9 "Forced Migrants," Human Rights, and "Climate Refugees" MICHAEL W. DOYLE

Capital, goods, and people are more mobile than ever in our globalized world. Yet the movement of people across borders is still a largely unregulated enterprise at the global level that leaves many people unprotected in irregular and dire situations. 1 International mobility – the movement of individuals across borders for any length of time as labor migrants, entrepreneurs, students, tourists, asylum seekers, or refugees - has no common definition or legal framework.

The absence of concerted global regime for international mobility, unlike the regimes for trade (World Trade Organization), finance (International Monetary Fund), and development funding (World Bank and regional development banks), is a glaring global governance gap. The humanitarian consequences are most acutely felt in the many forced migrants who do not qualify as refugees under the 1951 Refugee Convention. Increasingly central among them today are those driven by climate change, the so-called climate refugees, climate forced migrants, or (more skeptically) climate-induced migrants.

This chapter explores arguments for assistance and asylum (nonrefoulement) that those who are driven by climate to cross international borders can and should claim. It seeks to amend the standards developed by the Model International Mobility Convention and it draws upon the jurisprudence of the Teitiota Case and other recent cases that probe claims for asylum based on climate necessity. It addresses the recent (2022) Torres Straits Island Case and the significant additional protections it recognizes under international human rights law. It will conclude that relying on general human rights conventions such as the International Covenant on Civil and Political Rights (ICCPR) is not adequate and that a special convention focused on climate refugees

¹ For a good accounts of the "radical decouplings" between rights and iurisdictions in migration and refugee law see Ayelet Shachar (2020) and Seyla Benhabib (2020).

is required along the lines of the 1951 Refugee Convention, which specifically addressed those facing "persecution" on grounds of "race, religion, nationality, social group or political opinion."

1 The Model International Mobility Convention

In order to address gaps in the global governance of mobility across borders, a group of forty-plus specialists in migration and refugee protection gathered in 2015 and 2016 to draft a Model International Mobility Convention (MIMC). MIMC offers a "realistic utopia" that is comprehensive of the various forms of mobility and presents a cumulative protection of rights for the varying statuses under which people move across borders. The completed convention with commentary was published as a special issue of the *Columbia Journal of Transnational Law* in 2018.²

Some of those gaps involve students, tourists, and short-term workers who do not fit the UN definition of migrant and who face distinct and separate governance regimes. International migration has only recently (with the affiliation of the International Organization for Migration as a related agency of the United Nations in 2018) acquired a lead organization within the UN system. International migration also has a very weak international legal regime – the Migrant Workers Convention (1990) - that has not been adopted by destination countries. Critics have charged that in its diverse national settings, the "national" standard of treatment of the Migrant Workers Convention simultaneously under-protects and overprivileges temporary migrants. The overlaps and gaps of these existing regimes need to be addressed, taking into account the impact mobility has on economic growth, development, and security for all countries and their populations. An international mobility regime is thus needed in order to establish a system that recognizes the human dignity of all while promoting the interests of countries of origin, transit, and destination.

Forced migration is a particular concern from a humanitarian point of view. There exists a well-established refugee regime based on the

² For texts and commentary on MIMC, see Michael Doyle (2019). For additional commentary see Doyle (2018a) and Doyle and Borgnäs (2018). For a thoughtful treatment of the challenges involved in revising the 1951 Refugee Convention, see Ferracioli (2014).

1951 Refugee Convention and its 1967 Additional Protocol, both implemented by the United Nations High Commissioner for Refugees (UNHCR). As the nature of conflict has changed in recent decades, however, this regime has shown strain and weakness. Today there are approximately 27 million refugees and 5 million asylum seekers in the world³. Mixed flows of labor migrants and refugees fleeing for safety and economic prospects have created a crisis in the asylum-seeking process. Those forced to move as a result of severe economic devastation, gang violence, natural disasters, or climate change often do not meet the "persecution" threshold of "refugees" and therefore are not guaranteed protection, even though the threats to their lives are manifest.

