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Policy challenges and responses to environmental non-migration

Mostafa Mahmud Naser¹, Bishawjit Mallick²✉, Rup Priodarsini³, Saleemul Huq^{3,4} and Ajay Bailey²

The scientific literature, media, international summits, and policy forums highlighted enough the people who either move or are willing to move because of environmental reasons. Still, the voluntary environmental non-migrants (ENM), who are assumed to have strong resilience and coping capacity, are inordinately overlooked. The importance of addressing these ENMs has increasingly been emphasised. First, the paper explains the characteristics of ENM, outlining the key distinction between voluntary and forced non-migrants. Second, it emphasises the need to protect populations affected by environmental change and disaster, specifically highlighting oft-neglected ENM policy gaps. Thus, it examines to what extent ENM is addressed in existing global legal and policy responses. Having identified the gaps, it further considers the importance of adaptation strategies and well-planned relocation policies to support non-migration. Finally, it summarises the existing ENM policies' scope and reflects on the key policy gaps identified to suggest the way forward. This paper urges for a pragmatic and strategic policy approach that ensures bottom-up community-oriented approaches for supporting ENM by: (i) coordinating adaptation activities, (ii) ensuring planned relocation and migration with dignity, (iii) enabling informed decision-making, (iv) mobilising national and international support, and (v) developing appropriate institutional structures for adaptation.

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INTRODUCTION

In the face of adverse climate change impacts, some people may 'decide to move' to a safer place either temporarily or permanently, while many are likely to 'decide to stay' in their original place^{1–4}. The people who either move or are 'willing to move' because of adverse environmental situations are characterised in the literature using a wide variety of terminologies such as climate refugees, climate migrants, environmental migrants, climate-induced displacement, and environmental displacement etc.^{5–7}. These terminologies refer to displacement either internally or internationally, and temporarily or permanently, due to an environmental hazard. Furthermore, the international climate policy discourse explains three human mobility outcomes in the context of climate change: migration, displacement, and planned relocation⁸. Here migration refers to the voluntary movement of the people; contrary to this, displacement is termed as the forced movement of the people. And planned relocation is defined as the anticipated process of moving to a new place. Given the complexity and difficulties in measuring the influence of climate change on human mobility (see refs. ^{9,10}) the International Organisation for Migration¹¹ estimates that the number of 'environmental migrants' in 2050 could fall between 40 million and 1 billion. For instance, according to a global report on internal displacement, in 2021 alone, around 23.7 million people were displaced by disasters in 141 countries, of which 22.3 million were displaced by weather-related disasters¹². There is limited empirical research demonstrating the exact types (forced or voluntary) and volume of environmental migrants and non-migrants^{13–15}, and many studies confirm that only a fraction of the total number of people affected by disasters worldwide adopts the path of migration^{16–18}.

Evidence shows that most who experience environmental hazards stay put, even in precarious living situations¹⁹. These stayers, either voluntary or involuntary, are termed 'environmental non-migrants (ENM)' in this study.

For instance, between 2008 and 2016, it is estimated that about 85% of individuals threatened by disasters worldwide did not relocate^{20,21}. These populations, often referred to as 'immobile', 'non-migrant' or 'trapped', remain in dangerous situations where climate change increasingly exacerbates their vulnerability by affecting their exposure to natural hazards. But not everyone staying is trapped, rather many of them are voluntarily staying, given that they have resources, capabilities and aspirations to stay at risk¹⁹. As a result, this immobility has far-reaching implications for the current and future lives of this population as the climate change consequence is not only an immediate livelihoods threat but also contributes to their fragile livelihoods conditions^{14,15,22}. The importance of addressing the needs of these non-migrants in the policy discourses has increasingly been emphasised¹.

While the people who either move or are willing to move because of environmental reasons are highlighted in the scholarly literature, media, international meetings, conferences, and policy forums, the ENM is inordinately overlooked¹⁹. In particular, the charter and mechanisms of the United Nations Framework Convention on Climate Change (UNFCCC) systematically overlook the unique characteristics and needs of those stayers at risks, and have no specific reference to ENM¹⁹, although some of the recent developments are noticeable in different policy documents.

In 2010, the adoption of the Cancún Adaptation Framework (CAF) by Parties to the UNFCCC was the first explicit acknowledgement of the need for cooperation on human mobility in a changing climate. In 2009, during African Union's Kampala Convention, policymakers finally recognised the importance of

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internal migration due to natural or man-made disasters. Again in 2018, the United Nations adopted the Global Compact for Safe, Orderly and Regular Migration (GCM) that includes 12 actions under objectives 2, 5, 21, and 23 that are particular relevance to address the people who are compelled to leave their countries due to adverse effects of climate change and environmental degradation²³. Besides, the recent UNICEF's Guiding Principles for Children on the Move in the Context of Climate Change (2022) addresses the rights and well-being of children and youth moving in the context of climate change. In particular, these principles apply to children who cannot or choose not to move, including children 'left behind' by migrating parents, whose enjoyment of rights may be negatively impacted by climate change²⁴. Despite some of these initiatives, examining how the international climate policy, notably in the UNFCCC, systematically neglected the voluntary stayers and other immobile population at risk is evocative.

