Displacement and climate change: Literature Review

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Vocabulary of climate-induced mobility

Climate-related mobility is an emerging field of study and discourse, and many of the terms of use are contested, in part because they originate in very diverse disciplines. The main categories of climate-induced mobility have been broadly defined as climate-related migration, displacement and planned relocation. It should be noted that much of the discourse around climate-induced mobility has been impacted by the approaches and vocabulary developed over many decades of study of development-forced displacement. In that context it is important to keep in mind that while migration is considered to be essentially voluntary movement while displacement is involuntary, all forms of climate-induced mobility can be said to involve constrained volition, in that the mobility decisions of affected people are adversely affected by climate-linked local impacts.

Climate-related migration refers to people who decide to leave their homes voluntarily due to the deterioration of their local environment, often due to slow-onset cumulative deforestation, coastal erosion and others (McAdam, 2010, pp. 10–11). For migrants, climate change may be a leading factor or just one of many factors underlying the decision to leave one's home and community. In this case the affected people could decide to remain in their homes or return to them, but they choose to leave, often because climatic impacts on their livelihood have rendered the decision to stay as economically untenable.

Climate-forced displacement is often a result of a sudden-onset event, particularly what is referred to as a natural disaster or a natural hazard. An example of climate-forced displacement following a natural disaster is the Herold tropical cyclone in March 2020, which is estimated to have caused the displacement of 80 thousand people in the Solomon Islands, and 10 thousand people in Fiji (Ober and Bakumenko, 2020). Displacees are forced from their communities by human security needs such as securing physical safety and sustainable livelihoods. Examples of displacement due to cumulative environmental changes are also increasing. The residents of the Satabhaya village in Odisha, India, for example, were forced to migrate due to the salinization of their cultivable land, threatening the villagers' livelihoods (Dulluri, 2020). In Nepal, the villages of Sivalik Hills and Chure reported mass migration due to water scarcity (Khatiwada, 2016).

Planned relocation has increased greatly in scope and number in recent years. This term refers to communities that are vulnerable to slow-onset climate change impacts such as rising sea levels or desertification being relocated by the government or by non-governmental organizations to safer locations or locations with greater potential for supporting livelihoods and sustainable development. Examples of this kind of movement includes the community relocation projects in Fiji that settle coastal communities that are vulnerable to ocean storms further inland (Charan, Kaur and Singh, 2017), the resettlement of Inuit communities in Alaska in the US that are affected by melting permafrost, and the resettlement of farm communities in

arid or mountainous areas of China to periurban or urban settlements (Wilmsen and Wang, 2015).

Future predictions and cross-impacts of CC

Recent expert estimates suggest that by the end of the century there will be around 80 cm sea-level rise (Horton *et al.*, 2014; Antonioli *et al.*, 2017) and around 190 million people will be displaced as a result (Kulp and Strauss, 2019). The media has also portrayed catastrophic accounts of climate change (CC) and alarming estimates of sea-level rise (CBS, 2020; The Guardian, 2020). This narrative has provided impetus for action but it is important to assess the reliability of these numbers.

The first consideration is that the data reliability of global estimates has significant uncertainty (McMichael, Taoi and Tabe, 2021). The second consideration is the inferred direct link between exposure to sea-level rise and displacement or mobility. Although migration can be considered a measure of climate adaptation, it is not the only one. In reality, sea-level rise is a risk magnifier but many cities, including New York City, Tokyo, Jakarta, Mumbai, Shanghai, Lagos and Cairo, coexist with flooding risks through other mitigation strategies: building of sea walls, mangroves and others (Nicholls *et al.*, 2008). In conclusion, although it is certainly true that big proportions will be affected, not necessarily big numbers will be displaced. In addition, most of those who are displaced will remain within their own national borders, so the number seeking asylum or entry to other countries will certainly be fewer the number quoted above. Nevertheless it is important to note that currently climate-forced displacement is not recognized in international law as constituting a claim by those affected to be afforded legal protection and asylum equivalent to those recognized as refugees. According to global conventions legally protected "refugees" are those displaced by conflict and violence, not environmental impacts or climate change.

