Should the United Nations Framework Convention on Climate Change recognize climate migrants?

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Abstract
Climate change is expected to increase migration flows, especially from socially and environmentally vulnerable populations. These ‘climate migrants’ do not have any official protection under international law, which has implications for the human security of migrants. This work argues that the United Nations Framework Convention on Climate Change (UNFCCC) can and should recognize climate migrants, and is the most relevant international framework for doing so. While not legally binding, the acknowledgment of climate displacement, migration and planned relocation issues in the UNFCCC’s Cancun Adaptation Framework indicates a willingness to address the issue through an adaptation lens. Herein, the paper proposes a framework for setting the institutional groundwork for recognizing climate migrants, focusing on the most vulnerable, promoting targeted research and policy agendas, and situating policies within a comprehensive strategy.

Keywords: climate change, migration, UNFCCC, adaptation, climate migrant, Cancun Adaptation Framework

Online supplementary data available from stacks.iop.org/ERL/7/045601/mmedia

1. Introduction
Increasing attention is being paid to climate change as a driver of migration and displacement in both scientific and international policy arenas [1, 2]. Warner [3, p 1] credits the coordinated efforts of research and operational organizations for the relative speed with which ‘the human face of climate change’ entered into the United Nations Framework Convention on Climate Change (UNFCCC) negotiations, culminating in Decision 14(f) in the Cancun Adaptation Framework [4]. Decision 14(f)/CP.16 ‘invite(s) all parties (...) to undertake (...) measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels’ [4, pp 4–5]. Although it neither obliges signatories to take action, nor specifies how implementation should occur, this Decision is significant, representing a global affirmation that climate change induced mobility takes on different forms and needs diverse policy approaches [3, 5]. Moreover, it situates the UNFCCC as an appropriate forum for pursuing climate displacement, migration and planned relocation (hereafter climate migration) debates.
This letter investigates whether or not the UNFCCC should go a step further and recognize climate migrants, whereby recognition entails a legal term or an institutionalized mechanism in international law, a budget, identification of a responsible agency, designation of persons to protect, and implementation of specific measures to deal with the issue [6]. The letter does not imply that climate migration is the most pressing, devastating or costly of all contemporary migration types, and thus deserving of a special status vis-à-vis other migrants. Instead, it argues that recent developments within the UNFCCC indicate that the international community is receptive to addressing climate migration as an adaptation issue within the UNFCCC, thereby providing an opportunity to address one component of the broader global migration governance puzzle.

The letter begins by examining the complexity of defining climate migrants. It then assesses the potential for the UNFCCC to officially recognize climate migrants, and finishes by proposing a guiding framework that shows how the UNFCCC could achieve recognition.

2. Who are climate migrants?

Definitional issues have implications for migration governance; for example, on the scale of governance (e.g. local, regional or international), extent of the phenomenon, and state and institutional responsibility [7], as well as on whose agendas are served [8, 9]. Articulating a clear definition of persons displaced by climate change would thus appear to be an essential starting point for international protection. Differentiating among migrant types, however, poses a problem because no single factor, event or process inevitably produces migration. Indeed, while environmental change may be the proximate trigger of migration, the impetus to migrate or not is often deeply embedded in underlying and interacting social, economic, political, cultural and personal factors [7, 8, 10–28]. This complexity, compounded by the impossibility of isolating climate change as a cause, is reflected in wide discrepancies in estimates of the number of affected persons (cf [8, 20, 29–32]), in the absence of an internationally agreed legal definition of a climate ‘migrant’, ‘refugee’ or ‘displaced person’ [29, 33], and in the legally inaccurate and erroneous use of the term ‘refugee’ [5, 34, 35].

The lack of a formal legal definition, however, need not preclude international action, and may permit more flexible responses. For example, even though ‘terrorism’ has no uniform meaning, there are many terrorism-focused UN Security Council resolutions and treaties [7]. As a starting point for advancing international policy discussions and in guiding government policies, we suggest Kniveton et al.’s [35, p 31] definition of climate migrants as ‘persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment as a result of climate change that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad’. We do not, however, advocate its uncritical adoption as a legal definition because it is impossible to attribute a decision to migrate exclusively to climate change [26], and negotiating legally binding definitions can be a lengthy process (and used as a technique to postpone concrete action) [34].