This paper explores how far ENM has been addressed in international policy responses and argues that more significant consideration of non-migrants is needed. First, it explains the characteristics of ENM, outlining the key distinction between voluntary and involuntary non-migrants and the interrelationship between environmental migration and non-migration. It emphasises the need to protect populations affected by environmental change and disaster, specifically highlighting oft-neglected ENM policy needs. Second, this paper examines to what extent ENM is addressed in existing global policy responses. Having identified the gaps, it further considers the importance of adaptation strategies and well-planned relocation policies to support non-migration. Finally, it summarises the scope of the existing policies and reflects on the vital policy gaps identified to suggest the way forward for supporting ENM. This paper posits that a pragmatic, strategic policy approach to ENM can provide a framework for coordinating adaptation activities, ensuring planned relocation with dignity, enabling informed decision-making, mobilising national and international support, and developing appropriate institutional structures for adaptation.

DEMYSTIFYING ENVIRONMENTAL NON-MIGRATION

The environment-migration literature considers environmental conditions such as push factors²⁵, but the 'environmental non-migrants' are the people who stay in an environmentally vulnerable locale despite environmental risks, either voluntarily or involuntarily²⁶. Environmental degradation influences human life in diverse ways. The 'decision to move' is the most challenging decision for a person affected or likely to be affected by the impending disaster²⁷. Whether the decision will be of their free will or compelled by some other external factors is generally determined by the unique social, political, environmental, and security context of the concerned person or group of persons²⁰. It is not a linear decision but a complex outcome interrelated with many variable circumstances and factors at a range of spatial and temporal scales^{14,25} that affects the livelihood conditions²⁶. Thus, non-migration and migration are dynamic, intertwined processes that evolved through risk perception, risk tolerance, and self-efficacy²⁶. There are several dimensions of environmental migration and non-migration that have been debated; for instance, the place of destination, the extent of the move (near or distant), the duration of stay (temporary or permanent), the decision to return, and the time of return all result from a cognitive process weighing the adaptive capacity, availability of resources, the pace of environmental changes, and more²⁸. Several factors that influence non-migration have also been empirically verified²⁶. Like, based on a field survey in Peru, Adams¹ identified three reasons for non-migration: high satisfaction levels, resource barriers, and low mobility potential. The reasons identified for 'low mobility' include 'obligations to family members, property or assets, affective and

social ties to the location and no suitable alternative location' (p. 441)¹, displaying a complex blend of internal motives and external circumstances. In their study²⁹, elaborate on four dimensions of migrants and non-migrants based on the scale and severity of 'people-place vulnerability' and 'migration continuum'—trapped, displacement, voluntary migration (i.e., migration as adaptation), and voluntary non-migration (i.e., adaption in place). But, in this paper, we employ the 'capabilities and aspirations' framework, i.e., immobility in terms of the intersection of one's capabilities to move or stay and their preference³⁰, and defined environmental non-migrants into two groups: voluntary and forced. Amongst these, voluntary non-migrants are highly neglected in the climate change adaptation policy¹⁹.

Voluntary environmental non-migrants

Voluntary environmental non-migrants refer to the people who stay voluntarily at risk¹⁹; thus, they do not have a feeling of being trapped or having no choice but to stay. They may choose to stay because of multiple reasons, including strong resilience to cope with adverse situations, availability of and access to financial resources to sustain a livelihood, possessing the education and skill to avail alternative economic opportunities and having strong social networks which provide enormous support^{1,3,19,31}. It can be assumed that overall environmental non-migrants do not move because they deem they can cope with the livelihood risks of environmental change or disaster (e.g., voluntary non-migration) and/or they cannot realise their aspiration to migrate (e.g., involuntarily non-migration)³². One of the prime reasons for such decisions is the intergenerational learnings and practices—thus, they learned to live with environmental disasters from their earlier generations. Furthermore, voluntary non-migrants may have enough money to bear the livelihood costs^{25,27,33}, access to credit^{34,35}, alternative economic opportunities, including remittances³⁶, and vital place attachment¹ than the traditional ones. They may be sufficiently socially and politically well-connected to manage a livelihood crisis after an environmental event³³. According to Farbotko and McMichael (p. 150)¹³, these people have 'an informed, freely indicated preference to remain in sites where there is, or is expected to be, high vulnerability to environmental risk'; thus, they make a conscious and active decision to stay³⁷.

