Revisited: Applicability of Environmental Treaties in Times of International Armed Conflict Pursuant to the International Law Commission’s ‘Draft Articles on the Effects of Armed Conflict on Treaties’, 21 *Review of European Community & International Environmental Law* (2012) 2, 127.

¹¹⁵ The common good in this instance being the Earth’s climate.

the international community as a whole, not just between conflicting States.¹¹⁶ In any event, judicial consideration is desirable, perhaps just as much as the development of customary international law on this issue.

There are existing international environmental norms and principles that could guide the ICJ in opining on the issue of what obligations that protect the environment ought to apply in times of armed conflict. Environmental impact assessments (EIA), as set out in *Pulp Mills Case*,¹¹⁷ could limit the impact armed conflict has on the environment and would be in line with the ICJ's opinion in *The Legality of the Threat or Use of Nuclear Weapons*. However, while an EIA should be conducted prior to the relevant activity, given the unpredictability of armed conflict, it would likely be conducted after conflict has commenced. In other words, it would not be a preventative mechanism to protect the environment in the pre-phase of conflict, but rather a tool of mitigating environmental damage during conflict.

Two further principles that could guide the application of international environmental law during armed conflict are the precautionary principle and the principle of prevention. The precautionary principle, as encapsulated in the *Rio Declaration*, declares that, notwithstanding scientific uncertainty, actions that have the potential to cause significant harm to the environment must be abstained from.¹¹⁸ The principle is included in most international environmental treaties.¹¹⁹ The principle can work ancillary to the principle of prevention, which is applicable in circumstances of transboundary harm. The ICJ in the *Pulp Mills Case* discussed the principle of prevention at length, confirming its status as a principle of customary international law in tracing its origins back to the no harm principle and the obligation of due diligence. The ICJ opined that States are obliged “[...] to use all the means at its disposal in order to avoid activities

¹¹⁶ See S. Voeneky, ‘A New Shield for the Environment: Peacetime Treaties as Legal Restraints of Wartime Damage’, 9 *Review of European Community & International Environmental Law* (2000) 1, 20.

¹¹⁷ *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I), 14 June 1992, principle 17; see also *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Reports 2010.

¹¹⁸ K. Stefanik, ‘The Environment and Armed Conflict: Employing General Principles to Protect the Environment’, in C. Stahn, J. Iverson & J. S. Easterday (eds), *Environmental Protection and Transitions from Peace: Clarifying Norms, Principles and Practices* (2017), 93, 106.

¹¹⁹ *Vienna Convention for the Protection of the Ozone Layer*, 22 March 1985, preamble, 1513 UNTS 293; UNFCCC, *supra* note 74, Art. 3(3); A. Trouwborst, ‘Evolution and Status of the Precautionary Principle in International Law’, 96 *The American Journal of International Law* (2002) 4, 1016.

which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State.”¹²⁰ Others have observed that its application may involve orders for provisional measures¹²¹ limiting or prohibiting certain activities from being carried out.¹²² Yet the principle can be employed by States prior to disputes arising, such as by ensuring activities avoid environmental harm in the first place.

Given that armed conflict can cause serious and irreparable environmental damage, both the precautionary principle and the principle of prevention ought to apply in the pre-phase to armed conflict to enable preventative measures to be put in place to protect the environment.¹²³ In the context of climate change, these principles could be invoked before the ICJ to either limit or mandate State actions to avoid serious and irreparable environmental damage. These principles could guide the formulation of provisional measures to limit GHG emissions and/or support the direction of resources for adaptation measures to decrease vulnerability to environmental stressors that may lead to conflict. An example of the latter could be a provisional measure mandating developed States to channel resources to drought-stricken areas to mitigate the role climate exacerbated water scarcity plays in driving conflict. As noted by Trouwborst, “[t]he *more* significant or the *more* serious the expected environmental impact, the more rigorous preventive or abatement measures may, respectively must be.”¹²⁴ While Trouwborst refers to the principle of prevention, where its application is informed by the precautionary principle, the two principles can create an important source of legal protection that guides action in the pre-phase to armed conflict to protect the environment from serious or irreparable harm.

Ultimately, the lack of an effective enforcement mechanism within the International Climate Change Regime,¹²⁵ combined with uncertainty surrounding the application of international environmental law in the pre-phase

¹²⁰ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Reports 2010, 14, 56, para. 101.

