

**EXILED BY EMISSIONS—CLIMATE CHANGE RELATED
DISPLACEMENT AND MIGRATION IN INTERNATIONAL
LAW: GAPS IN GLOBAL GOVERNANCE AND THE ROLE OF
THE UN CLIMATE CONVENTION**

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INTRODUCTION

“To invent the . . . ship . . . is to invent the shipwreck.”¹

“Climate change is even one [of] the root causes of a new migration phenomenon. Climate refugees will become a new challenge – if we do not act swiftly.”²

International law gives reasonable hope for the remedying of transboundary harm and the governance of global warming alike. Yet, law transforms usually over long time periods, which can pose difficulties for international law relating to novel, multifaceted phenomena, such as the rapid changing of the planet’s climate and the human displacement and migration resulting from it. Migration induced by climate change presents a unique legal challenge both because of the losses associated with displacement, as well as the complexity of the phenomenon, which fits poorly into most existing legal frameworks. Partly, this is because relevant scientific awareness on climate change has only relatively recently entered legal discourse.³ Furthermore, law relating to climate-induced migration transcends not only national boundaries but also the silo of any single legal or governance regime. The issue is capable of triggering international environmental, human rights, humanitarian, criminal, and refugee law—as well as tort, land, and property law, *inter alia*. The latent urgency of climate-induced displacement and migration and the global response necessary to address these phenomena in a coordinated and equitable manner nonetheless make further development of international law on the topic vital.

This article concerns international law and global governance pertaining to the assistance of people displaced or prompted to migrate due to the effects of climate change on their environments, lives, and livelihoods. I do not attempt to cover all aspects of international law relating to climate-induced migration, and I concentrate mostly on possible international mechanisms for assistance. More precisely, my focus is on aspects of international environmental law (IEL), in particular, the sub-field of international law of climate change, largely embodied by the 1992

1. PAUL VIRILIO, *THE ORIGINAL ACCIDENT* 10 (Julie Rose trans., Polity Press 2007) (2005).

2. Jean-Claude Juncker, President of the European Comm’n, State of the Union 2015: Time for Honesty, Unity and Solidarity (Sept. 9, 2015), http://europa.eu/rapid/press-release_SPEECH-15-5614_en.htm [<https://perma.cc/G9PD-ZD4R>].

3. David B. Hunter, *The Implications of Climate Change Litigation for International Environmental Law-Making* 2 (Wash. Coll. of Law, Working Paper No. 14, 2008).

United Nations Framework Convention on Climate Change (UNFCCC or Climate Convention) as a global governance institution and source of international law on climate change.⁴ I aim to demonstrate that IEL and the UNFCCC might present a viable, albeit partial, *lex specialis* solution to gaps in the governance of climate-induced migration. International climate law, as it “has been shaped greatly by the political struggles between the North and the South,” affords a distinctive forum for the articulation of obligations around the fact that poor states and vulnerable communities suffer the most from climate change, while the wealthiest states and highest-emitting entities have historically been its main cause.⁵ As a result of these inequalities, this field of law has come to embody principles of equity, differentiated responsibilities, and assistance mechanisms that provide potential for international obligations regarding climate-induced migration. To respond adequately to how those displaced can best access assistance, I do not confine myself only to IEL but also explore aspects of the wider legal-governance landscape to seek out interconnections through examining international refugee law, human rights law, internal displacement guidelines, and certain national and regional examples. Given the exceptionally multidisciplinary nature of climate-induced migration, it is within this wider tapestry of law and governance that possible solutions under IEL and the UNFCCC should fit.

A fundamental problem at the heart of seeking to protect climatically-displaced people is that international refugee law does not presently include them as legally defined “refugees”—and generally rights give rise to remedies (*ubi jus ibi remedium*).⁶ The basic protections of human rights are, in principle, applicable to all people without distinction—but jurisdictional barriers likely hinder effectiveness in this context.⁷ However, regarding remedies, burden sharing and assistance reflecting the principle of common but differentiated responsibilities (CBDR) under the UNFCCC could in theory pertain to all people suffering harm from climate change. The formidable body of principles, instruments, and obligations under the UNFCCC, even if providing mainly soft-law remediation, is made more meaningful by the Convention’s virtually universal state participation—the

4. United Nations Framework Convention on Climate Change, May 9, 1992, S. TREATY DOC No. 102-38, 1771 U.N.T.S. 107 [hereinafter UNFCCC].

5. Benjamin J. Richardson et al., *Introduction to CLIMATE LAW AND DEVELOPING COUNTRIES* 1, 7–8 (Benjamin J. Richardson et al. eds., 2009).

6. Walter Kälin, *Changing Climate, Moving People: Distinguishing Voluntary and Forced Movement of People*, in *CHANGING CLIMATE, MOVING PEOPLE: FRAMING MIGRATION, DISPLACEMENT AND PLANNED RELOCATION* 38, 40 (2013).

7. G.A. Res. 217 (III) A, Universal Declaration of Human Rights, art. 2 (Dec. 10, 1948).

UNFCCC has 197 parties.⁸ Other international agreements, such as the 1992 Rio Declaration on Environment and Development, whose negotiation gave birth to the UNFCCC, and those concluded under the UNFCCC framework—including the 1997 Kyoto Protocol and its successor treaty,⁹ the new 2015 Paris Agreement, which creates a task force on displacement related to the adverse impacts of climate change¹⁰—give further legal weight and political prominence to the UNFCCC’s global governance mandate.¹¹

This article rests on the view that international law and governance provide a forum for cooperation crucial to avoiding the tragedy of the global commons. Climate change, at its core involving transboundary harm in the form of historically accumulated greenhouse-gas (GHG) emissions, makes governance necessary on the global scale. Furthermore, the “delocalised effect . . . between emission source and ‘victim’” of climate-change effects creates an international chain of causality and responsibility whose defining characteristic is the very lack of proximity between those responsible and those harmed.¹² The inequality between the high-emitting states largely responsible for climate change and the already-vulnerable states mostly suffering the effects thereof is indeed an inequality within which “lies the ethical dilemma of climate change.”¹³ Unless (and even if) addressed imminently, climate-induced displacement is projected to spill over into large-scale, cross-border migration that could, if ungoverned,

8. *Status of Ratification of the Convention*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE,

http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php [<https://perma.cc/BS2W-XKT5>] (last visited May 11, 2017).

9. *UNFCCC -- 20 Years of Effort and Achievement*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://unfccc.int/timeline/> [<https://perma.cc/CZ7Q-82W3>] (last visited Mar. 3, 2017).

10. *Paris – Displacement and Migration. What Happens Next?*, CLIMATE & MIGRATION COALITION, http://climatemigration.org.uk/alex_randall-paris-displacement-and-migration-what-happens-next/ [<https://perma.cc/4K2M-PXP4>] (last visited Mar. 3, 2017).

11. *See First Steps to a Safer Future: Introducing the United Nations Framework Convention on Climate Change*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/items/6036.php [<https://perma.cc/DS2S-KC8G>] (last visited Mar. 3, 2017) (stating that the UNFCCC has an overall intergovernmental framework with the aim to work together universally); Julia Toscano, *Climate Change Displacement and Forced Migration: An International Crisis*, 6 ARIZ. J. ENVTL. L. & POL’Y 457, 467 (2015).

12. Jutta Brunnée et al., *Overview of Legal Issues Relevant to Climate Change*, in CLIMATE CHANGE LIABILITY: TRANSNATIONAL LAW AND PRACTICE 23, 27 (Richard Lord et al. eds., 2012).

13. Sumudu Atapattu, *Climate Change, Differentiated Responsibilities and State Responsibility*, in CLIMATE LAW AND DEVELOPING COUNTRIES 37, 39 (quoting Jonathan A. Patz et al., *Climate Change and Global Health: Quantifying a Growing Ethical Crisis*, 4 ECOHEALTH 397, 398 (2007)).

severely deepen inequality.¹⁴ But even in its current localized form, responsibility and harm fall on global actors in a differential manner that fundamentally transcends national boundaries—and to this dilemma, international law should respond sooner rather than later.

I. LEGAL CONCEPTUALIZATION OF CLIMATE MIGRATION

“[A]n increasing incidence and changing intensity of extreme weather events due to climate change will lead directly to the risk of increased levels of displacement.”¹⁵

To understand the legal-governance response needed, it is first necessary to conceptualize the scientific and legal character of climate-induced migration. Science and law are inextricably linked in this context toward establishing causality and defining the problem to a legally satisfactory degree of accuracy. Despite the dearth of legal protection on climate migration, there is virtual consensus among scientists that climate change is significantly increasing human displacement.¹⁶ As climate change gives rise to more frequent and extreme droughts, floods, storms, earthquakes, sea level rise, salt water intrusion, glacial melting, and other rapid and slow-onset events, it tends to cause “temporary and eventually permanent human displacement”—first inducing internal displacement within countries before trickling over into regional, cross-border, and ultimately cross-continental migration.¹⁷

A. Definition in International Law

The projected numbers of those displaced by climate change by year 2050 range from 200 million to 1 billion—200 million is the most cited figure, proposed by the Stern Review and Oxford Professor Norman Myers.¹⁸ But, climate-induced displacement is already underway; natural disasters, the majority of which were considered climate-related, displaced

14. Benoit Mayer, *The International Legal Challenges of Climate-Induced Migration: Proposal for an International Legal Framework*, 22 COLO. J. INT'L ENVTL. L. & POL'Y 357, 397 (2011).

15. W. Neil Adger et al., *Human Security*, in CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY 755, 767 (Christopher B. Field et al. eds., 2014).

16. JESSICA WENTZ & MICHAEL BURGER, DESIGNING A CLIMATE CHANGE DISPLACEMENT COORDINATION FACILITY: KEY ISSUES FOR COP 21, at 1 (2015).

17. Poh Poh Wong et al., *Coastal Systems and Low-Lying Areas*, in CLIMATE CHANGE 2014: IMPACTS, ADAPTATION, AND VULNERABILITY 361, 393 (Christopher B. Field et al. eds., 2014).

