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EDITED BY

Kees Van Der Geest,
Institute for Environment and Human Security
(UNU), Germany

REVIEWED BY

Laurie Parsons,
Royal Holloway, University of London,
United Kingdom
Ann-Christine Link,
University of Marburg, Germany

*CORRESPONDENCE

Fanny Thornton
✉ Fanny.Thornton@pik-potsdam.de

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Trapped or staying put: Governing immobility in the context of climate change

Fanny Thornton^{1,2*}, Diogo Andreolla Serraglio^{3,4} and
Alec Thornton^{1,5}

¹Brazil East Africa India Peru Climate Capacities (B-EPICC) Project, Future Lab Social Metabolism and Impacts, Potsdam Institute for Climate Impact Research (Potsdam-Institut für Klimafolgenforschung, PIK), Leibniz Association, Potsdam, Germany, ²Canberra Law School, University of Canberra, Canberra, ACT, Australia, ³HABITABLE - Linking Climate Change, Habitability and Social Tipping Points: Scenarios for Climate Migration, Future Lab Social Metabolism and Impacts, Potsdam Institute for Climate Impact Research, Leibniz Association, Potsdam, Germany, ⁴South American Network for Environmental Migrations (RESAMA), São Paulo, Brazil, ⁵Institute for Global Development (IGD), University of New South Wales, Sydney, NSW, Australia

By presenting a range of outcomes which result from the impacts of a changing environment on human mobility patterns, the *Foresight Report on Migration and Global Environmental Change* emphasized that, whereas some people choose to stay in a specific location, others are simply unable to leave, leading to what the report termed “trapped populations”. Much understanding about both voluntary and involuntary immobility in the context of environmental or climatic change has been gained since. The IPCC’s recent report on climate change impacts, vulnerabilities and adaptation further underlined that, in the decades ahead, some people will be unable or unwilling to move away from locations in which they may nevertheless be vulnerable to the impacts of climate change. What has received less attention is how climate immobility ought to be governed and which norms should underpin its governance. In this paper, we rely on select existing law and policy instruments and frameworks from Latin American and the Pacific Islands regions to outline key considerations of a governance structure suitable for (in)voluntary immobility. This will inform individuals, communities, and policy makers who seek to navigate through complex reasons and decisions for “staying put” or “getting stuck” in the face of climatic change. The analysis builds upon a review of published literature and, especially, existing policy and legal frameworks at national and regional levels. We argue that a more widespread, timely and proactive approach to policy and governance is required in support of resilience in the context of climate immobility.

KEYWORDS

climate change, (in)voluntary immobility, trapped populations, governance, national policy and law, regional policy and law, Latin America, Pacific Islands

Interactions between environmental change, migration drivers and the personal characteristics of individuals can impel migration, but can also lead to people choosing to or being forced to stay in areas where they may become increasingly vulnerable to environmental and other risks. This is a particularly important conclusion, as subsequent chapters will show that future potential immobility will itself raise a range of issues for policy makers, possibly as important or more important as those associated with migration itself (Foresight, 2011; p. 43).

Introduction

A key conclusion contained in the 2011 Foresight Report *Migration and Global Environmental Change* was that within the nexus of environmental change, human mobility and individual context immobility may occur alongside mobility. Immobility was conceptualized as occurring voluntarily, as well as involuntarily, but in either case as likely to lead to growing precarity (Foresight, 2011, p. 43) also IPCC 2022. The Report focused in particular on the concept of ‘trapped populations’, those not mobile whilst facing growing vulnerability (Foresight, 2011, p. 25), noting that this group would need at least as much policy attention as their mobile counterparts. Immobility has since gained some traction in academic and applied debates concerning climate (im)mobility¹ (e.g., Black et al., 2013; Baldwin et al., 2019; Farbotko and McMichael, 2019; Farbotko et al., 2020; Cundill et al., 2021; Zickgraf, 2021; Boas et al., 2022).

