

Environmental change and migration

Introduction to International Migration

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Environmental Change and Migration

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Abstract

This chapter is about the subject of environmental and climate change-related migration. This topic has received increasing attention over the years both within academia and policy-making. Yet, many misunderstandings about the relationship between environmental change and human migration remain. For example, it is often assumed that environmental change leads to millions of people on the run for their lives, seeking shelter far away from home. Policy-makers are therefore predominantly concerned with addressing emergency displacement and want to know how many climate refugees they can expect seeking to cross international borders in the years to come. This chapter seeks to nuance these perspectives. It shows how the relationship between environmental changes and human mobility is far from straightforward, by highlighting the diverse and complex ways in which im/mobility in the context of social and environmental changes unfolds.

Chapter overview

The subject of climate or environmental change-related human migration – environmental migration, for short – has become one of the key issues of our time. By the 1980s, it was already receiving some scholarly attention, but the field really took off in the early 2000s as climate change became a high priority issue (for overviews see Morrissey 2012; Piguet 2013; Boas 2015). When people think about “environmental migration,” many envision millions of people on the move, leaving their homes and their countries en masse to seek shelter in neighboring countries or even on other continents, such as Europe. Yet, as this chapter will demonstrate, environmental migration takes many forms, and the relationship between environmental change and migration is far from straightforward.

The first section of this chapter provides an empirical overview of the topic of environmental migration, which includes the implications of climate change for human movement. We use many examples to show the diversity and complexity of this topic; there is no one kind of environmental migration. The second section describes the evolution of the academic debate and the drastic changes it has undergone in the past two decades. We explain how, in response to critiques of speculative predictions about the future numbers of “climate refugees,” theoretical debates moved towards a focus on the drivers of migration, and how migration might be considered a positive adaptation measure rather than an inherently negative development. We end this section by outlining the current research focus on empirically grounded accounts of environmental migration. The last section describes ongoing discussions in the academic literature, in policy circles, and around ethics. Ongoing theoretical issues center around an understanding of the relationship between migration and non-migration, and an increasing politicization of the field of environmental migration studies. Ongoing issues regarding policy and ethics center around the lack of existing policy measures to protect those losing their homes and livelihoods due to environmental changes, particularly climate change, and how this may evolve in the future. We also point to the need to involve affected communities themselves in co-designing policy responses.

As academic discussions of environmental change-related migration have evolved, so too has the terminology, which has been the subject of much debate. Early literature focused on *climate refugees*, while later scholars preferred terms like *climate migrants* or, more broadly, *environmental migrants*, to avoid conflation with political refugees (who exist within a very particular legal framework) and include a broader range of environmentally-motivated migration. Currently, there has been a shift towards language that highlights the structural causes of migration rather than the motivations of individual migrants, with terms like *climate* or *environmental change-related migration*, *migration in the context of environmental/climate changes*, or *environmental mobilities*. Throughout the chapter, we mirror this evolution by changing the terminology to what was common in the respective stage of the debate.

Empirical Overview

Discussions about environmental and climate change-related migration often start with the numbers: how many environmental migrants can we expect, and when? That is a question people new to this field often pose, and one that is of particular interest to policymakers. Yet, unfortunately for them, the extant numerical estimates have been fiercely critiqued as poorly substantiated and methodologically unsound, so we have a very vague and unclear understanding of actual numbers. The most famous example comes from Norman Myers (2002). He estimated that there would be 212 million environmental refugees by 2050, of which 162 million would be due to sea-level rise (Myers 2002, 609 and 611). These numbers certainly sound dramatic and have been cited in much scientific and policy work to attract attention to the issue. However, in calculating these, Myers simply assumed that a certain percentage of a population would be forced to flee due to sea-level rise – namely, all people living in areas below sea-level rise. However, this calculation does not take into account mitigation and adaptation measures, other causes of migration, nor other outcomes, such as people not being able to move (see, for example, Black et al. 2001; Castles 2002). As such, this quest for numbers has triggered much skepticism in more critical literature and has even been described by the Intergovernmental Panel on Climate Change as mere “guess work” (Parry et al. 2007, 365).