18. NICHOLAS STERN, STERN REVIEW: THE ECONOMICS OF CLIMATE CHANGE 77 (2006); Norman Myers, Professor, Oxford Univ., *Environmental Refugees: An Emergent Security Issue* (May 22, 2005), <http://www.osce.org/eea/14851> [<https://perma.cc/8XCX-DLNX>].

up to 184.4 million people between 2008 and 2014, with 19.3 million displaced in 2014 alone, mostly within countries.¹⁹ The Intergovernmental Panel on Climate Change (IPCC) projects that in low-lying areas alone, “[w]ithout adaptation, hundreds of millions of people . . . will be displaced due to land loss by year 2100; the majority of those affected are from East, Southeast, and South Asia.”²⁰ Furthermore, IPCC predictions rest on the hypothesis that countries will considerably mitigate their GHG emissions, but if instead the “business-as-usual” emissions scenario proceeds, climate-induced sea level rise alone could submerge “land currently home to 470 to 760 million people globally.”²¹ However, remaining under the UNFCCC-mandated threshold-limit of 2°C of global temperature rise would displace (only) 130 million people in this manner.²² Successful emissions mitigation is thus inextricably tied to how many people will be displaced. I will later elaborate on why, despite these stark numbers, climate-induced migrants remain largely invisible in international law.

To generate international law on an issue, the issue must be capable of legal definition. However, definition on this issue is made difficult partially due to the diverse ways in which climate change can cause displacement. Some possible ways are delineated by former UN Representative on the Human Rights of Internally Displaced Persons, Walter Kälin, as: (1) intensified sudden-onset natural disasters, e.g., storms; (2) slow-onset effects on livelihoods, e.g., chronic drought; (3) regions becoming uninhabitable or incapable of supporting livelihoods, e.g., submerging island states; (4) regions designated environmental high-risk zones; and (5) conflict stemming from resource-scarcity fueled by climate change.²³ Climatic displacement caused in these ways usually transforms from temporary to permanent displacement due to the exacerbated frequency or intensity of a climatic event (e.g., declining agriculture due to temperature extremes) or the irreversibility of the climatic event (e.g., sea-level submersion).²⁴

Generating legal terminology is likewise challenging because there is no agreed definition of climate-induced migration. In this context, the

19. *Global Estimates 2015: People Displaced by Disasters*, INTERNAL DISPLACEMENT MONITORING CTR., <http://www.internal-displacement.org/publications/2015/global-estimates-2015-people-displaced-by-disasters/> [<https://perma.cc/44L4-AA9L>] (last visited Mar. 30, 2017).

20. Wong et al., *supra* note 17, at 364.

21. BENJAMIN H. STRAUSS ET AL., MAPPING CHOICES: CARBON, CLIMATE, AND RISING SEAS, OUR GLOBAL LEGACY 6 (2015).

22. *Id.*

23. Walter Kälin, *Conceptualising Climate-Induced Displacement*, in CLIMATE CHANGE AND DISPLACEMENT: MULTIDISCIPLINARY PERSPECTIVES 81, 85–86 (Jane McAdam ed., 2010).

24. *Id.* at 85.

earliest and most-cited definition of “environmental refugees” was coined by Essam El-Hinnawi in 1985 as “people 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.”²⁵ Climate change, as such an “environmental disruption . . . triggered by people,” can generally be included as an environmental cause of migration; although, environmental migration is a broader, even prehistoric phenomenon, exacerbated by climate change to an unprecedented degree.²⁶ Myers expanded El-Hinnawi’s definition to include those migrating because they “can no longer gain a secure livelihood in their homelands” due to environmental reasons intertwined with poverty and demographic pressures.²⁷ Nevertheless, the UN Refugee Agency (UNHCR), which has the mandate to legally delineate “refugees”—while acknowledging the influence of environmental and climatic factors on patterns of forced migration—does not recognize “environmental refugees” as legally defined refugees.²⁸ Any type of environmental movement is thus more legally accurately described as “displacement” or “migration.” Moreover, the term refugee in reference to climatically displaced people can be partially inappropriate given that climate-induced movement is still largely non-cross-border movement—even though it involves a similar sense of exile, with the displaced having “abandoned their homelands on a semi-permanent if not permanent basis, with little hope of a foreseeable return.”²⁹ While the term refugee then connotes a narrower legal meaning, displacement and migration are more flexible, interchangeable terms—migration may be a more general term while displacement may better capture forced or internal movement, but both displacement and migration can ultimately denote internal, as well as cross-border, movement.³⁰ As for those displaced specifically by climate change, the Research Handbook on Climate Change Adaptation Law proposes the term climatically displaced

25. ESSAM EL-HINNAWI, ENVIRONMENTAL REFUGEES 4 (1985).

26. *Id.*; Chris Mooney, *Climate Shifts Dramatically Upended the Lives of Prehistoric Humans, Scientists Say*, WASH. POST (Feb. 4, 2016), https://www.washingtonpost.com/news/energy-environment/wp/2016/02/04/climate-shifts-dramatically-upended-the-lives-of-prehistoric-humans-according-to-scientists/?utm_term=.b5553d34209a [<https://perma.cc/ZEK7-8VH2>]; NELD, <http://climate-neld.com> [<https://perma.cc/GY39-K6N5>] (last visited Mar. 30, 2017).

27. Myers, *supra* note 18.

28. BRIAN GORLICK, ENVIRONMENTALLY DISPLACED PERSONS: A UNHCR PERSPECTIVE 16, 17 (2009), http://equatorinitiative.org/images/stories/events/2009events/brian_gorlick_environmentally_displaced_persons_unhcr_perspective.pdf [<https://perma.cc/47UZ-V2J6>].

29. Myers, *supra* note 18.

30. *Key Migration Terms*, INT’L ORG. FOR MIGRATION, <https://www.iom.int/key-migration-terms> [<https://perma.cc/KL55-M63Z>] (last visited Mar. 30, 2017).

persons (CDPs), which espouses previous definitions of environmental movement while focusing on climate change as a sub-category.³¹ Some, nonetheless, advocate for the term climate refugee to acknowledge that “climate change is a form of persecution against the most vulnerable” and could come to be recognized as such.³² While it may be theoretically preferable to then use the term refugee, it is difficult to maintain in the legal context given the lack of actual legal basis—I accordingly use the terms CDP or climate-induced migrant.

Finally, there are some diverging views as to whether climate-induced migration is a negative phenomenon to be prevented or whether it can be a positive adaptation strategy in response to climate-change effects that should be facilitated; I submit it can be both. CDPs may not desire to migrate in the sense that most attest they would “return to their original residence and rebuild as soon as practical,” given that exile involves not only economic loss but also loss of community, identity, cultural heritage, and sense of place (termed non-economic loss and damage under the UNFCCC).³³ Nevertheless, the irreversibility of climatic events may render moving, either internally or cross-border, the soundest coping strategy. Global governance, in turn, will be crucial “in determining the degree to which migration is a form of adaptation[] or an indicator of a failure to adapt” and, to this end, should involve a variety of options for threatened communities.³⁴

B. Science, Causality, and Inequality

Climate change is scientifically complex, which makes its legal attributes difficult to discern and unusually reliant on scientific evidence. Nonetheless, causality between the effects of climate change and increased levels of human displacement is virtually undisputed in climate science—as is the fact that climate change bears its worst effects on poor countries and vulnerable populations.³⁵ The IPCC has deemed that currently, humanity is

31. Mariya Gromilova & Nicola Jägers, *Climate Change Induced Displacement and International Law*, in RESEARCH HANDBOOK ON CLIMATE CHANGE ADAPTATION LAW 79 (Jonathan Verschuuren ed., 2013).

32. François Gemenne, *One Good Reason to Speak of Climate Refugees*, 49 FORCED MIGRATION REV. 70, 71 (2015).

33. Adger et al., *supra* note 15, at 758, 767.

34. KOKO WARNER, ASSESSING INSTITUTIONAL AND GOVERNANCE NEEDS RELATED TO ENVIRONMENTAL CHANGE AND HUMAN MIGRATION 8 (2010).

35. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *Summary for Policymakers*, in CLIMATE CHANGE 2014: SYNTHESIS REPORT 1, 8 (2015), https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf [<https://perma.cc/XC3J-ZLU9>] [hereinafter IPCC SYNTHESIS REPORT].

entering a phase of dangerous global warming, the limiting of which requires “substantial and sustained reductions” in GHG emissions.³⁶ Already in 1990, the IPCC warned that “[m]igration and resettlement may be the most threatening short-term effects of climate change.”³⁷ In its most recent 2014 report, the IPCC reaffirmed that “an increasing incidence and changing intensity of extreme weather events due to climate change will lead directly to the risk of increased levels of displacement.”³⁸ The IPCC’s analysis further demonstrates that climate change will increase human displacement in ways direly affect poor communities and countries:

Populations that lack the resources for planned migration experience higher exposure to extreme weather events, particularly in developing countries with low income. . . . [C]limate-change impacts are projected to slow down economic growth, make poverty reduction more difficult, further erode food security, and prolong existing and create new poverty traps, the latter particularly in urban areas and emerging hotspots of hunger.³⁹

In this context, “the biggest increase in migration comes from productive agricultural areas that support a large labor force,” a characteristic of many developing economies.⁴⁰ There can also be an inverse correlation between vulnerability and mobility; according to the IPCC, those “most exposed and vulnerable to the impacts of climate change” tend to have “the least capability to migrate” in a planned manner.⁴¹ While migration may be an inevitable adaptation strategy, when ungoverned and unassisted, it tends to constitute “an emergency response that creates conditions of debt and increased vulnerability.”⁴² Governance could, thus, facilitate planned, legal relocation instead of emergency displacement that fuels further risk. Climate change thus affects human mobility both directly and indirectly. When combined with other economic, social, and political instabilities, climate change can indirectly displace people as “a threat multiplier[,] which exacerbates pre-existing vulnerabilities,” such as fueling displacement in areas already affected by

36. *Id.* at 16.

37. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE WORKING GROUP II, CLIMATE CHANGE: THE IPCC IMPACTS ASSESSMENT 5-9 (W.J. McG. Tegart et al. eds., 1990).

38. Adger et al., *supra* note 15, at 767.

39. IPCC SYNTHESIS REPORT, *supra* note 35, at 16.

40. Adger et al., *supra* note 15, at 769.

41. *Id.* at 767.