¹²¹ Separate Opinion of Judge Treves, *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan)*, Order of 27 August 1999, ITLOS Reports 1999, 318, para. 9.

¹²² *Fisheries Jurisdiction (Germany v. Iceland)*, Judgment, ICJ Reports 1973, 49; *Fisheries Jurisdiction (United Kingdom v. Iceland)*, Judgment, ICJ Reports 1973, 3, where limitations were placed on parties by way of prescribed amounts of annual fishing catches.

¹²³ Stefanik, *supra* note 118, 117-118.

¹²⁴ A. Trouwborst, *Precautionary Rights and Duties of States* (2006), 150.

¹²⁵ Only three States, the Netherlands, the Solomon Islands and Tuvalu have accepted the ICJ's compulsory jurisdiction pursuant to art. 14 of the UNFCCC; see United Nations Climate Change, *Declarations Status of Ratification of the Convention*, available at <https://unfccc.int/process/the-convention/status-of-ratification> (last visited 21.02.2020).

to armed conflict, creates a gap in the ability for the international community to effectively deal with climate change as a driver of conflict. We argue in this paper that alternative legal and political mechanisms are required to effectively address climate change's threats to international peace and security and outline below a range of potential means to do so.

2. The UNSC and Climate Change as a Threat to International Peace and Security

Given that the UNSC is the body tasked with maintaining international peace and security,¹²⁶ it is arguably the most appropriate institution to address the security implications of climate change. While the UNSC has extensive powers under chapter VII of the *UN Charter*¹²⁷ to achieve its functions, it may only exercise these powers if it determines that a threat to international peace and security exists.¹²⁸ The effect of article 39 of the *UN Charter* is that the UNSC has the discretion to decide what constitutes a threat to peace and security. It has the discretion to then use its powers under article 41, being measures that do not use armed force, and article 42, being measures using armed force, to resolve that threat. In practice, the procedure of the UNSC is to pass a resolution that (i) determines a given situation to be a threat to peace and security; (ii) recognizes the steps required to remedy the situation, and; (iii) authorizes the use of article 41 and/or article 42 powers to achieve those steps.¹²⁹ This procedure can arguably be applied to address climate change as a security threat.

The absence of a definition of a *threat to peace* in the *UN Charter* means that the UNSC has broad discretion in determining what constitutes a threat to international peace and security for the purposes of article 39. Both juridical arguments and UNSC practice support an interpretation of a threat to peace to include any situation that may, in the short- or medium-term, provoke armed conflict between States.¹³⁰ Notably, in 2005, the UNSC acknowledged food insecurity as a threat to international peace and security.¹³¹ Further, in 2014, the UNSC passed a resolution affirming the Ebola crisis as an international peace

¹²⁶ UN Charter, *supra* note 70, Art. 24.

¹²⁷ *Ibid*, specifically, pursuant to Arts. 40-42.

¹²⁸ *Ibid*, Art. 39.

¹²⁹ See for example SC Res. 841, UN Doc S/RES/841 (1993), 16 June 1993.

¹³⁰ E. de Wet, *The Chapter VII Powers of the United Nations Security Council* (2004), 138, 149-174.

¹³¹ UN SCOR, UN Doc S/PV.5220 (2005), 30 June 2005.

and security threat,¹³² even though this crisis did not have any link to armed conflict or the use of force. The Ebola resolution is a significant precedent in terms of climate change as it demonstrates the furthest expansion as to what may constitute a threat to international peace and security.¹³³ These examples support the argument that climate change should be recognized as a threat consistent with UNSC practice in exercising its discretionary powers under article 39. Moreover, as outlined below, there is growing consensus in the international community to do so.

On April 17, 2007, the UNSC addressed climate change as an international security issue for the first time.¹³⁴ Then, on July 20, 2011, the UNSC held a controversial debate on climate change as a security concern, producing a *Presidential Statement* setting out that:¹³⁵

“The Security Council expresses its concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security. [...] [P]ossible security implications of loss of territory of some States caused by sea-level rise may arise, in particular in small low-lying island States.”¹³⁶

Expanding on this position, a major focus of Germany’s two-year membership of the UNSC, between 2019 and 2020, was the nexus between climate change and security. The *Berlin Call to Action*¹³⁷ was a notable product of

¹³² SC Res. 2177, UN Doc S/RES/ (2014), 18 September 2014.

¹³³ H. Nasu, ‘The Place of Human Security in Collective Security’, 18 *Journal of Conflict & Security* (2013) 1, 95.