This is not to say that there is no relation between environmental change and migration. But, it does mean that, as scientists, we need to be more accurate and precise in our empirical work on this subject. We need to understand how environmental migration takes shape – do people move away from their homes permanently or temporarily? Do they move long or short distances? Do they move in bigger groups, choosing one route, or move individually? Research suggests that people may react differently depending on the type of environmental impact (Warner 2010; Black et al. 2011; Boas et al. 2018), and both structural and individual limitations on the capacity to react (Wiegel et al. 2019). Furthermore, responses to climate change will likely be conditioned by how people have historically responded to other environmental changes, such as drought, typhoons, etc.

We can differentiate between at least two types of environmental change: slow-onset environmental dynamics and rapid-onset events (Warner 2010). Slow-onset environmental events and changes emerge more gradually, with long-lasting or even permanent effects. For example, sea-level rise or land degradation can permanently destroy land, including homes, villages, or even cities, which can lead to more permanent and structural forms of migration. Think, for instance, of low-lying small island states where people may lose their homes due to sea-level rise. In contrast, rapid-onset events are sudden (such as in the case of an extreme

storm or flood) and catch people off guard when not properly warned (Black et al. 2011; McLeman and Hunter 2010; Boas et al. 2018). This is the case, for example, in Bangladesh, where extreme storms or sudden floods frequently lead to the sudden displacement of people who then seek temporary shelter with the hope of returning home and rebuilding their livelihoods (Boas 2020).

Of course, this categorization simplifies a more complex reality. Rapid-onset events can have structural environmental impacts, such as saline intrusion resulting from cyclones, which negatively affects agricultural production in the long term. And recurring rapid-onset events (such as multiple cyclones) can challenge the fundamental livability of regions in a way that a single event would not. This categorization can thus serve as a useful analytical tool to understand differences in human mobility responses, such as different migration decision making if changes are slow or rapid-onset. However, it is only helpful as long as we are cognizant of the complex relationship between the two types of change and how it effects what happens on the ground.

The decision to move in response to an environmental change is conditioned, amongst others, by policy responses of states and the international community, which can facilitate staying, motivate leaving, and/or restrict movement. Are there local flood-proof shelters accessible to all? Do people get governmental support to return to their land? What adaptation and preventive actions are being taken to prevent negative impacts by climate change? Is migration towards safer areas facilitated? How do receiving communities and countries respond to new migrants (McLeman 2019; Wrathall et al. 2019)? All these factors are determined by political decisions and thus differ widely by country or even within the same country – but these are crucial factors determining to a large extent the necessity of moving, as well as people’s options for moving safely to safer areas.

This brings us to the final empirical question: where do environmental migrants move? While many imagine mass climate migration as a large scale-movement from the Global South to the Global North, the empirical reality is quite different (Bettini 2013; Boas et al. 2019). The majority of those affected by environmental change do not move across international borders, and when they do, it is mostly to neighboring countries (for an overview see Foresight 2011). As such, an image of millions of climate refugees on the move towards Europe or North America is misleading. In contrast to political refugees, environmental migrants still enjoy the protection of their home state, in principle, and may not want to leave. Often, they feel strong emotional ties with their place of origin, and many try to stay as long as they can, as shown in Box 1 (Adams 2016). When they do move, it is often to nearby areas with which they are familiar and where they might have an existing social network.

