

ENVIRONMENTAL CONFLICTS, MIGRATION AND GOVERNANCE

EDITED BY TIM KRIEGER,
DIANA PANKE AND
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List of Acronyms

ACLED	Armed Conflict Location and Event Data Project
ALBA-TCP	Peoples of Our America – Peoples’ Trade Treaty
AMISOM	African Union Mission in Somalia
ASEAN	Association of Southeast Asian Nations
CAR	Central Africa Republic
CARICOM	Caribbean Community
CRED	Centre for Research on the Epidemiology of Disasters
CSR	corporate social responsibility
DID	British Department for International Development
DRC	Democratic Republic of Congo
ECLAC	Economic Commission for Latin America and the Caribbean
Ecowas	Economic Community of West African States
FAO	Food and Agriculture Organization
FARDC	<i>Forces armées de la République Démocratique du Congo</i>
FGS	Federal Government of Somalia
GCM	Global Compact for Safe, Orderly and Regular Migration
GCR	Global Compact on Refugees
GLR	Great Lakes Region
IADB	Inter-American Development Bank
ICGLR	International Conference on the Great Lakes Region
IDP	internally displaced person
IGO	intergovernmental organization
IMPIC	Immigration Policies in Comparison
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
KP	Kimberley Process
KPCS	Kimberley Process Certification Scheme
Mercosur	South American trade bloc

NIROMP	New International Regime for Orderly Movements of People
NSAG	non-state armed group
OAS	Organization of American States
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organisation for Economic Co-operation and Development
PRMN	Protection and Return Monitoring Network
PTS	Political Terror Scale
RCM	Regional Certification Mechanism
RCP	Regional Consultation Process
RESAMA	South American Network for Environmental Migrations
ROC	Republic of Congo
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
UNHRC	United Nations Human Rights Council
UNSC	United Nations Security Council
USAID	United States Agency for International Development
USGS	United States Geological Survey

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Environmental and Resource-Related Conflicts, Migration and Governance

Tim Krieger, Diana Panke and Michael Pregernig

Introduction

The current era of globalization is characterized by a high degree of interconnectedness across borders and continents, which has become possible through cost-decreasing innovations in and the spread of technologies of communication and transport (Boyer and Drache, 1996; Perkmann and Sum, 2002; Baylis et al, 2011). The phenomenon ‘globalization’ goes hand in hand not only with significant levels of international and regional trade and foreign direct investments (Boyer and Drache, 1996; Hirst and Thompson, 1996) but also with significant numbers of migrants, including labour migrants and refugees (Piper and Grugel, 2015). These migrants are yet another source of very specific interdependencies between countries, especially when conflicts and migration interact. The relationship between conflicts and migration is complex. Conflicts can induce migration, but do not have to, since not everyone leaves a country of origin. Also, not every potential host country is equally open to migrants as countries differ in their migration governance approaches. Moreover, migration can but does not have to bring about a series of different unintended consequences in the countries of origin (for example, ‘brain drain’) and the host countries (for example, social conflicts).

While many of these interdependencies have been explored in the literature, a link that is not yet sufficiently understood relates to

the interdependencies between environmental or resource-related conflicts and migration as well as the role of governance in this respect. Therefore, the interdependencies between environmental and resource-related conflicts and migration and the related governance challenges form the core topic of this volume. More specifically, this book examines how environmental and resource conflicts, such as desertification or conflicts arising over scarce (extractive) resources trigger migration; how migration and conflicts are politically regulated in national, regional and international governance arrangements; how individual selection and sorting play out in this constellation; and how migration feeds back into countries of origin as well as host countries. Studying the complex linkages between resource and environmental conflicts, migration and governance is important, not the least since environmental migration is timely and often at the centre of public, political and scholarly attention, as recent debates about ‘climate refugees’ (Biermann and Boas, 2010) or ‘climate wars’ (Dyer, 2008; Welzer, 2012) demonstrate. Given that trends towards global warming and biodiversity loss cannot be entirely stopped or reversed and since, because of that, for example, fresh water and ecosystem services will become increasingly scarce, this topic is likely to become even more important in the near future.

In order to enhance our knowledge about the complex interlinkages and dynamics between environmental and resource-related conflicts and migration as well as the role of governance in this context, the *core questions* that the chapters collectively address are as follows:

- When do environmental and resource-related problems lead to conflicts and how does this create incentives for migration? How does the governance of natural resources either reduce or enhance the chances of conflicts and migration to emerge?
- Who leaves a country and where do migrants go? Which migration governance arrangements are at play in mediating conflicts and in directing migration flows?
- What do the trajectories of national, regional and international migration governance regimes look like? How effectively do they regulate environmental or resource-related migration?
- What effect does migration have on possible conflict dynamics in destination countries and what is the role of governance arrangements in this respect? How do host countries participate in governance for the prevention of environmental or resource-related conflicts in countries of origin in order to reduce or prevent migration?

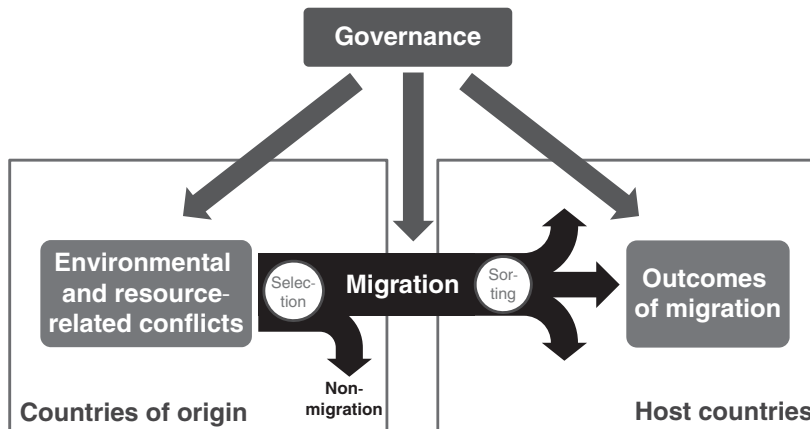
Hence, taken together, this book answers topical and important questions in an interdisciplinary manner. It brings together scholars from a broad range of social sciences including environmental studies, economics, sociology, law, development studies and political science. In doing so, this volume provides a novel account that sheds light on various aspects of the complex interdependencies between environmental and resource-related conflicts, migration and governance, thereby adding knowledge to an important and timely topic that is relevant for scholars and policy makers alike.