42. *Id.*

poverty or conflict.⁴³ For instance, many agree that the war in Syria was partly sparked by the worst drought in the country's history between 2006 and 2011, likely linked to climate change.⁴⁴ Thus, climate change “could, if migration and resettlement [resulting from it] are poorly managed, lead to local and regional instability.”⁴⁵ However, the framing of climate change as a security threat may be more reflective of “the preoccupations of the ‘developed’ world,” focused on the supposed threat of immigration instead of the needs of those displaced.⁴⁶

C. Legal Characteristics and the Basis of Responsibilities

What perhaps most distinguishes climate change from other environmental causes driving migration in history is its scientifically established anthropogenic or manmade causality. Anthropogenic causation means that it is possible to attribute causal responsibility to states that have emitted the most GHGs, significantly causing global warming, the effects of which harm and displace people.⁴⁷ The evolution of international climate law, alongside growing scientific evidence, has created conditions in which attributing not only causal but also legal responsibility for emissions seems increasingly possible, though challenges remain.⁴⁸ The fact that legal systems are largely devised to address harm confined within borders does “not translate easily to transboundary problems such as climate change, where the benefits and the costs are not all incurred by the same polity.”⁴⁹ Climate displacement is characterized by its globally disparate cause-effect-harm nexus, where those harmed most by the effects are generally not those causing the harm.⁵⁰ While refugees often face persecution enacted by their

43. JANE MCADAM, CLIMATE CHANGE, FORCED MIGRATION, AND INTERNATIONAL LAW 267 (2012).

44. Henry Fountain, *Researchers Link Syrian Conflict to a Drought Made Worse by Climate Change*, N.Y. TIMES, Mar. 3, 2015, at A13.

45. LUKAS RÜTTINGER, ET AL., A NEW CLIMATE FOR PEACE: TAKING ACTION ON CLIMATE AND FRAGILITY RISKS, at ix (Meaghan Parker ed., 2015).

46. David Hodgkinson et al., *The Hour When the Ship Comes in’: A Convention for Persons Displaced by Climate Change*, 36 MONASH U. L. REV. 69, 83 (2010).

47. Paris Agreement on Climate Change, art. 2(1), Dec. 12, 2015, T.I.A.S. No. 16-1104 [hereinafter Paris Agreement].

48. Michael Faure, *Climate Change Adaptation and Compensation*, in RESEARCH HANDBOOK ON CLIMATE CHANGE ADAPTATION LAW 110, 117 (Jonathan Verschuuren ed., 2013).

49. John H. Knox, *Human Rights Principles and Climate Change*, in OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW 213, 226 (Cinnamon P. Carlarne et al. eds., 2016), [hereinafter *Human Rights Principles and Climate Change*].

50. See Justin Worland, *How Climate Change Unfairly Burdens Poorer Countries*, TIME (Feb. 5, 2016), <http://time.com/4209510/climate-change-poor-countries/> [<https://perma.cc/WF82-9S4U>] (stating that more than half of the highest emitting countries are some of the least vulnerable and the lowest emitting countries are highly vulnerable to negative effects of climate change).

own state, in reverse, CDPs are typically forced to move due to the actions (emissions) of states other than their own, whereby the “persecutor” of CDPs, if there were one, could be described as the aggregate of industrialized states that failed to mitigate their emissions.⁵¹ Yet, regarding specific causation by a single state, it is “doubtful . . . that an individual would be able to hold a particular State responsible for harm caused by climate change” because, on “a strict legal perspective,” that particular state’s emissions would need to be “proven to be the specific cause of a particular climate-related impact,” which science can only demonstrate for states in the aggregate.⁵²

A better approach to establishing responsibility and remedy may indeed be to focus on the “wider responsibility of the North,” accounted for “through fair burden-sharing agreements or respective contributions” focused on the states largely responsible in the aggregate.⁵³ The UN Special Rapporteur on human rights and the environment, John Knox, considers such an approach possible: “the difficulty of tracing causal chains is not necessarily in itself an insuperable barrier to . . . an allocation [of legal responsibility], at least at an aggregate level,” because scientists can already establish causation between aggregate state emissions, climate change, and effects.⁵⁴ Even if climate science cannot (yet) establish whether State X’s specific emissions caused the climatic event Y that displaced community Z, science is capable of establishing that “human influence on climate substantially increased the probability of” even a “single weather event” Y that displaces community Z.⁵⁵ In turn, human influence on the climate can be shown to stem, in the aggregate, disproportionately from developed countries responsible for most emissions and resulting harm as established in IEL.⁵⁶ In the preamble to the UNFCCC, parties recognize both the manmade nature of climate change (“human activities have been substantially increasing the atmospheric concentrations of greenhouse

51. Jane McAdam, *Refusing ‘Refuge’ in the Pacific: (De)Constructing Climate-Induced Displacement in International Law*, in *MIGRATION AND CLIMATE CHANGE* 102, 116 (Etienne Piguet et al. eds., 2011).

52. U.N. Secretary-General, *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights*, ¶ 72, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009), <http://www.ohchr.org/Documents/Press/AnalyticalStudy.pdf> [<https://perma.cc/P7DE-DKAJ>] [hereinafter OHCHR]; WALTER KÄLIN & NINA SCHREPFER, UNITED NATIONS HIGH COMM’R FOR REFUGEES: DIV. OF INT’L PROT., *PROTECTING PEOPLE CROSSING BORDERS IN THE CONTEXT OF CLIMATE CHANGE NORMATIVE GAPS AND POSSIBLE APPROACHES* 10 (2012), <http://www.unhcr.org/4f33f1729.pdf> [<https://perma.cc/LR95-V6DK>].

53. KÄLIN & SCHREPFER, *supra* note 52, at 10.

54. *Human Rights Principles and Climate Change*, *supra* note 49, at 225 n.20

55. Myles Allen, *The Scientific Basis for Climate Change Liability*, in *CLIMATE CHANGE LIABILITY: TRANSNATIONAL LAW AND PRACTICE* 8, 12 (Richard Lord et al. eds., 2012).

56. Atapattu, *supra* note 13, at 40.

gases”) as well as the differential contributions and responsibility of states for those GHG emissions:

Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs.⁵⁷

This actualization of social and development needs mentioned in the preamble reflects the principle of the “right to development” of poor countries, whose industrial development inevitably requires mitigation of disproportionate emissions by high-emitting countries to make ecological space for others.⁵⁸ The differential responsibility of states for climate change was operationalized *inter alia* as greater emissions-reduction targets for developed countries under the Kyoto Protocol to the UNFCCC.⁵⁹

The causal contributions of states to GHG emissions are indeed wildly disparate and disproportionate. A recent Oxfam report on global inequality relating to GHG emissions illustrates just how deep this “extreme carbon inequality” is: “The poorest half of the global population are responsible for only around 10% of global emissions yet live overwhelmingly in the countries most vulnerable to climate change – while the richest 10% of people in the world are responsible for around 50% of global emissions.”⁶⁰ Data on historical carbon dioxide (CO₂) (the main GHG) emissions indicates that based on emissions between 1850 and 2011, Europe and the United States alone have “released around half the CO₂ ever emitted.”⁶¹ These facts remain relevant to climate effects today, such as displacement, because “CO₂ has a long-term effect and there is a significant time lag between emission and its effect.”⁶² Yet, even from an ahistorical perspective, developing country per-capita emissions are still radically smaller than those of developed-country residents: India, one of the largest

57. UNFCCC, *supra* note 4, at pmb1.

58. *Id.*

59. Kyoto Protocol to the United Nations Framework Convention on Climate Change art. 3, Dec. 11, 1997, 2303 U.N.T.S. 148.

60. TIMOTHY GORE, OXFAM MEDIA BRIEFING, EXTREME CARBON INEQUALITY: WHY THE PARIS CLIMATE DEAL MUST PUT THE POOREST, LOWEST EMITTING AND MOST VULNERABLE PEOPLE FIRST 1 (2015), https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/mb-extreme-carbon-inequality-021215-en.pdf [<https://perma.cc/KL2G-WZQD>].

61. Duncan Clark & Robin Houston, *Historical, THE CARBON MAP*, <https://www.carbonmap.org/#Historical> [<https://perma.cc/8AFZ-L2AR>] (last visited Mar. 29, 2017).

62. Brunnée et al., *supra* note 12, at 27.

developing country emitters, still only emits about 1.6 tons of carbon per capita, compared to the United States at 24.0 tons per capita.⁶³ An International Bar Association (IBA) report further notes that 63% of historical emissions can be attributed to a mere 90 entities, public and private, which could help identify those entities liable for harm caused under the polluter pays principle of IEL.⁶⁴ When responsibility for emissions leading to climate change is therefore considered in the aggregate, “even if all states contribute to climate change [as] joint violators” of sorts, Knox contends that it is clear that “some states are far more culpable” and it is possible “to allocate responsibility accordingly” to the major emitters, namely the United States and the European Union (EU) (potentially China, under an ahistorical perspective).⁶⁵

Customary IEL might also function as a basis for responsibility. The iconic *Trail Smelter* arbitration laid down the customary international law no-harm rule of state responsibility for transboundary harm, crystallized in the 1992 Rio Declaration as state responsibility “to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”⁶⁶ *Trail Smelter* established that causation of transboundary harm can be demonstrated by “probable and inferential” evidence showing “the extent of the damages,” even where “the result [is] only approximate.”⁶⁷ Demonstrating probable causation could be, therefore, enough in customary IEL to find a link between a violation (emissions contributing to climate change) and harm suffered as a result of the violation (climate-induced forced displacement). Evidence on causality appears to meet the threshold of probability on aggregate causality, because IPCC projections, based on all published research worldwide, describe, for instance, displacement due to climate change as “medium evidence, high agreement”—implying likelihood, if not certainty.⁶⁸ Similarly, given that the standard of proof required to establish a “well-founded fear of persecution” in refugee law

63. RICHARD WILKINSON & KATE PICKETT, *THE SPIRIT LEVEL: WHY GREATER EQUALITY MAKES SOCIETIES STRONGER* 220 (2009).

64. INTERNATIONAL BAR ASSOCIATION, *ACHIEVING JUSTICE AND HUMAN RIGHTS IN AN ERA OF CLIMATE DISRUPTION* 134, 186 (2014), <http://www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx> [<https://perma.cc/672B-YA42>] [hereinafter IBA REPORT].

65. John H. Knox, *Linking Human Rights and Climate Change at the United Nations*, 33 *HARV. ENVTL. L. REV.* 477, 489 (2009).

66. *Trail Smelter (U.S. v. Can.)*, 3 R.I.A.A. 1905, 1965 (Perm. Ct. Arb. 1941); U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26 (Vol. I), annex I, princ. 2 (Aug. 12, 1992) [hereinafter *Rio Declaration*].