MIMC's standards for the protection of forced migrants are significantly wider and are set forth in Section 5: Article 2, defining a "forced migrant" as:

Every person who owing to a threat of "serious harm" consisting of a threat to an individual's physical survival, which is external to her or him, or threats of torture or inhuman or degrading treatment or punishment or arbitrary incarceration, is compelled to leave his or her State of origin or place of habitual residence in order to seek refuge in another place outside his or her State of origin. These threats may arise during indiscriminate violence, severe international or internal armed conflict, environmental disaster, enduring food insecurity, acute climate change, or events seriously disturbing public order...⁴

MIMC grants asylum and protection rights equivalent to 1951 Convention refugees to all forced migrants. Indeed, it extends those rights, granting forced migrants rights equivalent to nationals, including access to employment and housing, rather than the rights equivalent to admitted foreigners granted by the 1951 Convention. It redefines how we understand protection by broadening what classifies as warranting such from the 1951 Refugee Convention's "persecution" on

www.carnegiecouncil.org/initiatives-issues/model-international-mobility-convention. MIMC's "serious harm" standard is thus broader than the EU's which focuses on violence.

³ Forcibly displaced according to UNHCR categorizations number 89 million (2021); with 53 million internally displaced, 27 million refugees, 5 million asylum seekers (seeking refugee status), and 4.4 million Venezuelans (a special category of politically forced migrants). See www.unhcr.org/figures-at-a-glance.html.

five grounds to including all threats – from whatever source – of "serious harm," defined as external threats to an individual's physical survival. It specifically encompasses "environmental disaster" and "acute climate change." Accommodating the generalized harms of climate change, it moves away from the narrowing, intentional harm of "persecution" and broadens the elements to include external threats people face from the "environment" and "acute climate change." But it does not provide clear operational standards on asylum for those forced to migrate across borders owing to the threat of imminent death from "external" causes.

Significantly, as Sections 2 and 3 illustrate, the impact of climate change is becoming more destabilizing while jurisprudence based on basic human rights standards are beginning to clarify the threats to life posed by climate change.

2 Forced Climate Migration

On Earth Day 2021 (April 22), the UNHCR identified the tragic impact that climate change has been having on developing countries of the Global South. The High Commissioner noted that from 2008 to 2019 an average of 22 million people were displaced from their homes each year owing to weather-related events - more than twice the number of displacements which occur each year owing to conflict and violence (United Nations High Commissioner for Refugees [UNHCR], 2021a). Adding to the assessment of impacts, the World Bank (2021) has estimated that without concerted climate and development action by 2050, 216 million people could be forced to migrate within their own countries as a result of climate change. As other meta-analyses indicate, many of these will be forced to flee across borders. As many as 150 million people are currently living on land that is projected to be below the high-tide line in 2050 (Lu & Flavelle, 2019). Eight islands in the Pacific have already been submerged by rising sea levels, and 40 more are expected to be underwater by 2100 (Podesta, 2019). Acute and slow onset crises of drought, flood, and other harms are all connected to climate change.

In a powerful series of influential articles in *the New York Times* by Ian Lustgarten and Meredith Kohut (2020, Part 1–3) the authors describe studies demonstrating that, while today 1 percent of the earth is a barely livable hot zone, by 2070, 19 percent could be. In extreme

scenarios, 30 million migrants could surge from Central America to the US in the next thirty years. Drawing on recent systemic modeling exercises, the authors report the following stark conclusion:

Our modeling and the consensus of academics point to the same bottom line: If societies respond aggressively to climate change and migration and increase their resilience to it, food production will be shored up, poverty reduced and international migration slowed – factors that could help the world remain more stable and more peaceful. If leaders take fewer actions against climate change, or more punitive ones against migrants, food insecurity will deepen, as will poverty. Populations will surge, and cross-border movement will be restricted, leading to greater suffering. Whatever actions governments take next – and when they do it – makes a difference. (Lustgarten & Kohut, 2020, Part 1)⁵

Clearly, climate change is placing human beings at increasing risk of life, dignity, and welfare.⁶

Climate change destabilizes the connections among borders, territories, and rights in a fundamental way. One of the underlying but unarticulated assumptions of the Westphalian territorial sovereignty model is that the territory is habitable. Territories being flooded by rising seas or desertified by drought challenge the underlying model that protects public rights with exclusive claims to territorial jurisdiction. One can imagine alternatives to the territory-rights holders model including "democratic cosmopolitan" systems of governance that adjust borders to flexibly fit evolving demoi defined by changing democratic public communities that take jurisdictional rights with them wherever they settle. Another possibility is libertarian jurisdictions based on residence in which all residents presently in place acquire governance rights within a set territory. Attractive as they are, these ideal and hypothetical regimes require large and untried reforms that alter the sovereignty-territory-rights system that has shaped the normative international public order for centuries.

⁵ For an eloquent argument on both the need for and the possibility of global reform that protects the habitability of the planet, see Darrel Mollendorf (2022).