The analytical focus of the book

Conflicts can take different forms or shapes. They can vary in the extent to which they are violent, they can be fought-over material or ideational turf, and they can take place within one country or have effects across borders (Singer, 1960; Rosenau and Tromp, 1989). This volume mainly looks at environmental and resource-related conflicts. These are defined as a struggle for power, or for control over resources or property in the context of resource scarcity or fundamental environmental change. This struggle can potentially culminate in violence or otherwise endanger the livelihood of people in the vicinity.

In the scholarly debate, a large and increasing number of conflicts are seen to be driven by environmental factors (WBGU, 2007). Environmental conflicts emerge as battles over access to non-renewable resources (such as oil, gas or rare earth); as conflicts in the context of the (over)exploitation of renewable resources (like water, arable land, fisheries or forest ecosystems); in general terms, as conflicts between competing land uses (for example, agriculture, energy production, infrastructure and housing) or environmental services (for example, disposal of waste, and conservation of biodiversity); and as distributional conflicts over the inequitable allocation of environmental burdens and hazards (for example, special waste deposits) between different social groups and/or countries (Homer-Dixon, 1999; Le Billon, 2001; Collier and Hoeffler, 2004; Solow, 2013). The nexus between environmental factors and violent conflicts has been theorized in various ways. The literature is, however, still quite fragmented (Solow, 2013), and there are various, partly competing, impact expectations (for an overview, see Floyd and Matthew, 2013). For instance, adherents to neo-Malthusian arguments argue that resource scarcity spurs violent conflict (for example, Homer-Dixon, 1994, 1999). By contrast, proponents of the almost reverse ‘resource curse’ thesis claim that it is environmental abundance that leads to conflict (Le Billon, 2001; de

Figure 1.1: The interdependencies of environmental and resource-related conflicts, migration and governance



Soysa, 2002; Collier and Hoeffler, 2004; Krieger and Leroch, 2016). A third field regards environmental degradation as the main cause of violent conflicts (Baechler, 1999; Ehrlich et al 2001).

Most importantly for this volume, many environmental and resource-related conflicts, especially if they are severe and lengthy and if there is no adequate governance regime working on the resolution of the conflict or its underlying problems, create incentives for migration (see Figure 1.1). In this book, migration is defined broadly as a permanent or semi-permanent change of residence (Lee, 1966: 49), either within a country or across borders. We are particularly interested in migration that takes place in reaction to or in anticipation of environmental or resource-related conflicts. Incentives for such environmental migration often lead to relocation within a country, but quickly also spill over into neighbouring as well as more distant countries when individuals move on (Betts, 2009, 2012).

In the political debate, the notions of ‘climate wars’ (Dyer, 2008; Welzer, 2012) and ‘climate refugees’ (Biermann and Boas, 2010) have gained considerable prominence in the last decade. In the scholarly debate, however, a (direct) link between climate change and migration is often seen with some scepticism (for example, WBGU, 2007; Tertrais, 2011; Morrissey, 2012; Selby and Hoffmann, 2012; Hsiang et al, 2013; Buhaug, 2015). In a similar vein, the scholarly literature also seems to agree that the sheer presence of resource scarcities can no longer be seen as a necessary and sufficient factor leading to conflicts and migration, but that more complex interactions between environmental, social and economic factors are at play. Thus, investigating how and under what conditions environmental and resource-related problems lead to

conflicts and how this – or the ineffective or non-existing governance of these conflicts – can induce migration is under scrutiny in the first part of the book (that is, [Chapters 2 to 4](#)). The contributions examine how components of such conflicts play out in creating incentives for the local population to migrate and discuss whether and how governance of these conflicts has the potential to mitigate migration (see [Figure 1.1](#)).

Yet, even if affected by severe resource and environmental conflicts, not all individuals leave and not all migrate to the same host countries. Accordingly, the second part of the book (that is, [Chapters 5 and 6](#)) studies the micro level and sheds light on how individual-level (self-) selection and sorting influence who is migrating and where to, and on the role migration governance plays in this respect (see [Figure 1.1](#)). Governance is defined as the ‘processes and institutions, both formal and informal that guide and restrain the collective activities of a group’ (Keohane and Nye, 2000: 12). One particularly interesting, but hardly investigated, question relates to the precise individual-level triggers, or ‘push factors’, of conflict-driven migration (Fiddian-Qasmiyeh et al, 2014; Martin et al, 2014) and the resulting selection of migrants. Arguably, different types of conflict (such as conflicts driven by disaster, ecocide or resources) and different speeds of conflict onset (rapid versus slow) ought to result in a different ‘selection’ of migrants, representing, for example, a disproportionately large number of oppressed minorities, skilled workers or women (Dreher et al, 2011). The individual agency to cope with environmental and resource-related conflicts ought to shape migration patterns of sub-groups in society.

At the same time, socioeconomic wellbeing and economic growth, peace and stability, environmental factors (such as a milder climate) or pre-existing ties based on prior migration or geographic proximity can serve as ‘pull’ factors for migration (Sirkeci et al, 2012; Docquier et al, 2014). In particular, national and regional migration governance regimes may lead to a ‘sorting’ of migrants into specific target countries (Grogger and Hanson, 2011; Krieger et al, 2018). Moreover, the sorting of migrants is not independent of their previous selection, implying that the destination countries are affected differently by different conflict drivers in the origin countries.

From the perspective of the destination countries, the presence of environmental and resource-related conflicts is an important but, as the sorting literature reveals, not a sufficient condition for actual migration to take place. Thus, individual-level sorting alone cannot account for the directionality of migration. The collective level is important as well, since the political governance of migration also affects real-world

migration streams (Hoffmann, 2010; Geiger and Pécoud, 2010; Kunz et al, 2011). In addition to destination countries, international organizations – for example, the International Organization for Migration (IOM), the United Nations High Commissioner for Refugees (UNHCR) and so on – and regional organizations pursue migration policies that might effectively hinder migrants from entering their preferred destination. Accordingly, the third part of the book (that is, Chapters 7 to 9) sheds light on national, regional and international migration governance and discusses how these regimes regulate the flow and directionality of migration (see Figure 1.1).