3. Should the UNFCCC recognize climate migrants?

Just as international and historical processes contributed to the creation of environmental problems, long-term solutions will only be possible with significant involvement of the international community [12, 20, 22]. While states are responsible for planning, predicting and managing the impacts of climate migration [20], it is through high level dialogue and coordination among national governments, intergovernmental agencies and civil society that commitments, policy initiatives and institutional roles will be determined. At this point, the only truly global institution is the United Nations. As McNamara [21, p 21] explains, ‘although imperfect, the United Nations is still the only institution that has the capacity to develop multilateral solutions to global problems, and defend and uphold basic human rights’. The UN framework tasked with developing and implementing international climate change related rules and programmes is the UNFCCC. Decisions taken at the UNFCCC COP 16 in Cancun indicate a willingness of signatories to address the climate migration issue [3, 4], and we examine below the suitability of the UNFCCC to this end. (A full examination of alternative options for addressing climate migration issues is beyond the scope of this letter. See [8, 22, 26, 36–39] for recent positions on the issue.)

To answer the question ‘should the UNFCCC recognize climate migrants?’, we first establish that the UNFCCC can recognize climate migrants. This is so for two reasons. Firstly, migration is widely regarded as an adaptation to climate change and should be supported as such (cf [2, 5, 40])5. Secondly, the UNFCCC has a mandate to address adaptation issues as articulated in Article 4 of the Convention, Decision 5/CP.7, Decision 1/CP.10, and most recently, in the Cancun Adaptation Framework [4, 41–43]. Herein, the following sections examine if the UNFCCC should recognize climate migrants, evaluating the benefits and trade-offs implied (see table 1 for summary).

3.1. Arguments for recognition

By May 2012, with 194 countries and the European Union signatories of the UNFCCC, and the Holy See as an official observer, this intergovernmental process represents a high profile global policy forum for climate policy. The methods for negotiation and implementation are familiar

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4 The 2007 IPCC Assessment Report defines climate change adaptation as ‘adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities’.

5 Migration can also result from the failure of adaptation efforts. This letter focuses on migration streams that can be addressed through adaptation policies.
to members and generally accepted. Thus, there could be less delay in taking concrete global action as compared to creating an entirely new mechanism. In a post-Kyoto context, enabling countries to choose policies that best suit their particular circumstances is preferred over a singular unilaterally imposed solution [44]. As states will be main implementers of policy, a forum that allows states to control implementation, informed by a clear set of guiding principles, is needed [5, 28, 45, 46]. The UNFCCC can fill this role: it encourages states to take action within their borders [47], and to negotiate and act with other states at the global level (e.g. Articles 3, 4, 5, 7, 15), without impinging on state sovereignty [48]. Moreover, it provides a significant voice for the most vulnerable countries and opportunities to link mitigation, development, humanitarian issues and security issues [3].

Building migration and mobility policies within existing adaptation strategies, laws, policies and institutions will increase the effectiveness of both adaptation and broader development goals [5, 22, 24], while ignoring the migration issue could undermine other adaptation efforts, render such efforts maladaptive [28], and even permit powerful actors to use forced migration for political and economic gain [25, 49]. Hence, a good fit exists between the UNFCCC’s mandate to address adaptation issues and recognizing climate migrants. Moreover, by reducing greenhouse gas emissions and avoiding dangerous interference with the climate system (Article 2) [41], UNFCCC member states are tackling an underlying driver and ultimately helping to reduce future migration pressures [25, 50].

Support for climate migration initiatives could be channelled through existing adaptation funding mechanisms (supplementary data 1 available at stacks.iop.org/ERL/7/045601/mmedia). The UNFCCC funds activities to build resilience to climate change through voluntary pledges, bilateral contributions and levies on carbon trading mechanisms [51, 52]. Newer funding opportunities through the Copenhagen Accord and the Cancun Adaptation Framework address structural and governance problems of earlier funding mechanisms [4, 53].