Adaptation strategies can offset voluntary environmental non-migration in the form of in situ adaptation³² or translocal livelihoods^{38,39}, or itself adopted as part of a strategy for resilience⁴⁰. Translocal livelihoods refer to the adaptation practices when the wage-earners of the family migrate because of better livelihood opportunities and continue to share the burden of their dependants at the origin. This type of translocal livelihoods is very common in the face of slow-onset environmental changes because such slow-onset events (i.e., salinity intrusion, sea level rise) do not always directly affect the livelihoods drastically, and therefore, people accustomed to the changes as part of the fluctuations of their regular livelihood, despite the opportunity to replan their in situ livelihood strategies to overcome impending environmental change³². But there are also evidence that slow-onset environmental changes with their cumulative impacts on resource-based livelihoods, as well as due to their often-prolonged nature are increasingly shaping the need of migration, for instance, the seasonal migration pattern in Bangladesh due to salinity intrusion⁴¹ and the pastoralist mobility in Africa due to drought⁴².

Again, human mobility triggered by rapid-onset natural hazards is primarily determined by the location of homes in areas prone to their impacts, and people's underlying vulnerability to shocks and stresses that can disrupt or destroy their livelihoods, leaving them with few safe and voluntary solutions to their immediate predicament⁴³. Thus, people who have enough resources or

adequate opportunities to overcome the damage and losses caused by rapid-onset hazards remain voluntary and are considered voluntary environmental non-migrants²⁶. Importantly, in all cases, people decide to stay³⁷.

Forced environmental non-migrants

On the opposite end of the continuum of ‘aspiration and capability’ approach, certain people are not capable of handling the livelihood risks of environmental disasters yet are compelled to stay put—they are termed forced environmental non-migrants. They are characterised using various terms such as ‘left behind’, ‘immobile’^{5,44} and ‘trapped populations’ or ‘trapped non-migrants’²². Biao⁴⁵ expresses ‘left-behinds’ in terms of suppressing their migration decision through institutional limitations; they are unable to move because of socioeconomic and institutional factors, irrespective of their motivations. In their overview, Toyota et al.⁴⁰ developed a framework based on ‘household strategy theory’ that sees those ‘left behind’ as part of a strategy directed towards diversifying income sources to reduce economic risks and losses. It is evident that the left-behind peoples are dependent but whether they decide to stay voluntarily is unexplored. In the case of involuntary non-migrants, the capability to migrate is insufficient but the aspiration is present¹⁹. However, in the long view, changing resources, strategies, and desires over time also play a vital role in the development (or reduction) of capabilities⁵. Immobility refers to such contexts where non-migrants have never migrated before, i.e., there is a persistent lack of mobility due to their circumstances.

Environmental non-migrants ‘exist along a continuum’ (p. 429)¹. Furthermore, forced and voluntary migration may not be clearly delineated as ‘all migration involves both choices and constraints’ (p. 8)³⁰. When considering these shifting capabilities, there is not an easily discernible answer to why many people at risk do not appear even to seek or attempt migration. It is important to attend to the causes of this immobility, whether forced, involuntary or somewhere in between, especially in cases where migration presents a more outwardly active and favourable, but ultimately discarded or untenable, prospect. By extension, perspectives that broaden the remit of ‘environmental migration policy’ to include non-migration outcomes are necessary. Reviewing how this more extensive group of non-migrants has been addressed in legal and policy responses is the prime task of this review.

REVIEW OF EXISTING POLICY RESPONSES TO ENVIRONMENTAL NON-MIGRATION

In response to environmental change, mobility takes various forms because of a multiplicity of drivers; these forms include evacuation, planned relocation, internal displacement, cross-border displacement, migration as adaptation, and more⁴⁶. Bettini (p. 35)⁹ argues that these forms are viewed as mobility responses to climate change and that ‘while these different ‘mobilities’ are understood in a continuum, each speaks to specific audiences and agendas’. Policy responses dealing with this broad population whose migration decision is influenced by environmental events must consider these variables and differences. A close look at the ‘wording’ of the discussions and decisions of the UNFCCC Conference of the Parties (COPs) concerning climate-related human mobility between 2010 and 2015 reveals that the policymakers emphasised ‘enhanced understanding’ of different aspects of human mobility (including non-migration) and displacement⁴⁷. While the Cancun Agreement (1/CP.16) (p. 4)⁴⁸ urges the parties to undertake ‘measures to enhance understanding, coordination and cooperation about climate change-induced displacement, migration and planned relocation’, the Doha decision on loss and damage (3/CP.18) encouraged work to enhance understanding of how impacts of climate change are