Together, the first three parts of the book illustrate that there are important interdependencies between resource problems, conflicts and the individual decision to migrate, as well as collective migration governance arrangements. Building on that, the fourth part of the book (that is, Chapters 10 and 11) sheds light on the effects of migration in the host countries and the countries of origin (see Figure 1.1). Once migrants have entered their final destination country, another level of migration governance starts to play a role. This sub-national or regional level is even more relevant, given that migration usually also poses a challenge to regional political and socioeconomic stability, as well as domestic institutions (Li et al, 2017) and even the environment. The complex conflict-related migration dynamics may trigger undesired effects in the host countries when violent conflicts spread (Hall, 2016) or cause conflicts of their own kind abroad. An example is the current wave of anti-refugee and anti-Islamic propaganda and behaviour in many European countries. Such possible effects of migration are subject to various types of governance intervention – interventions that are either forged by host countries or by countries of origin alone, or by origin and host countries in tandem. An example of the latter is transnational governance initiatives and instruments, which by means of private standard setting and certification as well as import bans strive to regulate global supply chains to mitigate illegal extraction activities (for example, concerning timber, palm oil or minerals) (Lebel et al, 2006; Bell and Hindmoor, 2012). While previous analyses of those instruments have focused on their economic effects on specific industries (Visseren-Hamakers and Pattberg, 2013), their economic effects on specific industries (Li et al, 2008) or their potential for norm diffusion (Naiki, 2014), there are no studies that have explicitly taken a conflict perspective.

Generally, the volume shows that governance regimes play a key role for the flow of environmental and resource-related migration (see Figure 1.1). Governance, first, comes into play with respect to

whether rapid or fundamental environmental change or resource scarcity indeed turns into conflicts. Second, not all environmental or resource-related conflicts trigger migration or trigger it to equal extents. The governance of conflicts can prevent migration into third countries when such governance regimes provide effective solutions to the underlying problems or succeed in mediating or ending conflicts. Third, the flows of migration themselves are affected by migration governance arrangements. The more liberal the migration governance approach at play, the greater the freedom of migrants to decide for themselves to which host countries they relocate. Fourth, migration governance is complex and takes place at international, regional and national levels, not all of which explicitly recognize environmental or resource-related migrants as specific types of migrants. Fifth, governance regimes in host countries can influence whether migrants will have good prospects for integration or the extent to which their presence will trigger new conflicts. Finally, host countries that expect to become subject to environmental and resource-related migration in the future can participate in regional or national governance arrangements in order to counteract negative consequences of environmental changes or resource scarcity in countries of origin.

Contributions to the state of the art

This volume adds value to state-of-the-art research on environmental or resource-related conflict, migration and governance in several respects. Extensive literature exists on the emergence of conflicts and determinants of conflict dynamics within and between countries (for example, Cederman et al, 2013; Van Evera, 2013; Tarrow, 2015). The literature often also touches on the topics of migration and refugees without systematically examining the links between conflict dynamics of two or more not necessarily bordering countries created by flows of migration. In addition, there is a large body of migration research that mentions environmental and resource conflicts as an essential determinant of migration (for example, WBGU, 2007; Morrissey, 2012; Adhikari, 2013; Fiddian-Qasmiyeh, 2014). However, it does not explicitly shed light on interdependencies between different countries of various geographical distance through migration and its governance, or on the specific characteristics of migration flows including selection and sorting effects (for example, Grogger and Hanson, 2011). As the interconnectedness between migration, environmental and resource conflicts and the roles of governance in these respects is seldom under scrutiny from an interdisciplinary

perspective, this volume seeks to fill this gap in order to make a significant contribution that is not only scientifically but also politically relevant and timely.

There are a number of books on environmental conflicts, on migration and on national, regional and international governance, but these three strands of research are rarely brought together. For instance, an edited volume by Bavinck and colleagues (2014) takes an interdisciplinary approach to shedding light on natural resource conflicts. However, it adopts a case study-oriented approach and remains largely silent on the link between conflict and migration, as well as on the possible role of governance in this relationship. Another important contribution to the state of the art is a volume by Brauch and colleagues (2011) that is framed around the concept of 'environmental security' and makes frequent reference to migration questions. However, since the book was primarily written for a policy audience, it does so in a largely empirical way. Finally, a book by Clarke and Peterson (2016) stands for a whole group of publications that take a more instrumental perspective on environmental conflicts, in which the systematic analysis of conflicts is seen as a mere prerequisite for the development of practical tools for conflict management and resolution. This book opens new terrains, as it brings together environmental migration with politics on environmental migration and environmental change in general.

Research on migration has pointed out multiple root causes for displacement as well as legal and institutional responses, and regional perspectives to forced migration. Yet, linkages to environmental or resource-related conflicts and governance arrangements are not usually in the limelight of this strand of research. For instance, a book by Lucas (2014) considers mainly local economic developments as a trigger for migration but includes only one chapter on the economic consequences of conflict and environmental displacement (Kondylis and Mueller, 2014). The same phenomenon can be observed in a handbook by Constant and Zimmermann (2013) that contains only a single chapter on natural disasters and migration. Hence, while environmental and resource aspects, as well as conflicts (whether or not related to environment or resources), have been acknowledged by leading researchers in the field, their perspectives emanate from a disciplinary perspective. No volume exploring the topic comprehensively and interdisciplinary has been published so far. Probably the closest work to this edited volume is the one by Collier (2013), who has published extensively on the resource curse and migration in developing countries. In his 2013 book, however,

he deals with migration and its effects on a rather general level, with little reference to migration triggered by environmental and resource conflicts (Collier, 2013).

In short, while there are books related to the topics of environment, conflict and migration, they are either very specific in scope and/or take a purely monodisciplinary approach. Our book, in contrast, is novel, and makes an important contribution to the literature, shedding light on various aspects of the interdependencies between migration, environmental and resource conflicts, as well as the development and roles of national, regional and global migration governance regimes.