67. *Trail Smelter*, 3 R.I.A.A. at 1920.

68. IPCC SYNTHESIS REPORT, *supra* note 35, at 16.

can be even “less than a 50 per cent chance,” Law Professor Jane McAdam has argued that rather than requiring absolute certainty on causality, it should analogically be legally sufficient to show that climate-change effects caused by the emissions of an aggregate of states was a probable cause of displacement.⁶⁹

Finally, IEL tends to adopt a broad notion of responsibility that need not be strictly legal, but per environmental law scholars Philippe Sands and Jacqueline Peel, can connote “common responsibility” and “shared obligations” of states for the global commons, such as the atmosphere, termed the “common concern of humankind” in the Climate Convention.⁷⁰ Additionally, in IEL, liability does not refer merely to a breach of a legal obligation but denotes a “unique concept” including “both the primary obligation to prevent . . . and the obligation to make reparations.”⁷¹ Therefore, in international climate law, the use of liability should be understood “in a broader sense than litigation . . . which may fall short of enforceable legal liability” but, nonetheless, can involve responsibility to act, refrain, and compensate.⁷² Given the current stage of evolution of international climate law and the focus on aggregate state responsibility, it is perhaps global governance rather than courts that is more capable of working with these broad soft-law notions of responsibility and liability toward facilitating the protection and assistance needed.

II. GLOBAL GOVERNANCE: FROM LEGAL GAPS TO PLURALISM

“International law will need to operate within an area where the demands of coherence and reasonable pluralism will point in different directions.”⁷³

This chapter aims to examine the fragments of international law and governance that pertain to climate migration as well as the patent legal gaps in this context—gaps that are gradually being noted by governments and international institutions alike. For instance, a number of governments recently founded the Nansen Initiative on disaster-induced displacement

69. Jane McAdam, *Swimming Against the Tide: Why a Climate Change Displacement Treaty Is Not the Answer*, 23 INT’L J. REFUGEE L. 2, 14 (2011) (internal quotations omitted) (quoting *Immigration & Naturalization Serv. v. Cardoza-Fonseca*, 480 U.S. 421, 431 (1987)).

70. PHILIPPE SANDS ET AL., *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 234 (Cambridge Univ. Press, 3rd ed. 2012).

71. ELLI LOUKA, *INTERNATIONAL ENVIRONMENTAL LAW: FAIRNESS, EFFECTIVENESS, AND WORLD ORDER* 477 (2006).

72. Brunnée et al., *supra* note 12, at 23.

73. Int’l Law Comm’n, *Rep. on the Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law*, ¶ 493, U.N. Doc. A/CN.4/L.682 (2006).

explicitly in response to the perceived “serious legal gap . . . with regard to cross-border movements in the context of disasters and the effects of climate change.”⁷⁴ Given this apparent vacuum, it must be asked what (if anything) are the relevant institutions, whose mandate we might expect to include building solutions to climate-induced migration, doing to respond and how might they proceed and cooperate. Given the lack of agreed definition and the multi-faceted nature of climate-induced migration, there may be a need for multiple, global governance approaches.

A. Fragmentation and Pluralism in International Law

Climate migration can evoke multiple separate realms of international law, of which I limit my focus to international refugee, human rights, and environmental law as well as certain domestic examples and internal displacement guidelines.⁷⁵ My query prioritizes assistance, which I view as more imminently achievable within existing legal architecture than within theoretical proposals for wholly new institutions that I leave largely unexplored here.⁷⁶ Despite projects such as the Nansen Initiative, there is no single institution with a satisfactory mandate over climate-induced migration.⁷⁷ Rather, each regime appears to cover a certain *lex specialis* aspect. Though a fragmented governance landscape may seem ineffective, multi-institutional governance can be acceptable when the question becomes “how the expertise of . . . relevant organizations can be most effectively utilized and integrated.”⁷⁸

Such rifts between governance regimes are well described by the concept of fragmentation of international law, as elaborated in the International Law Commission (ILC) report on the topic, finalized by International Law Professor Martti Koskenniemi.⁷⁹ In general, fragmentation manifests as separations between different types of *lex specialis*—for example, the World Trade Organization (WTO) concluded that whatever the status of the IEL-based precautionary principle is “under international environmental law,” it has “not become binding” in trade

74. *About Us*, NANSEN INITIATIVE, <https://www.nanseninitiative.org/secretariat/> [<https://perma.cc/H6QN-5L9A>] (last visited Mar. 29, 2017).

75. MCADAM, *supra* note 43, at 215.

76. See Katrina Miriam Wyman, *Responses to Climate Migration*, 37 HARV. ENVTL L. REV. 167, 185 n.101 (2013) [hereinafter *Responses to Climate Migration*] (providing an outline of other theoretical proposals).

77. See WENTZ & BURGER, *supra* note 16, at 6 (noting that current international agencies and organizations only address some aspects of climate-induced migration).

78. MCADAM, *supra* note 43, at 213.

79. See generally Int'l Law Comm'n, *supra* note 73, ¶ 491 (emphasizing the need for coherent international law, despite its fragmentation).

law—suggesting separate regimes may be governed by separate rules.⁸⁰ Nonetheless, such fragmentation need not decapitate the coherence of international law if fragmentation is accommodated under “reasonable pluralism,” where deviations in rules function to “reflect the differing pursuits and preferences that actors in a pluralistic (global) society have,” rendering it even “pointless to insist on formal unity.”⁸¹ The multidisciplinary complexity of climate-induced migration may mean that each regime—human rights, environmental, refugee law, etc.—is capable of addressing different socially valuable aims. For these reasons, IEL might be uniquely tailored to addressing those aspects of climate-induced migration that deal with the *lex specialis* characteristic of IEL, such as differentiated responsibilities between states. Moreover, international law already involves disparate political ambitions, particularly along the North-South divide—and in this “world of plural sovereignties,” pluralism has always been “a constitutive value of the system.”⁸² To preserve the coherence of international law while accommodating pluralism, it is nonetheless essential to give “increasing attention . . . to the collision of norms and regimes.”⁸³ Accordingly, while embracing reasonable pluralism, I occasionally touch on how the legal regimes can overlap and complement each other.

B. International Refugee and Human Rights Law

The principal international law on refugees is contained in the 1951 UN Refugee Convention.⁸⁴ Article 1 of the Refugee Convention states that the term refugee applies to someone “outside the country of his nationality” whose movement is “owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion.”⁸⁵ The principle of non-refoulement (Article 33(1)), in turn, prohibits states from returning a refugee to a country where he or she has reason to fear such persecution.⁸⁶ However, the Article 1 definition has not been interpreted to lend itself to environmental/climatic reasons for movement, and the UN Refugee Agency has indicated that there currently is little likelihood of including environmental or climatic events

80. *Id.* ¶ 55 (internal quotations omitted).

81. *Id.* ¶ 16.

82. *Id.* ¶ 491.

83. *Id.* ¶ 493.

84. Convention Relating to the Status of Refugees, July 28, 1951, 360 U.N.T.S. 117 [hereinafter Refugee Convention].

85. *Id.* at art. 1(A)(2).

86. *Id.* at art. 33(1).

under the Convention—the Agency fears that opening re-negotiation in the current political climate could dilute even existing protections.⁸⁷ The requirement to be outside one's country further means that international refugee law mainly protects those who have undertaken cross-border movement—a limitation regarding the largely internal nature of current climate-related movement. It may be possible that refugee law could currently apply in rare cases where people cross borders partly or indirectly due to climatic reasons (e.g., climate events combining with conflict). When people do cross borders for environmental reasons, they would likely refer to persecution instead of environmental reasons because most legal systems grant refugee status for persecution.⁸⁸ Indeed, until the Convention is potentially extended to cover environmental reasons, it seems more practical for making a stronger legal case to emphasize traditional persecution reasons contained in Article 1 rather than the presence of environmental/climatic reasons.

International human rights law, in turn, upholds basic protections for the rights of all people, including migrants regardless of reason for movement.⁸⁹ According to a Human Rights Council Resolution, the effects of climate change engage multiple existing human rights, including rights to life, health, adequate housing, adequate food, self-determination, and safe drinking water and sanitation.⁹⁰ One challenge is that many of these rights, relevant to climate-induced displacement, are socioeconomic rights—relating to the loss of sustenance, abode, food, and deteriorating health and living conditions—which are often given less emphasis in western legal systems fixated on political rights. Overall, there have been few cases in human rights bodies even concerning climate change, although many claims have been brought in relation to environmental harm more generally—notably *Budayeva and Others v. Russia*, where the European Court of Human Rights (ECtHR) found a violation of the right to life based on the state's failure to protect against an environmental threat.⁹¹ One climate-change claim was launched by the Inuit in the Inter-American Commission on Human Rights against the United States on its responsibilities as a major GHG emitter, but the case yielded no formal

87. Gromilova & Jägers, *supra* note 31, at 88.

88. See LOUISE OLSSON, ENVIRONMENTAL MIGRANTS IN INTERNATIONAL LAW: AN ASSESSMENT OF PROTECTION GAPS AND SOLUTIONS 1, 11 (2015) (discussing how environmental migrants do not easily fit into any international protection regimes and therefore have less protection compared to one claiming persecution).

89. Universal Declaration of Human Rights, *supra* note 7.

90. Human Rights Council Res. 10/4, U.N. Doc. A/HRC/RES/10/4, pmb1. (Mar. 25, 2009).

91. *Budayeva v. Russia*, App. No. 15339/02, 2008 Eur. Ct. H.R. at 32.

decision largely due to its prospective nature.⁹² Jurisdictional limitations similarly confine the effectiveness of human rights in relation to climate change, and individuals rely “first and foremost on their own States for . . . protection.”⁹³ Thus, human rights law may be most effective when states take domestic legal actions on climate-related matters—actions that may be judicially reviewed in domestic courts on human rights grounds.⁹⁴ These and other human rights questions relating to climate migration are thoroughly explored by McAdam.⁹⁵

C. Examples from National Law

Domestic laws present fragmented examples of a possible emerging trend toward broader protection for environmentally induced migration. National refugee laws, mirroring the 1951 Convention, generally do not include environmental causes as warranting refugee status or permanent residency.⁹⁶ The handful of laws that do include environmental causes are fairly recent legislation and often untested in case law.⁹⁷ Finland and Sweden are the only countries with comprehensive domestic legal provisions protecting environmental refugees, providing a potential template for others to follow.⁹⁸ Under the Aliens Act of 2004, Finland can grant a residence permit to a person who cannot return to his or her origin country, *inter alia*, “as a result of an environmental catastrophe.”⁹⁹ Sweden has similar 2009 legislation protecting those who cannot return “because of an environmental disaster.”¹⁰⁰ In the Americas, disparate examples exist. Cuba’s immigration legislation, the only one of its nature in the region, includes as refugees those who flee due to a “cataclysm or other natural phenomena”; however, the UNHCR is unaware of practical applications thus far.¹⁰¹ The United States grants temporary protection to those unable to return due to, *inter alia*, an environmental disaster through the bilateral

92. Andrew C. Revkin, *Inuit Climate Change Petition Rejected*, N.Y. TIMES (Dec. 16, 2006), <http://www.nytimes.com/2006/12/16/world/americas/16briefs-inuitcomplaint.html> [https://perma.cc/S7GE-QDUQ].