Many communities affected by environmental have a history of mobility. For example, in Bangladesh, the areas most exposed to sea-level rise largely comprise a dynamic delta area that has always been changing, with land submerging and emerging from the river. As such, migration in this area is not new, and people know how to make and draw on connections to enable moving locally (Boas 2020). Oftentimes people join established migration flows when facing the effects of climate change. For example, when farmers cannot sustain themselves any longer through agriculture due to floods, droughts, or other climate change-related events destroying their production, one of the most common solutions is to move to a city to find work, thereby becoming “labor migrants,” like so many before them (Bettini and Gioli 2015). Engaging in a long-established pattern of migration allows them to rely on their network, making it easier to find work and accommodation in the new place. This dynamic makes it difficult to distinguish environmental migrants from other types of migrants.

Many of those who are most affected by environmental change are poor and may not have resources to move to a safer place at all. These are often the most severe and precarious cases. For example, alongside rivers and the coast in Bangladesh, the most vulnerable households move their houses several meters' land inwards every time they gets washed away by a cyclone or river erosion. Some have had to reconstruct their houses five times in ten years, each time only a few meters further away from the water line (Boas 2020; see also Text Box 12.1). This is because they lack the means to buy land in a safer location and can only rebuild their homes on one of the temporary embankments, which are government land that can be occupied free of charge. Economic limitations keep them in the most environmentally vulnerable locations, and they don't participate in migration at all.

Theoretical evolution of the academic debate on environmental migration

In response to the initial preoccupation with numerical predictions and alarmist warnings of millions of climate refugees on the move, several different scholarly perspectives have emerged to influence public understanding and political debates on environmental migration (see Wiegel et al. 2019 for an overview). One of the most prominent perspectives emerged in the late 2000s/early 2010s and emphasizes the complex and multi-causal relationships between human migration and environmental change (Foresight Science 2011; Black et al. 2011; Morrissey 2013). It challenges the assumption in the "alarmist" literature that there is a direct causal link between environmental changes and outmigration. Piguet (2013, 155) has labeled this a "pragmatist" scholarship which, "without any claim or ambition to numerically forecast flows of migrants, questions the role and weight of environmental factors in already-occurring displacements and attempts to build scenarios for the future." Black et al. (2011) propose a multi-causal model of migration in which environmental drivers are just one factor out of several that, in different constellations, can affect migration decisions; the other drivers are social, political, demographic, and economic factors. "Pragmatists" examine, for example how environmental change might impact demand for labor, or how the severity of change might matter (Black et al. 2011; Morrissey 2013). This growing body of research underscores how highly context-specific the impacts of environmental change are.

These efforts, however, have not eliminated new alarmist numerical estimates on climate change and migration, or even made them more nuanced and contextualized. Scientists, think tanks, and even by the World Bank have to continued attempts to estimate the number of future climate refugees (e.g. Rigaud et al. 2018). Yet, as many social scientists argue (e.g. Foresight 2011; Boas et al. 2019), these continue to be fraught with uncertainties and often falsely assume a linear relationship between environmental change and human migration, inflating the potential number of climate migrants while ignoring the inherent multicausality of human migration. But these estimates continue to be adopted and disseminated by policymakers, NGOs, and the media, often with the political purpose of attracting attention and creating a sense of urgency around climate change-induced migration (Boas and Wiegel 2020). In doing so, these estimates often become associated with a language of threat, risk, chaos and distress, as described further in Box 2 (Boas 2015; Bettini 2013). The implication most frequently emphasized is that "climate refugees" will be disruptive and damaging for receiving states (Bettini 2013; Boas 2015).

Since the late 2000s, several academics as well as migration and development organizations (such as the Asian Development Bank and the International Organization for Migration) have sought to counter the "alarmist" perspective (Bettini and Gioli 2015). This

alternative perspective considers migration to be a normal and even potentially positive adaptation strategy to environmental and climate change (see e.g., McLeman and Smit 2006; Warner 2012; Warner and Afifi 2014; for critical reviews see e.g. Bettini and Gioli 2015; Methmann and Oels 2015). In doing so, it addresses some of the shortcomings of the alarmist imagining of climate migration, which is often discussed negatively as posing a threat to world stability (see Box 2). In contrast, in this migration-as-adaptation frame, migration becomes a means for people to “self-manage their situation” and weather the negative impacts of climate change through, for example, finding employment elsewhere, sending home remittances, or gaining skills and knowledge elsewhere that may better enable adaptation in places of origin (Boas and Wiegel 2020).