Table 1. Reasons why the UNFCCC should and should not recognize climate migrants.

| Advantages of UNFCCC recognition                                      | Risks of UNFCCC recognition                                      |
|---------------------------------------------------------------------|------------------------------------------------------------------|
| Established process and near-universal membership                   | Implementation suffers from a lack of enforcement                |
| Fit with adaptation mandate of UNFCCC                               | The UNFCCC may not be the best place for adaptation policy       |
| Mitigation focus addresses an underlying cause of climate migration | Adaptation fallacy may marginalize the migration issue            |
| Funding through existing adaptation funding mechanisms              | Restrictions on funding mechanisms may inhibit effective results |
| Climate migration relevant debates are already underway in UNFCCC processes | Inherent weaknesses of the UNFCCC may limit progress             |
| Current context is supportive                                      | Risk of oversimplification                                       |
| Ensure a fairer cost burden                                        | Inadvertent creation of unintended victims                       |

*a The adaptation fallacy posits that acknowledging that climate change will induce migration spurs policy makers to take adaptation measures, which then enables them to neglect migration issues because adaptation will supposedly eliminate the projected migration [6].

Timing and broad contextual factors can make or break the acceptance of an issue and propel action [6, 21]. Given current levels of public awareness on climate change and adaptation issues and public pressure from both the developed and developing world, and climate change’s positioning as a major global public policy issue, there is now sufficient momentum and political will to advance the recognition of climate migrants and end past stalemates [54, 55]. The integration of climate migration into ongoing discussions on adaptation and vulnerability within the UNFCCC will minimize duplication of efforts by working within existing processes instead of creating new spaces for dialogue [56–58]. These efforts could be more effective if the Intergovernmental Panel on Climate Change (IPCC) also addressed the issue of migration, which will be considered in the contexts of human security and of rural areas in the forthcoming Fifth Assessment Report.

Equity and justice issues are pertinent to adaptation, and should be addressed at each of the international legal framework and national adaptation policy levels [51, 58–61]. Inequality in income, human security and development between nations and regions is among the most important factors driving migration [62]. Recognizing climate migrants under the UNFCCC would ensure a fairer cost burden, with the concept of common but differentiated responsibility foundational to the UNFCCC. The costs of climate migration will be borne by someone; without recognition they will likely be borne by the most vulnerable countries [63, 64], because most migrants do not travel far, especially if they are poor [5, 24]. It is noteworthy here that Article 4.4 commits developed and developing world, and climate change’s positioning as a major global public policy issue, there is now sufficient momentum and political will to advance the recognition of climate migrants and end past stalemates [54, 55]. The integration of climate migration into ongoing discussions on adaptation and vulnerability within the UNFCCC will minimize duplication of efforts by working within existing processes instead of creating new spaces for dialogue [56–58]. These efforts could be more effective if the Intergovernmental Panel on Climate Change (IPCC) also addressed the issue of migration, which will be considered in the contexts of human security and of rural areas in the forthcoming Fifth Assessment Report.

3.2. Arguments against recognition

Although Warner [3] notes that it is difficult to imagine the disadvantages of discussing migration in the UNFCCC process, administering recognition through it is not without risks. The original and ultimate intent of the UNFCCC is
4. How should the UNFCCC recognize climate migrants?

The first step of recognition is acknowledging an issue is a public problem [6]. The climate migration issue has achieved this step, as shown in Decision 14(f)/CP.16 [4]. Adaptation, however, is not inevitable and thus needs devoted political and research attention [73]. The Cancun Adaptation Framework is too weak to ensure that climate migration is adaptive and does not become a humanitarian problem. These migrants require systematic protection (cf [12, 26, 39]), which necessarily goes a step beyond a regional approach. Recognition should come in the form of a Decision that builds on Decision 14(f)/CP.16 that calls upon parties to implement the Nansen Principles (supplementary data 2 available at stacks.iop.org/ERL/7/045601/mmedia), and is led by an Ad Hoc Working Group on Climate Migration within the UNFCCC.

