



Planned Relocations: What We Know, Don't Know, and Need to Learn

This timely and insightful assessment of 'planned relocations' flags critical knowledge, normative and governance gaps in both research and practice. With climate-related planned relocations already widespread and set to increase, this short piece aims to catalyse greater dialogue around the research agenda for planned relocation - priority topics as well as methodological considerations on how future research is conducted.

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Introduction

Most of the literature on climate change and human mobility has focused on displacement – people who are forced from their homes by sudden-onset hazards such as hurricanes, or those who will be displaced over the long term by intensifying drought or sea level rise. Comparatively little research has focused on those who choose to move voluntarily to avoid the severe effects of climate change. While there is growing interest in planned relocation of entire communities out of harm's way, this remains the most understudied of the three forms of human mobility identified by the 2010 [Conference of Parties](#) in Cancun and there is much that remains to be learned. While research on planned relocation has advanced considerably in recent years, there are gaps in our understanding – what it should be called, how it relates to other forms of government-supported human mobility (such as buy-outs), and whether and under what conditions it may be 'successful.' Indeed, there are questions about what even constitutes 'success' when a community is moved, and what governance arrangements are needed to enable better outcomes.

What we know about planned relocations

We know that planned relocations are already happening globally. Recent surveys of the available literature ([Bower and Weerasinghe, 2021](#), [Moknacheva, 2022](#)) have identified over 400 cases of planned relocations globally since 1970. This global mapping demonstrates that planned relocation is more geographically widespread than the few cases most often highlighted in the media. While cases were identified on every inhabited continent, some regions are hotspots such as the Pacific. However, given these studies' focus on cases documented in publicly available literature, and specifically English, Spanish, French or Portuguese language publications, this is far from a complete picture: many more planned relocations have already occurred or are underway. Other recent comparative studies confirm this global distribution: a mapping of 138 cases of “managed retreat” by [Ajibade et al. \(2022\)](#) found cases across most inhabited continents, as did [Balanchandan, Olhansky and Johnson \(2021\)](#) in their review of 53 cases of “disaster-induced community relocations.” But these literature reviews equally demonstrate there is not consensus on what to call the phenomena, although generally it is a combination of an intention term (planned, strategic, managed) and a movement term (relocation, resettlement, retreat, realignment). Regardless of the label, ample evidence suggests that movements here called “planned relocation” are already happening around the globe.

We know that planned relocations are likely to happen more in the future. Given [projections](#) that extreme and slow onset events will intensify as the climate changes dramatically in the coming years, all signs are that there will be more planned relocations in the future. For instance, in 2017 the Government of Fiji identified 830 potentially vulnerable communities and 48 communities that may more urgently need planned relocation ([McMichael et al., 2019](#)). We know that all – or almost all – of these planned relocations will be internal – that is, within the borders of a country. While there are predictions in the popular

media that whole island populations will relocate elsewhere because of climate change, the historical record of such cross-border planned relocations is quite negative ([McAdam, 2014](#)) and there is resistance in the Pacific Islands to even contemplating moving away from their ancestral homes ([Farbotko, 2023](#)). In general, planned relocations should be considered as internal movements. In some cases, planned relocations may be a form of internal displacement, while in others it may be a strategy to prevent future internal displacement, or to provide durable solutions to people displaced by recent disasters.

We also know that planned relocations will – and arguably should – take different forms, tailored to the specific context of a given population, place and time. Differences in what planned relocation looks like may reflect a range of environmental hazards, spatial patterns, regional and demographic differences. We also know that decisions about planned relocations are made differently – in some cases a hazard event (say a landslide) may be the catalyst for a decision to relocate; in other cases, a decision may be made before the situation becomes disastrous. Or, as [Bower and Weerasinghe \(2021\)](#) argue, it isn't always easy to determine if a decision to relocate is made in reaction to or in anticipation of an adverse natural event as most planned relocations have elements of both response and prevention. In some cases, such as [Newtok, Alaska](#) or [Gardi Sugdub](#), Panama, communities themselves will decide it's time to relocate; in other cases, such as [Vietnam](#) or the [Maldives](#), the government will decide that planned relocation is necessary. These differences have critical implications for policy-making and practice. There is no one single universal archetype of a planned relocation, and therefore, there is also no single political, policy and practical approach to support.