affecting ‘patterns of migration, displacement and human mobility’ (p. 23)⁴⁹. Gibb and Ford (p. 1)⁵⁰ argue that through the aforementioned para 14(f) of COP16, the global community acknowledged that human mobility in the context of climate change may have different forms and dimensions, therefore requiring ‘diverse policy approaches’. The historic Paris Agreement (COP23)⁵¹, without having a separate provision on human mobility, broadly recognises the importance of protecting the human rights of people in vulnerable situations, such as children, women, migrants, and indigenous people. Furthermore, the recommendations made by the Task Force on Displacement (TFD) also refer to and include ‘the broader term of human mobility’ and recognise the long continuum of human mobility⁴⁶. The TFD recommends the state parties to ‘adopt and implement national and subnational legislation, policies, and strategies recognising the importance of integrated approaches to avert, minimise and address displacement related to the adverse effects of climate change and issues around human mobility, taking into consideration human rights’ (p. 9)⁴⁶.

Although, in the last decade, there have been some optimistic developments in the UNFCCC decisions and processes in regard to human mobility in the context of climate change⁵² the ENM populations are systematically neglected in international policy discussions^{13,19}. While the literature shreds evidence that a large number of people in the face of extreme environmental events may decide to remain in their original place, the current global migration governance is substantially premised on the concept that ‘people have to be forced to move’ to be entitled to protection⁵³. For example, the only international treaty to deal with refugees, the 1951 Refugee Convention, extends protection only to the people who are compelled to cross an international border due to certain social and political reasons (p. 3)⁵³. Although the Convention excludes the people, who are displaced internationally because of environmental drivers, the principles of non-refoulement and the complementary protection within the international refugee law and human rights provide some limited protection to the people who decided to ‘move’ due to environmental reasons⁵⁴. Furthermore, the UNHCR’s Legal Considerations Regarding Claims for International Protection Made in the Context of the Adverse Effects of Climate Change and Disasters (2020) provides ‘key legal considerations’ regarding the applicability of the international protection regime including international refugee law and human rights law when cross-displacement occurs in the context of climate change and disasters⁵⁵. The UN Guiding Principles on Internal Displacement recognises and extends protection to the people displaced internally due to natural or human-made disasters. Furthermore, the Global Compact on Refugees (GCR) and Global Compact on Migration (GCM) adopted in 2018 recognise the need for the protection of people displaced because of environmental reasons.

However, people who decide to stay in the face of adverse environmental situations may equally require protection and can pose just as important a policy concern as those who decide to ‘move’. Therefore, focusing exclusively on people who moved the policy interventions may risk leaving behind a vast majority of people who tend to stay in environmentally vulnerable areas.

Therefore, the international legal apparatus needs to recognise the plight of people who remain either voluntarily or involuntarily while others choose to leave to initiate measures for their protection. Sometimes governments follow an easy route to protecting people living in areas affected by severe environmental events by declaring the area uninhabitable and promoting relocation¹. However, relocation without proper planning and consultation may further aggravate existing vulnerability⁵⁶. By understanding the entire continuum of migration decision-making in environmentally vulnerable areas, the global community can instead put policies in place that address people’s vulnerability, choice, and adaptive capacity irrespective of migration outcome.

Policy responses need to consider a holistic approach encompassing the concerns of people who are unable or unwilling to move in the face of deteriorating environmental conditions and adopt innovative adaptive measures to make them more resilient to environmental effects and reduce their vulnerability. Specifically, guiding policies are required that engage with the desires as well as the material conditions and capabilities of non-migrants¹ to better facilitate adaptation that allows them to survive in place⁵⁷. The literature review on ENM as stated in the section 'Demystifying environmental non-migration' reveals that ENM broadly falls into two categories: (a) voluntary and (b) forced or involuntary. The global policy instruments developed in the context of climate change, disaster and sustainable development, including UNFCCC, the Paris Agreement, the UN Sendai Framework for Disaster Risk Reduction (2015–2030) and the 2030 Agenda for Sustainable Development emphasised strengthening adaptation mechanisms in the environmental vulnerable area to build community/individual resilience through comprehensive climate change adaptation, disaster risk reduction, sustainable development, infrastructure development and livelihood diversification etc. to help people 'stay' in their original places⁵⁸. However, migration itself is considered an important adaptation and coping strategy in some literature. Furthermore, the UNFCCC Decisions and the TFD recommend undertaking planned relocation of people away from at-risk areas when necessary⁵⁹. This approach helps people move out of harm's way in high-risk situations and when the displacement is difficult to avert or prevent⁴⁶. Thus, the policy development regarding human mobility in the last decade as well as the scholarly literature on climate change and human mobility, reveals the following two main approaches that may be useful in dealing with environmental non-migration, both voluntary and forced.