¹³⁴ United Nations Meetings Coverage and Press Releases, Security Council Holds First-Ever Debate on Impact of Climate Change on Peace, Security, Hearing Over 50 Speakers (17 April 2007), available at <https://www.un.org/press/en/2007/sc9000.doc.htm> (last visited 24 February 2020).

¹³⁵ During the debate Russia, China and many representatives of the Group of 77 (G-77) opposed the UNSC discussion of climate change as a security concern, but a coalition of OECD countries and the Pacific Small Island states stressed the need to address climate security implications in the UNSC from a proactive perspective.

¹³⁶ Statement by the President of the Security Council on Maintenance of Peace and Security: Impact of Climate Change, S/PRST/1011/15, 20 July 2011, available at <https://www.securitycouncilreport.org/un-documents/document/cc-sprst-2011-5.php> (last visited 24 February 2020). This statement reflected the lowest common denominator of the debate.

¹³⁷ Berlin Climate and Security Conference 2019, ‘Berlin Call for Action’ (2019), available at <https://berlin-climate-security-conference.de/callforaction> (last visited 24 February 2020).

this focus, which outlined the following three concrete areas to tackle the risks climate change poses to peace and security:

- “1. risk-informed planning: Create a better understanding and sound analysis of how climate change exacerbates conflicts;
2. enhanced capacity for action: Strengthen the [UN]’s ability to act in the area of climate and security [...]; [and]
3. improving operational responses: Consider climate, sustainable development, security and peacebuilding as related issues in all programmes.”¹³⁸

More recently, numerous States have called for the UNSC to establish an international mechanism to address the nexus between climate change and international security. At a UNSC debate on July 11, 2018 titled *Understanding and Addressing Climate-related Security Risks*, Iraq, Nauru (on behalf of the Group of Pacific Small Island Developing States), Peru, Cote d’Ivoire, Sweden, the Netherlands, Kazakhstan, the United Kingdom, France, Bolivia, Ethiopia, Equatorial Guinea, Poland, Trinidad and Tobago, and Sudan called for a greater response by the international community to the security factors that are emerging with climate change.¹³⁹ Sweden and Nauru requested a *Special Representative on Climate and Security* be appointed to an *institutional home* to deal with climate-related security risks within the UN system.¹⁴⁰ However, some States, such as Russia, expressed concerns about whether the UNSC is an appropriate body to address climate change’s security implications.

In view of our considerations on how climate change acts as a driver of conflict, and the growing international consensus on the need to address the nexus between climate change and security, we argue that it falls within the scope of what may constitute a threat to international peace and security. While the UNSC’s approach to conflict resolution is largely case-oriented, circumstances where the impacts of climate change induce and exacerbate conflict warrant its close attention. However, given that climate change is an overarching and intensifying problem, taking a broader approach and declaring it as a threat to international peace and security would provide the groundwork to strengthen the UN’s institutional responses.

¹³⁸ *Ibid.*

¹³⁹ UN SCOR, UN Doc S/PV.8307 (2018), 11 July 2018.

¹⁴⁰ *Ibid.*, 8.

3. Preventing Climate-Induced Conflict Through Human Rights Treaties

As environmental treaties lack a compulsory complaint and enforcement mechanism, dispute resolution mechanisms in regional human rights treaties could provide an avenue for bringing complaints of breaches of environmental obligations. In this way, individuals may have standing to influence the resolution of disputes without resorting to armed conflict. The ILC Special Rapporteur, Marja Lehto, in her first report stated that “[...] environmental degradation may be linked to the violation of several human rights, such as the right to life, right to private and family life, right to health, or right to food”.¹⁴¹ Further, the Committee on Economic, Social and Cultural Rights has commented that the right to life extends to “[...] detrimental environmental conditions that directly or indirectly impact upon human health”.¹⁴² Arguably, the protection of human rights, such as the rights to life and to health, should involve protecting their environmental preconditions (i.e. having healthy and functional planetary ecosystems).¹⁴³ Given the normative status of human rights, the force of doing so would be considerable.

As a starting point, it is well accepted that human rights, inclusive of the right to life, and the right to health, are *erga omnes* obligations that States owe to the international community.¹⁴⁴ Further, it is arguable that a right, such as the right to life, is a *jus cogens* obligation. This is subject to much juridical debate, with some considering it a *jus cogens* norm,¹⁴⁵ especially when considering *obiter dicta* in various judicial decisions.¹⁴⁶ Others have rebutted,

¹⁴¹ *First Report of the Special Rapporteur on Protection of the Environment in Relation to Armed Conflicts by Marja Lehto*, UN Doc A/CN.4/720, 30 April 2018, 33, para. 64.