The importance of tackling climate change challenges goes beyond future predictions of displacement. In the present settings, exposure to climate change is a proven a risk-multiplier on political stability and security. A notable example is Afghanistan, where a crucial issue of political instability is the scarcity of access to water, which will be negatively impacted by increasing climate change challenges. Climate change also has a strong link to food security and oftentimes CC Hotspots are sites where residents should be considered for relocation (Lake *et al.*, 2012; McMichael, Taoi and Tabe, 2021).

CC and sustainable development

After decades of associating migration with the negative phenomenon of "brain drain", recently the literature has revisited the relationship migration-development in a more positive light (McAdam, 2010). The positive outcomes have been listed for both the receiving and sending countries in terms of: remittances, knowledge transfer and financial investments (ibid.). Similarly when it comes to climate-induced migration, it has been argued that the condition of the people who move can be improved through well planned policies and also the affected areas can "improve resilience and adaptive capacities…through remittances and other diaspora influences" (Hugo in McAdam, 2010, p. 30).

The desire for a more sustainable future is a primary motivation in both voluntary and planned relocation. In the case of the Vunidonigaloa Village in Fiji, moved 2 km to higher lands, the community was rebuilt based on a more sustainable model: better housing sanitation, increased women participation in decision making, livelihood diversification and better education (Charan, Kaur and Singh, 2017; McMichael, Taoi and Tabe, 2021). However, there are undoubtedly sustainability risks in relocation that need to be forecast and minimized. A crucial aspect to correctly evaluate and monitor sustainability risks for the relocated people is the power relations between the government, the business and the civil society. In particular, as Bertana argues (2020), scholars need to research the mode and extension of participation of the civil society in every stage of the relocation process.

Displacement and relocation: policy and stakeholders

Policy criteria of relocation

Relocation can be the result of natural disasters or development projects. The Asia-Pacific region is not only highly exposed to natural disasters but also the site of various development efforts. Various case-studies in the Pacific region highlight the importance of the following four questions in resettlement (McMichael, Taoi and Tabe, 2021):

1. Who decides to move?

This aspect is important as it determined the expectations of the moving community as well as the level of participation in the resettlement process. Case-studies from the Pacific Islands have shown that outside management, lacking participation of people familiar with the islands' contexts and diversity can sometimes account for the failure of relocation projects (Nunn *et al.*, 2020). An example of success driven by local participation is the case of the Carterets islanders, Papua New Guinea. The residents themselves took the initiative to resettle to Bougainville, in the Solomon Islands, and the high interest in the resettlement promoted the involvement of the Carterets Council of the Elders, which organised an NGO dealing with resettlement issues (Boege, 2011).

2. What is the scale and scope of relocation?

There are various cases in the Pacific where communities have relocated within their land tenure boundaries. An example was the relocation of Vunidigoloa, a coastal village in Fiji, which was resettled 2 km inland in 2014 after years of inundations and flooding (Charan, Kaur and Singh, 2017). These small scale resettlements offer less attrition than cases where people are completely eradicated from their land. With regards to scope, the number of families moved influence the consultation modes: the bigger the group to be relocated the more difficult to have efficient and continuous consultation with the community.

3. What are the procedures of consultation and content of the moving and receiving communities?

It is crucial to understand perceptions and feelings of the relocated communities, as well as thoughts about the future. For example in the case of Vunisavisavi village, the strong recommendations to relocate by the government officials were invalidated by the cultural duties

to the Fiji Chiefs, which ultimately prevented the relocation altogether (Charan, Kaur and Singh, 2017).

4. Was there sufficient preparation and reasonable timing?

The level of preparation and planning associated with resettlement projects is often insufficient. In particular, the accounting for finances and costs determines the circumstances of the resettlement and can even postpone it from happening (Bronen, 2011). Alexandra Nichols brings the example of the latter case with Nabukadra village in Fiji, left extremely vulnerable after the Tropical Cyclone Winston in 2016. Even though there is a desire to relocate, because of lack of available funds, the Nabukadra residents have been unable to relocate, facing the climate change-related risks only by incremental changes made by residents (Nichols, 2019).