⁶ For other systematic modelling studies demonstrating the impact of climate on mobility, see Horton et al. (2021).

Paulina Ochoa develops three models in Chapter 14: sovereigntism, democratic cosmopolitanism, and the watershed model.

A less transformative but still responsive measure would be to identify protections for those whose sovereign "territory" has failed them because the global economy has imposed deep stresses on the environment. Before considering the special rights of "climate refugees," I will thus next turn to standards for refuge that draw upon a commitment to the basic protection of human life embodied in general human rights law.⁸

3 Human Rights: Teitiota Standards

Teitiota has been justifiably recognized as a landmark case. Mr. Ioane Teitiota (a national of Kiribati in the South Pacific) had his petition for protected status on grounds of his being a "climate change refugee" rejected in New Zealand, a judgment that was affirmed by the United Nations Human Rights Committee. Both found that he had not been "persecuted" on any one of the five protected grounds of "race, religion, nationality, social group or political opinion" that would establish his credentials as a "refugee" under the 1951/1967 Convention.

Equally importantly, however, the Committee noted "that in their decisions, the (New Zealand) Immigration and Protection Tribunal and the Supreme Court both allowed for the possibility that the effects of climate change or other natural disasters could provide a basis for protection," and:

Committee is of the view that without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the *non-refoulement* obligations of sending states. Furthermore, given that the risk of an entire country becoming submerged under water is such an extreme risk, the conditions of life in such a country may become incompatible with the right to life with dignity before the risk is realized.¹⁰

While acknowledging the possibility of climate-based asylum and the accuracy of the facts provided by Teitiota before the New Zealand

⁸ See Hiroshi Motomura, Chapter 1, for a wider discussion of the exceptions to the standard 1951 Refugee Regime.

⁹ Two valuable sources that have been especially helpful for this interpretation of the Teitiota decision are McAdam (2020) and Keshen and Lazickas (2022).

Human Rights Committee, Views adopted by the Committee under article 5(4) of the Optional Protocol, concerning communication No. 2728/2016, UN Doc. CCPR/C/127/D/2728/2016 (January 7, 2020). Para. 9.11.

Tribunal, the Committee affirmed the judgments of the New Zealand Tribunal that the evidence the author provided did not establish that he faced a risk of "an imminent, or likely, risk of arbitrary deprivation of life upon return to Kiribati." The basis for the rights at stake were Articles 6 and 7 of the ICCPR: "Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life" and "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment."

Examining six factors, the Tribunal found that there was not sufficient evidence to establish that Teitiota had a claim to nonrefoulement. Importantly, at the same time, the Committee thereby suggested what in fact *would* justify asylum on human rights grounds.

- 1. The Committee noted that he had not "been in any land dispute in the past, or faced a real chance of being physically harmed in such a dispute in the future." This suggested that if there had been widespread violence over land, or if it had been targeted against Teitiota, he would have had a claim to asylum.
- 2. Nor did the Committee find that "he would be unable to find land to provide accommodation for himself and his family." It added that though "it was difficult to grow crops, it was not impossible." The Committee therefore suggested that Teitiota could move and find arable land or other employment. Had that not been available, he might have qualified for asylum.
- 3. Had he been "unable to grow food or access potable water" needed for a healthy existence, he would have had sufficient grounds to claim asylum. The Committee noted that "60 per cent of the residents of South Tarawa obtained fresh water from rationed supplies provided by the public utilities board."
- 4. If he "would face life-threatening environmental conditions" he also would have qualified. Had, that is, his farm been subject to flooding, threatening his life, and other land was not available, he would have been able to claim asylum.
- 5. If "his situation was materially different from that of every other resident of Kiribati" he also should have received asylum. But his experience was generalized as climate impacts often are.

¹¹ Para 9.6, UN Doc. CCPR/C/127/D/2728/2016.

¹² Para 9.9, UN Doc. CCPR/C/127/D/2728/2016.

6. He would have received asylum if "the Government of Kiribati had failed to take programmatic steps to provide for the basic necessities of life, in order to meet its positive obligation to fulfill the author's right to life." While agreeing that Kiribati faced likely inundation in ten to fifteen years, the intervening ten to fifteen years allow for "intervening acts by the Republic of Kiribati, with the assistance of the international community, to take affirmative measures to protect and, where necessary, relocate its population." The Committee noted that the New Zealand authorities thoroughly examined this issue and found that "the Republic of Kiribati was taking adaptive measures to reduce existing vulnerabilities and build resilience to climate change-related harms." There was no discussion of how efficacious those measures were.