Strengthening adaptation, promoting resilience

Adaptation depends largely on the adaptive capacity of people to cope with the changing environment. Therefore, the adaptation programs are mainly premised on the concept of capacity building of the people living in environmentally vulnerable areas so that they can be more resilient to the impending change^{60,61}. However, the adaptive capacity of a particular community depends on that community's socioeconomic needs and livelihood options⁶². Therefore, the coping capacity can be substantially strengthened by promoting sustainable rural and urban development, such as improving food security, providing shelter, facilitating access to safe water and health care etc.⁶². (The IPCC defines adaptation as an 'adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harm or exploits beneficial opportunities').

The IPCC (2007, 6)⁶³ defines adaptation as an 'adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harm or exploits beneficial opportunities'. The UNFCCC is the basic legal document for adaptation to climate change. Article 4 of the Convention is the pivotal section for adapting and enhancing adaptive capacity in a climate change regime. Paragraph 1(b) of article 4 provides that parties must formulate and implement national or regional programmes containing 'measures to facilitate adequate adaptation to climate change' (UNFCCC, 1992, 5)⁶⁴. Article 3(3) complements this clause, committing the parties to 'take precautionary measures to anticipate, prevent or minimize the causes of climate change' (UNFCCC, 1992, 5)⁶⁴. Thus, the Convention obliges all state parties to address adaptation in a preventive and strategic way through programmes, not merely relying on autonomous adaptation by nature. Significantly, the Cancun Summit in 2010 (COP16) particularly emphasised enhancing action on adaptation, deciding to establish the Cancun Adaptation Framework (CAF). During the same period, the

discussion on human mobility and climate change began in the COP's meetings and decisions. For the first time, the issues of migration, displacement, and planned relocation in the context of climate change were referenced in the CAF, where the states recognised human mobility potentials of climate change impacts⁴⁸. Recognising the complexities involved in human mobility, the CAF addressed three distinct responses to environmental degradation—migration, displacement, and planned relocation⁵⁸. The historic Paris Agreement (COP23) also provided a global goal for adaptation to strengthen sustainable development and resilience building⁵¹.

Thus, an international framework for adaptation exists within which regional and national initiatives can be developed to respond more clearly and directly to ENM adaptation needs. A Report published by the Platform on Disaster Displacement on Implementing the Commitments Related to Addressing Human Mobility in the Context of Disasters, Climate Change and Environmental Degradation: A Baseline Analysis Report under the Global Compact for Safe, Orderly and Regular Migration highlighted the importance of addressing the rights of people with special needs including people with disabilities, older persons and economically and socially marginalised people who may face difficulties in movement and at risk of being trapped in areas affected by disasters and integrating their concerns in the national policy responses²³.

However, many scholars and international organisations, including IOM, view migration can be framed as an adaptation⁶⁵. The exponents of this framing assume that migration can have a positive impact enabling migrants to earn income and send back remittances to the families staying behind regularly. Thus, families can diversify their livelihood⁶⁵. Studies found some vulnerable areas where remittances sent by migrants have long been a key element of food security. Drawing on case studies in Tanzania, Bolivia and Senegal, Tacoli showed that 'the most vulnerable households are those that do not receive remittances'⁶⁶. In the context of ENM, especially in the case of involuntary immobility, the working persons of the household may choose to migrate temporarily to neighbouring cities or across borders for livelihood and send remittances to the family staying put. The remittances help the family attain education, reduce poverty and build resilience to the vulnerability triggered by environmental events. Thus, policy approaches may consider facilitating safe, orderly, and regular forms of migration to the capable working members of the trapped population in supporting adaptation to climate change.

However, some states have already adopted the approach of strengthening adaptation measures and building the resilience of the people living in the areas at risk due to disaster and the effects of climate change to minimise displacement in their national policies, strategies, and national adaptation plans (NAPs) and the nationally determined contributions (NDCs).

For instance, the Displacement Guidelines in the Context of Climate Change and Disasters adopted by Fiji in 2019 acknowledges the importance of exploring all feasible alternatives to avoid displacement and strengthening adaptation and resilience strategies together with the integration of displacement considerations into disaster preparedness strategies as proposed by the Global Compact for Safe, Orderly and Regular Migration (GCM)⁶⁷. The Guidelines recognised three phases of displacement – pre-displacement, in-displacement and post-displacement. The pre-displacement phase represents the stage the decision to migrate has not been taken yet and 'adaptation options are still in place'⁶⁷. In the pre-displacement process, the government authorities are required to generate awareness among people about the nature and consequences of displacement and implement national adaptation plans and programs to build resilience and avoid displacement⁶⁷.