Like mobility, immobility in the context of climate change is understood as likely occurring on a spectrum—from voluntary to involuntary (e.g., Zickgraf, 2021, p. 127). The former revolves around the idea of immobility by choice, the latter around immobility that is forced. Individual immobility decisions or outcomes can revolve around varying degrees of vulnerability and/or resilience (Ibid: 128). Although the Foresight Report emphasized the potentially detrimental effects of immobility, others have since noted that immobility as well as mobility can be a desired adaptation strategy in the context of climate change. Farbotko and McMichael (2019, p. 154), for example, stress that voluntary immobility can be one way to strengthen important cultural and spiritual resilience, aiding in the assertion of self-determination in a context of threatened territorial loss from global warming. Boas et al. (2022) note mobility as well as immobility as potential “acts of resistance” in a changing climate. Robins (2022), more broadly, outlines the concept of “active immobility”—as one way to capture voluntary decisions to stay, even where households or individuals have the means to depart in times of crisis.

Wiegel et al. (2019) describe how mobility and immobility patterns are inseparably interconnected across scales, and thus need to be considered conjointly. Yet, the climate change and (im)mobility literature asserts mobility receives more attention over immobility (e.g., Farbotko and McMichael, 2019; Zickgraf, 2021), something also noted in mobility literature more broadly (e.g., Schewel, 2020). The question of why and how people are not moving in the context of climate and/or environmental change is often left aside by policy discussions focused solely on those who are (expected to become) mobile, centering on whether their mobility should be regarded as a threat or an opportunity, and for whom (Ayebe-Karlsson et al., 2018; Wiegel et al., 2019). With such a focus, immobility struggles to gain traction, including in policy settings (Farbotko et al., 2020). Whilst mobility policy in the context of climate change is now emerging in varying fora and locations, as is discussion of it (e.g., Thornton et al., 2021), there has been a

marked absence of immobility as a primary concern in the relevant discourse. This paper seeks to contribute to closing this gap by outlining key considerations for a governance structure suitable for (in)voluntary immobility. For the purposes of this paper, by governance we rely on the second of three meanings of the term outlined by Fukuyama (2013)—“effective implementation of state policy”, focusing on a review of relevant policy and legal documents at the national and regional level.

The paper contends that climate immobility policy is, at best in its infancy. In part, this is because of the aforementioned policy inattention—compared to mobility; in part, it is also because there is a significant lack of good quality, reliable data. Further development should pursue data provision and otherwise innovations tied to existing law and policy spheres—whether these be human rights, disaster risk reduction or land policy.

Methodology

We highlight two key regions subject to (im)mobility pressures from climate change—Latin America and the Pacific Islands. We outline briefly the vulnerabilities that arise for each region with global warming. Importantly, we emphasize how, in particular, immobility occurs in the climate change context and then present law and policy developments relevant to (im)mobility. Our focus is publicly accessible law and policy instruments and frameworks, which have also been reviewed elsewhere (e.g., Serraglio, 2020; Thornton et al., 2021). We note how far governance of immobility arising with climate change has developed, as well as important gaps. Latin America and the Pacific Islands were chosen to demonstrate how the impacts of climate change foster the vulnerability of entire communities in two distinct regions of the globe. Both geographical areas are particularly impacted by the adverse effects of climate change, with the frequency and intensity of sudden- and slow-onset events affecting people’s way of living and their resilience, often to a degree where they must seek better conditions elsewhere or face the consequences of immobility. Furthermore, the paper concentrates on these two regions due to current developments in terms of national and regional normative instruments and other official documents that recognize population movements in the context of climate change, with emerging hints that would also enable the addressing of situations of (in)voluntary immobility.

To verify to what extent Latin American and Pacific Island countries have integrated the distinct dimensions of human (im)mobility in the context of climate change in their national or regional agendas, the analysis builds upon a systematic review of official documents to which we applied a selection of different search terms.² Once relevant documents had been identified, their content was further scrutinized in detail.

¹ We will adopt the use of brackets when discussing immobility and mobility – henceforth (im)mobility, as well as voluntary and involuntary – henceforth (in)voluntary. When specifically referring to either term, the brackets will be excluded.

² The following keywords were used to detect references to human (im)mobility: “migration”, “displacement”, “planned relocation”, “trapped”, “(re)settlement” and “immobility” (including related words such as “migrating” and “migrated”, “displacing” and “displaced”, “relocating” and “relocated”).