93. OHCHR, *supra* note 52, ¶ 72.

94. *Id.*

95. See generally MCADAM, *supra* note 43 (analyzing the normative gap in international legal protections for climate-induced migration).

96. Gromilova & Jägers, *supra* note 31, at 88.

97. *Id.*

98. *Id.*

99. Aliens Act (Act No. 301/2004), § 88a(1) (Fin.).

100. 4 ch. 2a § Act amending the Aliens Act (2005:716) (Svensk författnings-samling [SFS] 2009:1542) (Swed.).

101. U.N. High Comm’r for Refugees, *Compilation Rep. on Universal Periodic Review: Cuba*, at 1 (Oct. 2012).

Temporary Protected Status (TPS) legislation.¹⁰² The United States Attorney General can designate countries under TPS where he finds “an earthquake, flood, drought, epidemic, or other environmental disaster in the state resulting in a substantial, but temporary, disruption of living conditions” and where the foreign state is temporarily unable to handle return.¹⁰³ The law has been used to grant temporary protection, for example, to those displaced by the 2010 Haiti earthquake.¹⁰⁴ New Zealand has no explicit legislation on the matter, yet it recently encountered the first climate-refugee claims for residency on the basis of climate-induced displacement. The 2015 case of Ioane Teitiota centered on the argument that the consequences of climate-induced sea level rise in Kiribati constituted a form of persecution that qualified Teitiota’s family as refugees under the 1951 Convention.¹⁰⁵ The New Zealand Supreme Court, however, held that the 1951 Convention did not presently protect on climatic grounds, though it might in the future.¹⁰⁶ By contrast, in 2014, a Tuvaluan family gained residency on the grounds that they would be severely affected by climate change if returned; although, the Tribunal’s rationale was stringent, requiring “exceptional circumstances of a humanitarian nature” (there, illness from seawater-infiltrated drinking water) and rendering return “unjust and unduly harsh.”¹⁰⁷ The precedent of the case may be limited by applying the rule of family life rights because the children were born in New Zealand.¹⁰⁸

D. Internal Displacement in International Law

International law concerning internally displaced persons (IDPs) is a system separate from refugee law, providing mainly soft-law, non-binding guidelines. It is governed by the 1998 UN Guiding Principles on Internal Displacement, which deem national authorities responsible for protecting people within their borders from forced displacement.¹⁰⁹ The Principles

102. Aliens and Nationality Act, 8 U.S.C. § 1245(a)(1), (b)(1) (2012).

103. *Id.*

104. See generally *Temporary Protected Status*, U.S. CITIZENSHIP & IMMIGR. SERVICES, <https://www.uscis.gov/humanitarian/temporary-protected-status> [<https://perma.cc/B5SG-YC99>] (last updated Jan. 17, 2017) (describing conditions in countries from which individuals may be granted temporary protected status).

105. *Teitiota v. Chief Exec. of the Ministry of Bus., Innovation & Emp’t* [2015] NZSC 107 at [11] (N.Z.).

106. *Id.* at [5] n.5, [13].

107. *AD (Tuvalu)* [2014] NZIPT 501370-371 at [29], [32] (N.Z.).

108. *Id.* at [31].

109. Francis M. Deng (Representative of the Secretary-General), *Rep. on Guiding Principles on Internal Displacement*, princ. 3, U.N. Doc. E/CN.4/1998/53/Add.2 (Feb. 11, 1998) [hereinafter *Guiding Principles*].

could accommodate CDPs as IDPs include those forced to flee “natural or human made disasters.”¹¹⁰ The Principles purport to not create new legal obligations but function as a restatement of humanitarian obligations and “the human rights of all persons on their territory” whether displaced or not.¹¹¹ Only about 20 countries have incorporated the Principles into law with mixed effectiveness.¹¹² The Principles emphasize domestic responsibilities of origin states but are less articulate concerning high-emitting countries’ international responsibilities to those displaced in other origin countries, offering little to countries with few resources to uphold provisions.¹¹³ Further, international law tends to construe state responsibility as proportional to its available resources, meaning that poor countries cannot be obliged to assist beyond their available resources.¹¹⁴

Regionally, there may be new international law concerning people internally displaced by climate effects. The African Union’s (AU) 2009 Kampala Convention presents a formidable regional legal solution as the first treaty on displacement, recognizing climate change as triggering protection obligations.¹¹⁵ Partly modeled on the UN Guiding Principles, the Kampala Convention explicitly protects those displaced due to climate change.¹¹⁶ As of 2016, the Convention had been ratified by 25 AU member states.¹¹⁷ The UN Special Rapporteur on the human rights of IDPs praised it as forward looking in its integration of climate displacement, also noting its focus on “sovereignty as responsibility.”¹¹⁸ This emphasis on sovereign responsibility means that responsibility rests on the shoulders of the AU origin states—so, while IDPs can have robust protection in AU member states with ample resources, many AU member states may, in reality, be too resource constrained to assist beyond minimal protection. Furthermore,

110. *Id.* at annex ¶ 2.

111. The American Society of International Law, *Incorporating the Guiding Principles on Internal Displacement into Domestic Law: Issues and Challenges*, 41 *STUD. TRANSNAT’L LEGAL POL’Y* 1, 2–3 (Walter Kälin et al. eds., 2010).

112. *Id.* at 4.

113. *Guiding Principles*, *supra* note 109, at princ. 21.

114. Astrid Epiney, ‘Environmental Refugees’: *Aspects of International State Responsibility*, in *MIGRATION AND CLIMATE CHANGE* 388, 411 (Piguet et al. eds., 2011).

115. MCADAM, *supra* note 43, at 99 n.2.

116. *African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention)*, 22 *Int’l J. Refugee L.* 119, 125 (2010).

117. See, e.g., *African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala Convention)*, AFR. UNION, <https://www.au.int/web/en/treaties/african-union-convention-protection-and-assistance-internally-displaced-persons-africa> [<https://perma.cc/AQ8G-TJNH>] (last visited Feb. 24, 2017) (listing countries that have signed and ratified the Kampala Convention).

118. BROOKINGS INST., *KAMPALA CONVENTION: SIGNIFICANCE AND NEXT STEPS 2* (2014), <http://www.brookings.edu/~media/research/files/reports/2014/04/08-kampala-convention-bradley/kampala-convention-event-at-swiss-mission-april-8-2014.pdf> [<https://perma.cc/2SNQ-VGVW>].

African states are hardly responsible for causing climate change and displacement thereof.

E. Locating the Function of International Environmental and Climate Law

As indicated, most migration triggered by climate change is presently characterized by its confinement within national borders.¹¹⁹ In the future, movement is set to become more cross-border and to increasingly engage refugee law. Present governance responses should not focus exclusively on future cross-border scenarios and rights in that context. Such an approach could be overtly North-centric, depicting displacement as an issue only once cross-border migration reaches developed countries and not while it is still mostly confined within Global South borders.¹²⁰ Because disaster- and climate-related displacement already affects millions in the South, assistance particularly to origin states is already needed.¹²¹ This is also because, while climate change can amplify cross-border migration, it may render cross-border migration less available to some. In circumstances of poverty, climate change can trap populations within climatic hotspots—populations that can be “just as important a policy concern as those who do migrate” across borders.¹²² To prevent such entrapment in intolerable environments, NYU Law Professor Katrina Wyman proposes “expand[ing] ways for people to move *ex ante* . . . before conditions deteriorate” to “reduce the extent of subsequent forced displacement.”¹²³ McAdam similarly advocates the international facilitation of “pre-emptive and staggered” planned migration options “with dignity.”¹²⁴

International provisions of assistance are equally important to countries and communities to cope with displacement as the facilitation of dignified migration. Such assistance should be governed globally because those responsible for climate change and associated harm “are found beyond the

119. U.N. High Comm’r for Refugees, *Rep. on Forced Displacement in the Context of Climate Change: Challenges for States Under International Law*, at 4 (May 20, 2009).

120. Khalid Koser, *Climate Change and International Displacement: Challenges to the Normative Framework*, in *MIGRATION AND CLIMATE CHANGE* 289, 293 (Piguet et al. eds., 2011).

121. See Aminul Hoque, *Climate-Induced Migrants Need Dignified Recognition Under a New Protocol*, in *ORGANIZATIONAL PERSPECTIVES ON ENVIRONMENTAL MIGRATION* 167, 171 (Kerstin Rosenow-Williams & François Gemenne eds., 2016) (citing Bangladesh as an example of a country that is already heavily impacted by climate-induced migration and will need additional assistance from international organizations).

122. U.K. GOV’T OFFICE FOR SCI., *MIGRATION AND GLOBAL ENVIRONMENTAL CHANGE: FUTURE CHALLENGES AND OPPORTUNITIES* 9 (2011).

123. *Responses to Climate Migration*, *supra* note 76, at 205.

124. McAdam, *supra* note 69, at 10, 22.

borders of affected countries.”¹²⁵ Along these lines, Wyman identifies two main gaps in international law on climate-related migration: a lack of refugee rights (the rights gap) and a lack of practical assistance available to recompense and facilitate dignified migration (the funding gap).¹²⁶ Regarding the rights gap, the role of IEL—particularly the UNFCCC—is important in raising awareness for the potential creation of legal rights for climate refugees; institutionally, these legal rights would be most effectively accommodated under general refugee law to appreciate the multi-causality of most migrations and not to single out climatic reasons as uniquely deserving reasons for movement.