The NDCs submitted by Chad, Nigeria, the Republic of Sudan, and Sri Lanka refer to 'how adaptation measures may allow people

to remain in situ⁶⁸. For instance, Nigeria emphasised ‘strengthening rural infrastructure and the availability of jobs to discourage out-migration’⁶⁸.

The NAPs submitted by states under the Cancun Adaptation Framework (CAF) increasingly integrate human mobility within adaptation plans and strategies. The Plans include adaptive measures to reduce the effects of environmental triggers on communities so that the ‘push’ for migration is reduced and displacement can be averted⁶⁸. However, the plans also acknowledge the need for planned relocation and facilitating migration as an important adaptive strategy.

Thus, the national responses have increasingly adopted measures to build the resilience of vulnerable communities to environmental and climate change impacts aligned with the internationally agreed priorities of minimising and averting displacement. These policies, approaches, and best practices can be replicated in other countries vulnerable to climate change’s effects to prevent and minimise displacement in the context of climate change. The TFD can provide further guidelines for policymakers to integrate this approach in other policy areas such as migration, DRR and sustainable development policies. Also, the international community should provide technical and financial assistance to developing and the least developed countries in planning and implementing the adaptation programs, which may facilitate the people who either ‘choose’ or are ‘forced’ to stay in their original in face of intensifying environmental events.

Planned relocation with dignity and protection from arbitrary displacement

While research studies confirm that most people want to stay in their original place, in certain situations of extreme environmental degradation, when living in the area becomes impossible, planned relocation may inevitably be required⁶⁹. Climate-related planned relocation is defined by⁷⁰ as ‘the systematic relocation of people and assets away from places that have become uninhabitable or are considered to be at increased risk to climate change impacts, such as sea level rise, coastal erosion, flooding, thawing permafrost or land loss. Planned relocation can occur at a community, household or individual scale and is carried out under the authority of the State’. The international climate change negotiations emphasise strengthening cooperation among states concerning climate change-related ‘migration, displacement and planned relocation’⁵². Focusing on ‘planned relocation’ along with the ‘migration and displacement’ in the context of climate change, the international climate change framework emphasises that in dealing with climate-related human mobility, policy responses should encompass the people who are unable to unwilling to move without the assistance of planned relocation. It is encouraging that the Nationally Determined Contributions (NDCs) submitted by the state parties within the Paris Agreement (2015) increasingly refer to planned relocation as a necessary adaptation strategy. In particular, The Bahamas, Comoros, Fiji, Haiti, Kiribati, Maldives and Mexico include provisions for the planned relocation of vulnerable people from the areas prone to disaster to safer places.

However, relocation without a concrete plan may further aggravate vulnerabilities rather than reduce existing vulnerabilities from environmental events^{56,60,70}. Any relocation, not only that in the context of climate change, may lead to ‘loss of livelihoods, land and natural resources; food insecurity; homelessness; adverse health consequences; and economic and political marginalization’ (p. 702)⁷⁰. Furthermore, poorly planned and forced relocations may violate several internationally recognised human rights, such as the International Covenant on Civil and Political Rights (ICCPR), which includes rights to culturally and spiritually important territory (Art. 27, ICCPR)^{71,72}. The potential vulnerabilities are likely to emanate from planned relocation lead migration discourse to

consider relocation as a ‘last resort’ (p. 703)⁷⁰. For example, Vanuatu’s National Policy on Climate Change and Disaster-induced Displacement (2018) considers the planned relocation as ‘an option of last resort’ and the policy instead aims to ‘reduce the triggers of displacement as much as possible’⁷³.

However, international law, in certain exceptional situations when severe environmental disasters or conflict may result in conditions that can thwart ‘national security, public order or public health’, allow governments to relocate people from places where lives are at risk (p. 195)⁵⁸.

According to the UNHCR⁷⁴, the evacuation, relocation, or prohibition of return from the affected area must be necessary and proportional to ensuring the safety and health of the people concerned. The UNHCR’s guiding principles on international displacement state that forced evacuation or relocation in the context of disasters are arbitrary ‘unless the safety and health of those affected require their evacuation’ (p. 7)⁷⁵. de Sherbinin et al. (p. 456)⁷⁶ state that ‘resettlement should only be considered in cases where in situ adaptation is impossible’; all feasible alternatives must have been explored⁷⁵. This is consistent with the international law of the right not to be displaced^{70,77,78}.