The Latin American context

Background

The impacts of climate change are already affecting Latin American countries, with the Andes, northeastern Brazil and northern Central America among the areas vulnerable to climate-induced (im)mobility (IPCC, 2022). Extreme weather events, rising temperatures, coastal erosion as a result of sea level rise and increased frequency of droughts are some of the climatic threats that can lead to population movements and/or situations of (in)voluntary immobility in the region (Ibid.). That is because the disruption of fragile ecosystems due to climatic impacts jeopardizes the livelihood of entire communities, especially of those depending on agriculture (Bilsborrow and Delargy, 1990; Magrin et al., 2014; Williams, 2020). Such impacts often interact with non-environmental factors, such as food insecurity, land inequality, poverty and violence (Taylor et al., 2016; Bolaños Guerra, 2018; American Security Project, 2019; Ruiz-de-Oña et al., 2019; Dodd et al., 2020; Williams, 2020), intensifying tensions on livelihoods in rural areas (Radel et al., 2018) and stressing the labor market due to rapid urbanization in cities (Dodd et al., 2020). In many countries in the region, mobility is used as an adaptation strategy to cope with climate change and its associated impacts (Radel et al., 2018; Lynch, 2019; Dodd et al., 2020; Hoffmann et al., 2020). For example, mobility has served as a way to alleviate the effects of prolonged droughts in Central America (López-Carr, 2012; Davis and López-Carr, 2014; Lynch, 2019; Angelsen et al., 2020). However, mobility is not an option for all populations vulnerable to climate-related impacts. In a survey of farmers living in Peru, Bergmann et al. (2021) learned that, in the absence of climate adaptation measures in the long run, people will be particularly at risk of becoming “trapped” in unsafe areas when more climate impacts erode the ecosystem on which they depend. Likewise, Blocher et al. (2021) observed that many people in Peru may find themselves in increasingly dangerous areas and unable to move due to glaciers melting. Importantly, the findings indicate that many people also opt to stay, at least in the beginning of gradual climatic changes, as the lack of financial resources, social networks and/or obligations prevail (Ibid.). In addition, Williams (2020) points to involuntary immobility by showing that families living in parts of the Northern Triangle remain “trapped” in their place of origin due to food insecurity. In this context, better economic conditions would incentivize mobility. As for situations of voluntary immobility, cases of small farmers that, instead of moving, preferred to convert agricultural practices to livestock cultivation can also be identified in Central American countries (Davis and López-Carr, 2014).

Law, policy, and governance context concerning immobility

The Inter-American Human Rights System (IAHRS) plays an important role in safeguarding individuals in situations of climate-induced (im)mobility in Latin America. Its instruments reinforce and clarify the minimum human rights protection standards and their respective implementation by regional and national

jurisdictions (IIDH, 2022). For example, despite the discretion allowed to the Member-States of the Organization of American States (OAS) in establishing their own migration policies, the Inter-American Court of Human Rights (I/A Court HR) declares that these must be compatible with human rights protection standards set out in 1969 American Convention on Human Rights (Inter-American Court of Human Rights (I/A Court HR), 2010). Hence, migration policy and legal instruments addressing the distinct dimensions of human (im)mobility in the context of climate and/or other environmental change must adopt a rights-based approach. The I/A Court HR's standards on migration and international protection indicate an extensive and/or broad interpretation regarding the human rights' protection of individuals on the move (Inter-American Court of Human Rights (I/A Court HR), 1989, 2003, 2014a,b, 2018). Although such standards are not specifically aimed at population movements and/or (in)voluntary immobility in the context of climate change, they are nonetheless applicable to them without limitation since the ultimate goal is to ensure the safeguarding of human dignity (IIDH, 2022).

The I/A Court HR has also recognized that internal displacement affects a wide range of human rights, such as (i) the freedom of movement within national borders, (ii) the freedom of choosing the place of habitual residence, (iii) the right to personal integrity, private and family life, and, more recently, (iv) the right not to be forcibly displaced (Inter-American Court of Human Rights (I/A Court HR), 2006). With the publication of the Advisory Opinion OC-23/17, the I/A Court HR acknowledged the vulnerability of those displaced by the impacts of climate change, emphasizing environmental degradation as a driver of immobility, especially for communities whose livelihoods and subsistence depend on environmental resources (Inter-American Court of Human Rights (I/A Court HR), 2017). The OC-23/17 defends the establishment of the right not to be forcibly displaced in the context of climate change, stating that such phenomena often jeopardize the fulfillment of human rights (Ibid.). Such rights serve to protect those in situations of (in)voluntary immobility.