Governance interventions will play a critical role in determining whether climate migration is an adaptation or a failure to adapt [28], thus it is imperative that in establishing a framework the UNFCCC considers past failed recognition attempts and addresses key procedural, policy, structural and research elements (cf [6, 25, 28, 71, 74]). Moreover, proposed interventions should be politically feasible, require minimal amounts of political capital to achieve, and match party needs [3]. The following discussion elucidates these elements, a summary of which is provided in table 2.

4.1. Institutional groundwork

Several elements are necessary in structuring an institutional framework. A clear mandate and objectives are essential as UN agencies have limited leeway to act upon non-mandated activities [21]. The mandate for the UNFCCC with regard to climate migration should be articulated in a COP Decision, and the specific objectives developed by an Ad Hoc Working Group on Climate Migration. The working group should involve actual and potential climate migration victims in policy and programme formation, and coordinate with other UN and non-UN agencies working on relevant issues. Although it is neither cost-effective nor desirable to create an enormous but representative working group for all stages of international level decision-making, the participation of affected people at key stages, in particular during the initial development and testing stages, is more likely to achieve good policies and lasting results [13, 22, 28, 40, 59], confer legitimacy [75], and instil procedural justice [61]. Such broad-based participation could be modelled on the UNHCR-convened Dialogue on Protection Challenges meeting in December 2007 that studied gaps in the protection for non-refugees and how to fill these gaps [46]. Unlike other official UN forums in which non-party stakeholders are limited to observer status, all stakeholders at the dialogue—governments, UN organizations, NGOs, civil society representatives and individual experts—participated on equal footing.

Issues of scale and units of measurement must be agreed upon. Because climate change generally affects...
groups of people and not just individuals, addressing climate migration requires the collective protection of villages, cities or affected areas [15, 76]. This perspective could be conceptually difficult for states to accept because the Refugee Convention, to which they are accustomed, focuses on individuals [15]. Clarifying an appropriate scale of analysis is critical as its absence hinders an understanding of migration and an ability to generate predictions [14], and prevents research conclusions consistent among studied groups [25]. Indeed, policy mismatches at different political scales have constrained mitigation efforts of the UNFCCC [48]. Scale is also important for selecting vulnerability indicators and prioritizing vulnerable people and places [77], as discussed in section 4.2.

Securing permanent funding is the final component of the institutional framework. The UNFCCC projects that adaptation investments will cost $44–166 billion annually, including $27–67 billion for developing countries; the World Bank’s estimate is higher—$75–100 billion in developing countries [58, p 844]. Neither estimate includes the costs of migration, for which no assessment exists, thus some additional monies are likely required. Parry et al [78] further contend these figures are underestimates and could jump to one trillion dollars per year if action is delayed. To be effective, adaptation funding must be adequate, accessible to developing countries and available to be used comprehensively on the ground [52], including for national level humanitarian responses [72]. Allocation of funds should be transparent, efficient and equitable, and based on empirical research [58]. The climate migration portion of adaptation funding should reduce the costs of moving money and people between sending and receiving areas, and target both migrants and host communities so that all people in the receiving areas benefit [25]. Funding could be sought from one of the UNFCCC adaptation funding mechanisms, the UN Central Emergency Response Fund and/or official development assistance [15, 25, 50].

### 4.2. Vulnerability focus

Because climate migration will occur primarily in developing countries [18, 25], and the most vulnerable will be less able or likely to migrate [5], targeting vulnerable nations is ethically and practically justifiable [13, 59, 61]. Vulnerable populations are often exposed and must adapt to multiple stresses simultaneously, such as climatic change and globalization [49, 73, 79, 80]. They often live in marginal ecosystems and high risk locations, depend on natural resources for their livelihoods and have a limited ability to adapt to the impacts of climate change [18, 58, 81]. During displacement, these vulnerable groups may be further marginalized as pre-existing patterns of discrimination are exacerbated [22]. As such, efforts should be aimed at increasing social capital [17], ensuring acceptable, diversified livelihoods and income sources [24, 64], and avoiding involuntary resettlement [5, 25, 27]. Most importantly, adaptive capacity—defined as the ability of human systems to address, plan for, or adapt to climate change impacts and take advantage of new opportunities [82, 83]—must be enhanced [13, 16–18, 72]. Migrant networks facilitate capacity building of both sending and receiving areas through remittances, social infrastructure and informational exchange [25, 28]. More generally, adaptive capacity is improved through the availability and equitable distribution of economic resources, technology, information and skills, infrastructure, institutions and management capabilities [73, 84]. Supported by strong inter-agency coordination, capacity-building efforts should extend to vulnerable governance systems, vulnerable regional and international emergency response systems, and vulnerable decision-making processes [20, 25, 28, 58, 81].