The migration-as-adaptation perspective has, however, also become the subject of academic scrutiny. The primary critique is that it makes the individual migrant or household responsible for such adaptation (Bettini and Gioli 2015; Bettini et al. 2017). Failure to adapt becomes an individual failure, muting the issue of climate justice. Under this discourse of self-responsibility, global inequalities between greenhouse gas emitters and those most vulnerable to the effects of climatic and environmental changes are largely neglected, and it is those most affected that bear the greatest burden for their adaptation (Wiegel et al. 2019; Boas and Wiegel 2020).

In an effort to move beyond different attempts to frame the issue of environmental migration in a particular manner, there is a recent wave of environmental migration research that focuses on empirically grounded accounts of individual experiences and sense-making. It centers on those experiencing climate change in their daily lives (Klepp 2017), and thus seeks to bring research back to the here and now, as opposed to speculating about the future. Research in this – still young – field focuses on the cultural and emotional dimensions of how people understand and cope with climate change within the realm of the everyday, and how they make decisions about moving and non-moving. It aims to provide insights into how those individuals whose livelihoods are negatively affected by environmental changes “engage in long-established cyclic migration patterns, or instead diversify their [...] livelihoods in order to not move at all” (Wiegel et al. 2019, 3). Hence, such research also seeks to complicate the notion of environmental migration as a simple movement from A to B, and to ground it within the local realities that often already engage directly or indirectly with other forms of migration (Adams 2016; Farbotko and Lazrus 2012; Kothari and Arnall 2019).

Continuing issues on a theoretical level: towards broader conceptions of im/mobility and its politics

Ongoing discussions and open questions in the academic field of environmental change and human migration can be divided into two different categories: 1) the relationship between migrating and non-moving in the face of increasing migration pressures and environmental change, and 2) the wider questions of politics, climate justice, and equality. Four relevant topics, themes, and approaches related to these two categories are discussed below.

The first is the topic of non-migration in the face of increasing migration pressures due to environmental change, an important topic that has only recently started to gain more academic attention. Until recently, the focus has been exclusively on those already mobile and those who are expected to become mobile. However, the increase of empirically grounded research on local realities shows that, in many places, people also decide to stay in place in spite of environmental changes such as drought or increasing sea-levels (Adams 2016; Farbotko

2018; Klepp 2017; see also Box 1). Zickgraf (2018) writes that research needs to pay more attention to such cases, where people are not able to migrate (for economic, demographic, socio-cultural, or other reasons); have failed to migrate; or simply do not wish to leave, in order to better conceptualize environmental and climate migration.

The second topic is the translocality approach, closely related to the theme of non-migration, which finds its origins from the wider field of migration studies but has entered scholarly research on environmental change and human migration only recently (Sakdapolrak et al. 2016). This approach examines the connection between those who move and those who stay in place (for example, a family member who moves to a nearby city to find work and their other family members who remain in place). The translocality approach claims that it is not enough to consider one member of the household as a migrant and the others as non-migrant, but that these need to be understood together as a translocal household (Parsons 2018). This approach is very relevant to the study of environmental and climate migration, particularly in places where established livelihoods get disrupted through environmental changes and one family member moving away can be a way to diversify household income sources. Who moves and who remains is often determined by dimensions like social class, culture, gender, or (dis)ability. This shows how closely connected moving and non-moving can be, and how one family member migrating might be a strategy for the rest of the household to avoid becoming (climate) migrants. The translocal approach demonstrates the importance of moving beyond the individual level of analysis to consider migration as one part of a broader household or community strategy.