In turn, the Inter-American Commission on Human Rights (IACHR) recently adopted Resolution n. 3/2021, entitled “Climate Emergency: Scope of the Inter-American Human Rights Obligations” (Inter-American Commission on Human Rights (IACHR), 2022). The document underlines that the intensity and increased frequency of extreme weather events, as well as gradual climatic processes, have affected the living patterns of people living in the region, causing internal displacement and migration as a result of the lack of opportunities and destruction of infrastructure, among others. Importantly, such events have also led to situations of (in)voluntary immobility, which depends on the resilience and adaptation capacity of individuals to cope with deteriorated living conditions. Faced with people who (im)mobilize for reasons (in)directly associated with climate change, States must guarantee due process for those who choose and/or are forced to stay, regardless of their migratory status. In this context, they must guarantee their human rights, such as the safeguard of *non-refoulement*³ while their status remains

³ *Non-refoulement* is a principle of International Human Rights Law that forbids a country receiving asylum seekers from returning them to a country in which they would be in likely danger of persecution. In other words, it

undefined. At the same time, States must guarantee access to the right to health associated with climatic phenomena to all people under contexts of human (im)mobility. Finally, access to justice, to reparation measures, and guarantees of non-repetition of losses and damages related to the impacts of climate change with regard to the permanence of individuals in their usual places of residence must also be recognized (Ibid).⁴

To date, the acknowledgment of (im)mobility in the context of climate change in domestic policies is partial: references to the topic indicate a slow—but progressive—recognition of the impacts of a changing climate in vulnerable communities, which may include (forced) population movements (Serraglio et al., 2022). Mentions of the topic in Latin American countries' existing policy and legal frameworks tend to be generic and uncover a lack of a common approach to effectively address the phenomenon (Cavedon-Capdeville et al., 2019). The following gaps can be identified: (i) the lack of a clear framing of the human mobility—climate change nexus in policy and legal instruments, (ii) a focus on extreme events and disaster displacement, that is, little recognition of population movements associated with slow-onset processes, (iii) the lack of proactive measures and comprehensive management, as well as (iv) limited acknowledgment of broader climate-related impacts—including (in)voluntary immobility (Serraglio, 2020; Serraglio et al., 2022).

Even though climate-related immobility is not yet a key component of national policy and legal frameworks in the region, Latin American countries often dispose of laws to govern migration, internal displacement and planned relocation (Cantor, 2018; Cavedon-Capdeville et al., 2019). Even though little or no attention has been given to (in)voluntary immobility, besides integrated frameworks for disaster risk reduction (DRR) covering emergencies and humanitarian responses, many of the existing policy and legal instruments rely on human rights norms which could support a rights-based approach to address issues related to “trapped” populations. In addition, some climate policy documents deserve attention due to their potential to promote the inclusion of the issue on national agendas. Initially, the recent Peruvian Climate Change Framework Law and its Regulation (Law n. 30,754 of 2018) called for an “action plan to avert and address forced migration caused by the effects of climate change”. Currently in development, the action plan offers a window of opportunity to manage the poor outcomes that often arise not only from (forced) population movements but also (in)voluntary immobility. Also in 2018, Guatemala's National Action Plan for Climate Change

refers to the generic repatriation of people into war zones and other disaster localities.

⁴ Regional frameworks such as the MERCOSUR as well as the Cartagena and Brazil Declarations are promising entry points for protection. For example, in the framework of the 30-year anniversary of the 1984 Cartagena Declaration on Refugees (Cartagena +30), Latin American countries requested a study to better understand the challenges related to the impacts of climate change and disasters on the transboundary movement of people in the region. The report, entitled “Transboundary displacement, climate change and disasters: Latin America and the Caribbean”, focused on legal and regulatory measures to cross-border population movements in the context of climate and/or other environmental changes, remaining silent as for (in)voluntary immobility and related topics (Cantor, 2018).

presented a specific section on the (im)mobility—climate change nexus, listing measures to reduce the vulnerability of individuals and communities to the impacts of a changing climate, all of them applicable to immobile populations. Lastly, Chile's updated Nationally Determined Contribution (NDC), submitted in 2020, acknowledges that the ability of local communities to respond to the impacts of climate change is key to reducing impacts associated with sudden-onset events, and it was announced that the national government commits to producing guidelines on the effects of climate change in the phenomenon of (im)mobility. Despite not referring to the specific needs of (in)voluntary immobility, such guidelines may be a unique opportunity to address the specific needs of those individuals who are trapped or stay put.