However, planned relocation with dignity needs careful consideration of several issues, including ‘adequate financial resources, supportive legal and institutional frameworks, careful consideration of land issues, adherence to human rights principles and genuine and equitable community participation with affected people’ (p. 702)⁷⁰. If resettlement is considered the best option for the welfare of the communities, the relocation process ‘needs to be fair and equitable for the community, with every effort made to improve livelihoods’ (p. 457)⁷⁶. The relocation process and planning must clearly understand and recognise the needs of the people targeted for relocation. Under no circumstances should they be forced to return to or resettle in any place where their life, safety, liberty and/or health would be at further risk^{79,80}.

Thus, the authorities must establish legal frameworks for relocation/resettlement to protect the affected populations’ welfare and human rights⁷⁶. The Paris Agreement called on States to ensure that climate-related actions safeguard the substantive and procedural rights, including access to information and public participation enshrined in fundamental international human rights instruments⁵¹.

Thus, the policymaking process must ensure that procedural rights such as access to information, decision-making, and effective administrative and judicial remedies of affected individuals and communities are respected. According to the Aarhus Convention⁸¹, a successful procedure requires information sharing (Article 5) and participation (Article 7). Therefore, active and effective participation of the affected communities and civil society actors in the policymaking process is essential⁸². The regulations must be transparent and accessible so that people understand the requirements and plan for themselves accordingly.

The UN Guiding Principles on Internal Displacement emphasise the need for consultation with the affected parties, stating that displaced persons’ free and informed consent shall be sought. The authorities responsible for replacing persons are encouraged to involve those affected, particularly women, in the planning and managing of their relocation. In particular, care should be taken to ensure that ‘proper accommodation is provided to the displaced persons, that such displacements are effected in satisfactory conditions of safety, nutrition, health and hygiene, and that members of the same family are not separated’ (p. 196)⁵⁸.

Thus, the people affected by disasters should, in principle, be able to provide free and informed consent for relocation and choose freely where to live while displaced. For this, ‘accurate, up-to-date, and culturally relevant information’ must be provided to them so that they can ‘weigh the benefits and the risks involved’ (p. 12)^{83,84}. Fiji’s Planned Relocation Guidelines (2018) is a unique

example that safeguards the rights of the persons who choose not to participate in planned relocation. The Guidelines require the government authorities to assist them in determining how planned relocation will impact their lives and ensure their continued access to livelihoods, human rights, and basic services⁸⁵. Also, the Government authorities must ensure that human rights norms and principles are respected, protected, and fulfilled. The relocation process is carried out in a 'safe, dignified, and timely manner'⁸⁵. Also, the Fiji Government established the Climate Relocation and Displaced Peoples Trust Fund, the world's first-ever relocation fund, in 2019 to facilitate the relocation process in a planned and dignified manner according to the Planned Relocation Guidelines 2018. Fiji's policy responses including the Displacement Guidelines (2019), the Planned Relocation Guidelines (2018) and the Climate Relocation and Displaced Peoples Trust Fund (2019) represent a holistic approach integrating all aspects of human mobility, engaging the communities in the process of relocation and taking into account the needs of the marginalised groups of the community such as children, the elder and person with disabilities whose mobility may become limited requiring additional support.

DISCUSSION

Our analysis shows that existing policy frameworks on environmental migration tend to privilege the issues of migrants over non-migrants. On the whole, specific legal apparatus for the protection of non-migrants is scarce, with environmental migration itself being a relatively recent introduction to displacement frameworks. However, increasingly, the plight of those who stay in place has begun to be recognised; in particular, the acknowledgement of a wide range of climate-related mobility contexts by the UNFCCC framework allows for the diverse continuum of environmental migration experiences to be brought into the consideration of policymakers⁵⁰. The current policy discussions provide two broad paths for supporting ENM: in situ adaptation and eventually planned relocation. There is a clear need for more specific policymaking that provides direct guidelines regarding ENM to protect and support non-migrants. Adopting more precise guiding principles would help ensure that these strategies are successful, i.e., they provide community protection, do not violate rights, remain inclusive, remain locally led, and do not exacerbate vulnerabilities.

However, relevant existing policies do demonstrate the potential to support ENM. The Cancun Agreement presented a watershed moment for adaptation, providing a broad framework for developing more specific adaptation policies. Moreover, although climate-related displacement is itself difficult to locate in traditional displacement frameworks, recourse to internationally recognised human rights such as the right to stay, freedom of choice, and freedom of movement can be invoked to support ENM.