A third topic is the increasing importance of the mobilities approach. Based on disciplines of human geography, sociology, and science and technology studies, the mobilities approach examines movements (termed mobilities) to understand social reality. It studies how the mobilities of people (such as through migration or transport) relate to non-human mobilities, such as ideas that travel via digital communication, or the movement of viruses like Covid-19 (Sheller and Urry 2006). This approach analyses political constellations not as static entities but as being in constant flux shaped by mobilities (such as by migrant flows, trade flows, communication flows, etc), and how they relate and interact with immobilities, e.g. of infrastructures and people (Sheller and Urry 2006).

Applied to the field of environmental migration studies, the mobilities approach provides the conceptual tools and methodological approaches to see that there are highly “diverse ways in which people do or do not become mobile in response to a changing climate” (Boas et al. 2019, 902). Some people may move temporarily and try to return home; some may move seasonally and across short distances; others seek permanent homes in new places; some may not be able, or want, to move at all (Black et al. 2011; Adams 2016; see Box 1). Shifting the research focus from climate *migration* to climate *mobilities* can help to address “the multiple forms, directions and multiplicities of human movement in the context of climate change” (Boas et al. 2019, 902), such as the various forms of local and long-distance mobilities in which people engage, and how these in turn are shaped by other im/mobile dynamics (such as communication flows, social network processes, economic flows, trade relations, etc.). Changing the unit of analysis from *migrants*, i.e. people, to the dynamic *processes of mobilities* also allows for “more neutral (and therefore analytical) terms — avoiding assumptions that migration is unidirectional or monocausal, or inherently positive or negative” (Boas et al. 2019, 902). The mobilities approach also provides some tools to understand when, how, and under what circumstances different people experience a pressure to move, and how freely they can make their migration decisions (Cresswell 2010).

The last theme to be presented here is the increasing politicization of the field of climate migration studies. Academic work in this line, such as by Klepp and Herbeck (2016), Bettini (2017) and Zetter and Morrissey (2014), has long been critical of work that overstates the impact of environmental factors, arguing that “structures of economic and political power as well as hegemonic sociocultural norms are far more important in determining both affectedness by climate change and migration decisions” (Wiegel et al. 2019, 3). Empirical examples support this position, providing evidence of stark inequalities, even in within relatively affluent regions of the globe. The 2005 case of Hurricane Katrina in New Orleans, Louisiana, in the U.S. is one such example. In that case, the needs of those with fewer resources were not considered sufficiently in local evacuation policies, which relied heavily on the availability of private transportation to leave the city and the ability to find accommodation elsewhere. The vulnerability of the already disadvantaged, who often lacked the means to self-evacuate and thereby were “trapped” in the city, increased significantly. This also underscores how the issue of climate migration—including cases of immobility, evacuation, or displacement—is inherently interrelated with wider arguments about climate justice. Those who are the greatest greenhouse gas emitters are not those who are most affected by the ensuing changes in the climate and environment, and who thus face the earliest pressure to migrate; this is true at the global level and ~~on the ground~~ at the local level (Sheller 2018).

In line with this, critical analyses of climate migration show that both academic discussions and policy making on this subject have been infused with racism (Baldwin, 2016), colonialist imaginations (Samaddar 2017), and biopolitical “control over populations with the aim to secure uninterrupted circulation of labour and commodities” (Turhan, Zografos and Kallis, 2015). Thus far, the political interests of powerful players have influenced debates about climate change and migration far more than the empirical realities have (Nicholson 2014). Future research in the field of environmentally related migration needs to become more sensitive to these elements in order to better capture the complex contexts within which climate change effects, migration pressures, as well as the ability to make decisions about migration or adaptation play out.