Structure of the book

The book provides novel and timely insight into the interlinkages between environmental and resource problems, conflicts, migration and migration governance. It covers four broad themes in each of which the role of governance is addressed. These themes are environmental and resource conflicts as causes for migration; individual-level selection and sorting of migrants; the political regulation of conflicts and migration at the national, regional and international levels; and migration either as a cause for conflict in host countries or expected migration as an incentive for potential host countries to participate in the governance of environmental or resource-related conflicts in countries of origin. **Chapters 2 to 4** take environmental and resource conflicts as well as climate change as the starting point to investigate how such conflicts and their (lack of) governance turns into an impetus for migration within and across countries. **Chapters 5 and 6** shift to the individual level and examine how and under what conditions selection and sorting affect whether individuals react to climate and resource conflicts with migration choices, and how governance structures affect where these individuals go. **Chapters 7 to 9** shift the main emphasis from the individual to the collective level. Accordingly, they discuss national, regional and international migration governance regimes and provide insights into their trajectories and effects. Finally, **Chapters 10 and 11** focus on the effects of environmental and climate- and resource-related migration. They explore how and under what conditions environmental or resource-related migration is a cause for conflict, and shed light on other forms of interlinkages between host countries and countries of origin (for example, the adjustment of governance structures to manage initial conflicts).

While the introductory chapter provides the analytical framework to explore the nature of environmental and resource-related conflicts and

the linkages between conflict, migration and governance based on state-of-the-art research, the following chapters investigate different aspects in turn. Thereby they shed light on how environmental and resource problems can create conflict, which in turn can become a trigger for migration. They argue that governance plays a prominent role in the (un)successful management of environmental changes and scarce resources, the management of related conflicts, the stream of migration, the directionality it takes, and the effects it might trigger in host countries.

Chapters 2 to 4 examine environmental and resource-related conflicts in countries of origin, as shown on the left-hand side of Figure 1.1. Chapter 2 places emphasis on renewable resources, Chapter 3 on non-renewable resources, and Chapter 4 on climate change. Chapter 2 examines whether and how scarcity of renewable resources increases the risk of violent conflicts and how this affects migration flows. It shows that renewable resource scarcity leads to low-intensity conflicts, which trigger limited (short-distance) migration in general and need no centralized or international governance arrangements, as governance is most effective if it takes place in a variety of institutions and on local and sub-national levels. Chapter 3 shifts the focus to non-renewable resources. It argues that conflict is not brought about by the scarcity of these resources. Most often, they are abundant. Yet the failure of governance of abundant resources drives conflicts and related migration. In the subsequent Chapter 4, the focus is on climate conflicts. Using the example of droughts, the chapter shows that climate change per se does not bring about an increasing number of conflicts and more migration. Instead, pre-existing conflicts weaken local and national governance arrangements and decrease a society's capacities to deal with climatic shocks, in turn leading to increased migration.

Chapters 5 and 6 focus on migration flows, represented by the central arrow in Figure 1.1. Chapter 5 focuses mainly on selection, and Chapter 6 turns to sorting. Chapter 5 shows that individual migration decisions depend on the type of environmental change. In contrast to sudden changes, incremental environmental changes create opportunities for individual agency. Governance can play an important role as it can influence migration and environmental change, especially at local and state levels. While democratic governance arrangements confer agency to individuals, non-democratic governance delimits it. At the same time, the temporal dimension is important. If environmental disasters are sudden, forms of non-democratic governance can be effective in managing consequences in the short run. Yet slow onset environmental changes call for democratic governance arrangements. Chapter 6 illustrates that sorting patterns are affected by who migrates

in response to environmental changes as well as the anticipated effects of migration on the host countries. This has implications for governance, since host countries can adjust their immigration policies. Such adjustments, in turn, feed back into individual sorting decisions.

Chapters 7 to 9 focus on the overarching theme of Figure 1.1 in describing governance arrangements at state, regional and international levels. Chapter 7 presents insights into the migration governance of host countries. It not only argues that the immigration policies of the Organisation for Economic Co-operation and Development (OECD) countries vary in the extent to which they are liberal or restrictive, but also examines how these policies affect migration flows. Chapter 8 presents insights into regional migration governance. It argues that state responses alone might not be sufficient to regulate migration patterns and respond to related environmental changes. Thus, in all regions, states have developed (sub-)regional responses to migration, some of which engage explicitly in refugee protection. It is argued that regional governance arrangements are important and also serve as opportunities to develop and exchange best practices. Chapter 9 shifts the attention to migration governance at the global level and the corresponding management of environmentally induced migration. Migration governance takes place in a series of different international organizations, most notably the IOM and the International Labor Organization. The topic of environmentally induced migration also features on the agenda of the UNHCR, the United Nations Development Programme and the United Nations Environmental Programme. After laying out the regime complex, Chapter 9 discusses the achievements and difficulties of environmental migration governance at the international level.

Chapters 10 and 11 shed light on the outcomes of migrations, as shown on the right-hand side of Figure 1.1. Chapter 10 examines the link between forced migration as a response to environmental degradation on the one hand, and conflict in host countries on the other. The chapter shows that migration does not increase conflicts in host countries per se, but only exhibits negative consequences when migrants are marginalized or when aid and support are unequally distributed. Chapter 11 investigates if and under which conditions natural resource governance regimes can mitigate the likelihood of violent conflicts and, consequently, reduce sources of forced migration. The chapter specifically examines the norm dynamics in and the effects of two exemplary governance regimes that strive to regulate conflict-prone minerals – that is, the Kimberley Process and the International Conference on the Great Lakes Region.

In conclusion, [Chapter 12](#) summarizes some of the book's key insights and reflects on theoretical and methodological challenges tied to the study of the nexus between environmental problems, conflict dynamics and migration.