A vulnerability focus requires a mechanism to identify and prioritize places and peoples vulnerable to climate migration [58, 63, 65], and dynamic pressures shaping vulnerability [77]. The mechanism could be based on the identification of eight regions of concern [25], environmental pressure points—locations that are especially susceptible to environmental migration [10], or migration hot spots and existing migration channels [36]. Models that accurately

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| General area          | Specific elements                                                                 |
|-----------------------|-----------------------------------------------------------------------------------|
| Institutional groundwork | • Clear mandate and objectives  
|                       | • Participation of key stakeholders in processes  
|                       | • Appropriate unit of measurement  
|                       | • Source of permanent funding                                                      |
| Vulnerability focus   | • Focus on assisting the most vulnerable and the most poor  
|                       | • Enhancement of adaptive capacity and reduction of vulnerability  
|                       | • Mechanism for identifying and prioritizing vulnerable places                     |
| Research and policy   | • Consideration for migration patterns and ‘non-migration’  
|                       | • Rights for climate migrants                                                      |
| Comprehensive strategy| • Situation of efforts within the broader global migration issue and in concert with other processes  
|                       | • Focus on underlying causes of climate migration                                   |
predict the underlying drivers of vulnerability, likelihood of migration, offsetting effect of adaptive capacity, and number of climate migrants would be immensely useful to policy makers [13, 16, 17, 25, 77]. Existing vulnerability indices are inadequate however, challenged by conceptual and methodological difficulties [65, 75]. In a recent article, Gemeneé [32] points to promising models and methodological improvements that can yield more robust and reliable predictions on the number of people displaced by environmental changes.

4.3. Research and policy

The Ad Hoc Working Group on Climate Migration should prioritize strengthening an empirical understanding of climate migration and best practices for pre-emption and, when it does occur, ensuring its adaptiveness. Research into the diverse scenarios of climate migration [7, 23, 85], the spatial and temporal patterns of climate migration [5, 20, 25, 27], the humanitarian consequences of climate change [72], and the relationship between climate change and other drivers of population movements [5] is still in its infancy. Case study and analogue work can fill this gap (cf [17, 24, 86]). Better exchange of knowledge across disciplines, especially concerning institutional efforts on disaster risk reduction and climate change adaptation, would further improve climate migration research [20].

Not all people in a position to migrate will automatically do so; therefore careful study of patterns of non-migration should be examined. Different factors underlying non-migration of various groups will necessitate different policy responses [2, 17, 87]. For example, the incidence of migration can be reduced by positive factors such as enhanced human agency and adaptation, or by negative factors including a lack of financial, informational, social and institutional support [14, 20, 24, 25, 87]. Non-migrants of the latter type may suffer livelihood erosion, deteriorating health and reduced life expectancy, and may far outnumber climate migrants, thereby precipitating a greater humanitarian problem, albeit one more spatially and temporally diffuse than those brought about by acute catastrophic events [25].

Climate migrants are entitled to rights because they are (1) human and thus protected under international human rights laws and (2) migrants and thus protected under existing treaties guaranteeing rights to migrants [7, 22, 34, 38, 45]. These protections are insufficient, and their effectiveness may be eroded by climate change. For example, prevailing refugee law will not automatically apply to people whose states cease to exist due to sea level rise, nor is there any certainty that the (transplanted) government of the submerged state can ensure rights flowing from citizenship [34, 37, 72]. This situation explains the urgency with which UN agencies, scholars and activists call for an explicit focus on the rights of climate migrants (cf [5, 40]). While many of these rights are enshrined in the Guiding Principles on Internal Displacement [5, 18, 88], and the Inter-Agency Standing Committee Operations and Guidelines on the Protection of Persons Affected by Natural Disasters [72], the existing guidelines cannot account for all possible climate change scenarios [22]. Moreover, while the guidelines provide the normative framework for dealing with climate migration and displacement within a country, they are inadequate for overcoming operational hurdles [22]. Hence, the protection of rights is integral to the recognition of climate migrants.