Continuing issues on policy and ethics

While the academic discussions have focused on how best to understand the topic, an important ethical and policy question remains: Who protects those who lose their homes and livelihoods because of environmental changes, independent of whether they move long or short distances, internally or across international borders? Thus far, there has been a lack of governance mechanisms offering protection (Biermann and Boas 2017). One reason is that environmental migrants are not easily distinguishable from other categories of migrants, due to the multi-causality of migration and the diversity of the effects of environmental and climate change. However, it also has to do with a lack of political will. Many states, including Australia, the U.S., and many European countries, are already not very receptive to political refugees entitled to protection under the UN Geneva Convention, and as such are wary to protect yet another category of refugees or migrants (Biermann and Boas 2017).

International cooperation on climate migration is minimal. Climate displacement is part of the UN Framework Convention on Climate Change’s Loss and Damage negotiations, and it is mentioned as one of the environmental causes of migration in the in the Global Compact for Migration. There are also UN guidelines for displacement across state borders in the context of

natural disasters and climate change. Yet, all of these are rather soft law measures, offering guidelines but not requiring binding legal action.

A recent ruling in the UN Human Rights Council might, however, put more pressure on states to act; it concludes that it is unlawful for states to return people to countries where their right to live is threatened by climate change (UN 2020; Lyons 2020). This ruling concerns the case of Ioane Teitiota, a man from the small island state of Kiribati, whose claim for refugee status in New Zealand was rejected. The UN Human Rights Committee judged New Zealand's decision to be correct given that Kiribati still had a timeframe of 10-15 years, with help of the international community, to take action to protect its population from sea level rise. In doing so, the UN Human Rights Committee did, however, decide that an immediate risk to life due to climate change can serve as possible grounds for refugee status. Experts say this "represents a legal 'tipping point' and a moment that 'opens the doorway' to future protection claims for people whose lives and wellbeing have been threatened due to global heating" (Lyons 2020). In the meantime, while Australia and New Zealand have thus far rejected cases asking for refugee status on the basis of climate change reasons,¹ many people from small island nations in the Pacific are nonetheless already legally moving there for work, family, or educational reasons. Such international movement, falling under diverse categories of migration, was even actively promoted by the former President of Kiribati as a strategy to adapt to climate change (Farbotko et al. 2016).

In addition to these developments on international migration or the acceptance of climate refugees by other countries, there is increasing support for people (temporarily) displaced by disasters. For example, in Bangladesh local governments and humanitarian organizations (such as the Red Cross, the UN and local NGOs) assist people affected by storms by offering them temporary shelter, food or supplies to rebuild homes.² The often sudden character of a rapid-onset disasters and their extremely disruptive effects (destroyed houses and infrastructure, casualties, and large groups of homeless persons) attract attention from external governance actors seeking to respond to such emergencies, such as the Red Cross that assist displaced persons following a crisis or disaster. But such support often does not target and reach those affected by slow-onset changes, like drought or sea level rise. For example, in Bangladesh, many areas are affected by gradual river or sea erosion, leading to a highly fragmented yet continuous form of migration; those living closest to the coast are first to move, while those living farther away leave a few years or even decades later (Boas et al. 2018). Interviewees from affected areas in Bangladesh stressed that they receive most aid after a cyclone, whereas hardly any agency responds to the gradual but devastating impacts of erosion. The slowly creeping problems of erosion often do not make it to the news, making them less attractive for donors (Boas et al. 2018).

A way forward to improve governance in this field might be to more actively involve affected communities in decision-making processes. These communities know best how their daily lives are affected, what measures can best help them, and what role they themselves can play in these. This immediately can help to tackle the main ethical problem of this issue area: most research and policy-making on this subject comes from the Global North (Boas 2014). This often results in the simple and often misleading narrative that millions of climate refugees are

¹ For example, another well known case from 2014, concerned a family from Tuvalu that received a residence permit in New Zealand. They had put forward the threat of climate change as one of their arguments to stay in New Zealand. The Court did decide to grant them a resident permit for New Zealand, yet it did so on the grounds of family reunification, not on the basis of climate change (McAdam 2015).