As such, the more relevant role for international environmental and climate law may be to address the funding gap, considering that the UNFCCC institutionally already encompasses redistributive architecture to channel funds and other assistance to help communities most affected by climate change to adapt, build resilience, and potentially receive remedy on loss and damage.¹²⁷ Indeed, while the UNFCCC may not have the “operational capacity to oversee the issue of movement itself,” McAdam considers it crucial for “responsibility-sharing and financing of migration and other mobility strategies as a form of adaptation.”¹²⁸ Further, given the present precarious position of refugee and human rights law in the North, it may also be politically practical to explore assistance through international climate law.

III. THE ROLE OF THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

“... a more encompassing global order, which is a source not only of powers and rights, but also of obligations.”¹²⁹

The “relatively small body” of international law on climate change is comprised of three treaties, the UNFCCC, the Kyoto Protocol, and the 2015 Paris Agreement, as well as customary international law and general principles of law as they apply to climate-related issues.¹³⁰ The UNFCCC’s

125. Lars Thomann, *Environmental Migration*, in ORGANIZATIONAL PERSPECTIVES ON ENVIRONMENTAL MIGRATION 21, 25 (Kerstin Rosenow-Williams & François Gemenne eds., 2016).

126. *Responses to Climate Migration*, *supra* note 76, at 177, 181.

127. *Climate Finance*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/cooperation_and_support/financial_mechanism/items/2807.php [<https://perma.cc/DNB3-8UXQ>] (last visited May 11, 2017).

128. MCADAM, *supra* note 43, at 230.

129. EYAL BENVENISTI, THE LAW OF GLOBAL GOVERNANCE 123 (2014).

130. IBA REPORT, *supra* note 64, at 44.

chief objective, per Article 2, is mitigation or the “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system,” while enabling “economic development to proceed in a sustainable manner.”¹³¹ Prevention and mitigation are perhaps preferable to remediation, but climate change is already irreversibly underway; thus, provisions under the UNFCCC increasingly extend far beyond mitigation to different forms of assistance and remedy. With long-standing frameworks on adaptation and finance and a growing emphasis on loss and damage by the Conference of the Parties (COP) to the Convention, the UNFCCC could provide effective avenues to assist vulnerable, economically-constrained communities and countries by expanding its global burden-sharing architecture to climate migration.¹³²

A. The UNFCCC in the Global Governance of Climate-Induced Migration

The UNFCCC first incorporated climate-induced migration into its agenda in 2010 under the Cancun Adaptation Framework, whose Article 14(f) called for parties to take “[m]easures to enhance understanding, coordination and cooperation with regard to climate induced displacement, migration, and planned relocation” while “taking into account their common but differentiated responsibilities.”¹³³ By bringing climate-induced displacement under adaptation, the paragraph theoretically rendered migration a possible form of adaptation. The 2012 UNFCCC Doha Decision similarly recognized climate-induced migration but located it under the loss and damage (L&D) mechanism, encouraging “understanding of and expertise on loss and damage” and including “[h]ow impacts of climate change are affecting patterns of migration, displacement and human mobility.”¹³⁴ The 2015 Paris Agreement strengthens the UNFCCC mandate to tackle the issue under L&D: paragraph 50 of the Paris Decision (guiding section of the text) requests the Executive Committee of the Warsaw International Mechanism on Loss and Damage (WIM) “to establish . . . a

131. UNFCCC, *supra* note 4, at art. 2.

132. Julia Toscano, *Climate Change Displacement and Forced Migration: An International Crisis*, 6 ARIZ. J. ENVTL. L. & POL’Y 457, 467 (2015).

133. Conference of the Parties to the Framework Convention on Climate Change, *Rep. of the Conference of the Parties on its Sixteenth Session*, ¶ 14, 14(f), U.N. Doc. FCCC/CP/2010/7/Add.1 (Mar. 15, 2011), <https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf> [<https://perma.cc/PA9U-QNE9>].

134. Conference of the Parties to the Framework Convention on Climate Change, *Rep. of the Conference of the Parties on its Eighteenth Session*, ¶ 7(a)(iv), U.N. Doc. FCCC/CP/2012/8/Add.1 (Feb. 28, 2013), <http://unfccc.int/resource/docs/2012/cop18/eng/08a01.pdf> [<https://perma.cc/4BQ6-BWZC>].

task force . . . to develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change.”¹³⁵ The preamble of the Paris Agreement additionally states that parties “should, when taking action to address climate change, respect, promote and consider their respective obligations on . . . migrants,” *inter alia*.¹³⁶

The effectiveness of the Climate Convention, its accompanying instruments, and widely attended annual COPs is enlarged by its virtually universal membership of 197 parties, including the EU as a regional organization.¹³⁷ The assumption of responsibility by “industrialised countries of the North . . . for reducing global GHG emissions, as well as furnishing the financial and technological resources to enable the South to develop sustainably,” reflected CBDR and secured the Convention’s overwhelmingly wide ratification, especially by developing countries.¹³⁸ The Climate Convention encourages “the widest participation” of states and civil societies.¹³⁹ For instance, it may be used to assist representatives from poor countries and communities to participate in the COPs, involving not just the sovereign interests of the most powerful states but also the interests of those most affected.¹⁴⁰ This is reflective of Cambridge Law Professor Eyal Benvenisti’s notion of global governance “that minimizes the systemic democratic failures that inhere in the sovereign-based system,” providing “opportunities for individuals and communities to exert effective influence on policy-making that affects them,” beyond national boundaries.¹⁴¹

B. Common but Differentiated Responsibilities

The UNFCCC contains some substantial IEL principles that could potentially be employed beyond their conventional uses toward obligations concerning climate-induced migration. The most important principle is perhaps CBDR. It appears as Principle 7 of the 1992 Rio Declaration under which “States have common but differentiated responsibilities” and developed countries acknowledge the special “responsibility that they bear” due to their specific “contributions to global environmental degradation” and “the technologies and financial resources they command.”¹⁴² Adopting

135. Paris Agreement, *supra* note 47, ¶ 50.

136. *Id.* at pmb1.

137. *Status of Ratification of the Convention*, *supra* note 8.

138. Richardson et al., *supra* note 5, at 7–8.

139. UNFCCC, *supra* note 4, at art. 4.

140. *Id.*

141. BENVENISTI, *supra* note 129, at 125.

142. *Rio Declaration*, *supra* note 66, at princ. 7.

CBDR as Article 3(1) rendered the UNFCCC a more robust IEL principle, under which “Parties should protect the climate system . . . on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.”¹⁴³ Article 3(1) also requires that “the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”¹⁴⁴ Contentious North-South debates produced CBDR’s adoption; therefore, the CBDR presents merely a “watered-down” version of the legal responsibility for historic harm for which the developing companies advocated.¹⁴⁵ Notwithstanding, CBDR’s adoption was the first time in history that states agreed to recognize their differential contributions for causing climate change “and thus, their differential obligation to pay for the remediation and mitigation” thereof.¹⁴⁶ Law Professor Lavanya Rajamani argues that, while differentiated responsibilities may challenge sovereign equality as a general tenet of international law, CBDR, as *lex specialis derogat legi generali*, is the very “exercise of equal sovereignties in a world of unequal states that results in unequal rights and duties,” due to colonial, economic, and ecological plunder wrought by imbalanced exercises of sovereignty.¹⁴⁷ Some further claim that the underdevelopment of the “Third World” during colonialism and the accompanying plunder of natural resources “for the benefit of the imperialist Powers” generated a responsibility on those former powers for current ecological inequalities, such as climate change.¹⁴⁸ Even if the developed countries tend to adopt a less historic, more capacity-based rationale, state parties to the UNFCCC have, nonetheless, agreed to “grant special treatment to others” under CBDR.¹⁴⁹ Indeed, some legal scholars consider CBDR “of sufficient legal weight” for “the elaboration of future obligations” and “new kinds of solidarity duties” relevant in considering applications to potential burden-sharing obligations on climate-induced displacement.¹⁵⁰

Taking existing operationalization under the UNFCCC as a model, CBDR has provided for differentiated obligations between developed

143. UNFCCC, *supra* note 4, at art. 3(1).

144. *Id.*

145. Atapattu, *supra* note 13, at 39–40.

146. DAG HAMMARSKJÖLD FOUND., DEVELOPMENT DIALOGUE: NO FUTURE WITHOUT JUSTICE 24 (2012).

147. LAVANYA RAJAMANI, DIFFERENTIAL TREATMENT IN INTERNATIONAL ENVIRONMENTAL LAW 2–8 (2006).

148. R.P. ANAND, CONFRONTATION OR COOPERATION? INTERNATIONAL LAW AND THE DEVELOPING COUNTRIES 105 (2d ed. 2011).

149. RAJAMANI, *supra* note 147, at 2.

150. TUULA HONKONEN, THE COMMON BUT DIFFERENTIATED RESPONSIBILITY PRINCIPLE IN MULTILATERAL ENVIRONMENTAL AGREEMENTS 333 (Kurt Deketelaere ed., 2009).

countries (Annex I) and developing countries (Non-Annex I), with additional special treatment given to the Least Developed Countries (LDCs).¹⁵¹ Notably, Article 4(4) of the UNFCCC obliges developed countries to “assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.”¹⁵² Sands and Peel remark that while the “novel provision” of Article 4(4) “is not a formal expression of liability under the principles of state responsibility,” it is nonetheless “an admission of responsibility with financial consequences,” perhaps constituting soft-law liability.¹⁵³ Likewise, under Article 4(3), developed countries “shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties,” which “shall take into account . . . appropriate burden sharing.”¹⁵⁴ Thus, if climate migration is interpreted as an adverse effect under Article 4(4), in accordance with CBDR and greater developed-country obligations, Article 4 obligations could potentially extend to financial assistance on climate-induced migration.

C. Effect of the 2015 Paris Agreement

The Paris Agreement, adopted at the UNFCCC COP21 summit in December 2015, opened for signing on April 22, 2016, and exceeded any “historical record for first-day signatures to an international agreement.”¹⁵⁵ Though the Agreement appears more legally flexible than the Kyoto Protocol, it singularly reaffirms CBDR in Article 2(2), integrating differentiation in a subtler, bottom-up manner.¹⁵⁶ As Cambridge Law Professor Jorge Viñuales suggests, the Agreement’s social function is perhaps less to “bind States [than] to influence the levers of human behaviour.”¹⁵⁷ References to legal liability per se are limited following United States resistance, as former U.S. Secretary of State John Kerry stated, “framing it in a way that doesn’t create a legal remedy because

151. *Parties & Observers*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/parties_and_observers/items/2704.php [<https://perma.cc/B8NR-29XM>] (last visited May 11, 2017).

