Promoting Migration as Adaptation to Climate Change: Addressing Mobility Barriers

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In the past decade there has been growing pushback towards the idea of migration as a 'failure to adapt' to climate change. Increasingly, climate-related migration is coming to be viewed as an adaptation strategy itself, rather than the consequence of failed in situ adaptation (McLeman & Smit, 2006). As we move toward a more nuanced understanding of the interaction between climate change and migration, governments now need to work toward strategies to aid safe and supported mobility. While we are gradually understanding the drivers that lead to migration, we know comparatively less about the factors that compel people to stay (Wiegel et al., 2019). Unpacking the puzzle of immobility factors is a vital, but often neglected, pathway to assisting climate-affected populations who unable or unwilling to move. This viewpoint provides a commentary on top factors that keep climate-affected populations in place, detailing how they contribute to immobility as well as recommendations towards overcoming these barriers.

Populations which are affected by climate change but lack the ability to migrate are often termed 'trapped populations'; a concept first introduced in 2011 through the UK's Foresight Report on Migration and Global Environmental Change (Foresight, 2011). The inability to employ migration as an adaptation strategy stems from a lack of financial capital, resources, legal options, and political support, as well as border restrictions or social barriers. Trapped populations are doubly disadvantaged in that they are vulnerable both socio-economically as well as geographically in areas prone to natural hazards (Ayeb-Karlsson et al., 2018; Black et al., 2011). In instances where there is both ambition and inability to migrate, government policies are needed to help facilitate movement. It is important to distinguish, however, that not all who are immobile are necessarily trapped. Climate affected people may choose to be voluntarily immobile for reasons such as place attachment, family ties, assets, or previous in situ adaptation. It also follows that affected people can be unable to move as well as unwilling (Nawrotzki & DeWaard, 2018). While mobility and immobility decisions should be supported in ways that increase agency for those affected by climate change, we need increased attention on populations who lack the resources to migrate when they otherwise would have chosen this avenue of climate adaptation.

Supporting Mobility

Migration has long been used globally as a coping strategy to environmental change. In many cultures, such as in Pacific Island nations, migration is deeply embedded into culture and makes up a critical part of population dynamics. Assumptions that populations are

inherently sedentary lead to an underestimation of existing migration patterns and reinforce that notion that migration *must* be because of a failure to adapt.

Researchers and practitioners are now stepping away from the idea of migration as a failure to adapt and adopting a more mobility focused mindset that recognises migration as a viable and reasonable choice in coping with the risks and shocks associated with climate change. As with historic migration practices, current climate migration can be a household means of reducing vulnerabilities. As such, those choosing to migrate in response to climatic hazards do not see themselves as victims or refugees, but rather people who are taking advantage of their resources and ambition to find higher quality of living. This can be especially seen in Kiribati's past policy initiative, 'Migration with Dignity', in which then-President Tong advocated for increased legal and livelihood migration pathways prior to the brunt of climate change impacts to build up the nation's adaptive capacity and strengthen migratory networks (McNamara, 2015). Although not all climate-affected households would choose to participate in proactive migration schemes such as this, such opportunities help to reassert the agency and rights of affected people to enlist migration as a climate adaptation strategy. In the sections below we discuss emerging climate-related migration barriers and recommendations for how governments can assist to open the opportunity for migration as climate adaptation.

Mobility Barriers and Recommendations for Policymakers

In the following sections, we present descriptions and recommendations for barriers that limit migration for those affected by climate change. Combining experiential knowledge along with extensive research in the field of climate migration, we have selected the following barriers with the intention of providing steppingstones towards future conversation. The barriers in focus are insufficient immigration policies, lack of financial resources, and place attachment. These three factors are influential for potential migrants and thus present the highest opportunity for government intercession to facilitate migration.

Immigration Policy

Beginning with what would need the greatest deal of government willpower and cooperation, lack of sufficient climate migration recognition and policy has a major effect on the ability of affected populations to be supported in their mobility choices. At its core, this gap stems from disagreement over who exactly is being moved as a result of climate change and what such a population should be called. The term "climate (or environmental) refugee" has invoked much criticism, while others argue that it is impossible to separate climate migrants from traditional economic migrants. Although we will not weigh in on this terminology debate, it is clear that this lack of formal definition restricts potential policy initiatives dealing with the population in guestion (Parrish et al., 2020; Renaud et al., 2011; Stojanov et al., 2014). These snags are most apparent in discussions over which guiding documents should address climate migrants. Some scholars argue for the expansion of the definition of refugee to include those fleeing climate hazards, while others suggest the expansion of frameworks such as the UN Guiding Principles on Internal Displacement. While these discussions drag on, governments are not held to a standard on their expected responsibilities regarding climate-affected populations. This is true both of governments responsible for their own citizens, as well as governments of historically high-emitting countries who, it can be argued, should bear more responsibility to provide relocation support.