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Renewable Resource Scarcity, Conflicts and Migration

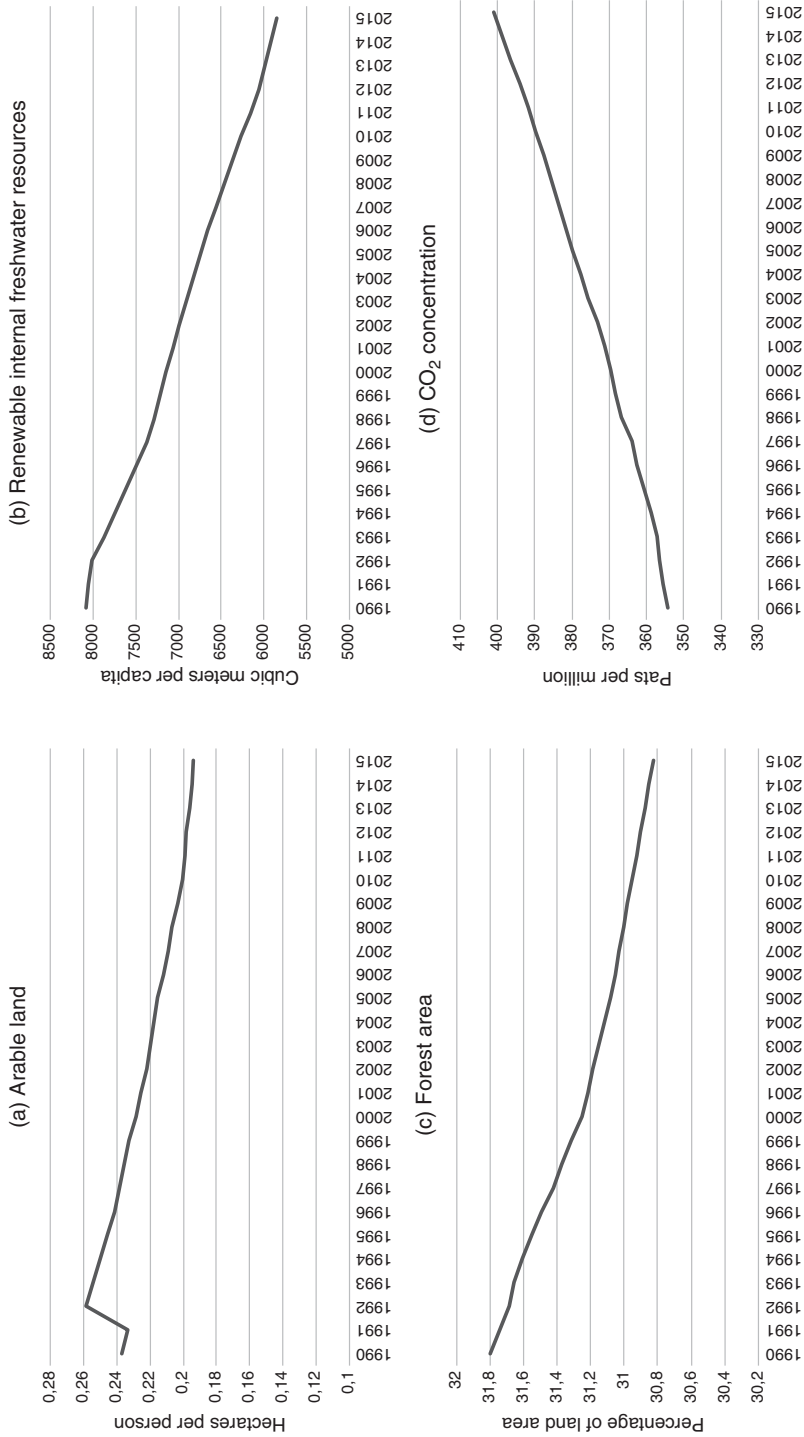
Tobias Ide

Introduction

Renewable resources such as water, soil and forests regenerate after extraction.¹ The day when human consumption exceeds global nature's regeneration capacity in a given year is called 'earth overshoot day'. In an ideal world, this day would be on 31 December of the same year or later. In the year 2000, however, earth overshoot day was on 23 September, and ten years later, humanity's annual budget of renewable resource use had already expired on 9 August. The 2018 earth overshoot day was on 1 August (Earth Overshoot Day Network, 2018).

This indicator is, of course, broad, but it demonstrates that the world's renewable resources face some worrisome degradation trends. As illustrated by [Figure 2.1](#), the amount of arable land and available freshwater resources per capita, and the global forest area, have all been in decline in the past 25 years. The main drivers of this increasing resource scarcity are rising levels of consumption (especially by the developed countries and emerging global middle classes) and population growth. Unequal access to natural resources (and related services) further plays a role by allowing for excessive overconsumption of the haves and by stimulating desperate overextraction by the have-nots. Climate change, itself a product of human-induced CO₂ releases into the earth's atmosphere (see [Figure 2.1](#)), will further aggravate the situation, for instance, due to more frequent droughts and a rising sea level (see [Chapter 4](#)).²

Figure 2.1: (a) 1990–2015 trends of arable land (hectares per person). (b) 1990–2015 trends of renewable internal freshwater (cubic metres per capita). (c) 1990–2015 trends of forest area (percentage of total land area). (d) 1990–2015 trends of CO₂ concentration in the atmosphere (parts per million)



Sources: NOAA (2018), World Bank (2018).

In the face of growing worldwide scarcity, access to renewable resources remains highly unequal within and between states. This is due to a number of factors. First, climatological, physical and geographical factors cause an unequal distribution of natural resources. Canada, for instance, has much more renewable freshwater (2.850 billion cubic metres) per year than Libya (one billion cubic metres). Second, some countries and regions are more effective (though not necessarily more sustainable) in managing their existing resources, for instance through dams, land-use planning, groundwater exploitation and demand management. Third, purchasing power is an important determinant of resource access. Rich states can import virtual water and land³ in the form of food or desalinate sea water, while poor ones have more difficulties in doing so. Companies can buy large tracts of forest land and prevent smallholders from assessing it. And the wealthier a household is, the easier it can cope with higher land, water and food prices. Fourth, large-scale emergencies such as wars and earthquakes can (temporarily) limit the availability of natural resources.

Scarcity of natural resources certainly has tremendous negative consequences for human security. According to the Food and Agriculture Organization (FAO) (2017), 815 million people, or more than ten per cent of the world population, were undernourished in 2016, which puts a considerable strain on their physical and psychological wellbeing. A similar number of people, 844 million, have no access to safe water, implying that they have to drink from polluted sources, walk large distances to obtain water, face a high risk of dehydration, suffer health hazards from inadequate hygiene and sanitation, and have limited opportunities to engage in agriculture or production (Water.org, 2018).