152. UNFCCC, *supra* note 4, at art. 4(4).

153. SANDSET AL., *supra* note 70, at 734.

154. UNFCCC, *supra* note 4, at art. 4(3).

155. Press Release, UNFCCC, Record Support for Advancing Paris Climate Agreement Entry into Force, U.N. Press Release (Apr. 22, 2016).

156. Paris Agreement, *supra* note 47, at art. 2(2).

157. Jorge E. Viñuales, *The Paris Climate Agreement: An Initial Examination* § 3.3.3 (Cambridge Ctr. for Env’t, Energy & Nat. Res. Governance, Working Papers No. 6, 2015) (internal quotations omitted).

Congress [would] never buy into” that.¹⁵⁸ The language from the COP21 decision adopting the Agreement thus states that Article 8 on L&D does not specifically “provide a basis for any liability or compensation,” though the legal weight of this part remains to be tested.¹⁵⁹

Displacement and migration were contentious negotiation items leading up to the Paris Agreement.¹⁶⁰ An earlier draft of the Agreement included a proposal to set up a specific “climate change displacement coordination facility” under L&D “to help coordinate efforts to address climate change induced displacement, migration and planned relocation.”¹⁶¹ The first draft advocated a similar facility that would have “[a]ssist[ed] in providing organized migration and planned relocation” and “[e]stablish[ed] procedures for coordinating compensation measures”—the compensation suggestion was notably removed.¹⁶² These proposals originated with the LDCs, supported by the G77 and China.¹⁶³ Some experts suggest that the proposed coordination facility could have included a mechanism to “pay countries to accept migrants,” particularly low-income countries already accepting “more than their fair share of displaced persons” while “taking into account their historical GHG emissions.”¹⁶⁴

With the new bottom-up approach, states define their own Nationally Determined Contributions (NDCs), anchored to the Paris Agreement, that outline national (for EU, regional) climate plans.¹⁶⁵ Almost one-fifth of the

158. Jeff Goodell, *John Kerry on Climate Change: The Fight of Our Time*, ROLLING STONE (Dec. 1, 2015), <http://www.rollingstone.com/politics/news/john-kerry-on-climate-change-the-fight-of-our-time-20151201> [<https://perma.cc/4RCG-NYCW>].

159. Paris Agreement, *supra* note 47, ¶ 52; *see also* JULIA KREIENKAMP & LISA VANHALA, GLOBAL GOVERNANCE INSTITUTE POLICY BRIEF: CLIMATE CHANGE LOSS AND DAMAGE 7 (2017), <https://www.ucl.ac.uk/global-governance/downloads/policybriefs/policy-brief-loss-and-damage> [<https://perma.cc/CA5X-MW6L>] (“Although the language used in Paragraph 52 is unambiguous, its inclusion in the Paris Decision – not the Agreement – means that it does not have the same binding effect and it could theoretically be challenged in future negotiations. In addition, Paragraph 52 does not exclude compensation in a context beyond Article 8 (e.g. litigation in a national court).”).

160. Sewell Chan, *Paris Accord Considers Climate Change as Factor in Mass Migration*, N.Y. TIMES, Dec. 12, 2015, at A16.

161. ADP Contact Group, *Draft Agreement and Draft Decision on Workstreams 1 and 2 of Ad Hoc Working Group on the Durban Platform for Enhanced Action*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE art. 5 (Dec. 4, 2015), https://unfccc.int/files/bodies/application/pdf/_adp_bridging_proposal_04dec@1000.pdf [<https://perma.cc/7AQ6-RWBQ>].

162. Ad Hoc Working Grp. on the Durban Platform for Enhanced Action, *Work of the Contact Group on Item 3: Negotiating Text*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 31–32 (Feb. 12, 2015).

163. CARLOS ARENAS, DISPLACEMENT SOLS., A CLIMATE CHANGE DISPLACEMENT COORDINATION FACILITY IN THE PARIS DRAFT AGREEMENT 7 (Nov. 6, 2015), <http://displacementsolutions.org/wp-content/uploads/2015/11/Climate-change-displacement-coordination-facility.pdf> [<https://perma.cc/7MYF-DATQ>].

164. WENTZ & BURGER, *supra* note 16, at 9.

165. Paris Agreement, *supra* note 47, at art. 3–4.

submitted Intended NDCs (INDCs) (mainly from Asia-Pacific, Africa, and Latin America) reference human mobility, such as preventing climate-induced displacement and migration, as adaptation.¹⁶⁶ Kiribati's INDC seeks to address "conflict and stress due to loss of property and land[] and forced migration" caused by sea level rise.¹⁶⁷ Togo's INDC projects a "exode rural massif" (massive rural exodus); Egypt's addresses internal climate-induced migration; India's prepares for evacuation due to climate-disaster risk; and Haiti's calls for planned relocation.¹⁶⁸ Viñuales suggests that NDCs "may qualify under international law as both a binding unilateral act and as a 'subsequent agreement,'" giving them potential future legal weight.¹⁶⁹

D. Aspects of the UNFCCC: Finance, Adaptation, and Loss and Damage

The UNFCCC establishes a general obligation to assist developing countries, and the Paris Agreement affirms that developed states "shall provide financial resources to assist developing country Parties."¹⁷⁰ Article 11 of the UNFCCC entrusts the UNFCCC Financial Mechanism to the Global Environment Facility (GEF), Special Climate Change Fund (SCCF), Least Developed Countries Fund (LDCF), Adaptation Fund (AF), and Green Climate Fund (GCF).¹⁷¹ Given the broad mandates of these climate funds, according to Wyman, their boards may already possess authority to establish "a 'substructure' or 'facility' [to] provide the first dedicated multilateral source of funding for climate migration."¹⁷² Using the above funds instead of other institutional sources to assist climate migrants would not be insignificant. The UNFCCC-governed funds are products of extensive negotiations with wide South participation and are often viewed as representing not traditional aid but "restitution and compensation for damages inflicted by those countries most responsible for . . . greenhouse

166. Eva Mach & Mariam Traore Chazalnoel, *Ahead of COP21 Intended Nationally Determined Contributions Take Stock of Human Mobility Questions*, INT'L ORG. FOR MIGRATION (Nov. 30, 2015), <http://weblog.iom.int/ahead-cop21-intended-nationally-determined-contributions-take-stock-human-mobility-questions> [<https://perma.cc/W7JN-8KMB>].

167. REPUBLIC OF KIRIBATI, INTENDED NATIONALLY DETERMINED CONTRIBUTION 16 (2015), http://www4.unfccc.int/submissions/INDC/Published%20Documents/Kiribati/1/INDC_KIRIBATI.pdf [<https://perma.cc/6UEF-94Z8>].

168. INT'L ORG. FOR MIGRATION, *MIGRATION IN THE INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDCS) AND NATIONALLY DETERMINED CONTRIBUTIONS (NDCS) 5-7* (2016).

169. Viñuales, *supra* note 157, § 3.2.1.

170. UNFCCC, *supra* note 4, at art. 4; Paris Agreement, *supra* note 47, at art. 9.

171. *Climate Finance*, *supra* note 127.

172. *Responses to Climate Migration*, *supra* note 76, at 185.

gases.”¹⁷³ Therefore, the use of “non-climate funds” on climate displacement might be “regarded as undermining the idea that developed countries have special obligations due to their responsibility.”¹⁷⁴ Additionally, because developing countries “have little control over the governance of” traditional international funds, they may prefer climate funds “over which developing countries have greater institutional control.”¹⁷⁵ However, financing of the funds has been “grossly inadequate,” leading to calls for mobilizing additional private finance; although, public finance will likely remain crucial for adaptation—the funding of which historically has been less popular than mitigation.¹⁷⁶

The impacts of climate change that can no longer be mitigated and affect communities are addressed under the adaptation framework, which helps develop and assist national measures to enhance climate-change resilience, for instance, via diversification of crops in drought-areas. National Adaptation Programmes of Action (NAPAs), in which developing countries identify priority adaptation needs, tend to recognize the possibility of climatic “large-scale migration,” often proposing “adaptation strategies to reduce pressure to migrate” or “planned relocation of individuals as an adaptive strategy.”¹⁷⁷ Given that Cancun’s paragraph 14(f) on migration recognized “migration as a form of adaptation,” there is potential “that international adaptation funding may be directed towards preventing displacement and developing relocation and migration schemes.”¹⁷⁸ The IBA report likewise recommends using UNFCCC LDCF’s financing for “domestic migration adaptation programmes,” given that “[f]unding to help developing countries resettle people internally is greatly needed.”¹⁷⁹

While the mitigation and adaptation sections concern stages in preventing harm, L&D, though still vaguely defined, involves addressing actualized harm through disaster response and, potentially, reparation.¹⁸⁰ The UNFCCC defines L&D as “the actual and/or potential manifestation of impacts associated with climate change in developing countries that negatively affect human and natural systems.”¹⁸¹ Loss involves “negative

173. RICHARDSON ET AL., CLIMATE CHANGE: GLOBAL RISKS, CHALLENGES AND DECISIONS 250 (2011).

174. *Responses to Climate Migration*, *supra* note 76, at 215.

175. *Id.*

176. RICHARDSON ET AL., *supra* note 173, at 250.

177. Koko Warner et al., *National Adaptation Plans and Human Mobility*, 49 FORCED MIGRATION REV. 8, 8 (2015).

178. MCADAM, *supra* note 43, at 232.

179. IBA REPORT, *supra* note 64, at 173.

180. Viñuales, *supra* note 157, § 3.2.3.

181. Subsidiary Body for Implementation, *A Literature Review on the Topics in the Context of Thematic Area 2 of the Work Programme on Loss and Damage*, at ¶ 2, U.N. Doc.

impacts in relation to which reparation or restoration is impossible,” while damage involves those on which it is still possible.¹⁸² The Paris Agreement strengthens the UNFCCC 2013 WIM by granting permanent legal footing to L&D in Article 8.¹⁸³ This was a victory for developing countries because L&D is a key negotiating demand, particularly for the Alliance of Small Island States (AOSIS), and an avenue toward potential compensation.¹⁸⁴ The WIM’s Action Area 6 on migration is mandated to conduct research on “migration and displacement based on projected climate and non-climate related impacts in vulnerable populations.”¹⁸⁵ As the WIM and the newly created Task Force on Displacement under its auspices proceeds further, communities could potentially seek assistance under the Task Force’s broad mandate, which allows it to develop recommendations on averting, minimizing, and addressing climate-related displacement.¹⁸⁶

E. Possible Governance Options Under the UNFCCC: Responsibilities and Assistance

It has been demonstrated that the UNFCCC is capable of functioning as a global burden-sharing framework with assistance mechanisms and funds that operationalize responsibilities, guided by adaptation and, increasingly, L&D. But, the UNFCCC is not a traditional aid institution—duties are rooted in CBDR and emissions. My approach to possible governance options under the UNFCCC falls somewhere in between McAdam’s consideration of human rights and others’ focus on climate liability. Global governance should conceptualize assistance as soft-law rights, including affected communities’ and countries’ rights to assistance and development.