4 Beyond Human Rights to "Climate Refugees"?

Thus, while the Committee concurred with the decision of the New Zealand authorities denying Teitiota's claim to asylum, it opened the door to other human rights claims based on demonstrations of more severe (or targeted) harms demonstrating an imminent threat to life. Respectable as the decision was, it nonetheless demonstrated at least three significant limitations that, together, suggest that we need a focused, specific set of standards that go beyond general human rights protections of imminent threats to life in order to govern asylum claims based on the adverse effects of climate change.

The first draws on the two dissents in the *Teitiota Case*. The decision was based on Teitiota's circumstances, not those of his entire family. Both the dissents by Vasilka Sancin (Annex II) and Duncan Laki Muhumuza (Annex I) highlight the effects on his family. In Sancin's view, New Zealand and the Committee failed to "present evidence of proper assessment of the author's and his dependent children's access to safe drinking water in Kiribati." The Muhumuza dissent correspondingly identifies the family's "bad health issues – with one of his children suffering from a serious case of blood poisoning, causing boils all over the body." As noted by Jane McAdam, failing to take into account the health interests of the children violates the Convention on the Rights of the Child and so does expelling Teitiota,

¹³ 9.13 UN Doc. CCPR/C/127/D/2728/2016.

as doing so would fail to protect the right to family unity (that is, even if only the children were experiencing the adverse health effects, asylum is merited) (McAdam, 2020: 717).

The second, also drawing on the dissents, highlights the "dignity" standards prohibiting "degrading" treatment found in Article 7 of the ICCPR that are distinct from the imminent threats to life referenced in Article 6. A dignified life can be compromised well short of an imminent loss of life. Scrambling from climate-compromised farmstead to farmstead while tending to children suffering severe health effects surely fails to meet the dignity standards evoked in Article 7.

Third, and lastly, as also pointed out by McAdam (2020: 720–721), the Committee's decision could be justified as resting on avoiding the infliction of "imminent" harm, but the standards actually invoked were "an imminent, or likely, risk of arbitrary deprivation of life." The "or likely" deserves specific attention. But neither the Committee nor McAdam (in the cited article) quite specifies the justifiable standards for what constitutes "likely" harm.

5 Torres Straits Islanders' Case (2022)

A second landmark decision from the Human Rights Committee was released in September 2022; it elaborated on states obligations that were identified in the dissents and left underspecified by *Teitiota*. The claim by Daniel Billy et al. and six of his children (all Australian nationals and Torres Straits Islanders) argued that Australia had violated his rights under ICCPR Articles 2, 6, 17 and 27 and the rights of his children under Article 24. The plaintiffs (unlike Teitiota) are not claiming asylum (they are Australians) but redress, including performance and compensation, from their government responsible for their protection.

Going well beyond the standards in *Teitiota*, the United Nations Human Rights Committee decided that the Australian government violated the human rights of indigenous Torres Strait Islanders by failing to adequately protect them from the severe impacts of climate change.¹⁴ The committee's decision (Para. 11) directed Australia to

Human Rights Committee, Views adopted by the Committee under article 5(4) of the Optional Protocol, concerning communication No. 3624/2019 CCPR/C/135/D/3624/2019 (September 22, 2022).

compensate the islanders for climate-related harm, carry out meaningful consultations with their communities to understand their needs, and take action to ensure that the inhabitants can safely occupy their lands.

Australia opposed the decision, but the eighteen human rights experts found that Australia has violated the islanders' rights to their family life (Article 17) and their culture (Article 27) under the ICCPR. The committee noted that Torres Strait Islands, located between Australia and Papua New Guinea, are home to some of the "most vulnerable populations" to climate change, subject to rising sea levels and flooding, high temperatures, ocean acidification, the loss of shoreline, coral bleaching, and the extinction of species that are culturally important to native communities, including coconuts relied on for the traditional diet. Storm surges have become so intense that they have destroyed family grave sites, scattering human remains. "Visiting the graves of loved ones is a core part of the islanders' cultures, and specific rites of passage can only take place on their ancestral lands" (Surma, 2020).

The committee thus held that the Australian government violated the islanders' rights by not implementing adequate adaptation measures to protect their family life (homes and livelihood) as well as their ability to maintain their indigenous culture, their traditional way of life, and the right to pass on their culture and traditions to future generations. Focusing on adaptation, while sidelining mitigation, allowed the committee to bypass the question of who caused the harms. It was simply necessary to point out, for example, that the Australian government had not built the seawalls the islanders had petitioned for, and which would have helped the communities to adapt to climate change.