Recommendations to respond to immobility in Latin America

Latin American countries, broadly, have strong human rights obligations, many with relevance to climate immobility patterns. While some domestic policy concerning climate- and disaster-related (im)mobility has emerged, there is very little overt attention paid to (in)voluntary immobility. We thus propose the following pathways toward improved management of the phenomenon:

- The linkages between climate change and (in)voluntary immobility still need to be better understood in the region. Whereas the regional human rights agenda should better explore the full continuum from mobility to immobility in the context of climate and/or other environmental changes, the topic should be effectively integrated into domestic policy and legal frameworks.
- Besides clear definitions and dispositions, such regional and national policy documents should define responsibilities aimed at protecting the human rights of vulnerable populations, including those individuals who choose or are forced to stay in their usual places of residence.
- To this end, establishing a strong knowledge base for data collection, management and dissemination is key for comprehensive management of (in)voluntary immobility. The lack of data on the topic hampers proactive response measures and effective decision-making on the topic.
- The impacts of climate change need to be better understood to encompass broader socio-environmental impacts. For example, risk assessments should be built upon the consultation and participation of affected people to strengthen the resilience of communities, facilitating thus dignified voluntary immobility.
- Support for policy development concerning human mobility in the context of climate change, in which immobility also features prominently.

The Pacific Islands context

Background

The Pacific Islands region faces a multitude of challenges arising with anthropogenic climate change. The region hosts many low-lying island nations, with relatively small, though climate-vulnerable populations. Small islands such as those in the Pacific

are increasingly subject to inundation from sea level rise, salt intrusion into freshwater sources, flooding, ocean acidification, more intense storms and marine heatwaves, amongst other effects (IPCC, 2021). These may contribute to environmental and livelihoods degradation and, in turn, affect human (im)mobility. A 2017 study concerning the Pacific Island nation of Tuvalu notes that although households surveyed there had overwhelmingly (97%) been affected by natural hazards in the decade prior, the unaffordability of mobility might nevertheless entrap about half into the future (UNU-EHS, 2017). Still, a 2014 study suggested that 1.7 million regional inhabitants could migrate or be displaced by mid-century due to climate change, with regional hotspot source areas comprising urban areas; urban and non-urban atolls; coastal, delta and riverine communities; as well as those prone to drought (Campbell and Warrick, 2014). Already, climate-related relocations are on-going in some regional island states (e.g., McMichael et al., 2020). Importantly, mobility across the region is not new, including in the context of environmental and livelihood degradation (Campbell and Warrick, 2014). At the same time, the region is inhabited by many who possess strong place attachment and a cultural identity that is intricately tied to (frequently communally owned) land (e.g., Perumal, 2018). Land tenure-related issues in the Pacific Islands can affect (im)mobility, including through entrapment. Fitzpatrick (2022, p. 9) notes: “Individuals and households with highly insecure forms of land tenure are not only more likely to live in hazard-prone areas but are also more likely to require protection measures in circumstances of displacement”. At the same time, attachment to land in the region, and the cultural identity tied to it, also drives voluntary immobility, even in an era of rising climate vulnerability (Farbotko et al., 2020). Oakes (2019) highlights how culture as grounded in both land and religion influences (im)mobility decisions in the climate change context in Pacific Small Island Developing States (SIDS). Yee et al. argue that, for climate adaptation to be successful and sustainable, relevant measures must pay attention to the “values, perspectives, and preferences of local people and account for the tangible and intangible connections to a place”, not least where they wish to stay (Yee et al., 2022, p. 1).

Law, policy, and governance context concerning immobility

Engagement with the international human rights regime is limited in the region. Only Fiji is a party to all nine major international human rights treaties—the most amongst the Pacific Island Countries (PIC). That said, human rights treaty ratification in the region is growing; Alefsen and Young (2021) report that 10 PICs had ratified or acceded to a total of 65 human rights treaties or optional protocols by 2016, which grew to 13 PICs and 73 instruments by 2020. This means that despite the absence of a regional human rights instrument, most regional governments have at least some international obligations to adhere to core human rights requirements also relevant in the human (im)mobility context—e.g. provision of food and shelter, non-discrimination, etc.