² This information is based on fieldwork done in Bangladesh in 2017.

on the move, potentially destabilizing receiving countries, outlined earlier in this chapter. Involving affected populations from different regions of the world in research and policy making can help to overcome such simplistic imagining of the issue, while creating a stronger evidence base, generating more effective governance proposals (Boas et al. 2019).

Chapter summary

This chapter has provided an overview of how the issue of environmental migration has evolved over time, remaining a subject of a contentious and unfinished debate – both empirically, theoretically and on the level of policy and ethics. Our main message is that the relation between environmental change and human migration is far from straightforward. It is embedded within a complex web of migration drivers and broader socio-political structures that shape it. As such, there is no one type or one form of environmental migration – it emerges and takes form in highly diverse ways. This is due to differences in abilities and desires to move; due to differences in the importance of environmental drivers versus other drivers of migration; due to differences in the types of environmental and climate impacts affecting local populations; due to differences in political responses to climate change and perceptions as to who should take action and as to who should be assisted first, etcetera. By and large this shows that the topic of environmental-related migration is very much a subject of social and political sciences; understanding it concerns so much more than just researching the impact that environmental changes have.

We started this chapter by an empirical overview of the subject, showing the many ongoing uncertainties regarding the questions how many will move because of climate change, why, how and where to. The subsequent section on the theoretical evolution of the academic debate shows that rather than seeking to answer such questions by a quest for numbers of future climate refugees, our knowledge of the subject can best develop by capturing how it evolves in practice – which is via a complex web of push and pull factors of migration and which requires better engagements with local experiences and perspectives by those already affected. The section on contentious issues on theory further delves into that by offering multiple upcoming theoretical perspectives that seek to further untangle and broaden the concept of environmental migration. It signals a need to also examine aspects of non-migration, and how the migrant is entangled within a wider translocal web of those moving or staying in place. Also these more recent theoretical perspectives underscore the need to better acknowledge the wider political structures and forces seeking to shape environmental migration or our perspectives and assumptions on it. We ended by a discussion on the evolution of policy and governance on environmental or climate-related migration. Also here we highlight the need to acknowledge the diversity of the subject, to avoid narrowly-focused policy measures that concentrate on one aspect of environmental migration. Ethically, this section touches upon the different views vis-à-vis the responsibility to protect those displaced by environmental or climate changes, and the lack of active policy engagement with that question. Last but not least, we have highlighted the lack of involvement of those most affected in shaping the measures that are to be designed for them and plea for their participation in both co-designing policy and in terms of research on environmental migration.

Discussion questions

1. When considering the multicausality of migration, and practical difficulties of distinguishing environmental migration from other migration dynamics, what is the value about talking about environmental migration as a separate field of migration studies?
2. Reflect on the evolution of the terminology: in particular, the concepts of environmental migration; environmental/climate refugees; environmental non-migration; and climate mobilities. What is the emphasis of each of the terms used? How do they depict/frame the relation between environmental change and human migration, and what aspects do they make invisible?
3. How to balance the ethical question of highlighting the urgency of people having to leave their homes due to the effects of climate change in calling for political change, versus highlighting the multicausal complexity of migration, its complex empirical realities, and thereby potentially downplaying the urgency?
4. Reflect on how the ongoing uncertainties around the issue of environmental migration can influence its governance (such as ongoing uncertainties on the best terminology to use; the complex factors causing migration; uncertainties on how the issue will look like in future; uncertainties about who is responsible or who will take responsibility).