The Panel rejected complaints that concerned violations of "a right to life" (Article 6) with "dignity" (Article 7) and that Australia had failed to mitigate the nation's contribution to climate change. The experts held that Australia's efforts to adapt still left ten or more years to secure life on the islands and that Australia's contribution to global warming was one part of a complicated global process.

Important as the decision is, it leaves open the question of whether violations of Article 17 (family life) and 27 (minority culture) are sufficient to trigger the nonrefoulement obligations of states. Should a Torres Straits Islander receive asylum in another state if Australia fails to implement the Human Rights Committee decision? Conventional jurisprudence suggests that nonrefoulement

obligations are generated by threats to life "(imminent" and perhaps "likely"), not necessarily by threats to other rights a person's home country is obliged to protect.

6 National and Regional Jurisprudence as Supplemental Standards?

A series of Italian cases before 2018 appeared to open the door to claims of "humanitarian protection" Relying on the protections of Articles 3 (inhuman or degrading) and 8 (dignity) of the European Convention on Human Rights, 15 and Article 7 of the ICCPR (degrading treatment, with reference to Teitiota), the National Commission for the Right of Asylum included "serious natural calamities or any other local factor that hampers a safe and dignified repatriation" as grounds for temporary protection. Regrettably, these standards proved to be unstable. Following the election of the League and Five Stars Movement, the new Minister of the Interior Salvini issued the Salvini Decree, restricting protection to "torture, persecution and massive violations of human rights." This was partly reversed by the subsequent 2019 electoral victory of the M5S and Democratic Party, which partially reversed the Salvini Decree with the Lamorgese Decree, which broadened protections (Negozio & Rondine, 2022). The election of the Meloni government in October 2022 returned Italy to the stricter standards and an arrangement with Albania to outsource asvlum applications. 16

Fortunately, the French Case of Mr. A provides important guidance both on the need for a "likely" (not merely "imminent") standard and what it should look like.¹⁷ Tried before the Appeals Court of Administrative Court of Bordeaux, in France, on December 18, 2020, the case set important standards (even if not precedents) for European law for environmentally justified asylum. "A" was a national of

J. Liboreiro and Vincenzo Genovese, Analysis: With her Albania deal Giorgia Meloni sets the pace for EU migration policy, *Euronews* 14 November 2023.

¹⁵ For a valuable discussion of how the rights protections referenced in the ECHR could be strengthened by specific application of climate responsibility, see Scott (2014).

A or Sheel are pseudonyms used at the plaintiff's request. See December 18, 2020. Cours administrative d'appel. 2eme chambre, Dalloz, accessed June 5, 2022. See also Peacock (2021).

Bangladesh suffering from both allergic asthma and sleep apnea. The Court found that "Mr. A would be confronted upon arrival in his country of origin ... with a worsening of his respiratory diseases because of atmospheric pollution" (Peacock, 2021, 1/4). "A" had been receiving care in France that stabilized his condition. The French regulations on entry, residence, and asylum (CESEDA) permit residence not just for required medical care but also consideration of "the delivery and characteristics of the country of origin's healthcare system," which would not allow for the claimant to "effectively access the appropriate treatment." A medical expert noted during the trial process that Bangladesh has among the highest rates of particle pollutants in the world and an asthma-related mortality of 12.92 per 100,000 inhabitants, compared with 0.82 in France.

The "likely" threat invoked was not an immediate threat to life but rather subjection to a system likely to increase the threat to "A's" life through airborne particle pollution, and the indirect effects of heat in disrupting the Bangladeshi electrical grid which would likely disrupt the air ventilators "A" needs for his care.

Expansive as the ruling was, it was still based on the human right to life, now extended into likely threats. It is questionable whether the international community as a whole is prepared to guarantee a general right to healthy life through asylum. And similarly, extending the "likely" standard to environmental harms per se, of the kinds faced by Teitiota and the Torres Straits Islanders, as grounds for nonrefoulement would probably require something more than a straightforward right to life reasoning.

What thus appears to be needed is a special convention that offers protection from global climate change-induced effects on a healthy life. It is worth recalling that the 1951 Refugee Convention was itself this kind of *lex specialis* limiting asylum to a gravity standard of "persecution" and to the five elements of "race, religion, nationality, social group or political opinion." These specifications were designed to reflect the special circumstances of some asylum seekers in postwar Europe. The Convention was, furthermore, specifically confined by geography ("Europe") and date ("before 1951") – until the limits on geography and date were removed in the 1967 Protocol.