¹⁴² Committee on Economic, Social and Cultural Rights, *CESCR General Comments No. 14: The Right to the Highest Attainable Standard of Health (Art. 12)*, UN Doc E/C.12/2000/4, 11 August 2000, 5, para. 15.

¹⁴³ F. Schuppert, ‘Beyond the National Resource Privilege: Towards an International Court of the Environment’, 6 *International Theory* (2014) 1, 68, 93.

¹⁴⁴ *Barcelona Traction, Light and Power Company, Limited (Belgium v. Spain)*, Judgment, ICJ Reports 1970, 3.

¹⁴⁵ B. Ramcharan, *The Right to Life in International Law (International Studies in Human Rights)* (1985), 297.

¹⁴⁶ *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, ICJ Reports 1996, 226; *Al-Adsani v. the United Kingdom*, ECtHR Application No. 35763/97, Judgement of 21 November 2001, per the Majority at 59 and 60.

based on the derogation provisions contained in human rights treaties¹⁴⁷ and by reference to State practice.¹⁴⁸ It is, at the very least, a substantive obligation that States must positively enforce.¹⁴⁹ As such, protecting the environmental preconditions to both the right to life and the right to health could bring the international community's attention to the threat of climate change to human life. Additionally, this approach could make environmental obligations, such as the prevention of transboundary harm in the context of GHG emissions, positive obligations that are part of States' *erga omnes* responsibilities.¹⁵⁰ In circumstances where non-derogable human rights apply during times of conflict,¹⁵¹ protecting the environmental preconditions to those rights could assist in enforcing environmental law and influence future actions that may occur in times of armed conflict.

There is potential for individuals impacted by climate change to influence the resolution of disputes through regional human rights treaties. For example, in the case of *SERAP v. Nigeria*, the Court of Justice of the Economic Community of West African States held that “[t]he quality of human life depends on the quality of the environment”, acknowledging the impacts of environmental degradation on human rights.¹⁵² The Inter-American Commission on Human Rights in *San Mateo de Huanchor v. Peru* applied the precautionary principle to require the development of an environmental impact statement in the context of the right to life.¹⁵³ Further, given that the ICJ has observed that States are bound to comply with the *International Covenant on Civil and Political Rights* (ICCPR),

¹⁴⁷ See for example the derogation exceptions in the *Convention for the Protection of Human Rights and Fundamental Freedoms*, 4 November 1950, 213 UNTS 222 (amended by the provisions of Protocol No. 14 (CETS No. 194)) [ECHR], Art. 15.

¹⁴⁸ I. Park, *The Right to Life in Armed Conflict* (2018), 16.

¹⁴⁹ *Ibid.*

¹⁵⁰ Schuppert, *supra* note 143, 93.

¹⁵¹ *Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I)*, opened for signature 8 June 1977, 1125 UNTS 3 (entered into force 7 December 1978), Art. 75; see further, Human Rights Committee, *General Comment No. 31 [80] The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, CCPR/C/21/Rev.1/Add. 13, 26 May 2004.

¹⁵² *Socio-Economic Rights and Accountability Project (SERAP) v. Nigeria*, Judgment of 14 December 2012, ECOWAS, Doc No ECW/CCJ/JUD/18/12, 25, para. 100.

¹⁵³ *Community of San Mateo de Huanchor v. Peru*, IACtHR Petition 504/03, Report No. 69/04.

where jurisdiction is exercised outside national territories,¹⁵⁴ there is potential for States to be held accountable for damage caused to individuals who reside outside their national territories.

The Inter-American Court of Human Rights held in the non-binding *Advisory Opinion on the Environment and Human Rights* that “[...] a person is subject to the jurisdiction of the State of origin if there is a causal connection between the incident that took place on its territory and the violation of the human rights of persons outside its territory”.¹⁵⁵ This suggests that a State has an obligation to protect the human rights of individuals impacted by transboundary harm (i.e. pollution), caused by that State.¹⁵⁶ Arguably, these cases form the basis for contending that States are under positive obligations to address circumstances where the adverse impacts of climate change are impinging on human rights within their jurisdiction, such as the right to life, and the right to health. While international human rights treaties may lack the capacity to respond to the extraterritorial detrimental impacts of climate change, the above cases demonstrate the potential for individuals to seek redress for environmental damage and could provide a legal approach to avoiding armed conflict.