We also know that there are many reasons for relocation. The most common hazard linked to the initiation of a planned relocation is floods, but most relocations take place in the context of multiple reoccurring and overlapping hazards. Furthermore, while a hazard (or multiple

hazards) may be the most visible catalyst, decisions made by community members and government officials on the need for planned relocation are often influenced by multiple non-environmental drivers. Economic, social, cultural, demographic, and other drivers may be at play. Scrutiny is needed to ensure that political motivations for government-initiated planned relocation are not “greenwashed” with climate adaptation narratives and that human rights safeguards are in place ([Bower and Weerasinghe, 2021](#)).

We know that politically, planned relocation is a minefield for authorities. Most people don’t want to move and they often question the decision by authorities that a community has to relocate. In cases where people don’t trust the government, a decision to relocate a community may be viewed with suspicion. Municipal authorities, in particular, may worry about the loss of their tax base – or their own positions – if a community moves.

Moreover, we know that planned relocations, at least if done well, are terribly expensive. Witness the expense of the planned relocation of 35 families from [Isle de Jean Charles](#) in 2022 – at a cost of \$48 million. Or the increasingly dire requests from Alaskan indigenous communities for funds from the government at all levels to support their planned relocations, which [recent \\$25 million per community](#) grants won’t fully cover. While there are some similarities between climate-related and development-related planned relocations ([Wilmsen and Webber, 2015](#)), there are also key differences especially in funding mechanisms; for example, major infrastructure projects funded by the World Bank generally provide funds for resettlement costs out of the expected profits from the project.

What we don’t know

We don’t know what happens over time. There is a serious lack of longitudinal research on what happens to communities that are

relocated. Usually follow-up monitoring is short term, sometimes lasting less than a year and linked to construction of physical infrastructure and homes rather than human wellbeing and livelihoods. For example, evidence from planned relocations after Hurricane Mitch show that most of the residents of relocated communities left the communities because of a lack of transportation to jobs ([Espacios Consultores, 2000](#)). We also don't know where relocated people go over time and how they fare.

We don't know what success looks like or how to measure outcomes. The lack of longitudinal research on outcomes is compounded by the fact that we also don't have a common understanding of what "success" entails. A few dimensions are critical to consider when assessing what, precisely, is meant by "success", each prompting further questions: 1) Across populations: Successful for *whom* - for people who relocate, for those who choose to remain behind, for the host community receiving these people, for society writ large? And according to whose perspective – people moving or a supporting actor? 2) Across space: Should success be measured relative to the conditions in each site of origin prior to planned relocation, or relative to other cases? 3) Across time: Is success measured a year or a generation after planned relocation? In 2030 or 2100? How can the success of a relocation be assessed against the backdrop of continuous change? Does success mean equal improvements for all, or equitable improvements that recognize histories of marginalization? 4) Across domains: Is success just about risk reduction and dollars saved, or also about livelihoods and justice? Is the goal merely for people to survive or to thrive? Clearly, what is and how to measure "success" are deceptively complex questions with no easy scientific, social scientific or political answers. Ultimately it will be context specific and there are always trade-offs across populations, space, time, and domain. Relocating community members should be involved in defining and evaluating what "success" means for themselves.

We don't always have clarity on what constitutes a community. Most discussions of planned relocations refer to the movement of a community as a whole, rather than individuals as in governmental buy-out programs. And while in some cases it is clear what a community is – e.g., indigenous groups in Alaska or residents of a distinct geographic area like the Carteret islands – in other cases, it is less clear cut. For example, people living in urban apartments may not necessarily consider their apartment building as a community in the sense that people would choose to move with the apartment residents. Residents of a “community” may already be dispersed; for example, leaders of Isle de Jean Charles were living away from the physical island for years before the physical move actually took place but were still important decision makers and members of the [“community.”](#) Communities are often assumed to be homogenous with consensus views, but this is rarely the case. Relatedly, what does it mean for supporting actors to meaningfully engage with the community? As [McAdam and Ferris \(2015\)](#) point out, there is a spectrum of engagement strategies that may be used, from provision of information to affected people by the state to community members taking the primary decision-making roles. In the case of Isle de Jean Charles, major [tensions](#) emerged between the state and indigenous groups among other things, over who should benefit from the planned relocation scheme: the inhabitants of the island who faced recurrent flooding or members of the indigenous community who had moved off the island on their own some years before?