To give consideration to the global origin of climate change and its disproportionate effect on certain countries and communities least responsible for global warming – for example, Kiribati or the Torres

Straits Islands – a special convention (a *lex specialis*), which would reflect common but differentiated responsibility, seems warranted. ¹⁸

Borrowing standards from *Teitiota*, *Torres Straits Islanders*, and the "likely standard" from the *Case of A*, it could define a "climate refugee" as someone (and their family) liable to being returned to a country experiencing adverse climate effects that were:

- 1. contributing to increased **threat** of a likely loss of life, even if they were not necessarily presently, imminently life threatening, (supplementing *Teitiota*); or
- 2. resulting in harms to family life or indigenous culture (the *Torres Straits Islanders* standards); and
- 3. not being adequately addressed by local policy measures; or
- 4. not supported by global measures for enhancing resilience. These "global measures" would be along the lines of those promised at the Paris Conference (including the Green Climate Fund), ¹⁹ and extended at the Glasgow Summit. ²⁰

Thus, in order to establish a valid claim to climate-based asylum, an individual must be experiencing a likely threat to life resulting from adverse climate change. His claim would be denied if his home government was not only adopting but also successfully implementing corrective measures that would remove the threat. His claim would also be denied even if he was experiencing threat and his government was presently failing to address the threat, but the global community was effectively mobilized to provide adequate assistance that would redress the threats by assisting his home government to remediate the threatening circumstances.

These four standards would supplement the national obligations outlined in the *Torres Straits Islanders* judgment. They would

Alex Aleinikoff and Susan Martin (2022) similarly argue for the need of a "global mechanism" to address environmental mobility. They propose a "multi-stakeholder platform, accompanied by a multi-donor trust fund to carry out platform functions, [that] would appear best suited to fulfilling the responsibilities of the international community for responding to environmental mobility." Another valuable exercise along these lines that starts from a different premise can be found in Hodgkinson et al. (2010).
For a description, see www.greenclimate.fund/about.

Regrettably, the Glasgow Summit is just the latest failed global attempt to address climate change. "No progress globally on promises made" is the assessment in Brady Dennis (2022): "Leaders made big climate promises. They're struggling to follow through."

supplement the *Teitiota* nonrefoulement criteria by offering "gravity" and "elements" standards of a special international convention that would consider family and communal cultural rights (not just individual), likely health threats (not just imminent), and the actual effects of policy on both a local and global scale (rather than just the presence of policy initiatives). The World Health Organization and the Intergovernmental Panel on Climate Change would need to team up to better define health threats to life and the impact of climate change on them, and to develop quantifiable measures that could rate countries' relative standing. The general principles underlying the Nansen Initiative (2015) concerning climate displacement and the norms articulated in the Global Compact on Migration (2018)²¹ could be drawn upon for support.

In order to increase the resources and cooperation that would be needed to sustain this commitment, more responsibility sharing would be needed. MIMC proposes a global scheme of cooperation that would share the burden of providing either funding or admissions for those claiming forced migrant status and consequent asylum. That arrangement assesses responsibility based on a formula that the parties would determine to be fair. One candidate would be the 2016 EU formula of shares based on gross domestic product, population, past refugee admissions, and current unemployment rates. ²² Climate-specific responsibility might be included by adding into the formula greenhouse gas emissions per capita (reflecting the historically larger contribution from the industrial countries). ²³

In conclusion, one cannot overstate how far the international community of today is from this kind of commitment. But the challenge of developing fair and effective standards should not deter the analysis and advocacy from starting now. Like the other trends and crises discussed in this volume, the climate-induced migration challenges ahead reflect the continuing gap between human needs and the national jurisdictions that are designed to meet them, leaving populations vulnerable to the adverse effects of climate change and unable to flee to find

²¹ www.iom.int/resources/global-compact-safe-orderly-and-regular-migration/ res/73/195.

For an elaboration of responsibility claims, see Doyle, Prantl and Wood (2022).
 Kendall Brennan and Noah Joseph (two Columbia students) made an argument for revising the MIMC formula along these lines in a workshop at SIPA, spring 2022.

safety and sustenance. But they also reflect gaps between human needs and current understandings of the human rights that populations can evoke before international organizations (such as the Human Rights Committee) that are designed to recognize and protect those rights. Here we need to develop a deeper connection between safety and sustenance in the face of climate-induced change that broadens the recognizable rights claims to include not only survival, but also sustenance, both personal and communal.