Vulnerabilities and capabilities

Displacement leads not only to the loss of physical homes, but to a serious disruption of livelihoods, food security, resource use, social and economic networks, and community cohesion. Therefore, in the planning of relocation, the preventive measurement of vulnerabilities and risks is crucial.

A number of vulnerabilities can be generated or accentuated by policy regulations and country laws. For climate migration, unlike displacement produced by infrastructure projects, implementation of community resettlement, compensation and land acquisition matters are solely regulated by country legal and regulatory frameworks, rather than leaving resettlement to project authorities and institutional lenders. As highlighted by Susanna Price (2021), national laws might create vulnerable groups by:

- Not recognising the validity of land claims of people who do not possess a formal legal title to the land
- Not recognising women's multiple roles
- Not setting clear land and livelihood rights
- Not replacing livelihood losses and costs in full
- Not providing sufficient compensation and assistance
- Not setting robust appeal procedures

However, although national and local laws constitute the safeguards that protect the rights and mitigate the risks of climate displaces, the safeguards that have been adopted by international lenders for infrastructure projects like hydropower dams and mining sites may serve as models for approaches that can manage the economic and social risks of relocation. One of the most authoritative institutions in this regard is the World Bank (WB), which has been increasingly involved in the evaluation of projects involving involuntary resettlement and project assessments since its first involuntary-resettlement policy standard in 1980 (World Bank, 2004). Some examples of international lender policies are: the World Bank Environment and Social Framework (ESF) 2017 (World Bank, 2016), the International finance corporation (IFC) Performance Standard 2012 (IFC, 2012), and the Asian Development Bank Safeguard Policy Statement (SPS) 2009 (Asian Development Bank, 2009). Although these policies go in the right direction, they fail to address the power imbalances between the displaced and the "displacers" and do not challenge the relocation model (Price, 2021).

In addition to these resettlement risks, a growing scholarship is focusing on underlying issues like the gender issues in relation to displacement and the problem of "trapped populations".

One of the main developments in the understanding of displacement risks has been the acknowledgment of displacement as a "profoundly gendered process" (Hugo in McAdam, 2010, p. 28). The issue of gender vulnerability in relation to displacement is particularly complex: gender roles are created in relation to the surrounding environment, and when the environment is disrupted these roles are inevitably affected. Tabe suggests that current policies over focus on women participation in the relocation process but ignore the importance of social and cultural spaces. It is argued that more research should go into understanding how gender expectation and roles play in the relocation and disaster phase and how these roles are challenged, especially in evacuation shelters (Leckie, 2012; McMichael, Taoi and Tabe, 2021).

In terms of capabilities, another often overlooked aspect is the desire of the people affected by climate change or development projects. Celia McMichael stresses the lack of research on the "trapped populations", those who have no resources and/or capabilities to move. She gives the example of Bangladesh, where oftentimes the families whose income is disrupted do not have the sufficient finances to relocate (ibid.). The issue of individual resources and capabilities is also problematic because people might want not to relocate. Ultimately, the aim of climate-change policies should shift their focus towards supporting people in their desire to relocate or stay.

Role of HR law and the international community

In addition to the international lender policy and country laws and regulations, displacement by development projects can be examined in light of human rights law (Price, 2021). The standards of human rights include international treaties and agreements, as well as soft law instruments like the Voluntary Guidelines on the Responsible Governance of Tenure (VGGTs) and UN guidelines: the UN Guiding Principles on Internal Displacement 1998 and the UN Guidelines on Forced Evictions 2007. The VGGT outline the roles of the government, the civil society and the business and by doing so, they recognise the power imbalances between the displaced and the displacers, particularly in the distribution of information (ibid.). However, these measures do not have any legal power and work exclusively through political process and international pressure (Price, 2021).