FCCC/SBI/2012/INF.14 (Nov. 15, 2012), <http://unfccc.int/resource/docs/2012/sbi/eng/inf14.pdf> [<https://perma.cc/2UGF-YSWU>].

182. *Id.*

183. Paris Agreement, *supra* note 47, at art. 8.

184. LILLIAN YAMAMOTO & MIGUEL ESTEBAN, ATOLL ISLAND STATES AND INTERNATIONAL LAW: CLIMATE CHANGE DISPLACEMENT AND SOVEREIGNTY 106 (2014).

185. Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts, UNFCCC, *Rep. of Work Completed at First Meeting*, ¶¶ 21(a), 22, 23, Doc. No. FCCC/SB/2015/3 (Nov. 17, 2015), <http://unfccc.int/resource/docs/2015/sb/eng/03.pdf> [<https://perma.cc/Q59A-LNAG>].

186. Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts, UNFCCC, *Rep. of the Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts*, Doc. No. FCCC/SB/2016/3 (Oct. 14, 2016), <http://unfccc.int/resource/docs/2016/sb/eng/03.pdf> [<https://perma.cc/N3M2-U8CP>]; see also *Task Force on Displacement*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/adaptation/groups_committees/loss_and_damage_executive_committee/items/9978.php [<https://perma.cc/7QG2-4HDD>] (last visited May 15, 2017). The Task Force on Displacement is set to have its first meeting May 18-19, 2017, in Bonn, Germany.

Global governance should also conceptualize responsibilities as soft-law liability, including CBDR, compliance, and assistance obligations. Along this responsibilities-assistance nexus, there could be many possibilities for expanding the UNFCCC architecture to purposefully assist climate-induced migrants, some of which I explore here.

Multiple legal scholars have envisioned a multilateral fund with obligations in line with CBDR that makes international payments to assist CDPs directly and the low-income countries hosting them indirectly.¹⁸⁷ Yale Professor Frank Biermann and Professor Ingrid Boas advocate for a climate-induced migration protocol and fund as *sui generis* additions to the UNFCCC based on “collective rights for local populations”—reflecting community-based rights in contrast to individualistic rights.¹⁸⁸ Reflecting CBDR, this fund would provide assistance under the “Principle of International Burden-sharing,” with the premise that “industrialized countries bear most of the moral responsibility” to compensate for resettlement while giving “countries equal clout” in decision-making.¹⁸⁹ Taking a distributive-justice approach, Wyman similarly supports “monetary transfers . . . to offset the costs of” displacement and a temporary non-refoulement right enabling “citizens of developing countries to remain in developed countries as long as they could not safely return for climate-related reasons.”¹⁹⁰

Harvard Professor Mathias Risse has proposed a collective earth-ownership rationale, where peoples’ rights to self-preservation override states’ rights to exclude, leading to open-border obligations.¹⁹¹ Wyman suggests an allocation of CDPs based on this collective-earth ownership, focusing on a country’s resources as a metric (GDP, GDP per capita, and land per capita).¹⁹² Based on her metrics, the highest percentage of climate refugees would be allocated to the United States at 11.2%.¹⁹³ Considering that developing countries currently host up to 86% of the world’s refugees, allocating CDPs to developed countries on almost any basis—whether rooted in historical responsibility, capabilities and resources, or a

187. Bonnie Docherty & Tyler Giannini, *Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees*, 33 HARV. ENVTL. L. REV. 349, 385 (2009).

188. Frank Biermann & Ingrid Boas, *Preparing for a Warmer World*, 10 GLOBAL ENVTL. POL. 60, 75 (2010).

189. *Id.* at 76.

190. *Responses to Climate Migration*, *supra* note 76, at 194–95.

191. Mathias Risse, *The Right to Relocation: Disappearing Island Nations and Common Ownership of the Earth*, 23 ETHICS & INT’L AFF. 281, 283 (2009).

192. Katrina Wyman, *Sinking States*, in PROPERTY IN LAND AND OTHER RESOURCES 439, 460 (Daniel H. Cole & Elinor Ostrom eds., 2012).

193. *Id.* at 463.

combination—would be highly useful.¹⁹⁴ Alternatively or additionally, the UNFCCC could provision climate-fund assistance to those poor countries hosting many CDPs toward infrastructure development. Even though there is uncertainty about how NDC emission goals will function legally under the Paris Agreement, it may be possible to integrate responsibility for CDPs into obligations and mechanisms.¹⁹⁵ More generally, in IEL, it is typical that “regimes provide for . . . compensatory mechanisms” supported by those “responsible in a broader sense as receivers of benefits from the dangerous activity.”¹⁹⁶ For instance, liability for harm from oil pollution is addressed through a compensation fund financed by oil-importers, whose responsibility is derived from their role as beneficiary customers while reflecting “solidarity between states.”¹⁹⁷ Applying this logic to climate change, it might be possible to attribute responsibility to high-emitting states that benefitted from industrial growth in the aggregate, for harm such as forced climate displacement.

While “[f]ew would dispute that regulation is a more appropriate response to climate change than litigation,” it may be useful to consider the role of climate litigation in complementing governance.¹⁹⁸ Generally, awards granted in the IEL context can inform compensatory assistance in the climate sphere. These include the approximately \$300 million awarded to Marshall Islanders due to United States nuclear testing on the islands, which involved payment for past and future loss, restoration of a safe and productive state, and \$34 million specifically for “hardship as a result of relocation.”¹⁹⁹ Though related to nuclear harm, the content of this award illustrates the possibilities of what climate-displacement compensation could include: future loss, restoration, and relocation.²⁰⁰ Climate compensation could also be claimed not only from states but also from high-emitting private entities. For example, in *Kivalina v. ExxonMobil Corp.*, the Inupiat Kivalina claimants facing imminent displacement requested monetary damages from 19 fossil-fuel companies to assist with relocation.²⁰¹ In relation to non-economic loss from exile, the *Nuclear Tests*

194. UNITED NATIONS HIGH COMM’R FOR REFUGEES, GLOBAL TRENDS 2013, at 2, <http://www.unhcr.org/en-us/statistics/country/5399a14f9/unhcr-global-trends-2013.html> [<https://perma.cc/E5C5-6BWZ>].

195. Cf. Atapattu, *supra* note 13, at 54 (suggesting that “special funding mechanisms” could be used to compensate victims of climate change).

196. LOUKA, *supra* note 71, at 448.

197. *Id.* at 455.

198. Brunnée et al., *supra* note 12, at 36.

199. SANDSET AL., *supra* note 70, at 720.

200. *Id.*

201. *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 868 n.1 (N.D. Cal. 2009).

Cases involved compensation for non-economic harm, describing them as “all the more real for being incapable of precise evaluation.”²⁰²

Soft-law climate governance and responsibilities and hard-law climate liability and litigation could function complementarily in seeking remedy and assistance for CDPs. According to distributive justice, the primary UNFCCC governance framework functions to establish norms and assistance, while remedial-justice liability provides a residual “second layer,” allowing corrective action toward compensating victims to complement gaps and failures in primary governance.²⁰³ Global governance provides a reliable, systemic solution to assisting communities affected by climate displacement, while litigation is likely to be *ad hoc*, “only help[ing] a few victims and not provid[ing] compensation in [the] structural manner” that governance can.²⁰⁴

CONCLUSION

I have argued that, pending climate refugee recognition in international law, coupled with growing human rights and domestic law, IEL institutions might be able to distribute responsibilities and obligations, as well as provide financial and other assistance when faced with climate-related displacement and migration. Alongside other regimes, global climate governance’s complementary role can involve early-stage adaptation assistance and preempt forced displacement as much as possible. But, climate change is so far along that engaging later-stage L&D and compensation seems inevitable. Thus, the UNFCCC burden-sharing mechanisms could provide useful, later-stage assistance for communities’ planned relocation and rebuilding, incorporating fair burden-sharing between high-emitting states and victim states. In any case, confronting the multi-fold challenge of environmental displacement needs a plurality of regimes. While it is traditionally a state’s domestic responsibility to protect those within its borders, it seems morally valid to assert climate-induced displacement as a globally inequitable phenomenon also calls for “shared state responsibilities” in the vein of CBDR.²⁰⁵ Expanding states’ obligations to assist with climate-induced migration would hardly be utopian—it would mirror existing ideas of international justice found in many principles, agreements, and judicial opinions making up international law. For

202. Nuclear Tests Cases (Austl. v. Fr.), 1974 I.C.J. Pleadings 383, 481 (July 6, 1974).

203. Angela Williams, *Promoting Justice Within the International Legal System*, in CLIMATE LAW AND DEVELOPING COUNTRIES 84 (Benjamin J. Richardson ed., 2009).

204. Faure, *supra* note 48, at 139.

205. IBA REPORT, *supra* note 64, at 180.

instance, Judge Weeramantry, in his separate opinion for the *Gabčíkovo-Nagymaros Project* case, wrote about the need to develop *erga omnes* obligations beyond individual state self-interest in light of the “great ecological questions now surfacing.”²⁰⁶ Similarly, Rio Principle 13 proclaimed that “[s]tates shall develop national law [and] international law” regarding liability and compensation for victims of environmental harm and “for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.”²⁰⁷ In light of the intersectional challenges and grave potential for human harm presented by complex environmental issues, such as climate-change-related displacement and migration, the urgency to evolve international law on these issues cannot be understated.

206. *Gabčíkovo–Nagymaros Project* (Hung./Slovk.), Judgment, 1997 I.C.J. Rep. 7, 118 (Sept. 25).

207. *Rio Declaration*, *supra* note 66, at princ. 13.