The first step in supporting climate-related migration is to develop a standardized definition to encapsulate those whose mobility is related to climate change. Following this, governmental and intergovernmental agencies will be better able to assign support responsibilities to aid populations on the move and vulnerable populations unable to move. As noted previously, some have called for increased responsibility to be placed upon governments who have contributed the most to greenhouse emissions. This could come in the form of proportional monetary aid to lesser contributing countries who are at risk, or even mandatory incoming immigrant quotas. Less restrictive policies on movement in general is

often recommended as a way to remove this legal barrier that holds climate-vulnerable populations in place. At a regional level, many have called for free entry of small island nationals into larger neighbouring countries such as Australia or New Zealand. Others propose for regional economic agreements to extend past money and goods to include the free movement of people as well. At a larger scale, recommendations have been made for shared citizenship, preferential visa status, or special rights of free global movement for migrants coming from particularly vulnerable nations. These policy recommendations may be an ask of migrant-accepting nations but would do much to enable climate-affected populations to move from their vulnerable origin locations.

Financial Resources

A second identified barrier that keeps potential migrants in place is a lack of financial resources. Often poverty is described as a driver of migration, motivating households to leave in search of economic opportunity in less climate hazard prone areas. It is important to recognize though, that as often as poverty may induce migration, it may also restrict people's ability to move. Those without sufficient financial resources or assets able to be liquidated become trapped and are especially vulnerable to future climate impacts. Many in the past have proposed a wide range of recommendations for policies that governments can enact to help assist financially strapped households and individuals in their mobility choice, which we will summarize below.

One of the most intuitive strategies for assisting those with a lack of financial resources is to provide monetary or in-kind aid. As mentioned previously, many advocate that large emitting countries should not only be expected to grant immigration access to climate migrants, but also provide aid to low emitting climate vulnerable nations proportional to their contribution of emissions. International compensation negotiations have already begun regarding loss and damage through the UNFCCC's Loss and Damage Mechanism. Others suggest that this aid should be budgeted through other bodies such as the Adaptation Fund Board or relevant incountry government agencies. To assist those trapped in place, applicable aid contributions could be in the form of airfare or transportation costs, purchase of land, or supplies for home and community building. Other proposed recommendations that would assist individuals and households include programs to strengthen migrants' social networks as well as buyout programs. Increased social capital through dense social networks have been found to increase migration capacity by providing temporary or permanent housing in destination locations. Remittances from already migrated kin also build up financial capital in origin location increasing the ability of other family members to migrate in the future. Buyout programs also give households cash to ease the transition from vulnerable to less vulnerable

Although often stated as a last resort option, government assisted relocation programs are another migration pathway for climate-affected communities that have been trapped in place. As opposed to more individualized assistance, relocation or resettlement programs run into the risk of restricting individual choice with studies finding low levels of agency among moved communities.

Place Attachment

The last factor that we will discuss is how the idea of place attachment among potential migrants leads to immobility. Rather than a "barrier" to migration, attachment to historic cultural land acts as a factor that often glues households to their home areas. Although households who choose not to move due to emotional attachments are not *necessarily* "trapped", unwillingness and inability are not exclusive.

Resettlement strategies are often criticised under the point that ethnic links to land and cultural identity will be lost. Many fear that as ethnic communities face diaspora, their language and practices will eventually die out. For those whose ancestry ties are interwoven

with the land, moving from their homes may seem unconscionable. While for others, social expectations play a factor where kinship obligates immobility to maintain familial lands. These emotional and non-tangible bonds create a deep reluctance in many to leave, regardless of future risk.

While migration may be viewed as a "last resort" option for those who feel strong place attachments to their homeland, governments and migration facilitators have options to support those who may experience emotional shock. The first recommendation is to keep ethnic groups together during the resettlement process so that cultural practices and traditions can continue, albeit in a new location. The formation of cultural support gatherings and community social groups is important to help ease migrants' transition especially to diverse urban centres. In addition to the Loss and Damage compensation mentioned in the previous section, Non-Economic Loss and Damage policies are a way to make up for the intangible disruptions. There is no equivalent payment that can be made for psychological and cultural loss, but governments can support displaced groups in ways such as supporting training for traditional livelihood continuation in their new location.

Conclusion

Recent criticism of migration as adaptation has been centred on the idea that it contributes to the shifting of climate management responsibilities from large government entities to individuals. It is important to recognize that trapped populations' inability to migrate is not an individual failure to adapt, but rather points to the lack of needed investment from governments. Although this is not an exhaustive list of barriers that keep climate-affected individuals and households from migrating, we hope that it does provide a steppingstone of ideas to help facilitate movement in the future. As we move forward with increasing amounts of the global population on the move from climate related causes, we should include in our view not only those who are on the move, but most especially those who are not.

Disclosure Statement

The authors report there are no competing interests to declare.

Notes on Contributors

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