The World Bank's Tangguh Resettlement project in West Papua Guinea is considered a model project combining the HR perspective with development for the people involved. On its list of merits: it supplied negotiated settlements, it had regular external reporting and aimed at improving the livelihoods of those resettled (Price, 2021). Furthermore, it was the first Human Rights Assessment Impact (HRIA), although only partially published (Martha and Logahan, 2016; Aizawa, dos Santos and Seck, 2018).

To acknowledge the interconnectedness of global challenges, rather than through specific climate-change agencies, organisations that were originally meant to tackle a single issue adapted to face these challenges. In particular, after the link between climate change and

migration became evident in the early 90s, there was an increasing involvement of development and migration-based international organisations.[1]

The United Nations High Commission for Refugees (UNHCR) offers a good illustration of this process. Officially, the UNHCR became involved in displacement the 1990s as a natural development of the original Geneva Convention of 1951. With the UNHCR 1991 "Committee for people displaced due to disaster" the UNHCR expanded its mandate to include not only the IDPs but also the host communities. An example was the case of the flooding in Somalia in 2020 (UNHCR, 2020). In fact, the normative framework and skills developed in the context of internally displaced people (IDPs) was found highly relevant in all displacement contexts, particularly the procedures and methods used to *identify vulnerable groups* (McMichael, Taoi and Tabe, 2021).

Resettlement in the Pacific

The Pacific region is at the present defined as the "theatre of climate change" for its exposure to sea level rise as well as extreme weather events (Boege, 2011, p. 8). The seasonal typhoons, frequent flooding and heavy rains as well as a high tsunami risk have led to temporary as well as permanent migration throughout its history (Piguet and Laczko, 2014).

Importance of the land

To the people in the Pacific, the land has not only a cultural value but also shapes the economic, social and political life (Campbell in McAdam, 2010). The loss of land is considered a loss of identity, as found in the Tuvalu case-study in the Marshall Islands (Tabe, 2019). In the traditional Pacific culture, the land is not only the primary means of livelihood, but has a nurturing role, often perceived as a "mother" or "placenta" (Campbell, 2016). The *land* then is not just the physical dimension of dirt but is constituted by all the living things, including the people.[2]

The "Mother land" is a coexisting entity with "Father Ocean". The ocean is a space that connects the islands and the people in the Pacific region, and this belief actively plays in the understanding of "home" and "mobility". For this connection between the land and the ocean, the people of the Pacific who are forcibly removed from their land still consider themselves as "people of the Ocean" (World Bank, 2012).

  It is crucial to consider the importance of the land in case of resettlement. Not only because the loss of the land inevitably brings loss of cultural values, livelihoods , spirituality and identity from the perspective of the resettled, but also because it may cause grievances or tension with the receiving community that has to give up the land (Campbell in McAdam, 2010).

Recent developments: Fiji's National Relocation Guidelines

Fiji was the first country to provide national Relocation Guidelines (Ministry of Economy, Republic of Fiji, 2018). The Guidelines are based on three pillars: a human-centred approach, a livelihood-based approach to adaptation, and a human rights based approach (p.8).

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[1] For an analysis on how three major international organisations (UNHCR, UNDP, IOM) have dealt with climate change by adapting their mandate please consult the book by Nina Hall, "Displacement, Development and Climate Change" (2016).

[2] For a list of evocative quotes on the value of the land consult Campbell in McAdams, 2016, p. 61.

"The Planned Relocation Guidelines …ensure that the relocation of any local community is carried out in a manner that guarantees its long-term survival, has viable options for economic activity, and provides support and services for those being relocated. The Guidelines also contain provisions to ensure the well-being and safeguard the rights of vulnerable members of any community being relocated." (p.1).

So far, the RG have been launched by not implemented extensively. Currently, the Fijian government is working on Standard Operating Procedures (SOP) on RG for all the stakeholders involved in order to clearly outline the responsibilities of each stakeholder.

The relocation guidelines have an international relevance, for they provide a platform for other countries in case communities need to relocate.

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