The humanitarian and disaster response sector in the region, as elsewhere, has historically tended to be reactive to disasters, including those with displacement or entrapment consequences. A shift to more proactive engagement is noticeable, however. The Pacific Response to Disaster Displacement (PRDD), for example, works in five regional countries to develop proactive modeling and policy in the climate disaster displacement context, including with respect to early warning and property protection systems (Internal Displacement Monitoring Centre (IDMC), 2020) that should also prevent entrapment. The now-emerging Pacific Resilience Facility (Pacific Island Forum Secretariat, 2021) has the core purpose of providing up-front financial resources for small-scale community-level climate resilience-building projects. (Im)mobility is not at the heart of the initiative but the envisioned support for small infrastructure development may also have a positive impact on both voluntary and involuntary immobility in some instances. It operates as a donor-funded trust fund, with the goal of seeking to attract substantial financial resources from which income can be generated and then distributed.

Land tenure systems or arrangements have garnered some attention with respect to climate (im)mobility in the Pacific. The adaptive capacity of predominantly poly-centric land systems in a climate mobility context has both been questioned and its development further encouraged (Fitzpatrick and Monson, 2020). Fitzpatrick (2022, p. 9) notes that whilst risk assessment, especially in areas of urban vulnerability and with it subject to entrapment, is growing, this is not connected to land tenure relationships. He charts, as a way forward, climate and disaster policy that also revolves around land tenure, rather than more fundamental land reform (Fitzpatrick, 2022, p. 15).

Perhaps most relevant in the Pacific Island region is emerging policy concerning climate mobility. Vanuatu’s *National Policy on Climate Change and Disaster-Induced Displacement* (Government of Vanuatu, 2018) does not mention immobility overtly. However, it supports, on the one hand, “voluntary and informed choices” and, on the other, “assistance and protection” to all who need it, including vulnerable groups. The instrument is grounded in human rights principles and makes a commitment to consultation and participation, whilst allocating sector-based responsibilities. Together, it provides a basic policy setting by which to support not only mobile people, but also at least some of those immobile, whether voluntarily or involuntarily. Fiji has two instruments concerning mobility in the climate change context. First, its *Planned Relocation Guidelines* (Government of Fiji, 2018) underscore that forced mobility does not lead to positive outcomes for individuals or communities. They thus view relocation in the climate change context as a last resort, one to which those affected should concede, all measures to allow people to stay ought to have been exhausted first. Human rights, equity and consultation are considered vital building blocks of this policy which revolves around measures and support in the three stages of mobility (prior, during, after). Secondly, Fiji’s *Displacement Guidelines in the Context of Climate Change and Disasters* (Government of Fiji, 2020) also do not concretely tackle immobility. That said, they note measures to prevent displacement and accept the responsibility of the state to provide “safe and dignified passage” as necessary, of importance to trapped populations. A

focus on mobility stages and a rights-grounded framework are prevalent here, too. The three instruments discussed are not predominantly about immobility; although all include measures that would allow people to stay, or to support them where moving is necessary or desired though seemingly impossible without broader intervention. That said, the opportunity to make immobility a core or more overt element of these (or separate) policies was arguably not taken, doing so might have been particularly supportive of voluntary immobility, which otherwise currently finds little treatment in domestic instruments concerning climate (im)mobility.

Most recently, the Pacific Islands region has committed to a regional policy tool concerning climate mobility—the *Pacific Regional Framework on Climate Mobility*, an initiative of the Pacific Climate Change Migration and Human Security (PCCMHS) programme. The Framework is not yet finalized, nor is a draft publicly available. However, what is clear from the debates that precede the Framework is that attention is to be paid to not only mobility but also immobility (*Pacific Climate Change Migration and Human Security (PCCMHS), 2022*). In other words, climate mobility concerns not only going elsewhere, but also *in situ* adaptation and habitation where at all possible, not least in a cultural context in which land attachment shapes personal and community identity. In that sense, the Framework may well go beyond the national instruments that preceded it in the region by giving more express voice to immobility issues and their resolve.