4.4. A comprehensive strategy

For climate migrant recognition to succeed, it must be situated within a comprehensive strategy. Climate migration is expected to affect agriculture, gender equity, health, state sovereignty, human rights, human security, development and resource availability and management [17, 23, 24, 72]. Involving non-environment-oriented agencies specialized in these areas can improve policy effectiveness and help to overcome an overemphasis on environment-based solutions. Indeed, mainstreaming adaptation measures into specialized policy and decision-making areas can accelerate and improve the effectiveness of the process of adapting [89], and is endorsed by relevant UN agencies (cf [72, 81, 90]).

Recognition must be done in concert with other initiatives advancing global migration governance, or, as outlined earlier, risk further marginalizing and increasing the vulnerability of people who may not otherwise receive protection. The various initiatives should be managed within an overarching programme that coordinates the responses of UN agencies, governments and non-governmental organizations [10, 11, 25]. The current lack of an overarching framework, however, should not preclude immediate action on climate migration issues at lower levels [6]. Indeed, Betts’ [36] recent edited collection, for example, examines the rich plurality and coexistence of diverse approaches to global migration governance. The collection analyzes institutional, political and normative challenges, including the duplication of efforts by UN and non-UN agencies, and offers options to avoid excessive repetition. Such a collaborative approach would adhere to the guiding principle of precaution pronounced in Article 3.3 of the UNFCCC.

A real and lasting response to climate migration must address not only the displacement itself but also its underlying causes [18, 71]. For climate migration these are often not environmental but related to the causes of vulnerability such as wider political, economic, social and demographic processes [10–14, 17, 25, 64]. Therefore, tackling the climate migration issue necessarily includes poverty alleviation [11, 12, 20, 63], improvements to sexual and reproductive health, sustainable development and full cost accounting [11–13], improved social capital and access to basic social services [17], environment-proofing development [20, 52], debt relief and increased levels of foreign aid, and enhancing the management of proximate environmental problems [12, 63]. As such, adaptation is not merely a future problem, but one concerned with addressing present day challenges within which interventions can be ‘mainstreamed’ or ‘normalized’ [20, 58, 89, 91–93].
5. Conclusion

Policy intervention at a global level can prevent climate migration from escalating into a humanitarian crisis by ensuring that people faced with climate change induced environmental pressures have viable options. Such policy intervention, however, could easily be stymied by political obstacles, notably competing national and international priorities (e.g. resolving financial crises) that divert extensive political will and resources. Until the world’s most influential nations truly acknowledge climate change as an urgent issue and commit to take action—be it within or outside UN processes—the proposed strategy for recognition will likely fail.

In framing migration as an adaptation to climate change, and not a threat to national security, identity or sovereignty, these obstacles can be minimized. This framing shifts the focus to finding solutions that address both proximate and ultimate causes of climate migration, while offering benefits to both sending and receiving communities. To ensure the protection of climate migrants, legal international recognition is required. Such recognition is best placed within the United Nations Framework Convention on Climate Change, and should build on the ‘climate migration and displacement’ clause of the Cancun Adaptation Framework. This letter has outlined key components required to operationalize recognition. By setting the institutional groundwork, focusing on the most vulnerable, promoting targeted research and policy agendas, and situating policies within a comprehensive strategy, UNFCCC recognition will tackle both displacement and its underlying drivers. As such, climate migration presents the UNFCCC with an opportunity to leverage its strengths in engaging the scientific, governmental and NGO communities and in providing a respected forum for international negotiation to tackle an emerging humanitarian issue. In acknowledging the primacy of human rights in environmental policy, the UNFCCC can radically reframe climate migration by inviting local, national and international institutions help make mobility a part of the solution.

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