But does renewable resource scarcity have further security implications by triggering violent conflicts, which in turn can amplify migration flows? Several recent studies support such claims, for instance by arguing that water scarcity was one of the reasons for the onset of the Syrian civil war, and thus also an indirect driver of the resulting mass displacement and large refugee flows towards the neighbouring countries and Europe (Gleick, 2014; Kelley et al, 2015). But such views are strongly contested on both empirical and normative grounds (for example, de Châtel, 2014; Selby et al, 2017).

This chapter provides a state of the art overview of academic debates on renewable resource scarcity, conflict and migration. For the purpose of the chapter, conflict is defined as a situation in which two or more social groups perceive their interests as mutually incompatible and undertake actions to enforce these interests. If these actions include

physical violence against humans or human property, this is a violent conflict, which can have severe consequences for human security and economic development. Migration refers to humans moving out of their usual places of living (that is, homes, working and leisure spaces) for longer periods of time (that is, not just for holidays or business trips).

The subsequent sections introduce the most important theoretical frameworks linking renewable resource scarcity to conflict and consider the existing empirical evidence for such linkages. Both sections highlight the importance of governance arrangements in linking renewable resource scarcity to conflicts, preventing such linkages, or even facilitating peace through resource-related cooperation. Based on the finding that renewable resource scarcity increases the risk of especially low-intensity violent conflicts under certain circumstances, the next section discusses how such conflicts can affect migration patterns. As research on the causal chain, connecting renewable resource scarcity and migration through conflicts, is at an early stage, theoretical considerations and empirical evidence are discussed in this one combined chapter. The concluding section summarizes key points, reflects on existing and potential governance arrangements, and suggests some avenues for further research.

Resource scarcity and violent conflict: theoretical perspectives

While some older work related to the issue exists, a distinct research field on environmental change, renewable resources and conflict began to develop in the early 1990s, when several large research projects analyzed such interlinkages (Rønnfeldt, 1997). The field has gained further currency with increasing concerns about the security implications of climate change (and the expected implications for water, land and food resources) since 2007 (see [Chapter 4](#)).

The scholars involved quickly realized the specific political economy of such renewable resource scarcity–conflict links, especially when compared with conflicts around non-renewable resources (see [Chapter 3](#)). First, especially for economically and technologically highly developed states, there are relatively convenient ways to access renewable resources (or the products derived from them) by non-violent means. Examples include the desalination of seawater, the use of fertilizers to address the scarcity of fertile soils, and the import of wood. Non-renewable resources such as oil or gas, by contrast, are harder to substitute and concentrated in a few countries, hence increasing their geopolitical relevance. Second, a given quantity of a renewable

resource usually has a lower market value than the same quantity of a non-renewable resource. The latter can hence be traded more easily and profitably. Diamonds worth US\$10,000 can be smuggled out of the country more easily than fertile soil or food worth the same amount of money. And a cubic metre of oil sells for higher prices on international markets than a cubic metre of freshwater.

Consequentially, renewable resources are considered strategically and geopolitically not relevant enough to trigger violent conflicts between states, and early claims of interstate water wars were quickly refuted (Yoffe et al, 2003; Katz, 2011). Similarly, organized armed groups tend not to rely strongly on revenues from renewable resources to buy weapons, pay fighters and enrich their leaders or patrons (see [Chapter 3](#)). But especially in less developed states with limited capacities to adapt to renewable resource scarcity, larger parts of the population depend on land, water and forest resources (rather than on non-renewables) for their livelihoods. Researchers hence focus on intrastate conflicts in economically less developed countries as well as on more diffuse conflicts (in contrast to highly organized and/or profit-seeking activities of a small, but strong, rebel group) when analyzing the impact of renewable resource scarcity on violence (Homer-Dixon, 1999; Ide, 2015).

Renewable resource scarcity – whether driven by limited supply, increasing demand or unequal distribution – is hypothesized to increase the risk of violent conflict within states in five ways. For all pathways, scarcities resulting from fast-onset changes (such as rapid environmental degradation or exponentially growing demand) are more conflict-relevant as there is less time to put adequate adaptation measures and governance arrangements in place. However, the cumulative effects of slow-onset scarcity can also induce conflicts, especially if not addressed in a timely and effective manner (see [Chapter 4](#)).

The five pathways supposed to connect renewable resource scarcity to intrastate violent conflict are as follows:

- Resource scarcity may lead to relative deprivation, that is, some groups feel they do not get their fair share of the resources or of the associated livelihood opportunities (as indicated, among others, by better resources access for other social groups). The resulting grievances can lead to violence either against the state or other groups (Homer-Dixon, 1999), including international and state-owned companies (Van Leeuwen and Van der Haar, 2016).
- If renewable resource scarcity undermines livelihoods (for instance because farmers have no longer access to sufficient water and arable

land), people can be more inclined to join existing violent groups, such as rebels or militias, because the opportunity costs for engaging in this kind of activities are reduced (Deligiannis, 2012).

- Droughts or food shortages might force the state to provide emergency aid, while the associated economic losses reduce its income base. Such a weakened state is less capable of suppressing rebellion or mediating communal conflicts (Homer-Dixon, 1999).
- Increased renewable resources scarcity can aggravate existing ethnic or social tensions about water and land, especially if state elites manipulate such tensions for their own political purposes (Kahl, 2006). In 1980, for example, Nigerian politicians fuelled the land-related grievances of the Senufo people and the associated conflicts with the Fulani in order to gain the electoral support of the Senufo (Bassett, 1988).
- Environmental stress can also lead to migration (see Chapters 5 and 6), with ethnopolitical or resource-related tensions in the receiving area as a possible consequence (see Reuveny, 2007 and Chapter 11 in this volume).

However, most other authors linking resource scarcity to conflict clearly highlight the importance of contextual factors. Specific governance arrangements, for instance regarding access to renewable resources, the distribution of the associated benefits, and the (non-)discrimination of ethnic groups are important intervening variables (Benjaminsen et al, 2012; Schleussner et al, 2016). Political instability and low levels of economic development also make a place simultaneously more prone to violent conflict onset (Dixon, 2009) and less capable of mitigating resource scarcity through trade or technological innovations (Homer-Dixon, 1999). In line with this, a number of recent analyses argue that perceptions about the extent and drivers of resource scarcity are strongly conditioned by dominant discourses. Conflicts about water resources, for instance, can be aggravated by considerations of the respective ‘other’ as responsible for the environmental destruction faced by the own group (Fröhlich, 2012; Ide, 2016b).