4. International Court for the Environment

A further option involves the establishment of an International Court for the Environment (ICE) that would serve an important role in the enforcement and interpretation of legal principles and obligations.¹⁵⁷ There is a growing global movement supporting the need for such a court. For example, the ICE Coalition advocates “[...] for an international rule of law that protects the global environment for present and future generations. We propose that an

¹⁵⁴ *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, ICJ Reports 2004, 136, 178, para. 107-110.

¹⁵⁵ *Advisory Opinion on Environment and Human Rights*, Advisory Opinion of 15 November 2017, IACtHR Series OC, No. 23, 4.

¹⁵⁶ A. Boyle, ‘Climate Change, the Paris Agreement and Human Rights’, *67 International & Comparative Law Quarterly* (2018) 4, 759, 773.

¹⁵⁷ See for instance S. Bruce, ‘The Project for an International Environment Court’, in C. Tomuschat, R. Mazzeschi and D. Thürer (eds), *Conciliation in International Law* (2016), 133; International Bar Association, ‘Achieving Justice and Human Rights in an Era of Climate Disruption’ (2014), available at <https://www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx> (last visited 13 March 2020), 28; A. Lehmen, ‘The Case for the Creation of an International Environmental Court: Non-State Actors and International Environmental Dispute Resolution’, *26 Colorado Natural Resources, Energy and Environmental Law Review* (2015) 2, 180.

international court for the environment is necessary to address significant gaps in the current international environmental legal order.”¹⁵⁸ The ICE could provide a forum for the judicial settlement of disputes and create a means for States to seek redress and remedy for climate induced damage.

The ICE, with a broad jurisdiction over the corpus of international environmental law, is much needed. In this respect, the ICE could opine upon disputes concerning environmental issues, such as access to resources and transboundary environmental threats. It could then assist States in judicially resolving environmental issues, rather than resorting to armed conflict, and examine the applicability of the precautionary principle and the principle of prevention to protecting the environment from potential damage prior to harmful activities taking place. Moreover, it could provide a clear and stable mechanism to enforce the International Climate Change Regime.¹⁵⁹

However, the extent and bounds of an ICE’s jurisdiction will be a determinative factor as to whether States are accepting its jurisdiction. It is unlikely that the ICE, with broad jurisdiction covering “[...] any environmental dispute involving State responsibility to the international community [...]” will gain traction amongst prospective signatories.¹⁶⁰ Rather, it is arguable that States would be more receptive towards the ICE with jurisdiction over specific environmental treaties and obligations. In this regard, Pedersen draws attention to the willingness of States to accept the compulsory jurisdiction of specialist courts, such as the International Criminal Court’s (ICC) compulsory jurisdiction in respect of crimes of genocide, crimes against humanity, war crimes, and the crime of aggression. Its complementary nature also allows States to take judicial and diplomatic steps prior to the ICC’s involvement.¹⁶¹ A further example is the International Tribunal for the Law of the Sea, where States have accepted and utilized the dispute settlement procedures in place to determine issues in relation to breaches of the *United Nations Convention on the Law of the Sea*.¹⁶² In this vein, there are arguable prospects for the ICE with jurisdiction to resolve disputes arising from breaches of specific environmental treaties.¹⁶³

¹⁵⁸ ICE Coalition, available at <http://www.icecoalition.org/> (last visited 24 February 2020).

¹⁵⁹ Schuppert, *supra* note 143, 90.

¹⁶⁰ Being the kind of jurisdiction envisaged by early proponents of an ICE, see further O. Pedersen, ‘An International Environmental Court and International Legalism’, 24 *Journal of Environmental Law* (2012) 3, 547, 549.

¹⁶¹ *Ibid.*, Pedersen, 557.

¹⁶² *United Nations Convention on the Law of the Sea*, 16 November 1994, 1833 UNTS 3.

¹⁶³ UN Charter, *supra* note 70, Art. 1.