Recommended readings

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Real world examples

Box 12.1, Im/mobility decisions and desires in Bangladesh. incl 1 picture

Arif lives on the coastal plains of the island Kutubdia, in the southeast of Bangladesh. It looks beautiful, even paradise-like, with long stretches of empty beaches, palm trees, and children playing soccer. How beautiful it may seem, but looks can be deceiving. Several decades ago, the area looked quite different. What is now beach, used to be land consisting of many trees and agricultural plots, while the beach started some 100 meters (328 feet) farther away. Coastal erosion, exacerbated by the increasing frequency of cyclones affecting the coast, has slowly eaten away pieces of land, turning green areas into sandy beach. Arif's house is now literally beachfront (Picture). It is built on the remaining pieces of his grandfather's private land, which he inherited, as the rest has been taken by the sea. In the past few years, his strategy has been to move up his house bit by bit on his grandfather's plot. His house is, however, currently on the very edge of it. Yet, despite this situation seeming unsustainable on the long-term, as sea levels continue to rise, Arif has no intention to move and feels no urgency to prepare for such a move. He loves his birthplace, his village, the people, and even the sea that is coming ever closer. "Good people, good soil," he said, "As long as the sea allows me, I will stay" (Interview with Farid, November 2019).

Box 2 – How climate leads to conflict... in science: a real-world example of the climate-conflict-migration debate

The presentation of climate migration in terms of mass displacement causing chaos and distress has also actively been connected to violent conflicts. This is exemplified by the civil war in Syria, which started in 2015 and has become the subject of academic discussions around the connection between climate change, migration, and armed conflict. The debate was unleashed by an article in an esteemed magazine called PNAS written by Colin Kelley and four colleagues, in which they argue that climate change led to a serious drought in Syria (Kelley et al. 2015). They claimed that as a result of the drought, 1.5 million people had moved from rural, agriculture-dependent areas to the city in search of work, creating fierce competition for jobs and overcrowding of the urban areas, which led to social unrest that eventually incited the civil war.

This argument was quickly picked up by the media and widely publicized, but criticism from science soon followed. Many climate migration scientists were surprised and indignant when this article was published, as it neglected all discussions of the complex reality of migration, its causes, and consequences by stating that drought-related migration in Syria was a catalyzing factor in creating the conflict.

No reliable proof

In response, Jan Selby, an expert in environmental security in the Middle East, along with three colleagues, published an article aimed at completely refuting the climate-conflict-migration thesis by claiming that there is no reliable proof that climate change was a factor in causing the

drought in northeast Syria, that the drought did not affect all of Syria, and that it did not last as long as is often suggested (Selby et al. 2017). In addition, they showed that the estimate of 1.5 million people displaced was based on erroneous statistics and that considerably fewer people migrated because of the drought. Moreover, they stated that it was unlikely that the drought migration contributed to the start of the civil war. They supported this last statement with 32 interviews with Syrian refugees from the Syrian city of Dara'a. These interviews indicated that the migrants from rural areas had no active role in the protests.

While these counterarguments managed to refute the initial thesis, the article also polarized the debate without leaving room for conversation between the scholars.

A Ritual Dance

The controversy the Syrian war represents a sort of ritual dance. Since the 1990s, the relationship between war and the environment has received a lot of academic attention, but every time a possible case comes along, the discussion reopens without ever being resolved, and without furthering theoretical insights. A similar discussion evolved around the 2003 conflict in Darfur, Sudan; after the UN stated that it was a conflict created by drought, an enormous number of contradictory articles was published on the relation between climate change and conflict, with titles like, "Warming increases the risk of civil war in Africa" (Burke et al. 2009) and "Climate not to blame for African civil wars" (Buhaug 2010).

De Châtel (2014) has shown that there is another perspective. She places the drought in Syria in a wider context of economic liberalization and the ensuing poverty (for example, noting that an abrupt end to fuel subsidies had dramatic consequences for farmers), the prolonged mismanagement of natural resources, and failure of the government to deal with this. She analyzes these factors and their relations in detail and thus adds more depth to the debate rather than polarizing it. Although published earlier than the Kelley et al. and Selby et al. articles, it never received as much attention in academia and the media. Evidently, depth and nuance is sometimes less exciting than absolute statements.

This text is adapted from a blog by Ingrid Boas, published in a Dutch Online Newspaper the NRC, September 25, 2017 (Boas 2017).