A more optimistic school of thought takes this governance argument one step further by claiming that the well-coordinated and efficient governance of shared renewable resources (and the associated environmental problems) facilitates cooperation and reconciliation (Conca and Dabelko, 2002). This approach is commonly termed environmental peacemaking or environmental peacebuilding. ‘The underlying idea is that when people meet and jointly work on

common problems, they recognize that they share needs and interests, making cooperation the more rational choice than conflict' (Maas et al, 2013: 102). Such cooperation can contribute to peacemaking by improving the environmental situation (and reducing related tensions), by building trust and understanding, by cultivating interdependence (for instance in the form of follow-up cooperation), and by creating joint institutions (Ide, 2019).⁴

Other lines of research, by contrast, are more sceptical about the impact of renewable resource scarcity on violent conflict, even in cases where facilitating context factors are present and adequate governance mechanisms are absent, or any such linkages at all. Political scientists have argued that the drivers of intrastate violent conflict – such as economic crisis, past conflict and medium levels of democracy – are well established and that renewable resource scarcity hence at best plays a secondary and minor role (Gleditsch, 1998; Dixon, 2009). Also, drawing on the political economy considerations mentioned earlier, renewable resources have a limited strategic and financial value (especially compared with non-renewable resources, see Chapter 3), hence providing little incentive to fight about them (Koubi et al, 2014).

Similarly, political ecology analyzes the interactions between environmental and political processes from a critical geography perspective. It argues that scarcity of renewable resources is driven by inequalities in access and distribution, and hence it is an expression of existing conflicts, for instance between neoliberal state policies and local populations or between dominant and marginalized political, social and ethnic groups (Peluso and Watts, 2001; Le Billon and Duffy, 2018). The governance of renewable resources is hence not a relevant context factor, but a crucial driver of and stake in these conflicts. Put differently, as renewable resource scarcity for certain groups is inevitably a product of conflicts, it makes little sense to discuss it as a conflict driver (Selby and Hoffmann, 2014). There is further concern that linking the scarcity of renewable resources to violent conflicts (at least ahead of convincing empirical evidence) facilitates a stigmatization of certain regions (especially in the Global South) as incapable of managing their environmental affairs, naturally violent, and a security threat to developed countries. Such frames, in turn, help to legitimate higher military budgets and external interventions (Ide, 2016a; Hoffmann, 2018).

After this brief theoretical overview, the next section reviews the empirical evidence for the different perspectives outlined.

Resource scarcity and violent conflict: empirical insights

Following the theoretical debates mentioned earlier, empirical evidence regarding renewable resource scarcity and intrastate violent conflict was rather divided for around two decades, with especially fierce controversies between proponents and critics of the environmental conflict approach, and some minor disputes between both of these approaches and proponents of environmental peacemaking.

Several early statistical studies found that reduced precipitation and the resulting scarcity of water and arable land (Hsiang et al, 2011), but also lower freshwater availability (Gizelis and Wooden, 2010) and land degradation (Theisen, 2008), increase the risk of violent conflict in a given country. Other studies, using different samples, datasets, definitions and/or estimation methods, disagreed and claimed that resource scarcity has no impact on conflict dynamics (for example, Hendrix and Glaser, 2007; Buhaug, 2010). Second-generation studies went away from the national level of analysis and utilized higher resolution, sub-national environment and conflict data, but the findings were still inconclusive (for example, Couttenier and Soubeyran, 2013; Salehyan and Hendrix, 2014). Cross-case research on environmental peacemaking remains extremely limited up until today (Ide, 2018b).

Disparate results are also a characteristic of qualitative research on the issue. The northern, semi-arid part of Kenya has experienced intense and recurring droughts as well as violent conflicts between local pastoralist groups⁵ in the past three decades. According to environmental security scholars (Ember et al, 2012; Schilling et al, 2012), such droughts cause a local scarcity of water and grazing land, which leads to intensified competition between different pastoralist groups over these resources. In times of scarce resources, pastoralists also have to travel further with their herds in search of fodder and water, thus increasing the risk of conflict related to entering another group's territory. Finally, violent cattle raids are a commonly used strategy for restocking herds after animals have died during a drought (see [Chapter 4](#) for another example).

Proponents of political ecology and other critical approaches disagree (Eaton, 2008). According to them, resource scarcity might be aggravated by droughts, but is primarily caused by existing conflicts between local pastoralists on the one hand and state elites and business interests on the other hand. The latter use their political power to promote governance arrangements according to which more and more land (and the associated water resources) can be

utilized for tourism, commercial agriculture and nature conservation, hence limiting access for pastoralists. Furthermore, the main drivers of pastoralist violence are competition for political influence, the availability of advanced weapons and a lack of proper state regulation (Adano et al, 2012).

Empirical studies also find that violence is not more, but less likely in times of drought and resource scarcity. According to some authors, pastoralist groups often (re)activate traditional resource governance and dispute resolution mechanisms in the face of shared threats like water and fodder scarcity (Adano et al, 2012; Linke et al, 2015). The resulting mitigation of resource conflicts, trust building and the establishment of institutions provides evidence for the environmental peacemaking perspective.

Similarly, the links between drought, resource scarcity and the Syrian civil war onset in 2011 are heatedly debated (see Ide, 2018a for a review). The north-eastern, ‘bread basket’ regions of Syria suffered from an intense drought between 2006 and 2009, leading to water scarcity, harvest failure, soil erosion, cattle deaths, and eventually the loss of livelihoods of at least 300,000 people, many of whom migrated to urban fringes (also because state support was largely absent). Several studies claim that these deprived groups articulated their grievances during the initial protests and were later more likely to be recruited by armed groups (Gleick, 2014; Kelley et al, 2015). Other scholars, however, argue that resource scarcity was only a minor driver of migration, that protests were mostly fuelled by the repressive regime, and that the majority of rural-to-urban migrants did not join these protests (de Châtel, 2014; Selby et al, 2017). There is also some limited evidence for cooperation between hostile groups on scarce water resources in Syria (Beck, 2014).