Further issues that need to be considered include determining causation, allocating responsibility, matters of standing, calculating damages, and enforcement.¹⁶⁴ Notwithstanding that developing models to address these issues are outside the scope of this paper, we do propose some general approaches to attribution, causation, and standing. First, as discussed above, issues of attribution and causation could be approached using concepts of joint, several, and proportionate liability. Second, and in a similar vein to the scope of jurisdiction, the ICE with broad standing that allows proceedings to be commenced *vis-à-vis* individuals, corporate actors, and States, would be unlikely to gain traction. A more pragmatic and acceptable approach to States would likely be the adoption of procedural rules of standing similar to the rules of the ICJ.¹⁶⁵ Finally, there is also the likelihood that the ICE would face similar issues as the ICJ in terms of the challenges of enforcing decisions. In any event, the ICE could influence the climate debate at the international level by interpreting the norms and standards recognized in international law.¹⁶⁶ Ultimately, and irrespective of questions of jurisdiction, by providing a forum to address environmental disputes, the ICE would comprise a further body that contributes to the maintenance of international peace and security, a key foundation and progression of the international system.

D. Conclusion

Preventing and addressing climate emergencies is an unprecedented global issue that must be mainstreamed into many forms of policy and law. It urgently requires stronger and enforceable international law and policy mechanisms that both reduce GHG emissions and respond to its adverse impacts on peace and security. For mechanisms in this regard to be effective and adhered to, they must include dispute resolution pathways. The impacts of climate change on already vulnerable communities can weaken political, legal, and governance systems and increase the likelihood of international tension and armed conflict. Concerns about a *Warming War* have arisen from the framing of climate change as a security threat that infringes upon development and human rights obligations

¹⁶⁴ D. Bodansky, 'The Role of the International Court of Justice in Addressing Climate Change: Some Preliminary Reflections', 49 *Arizona State Law Journal* (2017), Special Issue, 689, 694.

¹⁶⁵ See UN Charter, *supra* note 70, Art. 93; *Statute of the International Court of Justice*, 26 June 1945, 33 UNTS 993, Art. 35(2).

¹⁶⁶ Bondansky, *supra* note 164, 706.

and endangers human life on earth.¹⁶⁷ This article acknowledges the increasing prioritization of climate change within the security entities of many States. However, it is time to now step up the recognition and preparation for climate driven or exacerbated conflicts. This process of *stepping up* requires constraining the securitization of climate change and military countermeasures that may result in the aggravation of violent conflict, excessive consumption of natural resources (i.e. water and food), pollution of the environment, and prevention of peaceful solutions.¹⁶⁸

Such a *Warming War* can be more effectively tackled by the international community if climate change is legally recognized as a driver of conflict and treated as a threat to international peace and security. Whether climate stress triggers cycles of risk and violence, or rather favors a transition towards cooperation, resilience, and sustainability, depends on legal and policy responses.¹⁶⁹ This approach can ensure compliance and enforcement with methods of environmental protection. It can reduce the occurrence of climate-induced armed conflict and increase cooperation between States.¹⁷⁰ An important condition for such a transition is the emergence of law and policy recognizing the climate-conflict nexus. This recognition ultimately contributes to international cooperation, institution-building and new legal frameworks, and bridges the gap between policy and law to prevent warming wars.

The failure of the International Climate Change Regime and the broader international legal and governance systems to effectively address the impacts of climate change leaves States with little recourse to judicially resolve climate-related disputes. This weakens the ability of the international system to prevent climate induced armed conflict. In these circumstances, it is necessary for the UNSC to identify and address the vulnerabilities that are exacerbated by climate change by formally acknowledging climate change as a threat to international peace and security. Further, it is necessary for the UN's institutional responses to be strengthened to prevent the occurrence of climate induced armed conflict. The establishment of an ICE could provide States with an avenue to resolve

¹⁶⁷ Davies & Riddell, *supra* note 4, 50.

¹⁶⁸ J. Scheffran, 'Verbrannte Erde: Militär als Verursacher von Umweltschäden und Klimawandel', *Friedensforum* 01/2019, 32-44.

¹⁶⁹ Ide *et al.*, 2016, *supra* note 25.

¹⁷⁰ S. Dinar *et al.*, 'Climate Change, Conflict, and Cooperation: Global Analysis of the Effectiveness of International River Treaties in Addressing Water Variability', 45 *Political Geography* (2015), 55-66; P. M. Link, J. Scheffran & T. Ide, 'Conflict and Cooperation in the Water-Security Nexus: a Global Comparative Analysis of River Basins Under Climate Change', 3 *WIREs Water* (2016) 4, 495-515.

climate-related disputes peacefully. Climate induced conflict and damage to the environment resulting from conflict can only be mitigated if climate change is formally embedded within international law as the global threat that it is.