States are under obligation to mitigate the potential human rights violations likely to arise from the negative impacts of climate change, taking concrete measures to fulfil, protect and promote internationally guaranteed human rights. Therefore, a rights-based approach to human mobility in the context of climate change and disasters demonstrates the potential for development as a suitable legal apparatus to protect the rights of both migrants as well as non-migrants⁸⁶. The human rights-based approach requires measures to support the people living in the disaster-affected areas to consider the freedom of choice and movement as well as the unique vulnerability and needs of the disadvantaged group of people who become trapped because of their exposure in the disaster-ridden areas. The human rights framework obliges states to ensure substantive and procedural rights of the people requiring support. Thus, the human rights-based

approach protects vulnerable groups and facilitates policy coherence, legitimacy, and accountability⁸⁷.

It is encouraging that the human rights-based approach has been adopted in some recent national policies and guidelines, including Fiji's Planned Relocation Guidelines (2018), the Displacement Guidelines in the Context of Climate Change and Disasters (2019), and Bangladesh's National Strategy on the Management of Disaster and Climate Induced Internal Displacement (NSMDCIID) (2020). The Displacement Guidelines in the Context of Climate Change and Disasters asks the Government to ensure 'permanent access to (basic) human rights, such as the right to food, water, a standard of living adequate for the health and wellbeing of potentially at-risk groups, and access to social and cultural rights' following the national policies and international human rights laws⁶⁷.

For non-migrants, it can bolster the argument for in situ adaptation by legally reinforcing their right to stay. Furthermore, the human rights-based approach requires the authorities to ensure adequate information regarding the potential risks has been provided to people staying in environmentally stressed areas, and concrete measures are undertaken to minimise those risks⁸⁸. If planned relocation is necessary, the rights-based approach can help rescue this maligned strategy by ensuring it is indeed a last resort and that the dignity and participation of the affected people are assured throughout the process^{69,88}. For example, Fiji's Planned Relocation Guidelines (2018) and Vanuatu's National Policy on Climate Change and Disaster-induced Displacement (2018) contain provisions to protect the rights of the people being relocated in the context of climate change.

Thus, the policy responses need to incorporate core human rights principles of participation, transparency, and accountability so that the environmental non-migrants can either stay in their original place with in situ adaptation or relocate with dignity⁸⁸.

WAY FORWARD

In the face of degrading environmental events, especially slow-onset disasters, the decision to move or not to move is guided by multiple interrelated factors and variables, including individual preferences and characteristics. These characteristics may include education, age, gender, religion, assets, and, importantly, livelihood risks and strategies. It is not easy to provide a unique definition and categorisation for people who decide to stay put (i.e., non-migrants) as it varies greatly depending on the particular social and environmental context. Taking such complexities into consideration, this paper has explored to what extent non-migrants (ENM), both forced or voluntary, are addressed and supported in global environmental migration policymaking.

Since the migration decision depends on multifarious inter-related factors, and in the same environmental situation where some people 'decide' to move, others 'decide' to 'stay', both categories of people have complex needs and concerns requiring different protections. However, there is a disconnection in the migration governance exclusively focusing on migration and displacement, leaving behind a large majority of people who are unable or unwilling to migrate. Policymakers should understand that there is a deep interconnection between migration and protective measures for the remaining people. As people generally prefer to stay in their place, the numbers of environmental migrants substantially depend on the protection measures afforded to those who choose to stay.

Law and policy must be developed to help people remain at their homes if it is still feasible, so long as they wish to stay there and to provide protection and assistance. The 2030 Agenda for Sustainable Development suggests developing a comprehensive and integrated approach establishing a mandate to 'leave no one behind'. This framework now needs to be translated into resilience-building programmes and actions⁸⁹ and thus, of course,

include the issues related to voluntary non-migrants in the face of creeping environmental events.

Furthermore, the ENMs should not be compelled to relocate to another area unless it is absolutely necessary for the people's safety. Relocation should not be considered the only process for protecting climate change-affected people. However, relocation is a complex process requiring extensive consultation and planning. The affected communities must be involved in decision-making regarding resettlement locations, compensation, and development programs⁷⁶. The evacuation and relocation programs must ensure that the rights guaranteed by the international human rights standards, such as the right to life, liberty, dignity, and security of the affected people, are respected⁷⁵. The policy responses must devise innovative adaptation measures to build the capacity and resilience of the people so that people who choose to stay can cope with the changing environment and their livelihoods can sustain despite environmental risks.

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Conceptualisation: M.M.N. and B.M. Review and analysis: M.M.N., B.M. and R.P. Results and discussion: M.M.N., B.M., S.H. and A.B. Writing drafts: M.M.N. and B.M. Copy—editing and revision: R.P., S.H. and A.B. Finalising: M.M.N. and B.M.

COMPETING INTERESTS

The authors declare no competing interests.

CONSENT TO PUBLISH

All authors have read and agreed to the published version of the manuscript.

ADDITIONAL INFORMATION

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