We don't understand what constitutes an effective assessment. What is a risk to habitability and what makes a potential new site suitable and safe? Who decides? On what basis? Are assessments focused narrowly on current hazard profiles or also projections of future sea level rise, and if so, on what time horizons? Are assessments exclusively focused on damage to housing and economic livelihoods, or do they also consider histories of displacement and cultural heritage loss? Whose knowledge matters – and how can local, indigenous, and traditional knowledge be incorporated into assessments, alongside knowledge aggregated by

natural scientists modelling risk or social scientists circulating questionnaires? What happens when community members don't agree with the assessment as was the case in [Del Mar, California](#) or don't trust the decision-maker?

We don't always know why planned relocations are initiated. What are the non-environmental motivations for planned relocation? There are cases where governments move people, ostensibly for environmental reasons but in reality for political or economic reasons -- from poverty alleviation to land-grabbing. How widespread is this? [Martyr-Kenyon \(2020\)](#) outlines compelling examples where planned relocation has supported more covert economic or political aims: “[Artur and Hilhorst \(2014\)](#) situate Mozambique's flood resettlement programs, which are consistently undermined by the affected population, ‘as a continuation of a history of resettlement to enhance control and modernization of rural folks’ (p. 361). Kothari argues that the Maldives government proposal to relocate its population from 200 islands onto 10–15 central islands has mostly been driven, not by sea-level rise, but by long-standing priorities related to ‘the diseconomies of scale and the inefficiency of distribution of social services and basic infrastructure on islands with a small population’ ([Kothari, 2014](#): 136).” As these examples illustrate, planned relocation does not occur solely because of the need to reduce natural hazard risk and instead almost always reflects pre-existing plans and power dynamics, which as [Balachandran et al \(2021\)](#) argue, may translate to benefits for some (e.g., payment to the former owner of new land, new purposes for vacated land, construction payments) and consequences for others (e.g., lost livelihoods and culture).

We don't know how planned relocations should be funded. Where can the necessary funding be found to support planned relocations? Right now, there is a real hodgepodge of funding arrangements. Fiji has developed a [Trust Fund](#) to support its planned relocation. In the US, the Biden administration has recently committed [\\$115 million](#) to support

relocation and adaptation for 11 severely impacted tribes. In the Philippines, post typhoon Haiyan relocations were funded by a [diverse range](#) of NGOs but also churches and the private sector. Some planned relocation projects are funded by multilateral banks, including the [World Bank](#) and the [Inter-American Development Bank](#). A small number of projects funded by the UNFCCC's Green Climate Fund and Adaptation Fund have planned relocation components, such as in Senegal and in Rwanda ([German Watch, 2021](#)), and there is some discussion about whether the Loss and Damage fund created at COP27 may be a potential source for future planned relocations. There are also instances of direct bilateral aid. Still these arrangements are ad hoc and pennies compared to what is needed to support community-initiated planned relocations alone – how can this be scaled up? At the same time, how to ensure that funding is not misused? And how to ensure that human rights standards are implemented?

We don't know how planned relocations should be governed, managed, or supported in normative instruments. There is a paucity of guidance for policy makers on how to manage planned relocations. The guidance that does exist – the [Peninsula Principles](#), the [Brookings-IOM-UNHCR Toolbox](#) and the [IFRC Guide](#) – are all quite general and global in scope. To date, only a few countries have national scale guidance in place. Fiji has developed planned relocation [guidelines](#) and other Pacific nations including [Vanuatu](#) and [Solomon Islands](#) are following suit – but their efforts are unique. The United States, by contrast, has a regulatory void without a relevant legal and policy framework. Given the enormous variation in cases, we wonder if working on general policy guidelines is even useful – it might make more sense to develop guidance tailored to specific situations (e.g., for community-initiated indigenous planned relocations, for government initiated urban planned relocations of informal settlements in megacities with multiple origin and destination sites, etc.). Furthermore, at what level should the guidance be developed? Federal government policy in the US would necessarily be quite general – is it better to have policies at state or municipal levels?