Recommendations to respond to immobility in the Pacific

In the climate change context, the Pacific Islands region experiences, and will increasingly have to respond to, a variety of mobility patterns—both (in)voluntary mobility, as well as (in)voluntary immobility. Although policy dedicated to climate mobility has in recent years been emerging in the region at the national level, immobility is tackled there in cursory and fragmented fashion, with no dedicated instrument apparent. A regional instrument is under development, one which will likely revolve around immobility as much as mobility. We suggest the following broad steps as a way forward to respond, particularly to immobility in the region:

- Further ratification of, accession to, and engagement with the international human rights treaty system and the obligations that it raises—to hold governments and public authorities to account in the context of (in)voluntary immobility arising with climate change.
- Further development of proactive, rather than reactive, responses (modeling, policy, application, etc.) in disaster risk planning, management and financing, with a focus on preventing entrapment and facilitating voluntarily staying where possible.
- Enhanced inclusion of immobility in developing policy in the region concerning climate mobility.
- Development of land tenure or access arrangements that prevent entrapment in highly vulnerable or disaster-prone conditions.

Conclusion

The 2011 *Foresight Report on Migration and Global Environmental Change* highlighted “that future potential immobility will itself raise a range of issues for policy makers, possibly as important or more important as those associated with migration itself” (*Foresight, 2011*, p. 43). We find limited evidence that climate immobility has received the same policy attention as climate mobility, in itself a still-emerging policy area, in the two regions we investigated—Latin America and the Pacific Islands. Governance of climate immobility is currently fragmented at best, with only some policy hints or guidance arising either within human rights frameworks, within disaster risk reduction (DRR) frameworks, or within climate mobility policy. We presently find no dedicated climate immobility policy tool, although there is evidence that immobility may be part of a substantive emerging regional tool on climate (im)mobility in the Pacific Islands region.

Human rights norms are able to govern, at least broadly, the treatment of people in (in)voluntary immobility scenarios, though they provide scant policy direction directly or exclusively relevant to climate immobility. Human rights uptake and application is also fragmented—globally and amongst/within the two regions we studied. That said, the majority of instruments we investigated is grounded in human rights norms in some shape or form, a promising sign that human rights is to play a part in governing climate (im)mobilities. DRR frameworks and policy do not set out to deal expressly with climate (im)mobility, though they have a part to play in preventing and addressing involuntary immobility (entrapment) and possibly facilitating voluntary immobility, in particular where relevant norms are developed around a proactive approach (preparedness, planning, adaptation measures, etc.). Climate mobility policy, presently emerged in particular in domestic settings in our two study regions, concern in particular (in)voluntary mobility, though we also note at least some expressed norms concerning immobility: (i) in situations of entrapment, support is to be offered to affected persons; (ii) mobility should be a last resort, particularly when it comes to planned relocation. However, neither amounts to full-fledged, dedicated policy guidance for (in)voluntary immobility.

We anticipate that policy concerning immobility stemming from climate change will slowly continue to develop, not least as policy on mobility continues to emerge and as mobility pressures linked to climate change grow. Key here is that immobility is included in more than cursory fashion, as a topic deserving of full attention in and of itself, and along its full voluntary-involuntary spectrum. Broad *in situ* adaptation policy is unlikely to be sufficient, in what is a context where people stay, but pressures to move on otherwise may exist abundantly. Human rights will likely, and rightly, continue to be a basis for crystalizing norms, or be an integral part of relevant policy instruments. Resources are key to all forms of climate immobility, spanning those in support of tangible (e.g., shelter) or intangible outcomes (e.g., preservation of culture and tradition). Resources, however, will be hard to come by, not least as climate immobility competes for resources with mobility, but also those for broader adaptation and mitigation concerns. The fund dedicated to loss and damage, as agreed at COP 27 *U. N. Climate Change, 2022* provides some hope that (im)mobility

concerns will begin to find some traction within international climate finance.

In concluding, we note that our study concerns two regions only, which limits the global relevance of our findings. Further studies, concerning other regions, could contribute to completing the picture we have sketched in this paper. We also equate governance with policy in the paper but acknowledge that governance of climate immobility deserves broader treatment.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

Paper conceptualization: FT and DS. Paper drafting and revisions: FT—40%, DS—40%, and AT—20%. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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