Should it be standalone guidance for planned relocations or part of a more general climate displacement/mobility policy? What lens to planned relocation policy (human rights, people-centred disaster risk reduction, loss and damage, adaptation) is best received by policymakers in different places? Given that each institutional political and cultural context has different values, it may be that different policy lenses to the same human centred goals are more politically palatable. And what drives planned relocation policy development – existential need, presence of influential academics or INGO representatives that highlight the importance, a desire to comply with international norms, or a desire to appear novel and at the “cutting edge” of a new field?

We don't know how to support grassroots mobilizations. While top-down governance plays a critical role, there is also a need to better understand bottom-up grassroots community-led mobilization around planned relocation. The [Principles for Locally-Led Adaptation](#) provide insights about what community autonomy may ideally involve, but not necessarily what this looks like in practice. [Arnall et al. \(2019\)](#) advanced a conceptual framework for studying community-led “claims making” of relocating groups. Further evidence is needed to understand what works and what doesn't in these types of grassroots mobilizations for funding and international support.

We also don't know how the international community should engage with and support planned relocation. Current technical support to governments and communities on planned relocation is ad hoc and unsystematic. There is no obvious focal point in the international community, and different organizations lead in different country contexts based largely on pre-existing relationships. Yet there are growing needs (for technical assessments and decision support tools, human rights-based policies and standard operating procedures, funding applications). Which actor – or consortium of actors – should fill these coordination and leadership gaps? And yet questions also remain about what the role of the international community should be in these

circumstances, given the importance of community autonomy and leadership. What could decolonial models of technical support that centre leadership on the frontlines look like?

An agenda for research

As mentioned above, we don't know enough about a range of dimensions of planned relocation processes, outcomes, and governance. This includes: what is and how to measure "success"; what is a "community" and how to best enable engagement; how to improve assessments as decision support tools; how to fund planned relocation; and what policy frameworks are needed to govern planned relocation, among other questions. All these lines of inquiry and questions warrant further research. But equally important are four methodological considerations about *how* research is conducted on planned relocation.

1) More longitudinal studies with multi-dimensional evaluation of outcomes are urgently needed. Given that most research to date focuses on the decisions about whether and how to relocate, or circumstances immediately following planned relocation, there is a gap in work that monitors and evaluates outcomes over time. This is a challenge for communities, academics, and funders.

2) More community-based research is needed. Community engagement is essential not only for effective planned relocation governance, but also for addressing knowledge and data gaps. Research in this field presents an opportunity for affected communities to undertake research. Participatory Action Research (PAR) methodologies and other approaches to co-production of knowledge are critical opportunities. This is also a challenge for both communities and funders.

3) More comparative case studies would be helpful. Most evidence to date on planned relocation consists of single case studies, but there may be need for more comparative case study research (e.g., on

laws/policies/normative frameworks, assessments, funding models, grassroots mobilization) to extract lessons that may be more generalizable. Analysis of two or more cases offers the opportunity to pull out similarities and differences in decisions and implementation of planned relocation schemes. For example, it would be helpful to understand the different financing models that are used to support planned relocations. What are the advantages and disadvantages of funding from the multilateral development banks? More generally, what is the role of the international community in supporting planned relocations? Funding? Technical expertise? Encouraging communities to do research and make their own plans?

4) More multidisciplinary and transdisciplinary research is needed. Given that planned relocations are so complex and touch upon considerations of environment, displacement, development and livelihoods, planning, governance, human rights and human security, law and policy, it is essential that research approaches draw on diverse methodological and theoretical tools. Research that combines multiple natural and social scientific disciplines may lead to unexpected findings, such as research that explicitly combines climate science and protection issues. One example of a forum for catalysing multidisciplinary approaches is the Arctic [Migration in Harmony](#) initiative, which looks at human migration but also at migration of disease, plants, animals, insects, economies, etc. Transdisciplinary approaches that integrate perspectives of policymakers and community members, alongside traditional academic disciplines, may also be fruitful.

As the world warms, the importance of addressing knowledge and data gaps around planned relocation will only increase in importance. The thematic lines of inquiry and modalities for future research articulated here are by no means comprehensive, but rather aim to catalyse further dialogue about what and how research on planned relocation might be needed. Ultimately, addressing knowledge and data gaps is a foundation

for policy and practice that will help people stay or relocate with dignity in a changing climate.

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