In recent years, however, a certain consensus has emerged in research on renewable resource scarcity and intrastate violent conflict. Four points can summarize this consensus. First, renewable resource scarcity is not the main driver of violent conflicts. Second, renewable resource scarcity can increase the risk of such conflicts, but only if certain context factors are present. Third, low-intensity and local forms of violent conflict are more likely to be co-induced by resource scarcity. High-intensity, regional or national conflicts like Syria, but also Darfur (Selby and Hoffmann, 2014; De Juan, 2015) remain contested. This is in line with early claims of environmental conflict research that due to their limited financial and strategic value but their high relevance for livelihoods, renewable resources are more likely to trigger diffuse, local and/or low- to medium-intensity violence. Fourth, under certain

circumstances, the joint governance of renewable resources can also facilitate ongoing peacemaking processes.

A number of recent quantitative studies, for instance, find a link between water scarcity (mostly in the form of drought) and violent conflict risk, but only if context factors like agricultural dependence (von Uexkull et al, 2016), ethnic heterogeneity (Schleussner et al, 2016) and poor infrastructure (Detges, 2016) are present. Findings are generally stronger for low-intensity violence (Sakaguchi et al, 2017).

In line with this, my own systematic analysis of 20 cases (Ide, 2015) shows that renewable resource scarcity is often linked to low- to medium-intensity conflicts, but that a violent escalation only takes place if three factors are present simultaneously: low power differences between the groups, pre-existing narratives of the other as a competitor or enemy, and recent political changes (often acting as a trigger). A similar study of 11 cases in Africa also concludes that land and water scarcity are not the most important factors of but can contribute to an escalation of low-intensity violence under conditions of discriminatory state policies, weak local (traditional) institutions, and political instrumentalization (Seter et al, 2018).

In a similar manner, research on environmental peacemaking has shown how renewable resource scarcity raises incentives for cooperation (Linke et al, 2015), and how the inclusive governance of renewable resources has contributed to improved intergroup relations, for instance in Yemen (Taher et al, 2012) and Ghana (Bukari et al, 2018). But such governance can also be exclusive or ineffective, hence raising mistrust and tensions (Krampe, 2016). Based on the limited evidence so far available, it thus seems that the impact of renewable resource-related cooperation on peacemaking is rather modest and highly conditional on the presence of a number of scope conditions, including a previous improvement of mutual relations, external support, and a history of environment-related interactions (Ide, 2019).

From environmental conflicts to migration?

Renewable resource scarcity may have a direct impact on migration patterns, that is, the scarcity of resources important to sustain livelihoods and the associated environmental injustices may (in combination with other factors) act as a trigger of migration (for example, Raleigh, 2011; Hunter et al, 2015). This issue is discussed in greater detail in Chapters 5 and 6. The indirect links between renewable resource scarcity and migration mediated by violent conflicts discussed in this chapter are multifaceted and complex. At the most basic level, violent

conflict is a strong and well-established driver of migration (Bank et al, 2017), and especially of forced migration (more or less voluntary migration is to a much stronger degree conditioned by economic opportunities and personal considerations). So, if resource scarcity increases the risk of violent conflict (under certain conditions), it should also indirectly increase migration flows (Brzoska and Fröhlich, 2015). Abel and colleagues (2019), for example, find a link between climatic extremes and international migration mediated by armed conflict. But their statistical correlation is strongly driven by the events associated with the Arab Spring, and the impact of climate-induced resource scarcity on these conflicts is contested (Selby et al, 2017). Overall, the causal linkages between resource scarcity, conflict and migration are complicated by a number of factors.

First, as discussed earlier, renewable resource scarcity is much more likely to affect low-intensity, localized and intrastate violence such as community riots or inter-village disputes. Such violence is unlikely to trigger large-scale, international migration flows. In case the violence is temporary, limited to border areas between the groups' territories, and does not involve retribution by state actors, so most members of the affected communities are likely to remain in their place. Even if low-level violence directly affects livelihoods, erodes social capital and takes place over sustained time periods, the affected persons tend to relocate to nearby areas, such as safer neighbouring regions or ethnically homogenous suburbs (Heitmeyer, 2009; Raleigh, 2011). Large-scale violence like the Syrian civil war is, of course, likely to trigger long-distance, more permanent migration, but the links between resource scarcity and these conflicts is less clear theoretically and empirically.

Second, migration is not only driven by push factors such as violent conflict and livelihood deterioration, but also by pull and capability factors.⁶ Regarding the former, environment conflicts can make certain destination regions for migration less stable and prosperous. This can reduce migration flows as people see little gains in moving or at least temporarily wait to see how the situation develops. Two of the largest refugee camps in East Africa, Dadaab (~250,000 refugees) and Kakuma (~180,000 refugees), are located in Kenya's northern and eastern drylands. Should resource-related tensions in these areas worsen the security situation or even lead to conflicts involving inhabitants of the camps, migration flows to the region would likely decrease (De Montclos and Kagwanja, 2000; Kirui and Mwaruvie, 2012).

Further, environmental conflicts may affect the capability of people to migrate. In migration studies, the concept of 'trapped populations' refers to groups who are motivated, but unable to migrate, for instance,

because they lack the financial capabilities or because relevant transport routes are blocked (Freeman, 2017). Violent conflicts, including those co-induced by renewable resource scarcity, can deprive people of financial resources or render certain transport routes unsafe.

Finally, according to the environmental peacemaking approach, renewable resource scarcity may also facilitate cooperation and contribute to a more peaceful situation. The absence of violence and ongoing reconciliation processes, in turn, reduce push factors for migration (Bank et al, 2017). However, one should keep in mind that the success of environmental peacemaking processes is limited and highly conditional. Further, a peace process in a certain region may act as a pull factor for migration flows or improve the conditions for population movements within and through this region. After the end of violence in some regions of the Democratic Republic of Congo and Timor Leste, for instance, previous inhabitants returned in large numbers to the respective areas. In the absence of adequate land governance, this frequently led to the revival of old or the start of new land conflicts (Vlassenroot and Huggins, 2005; Thu, 2012; see also [Chapter 11](#) in this volume).

To sum up, violent conflicts related to renewable resource scarcity – just like other types of violent conflict – tend to increase migration flows, but such a relationship is complex and context-dependent, especially if pull and capability factors, as well as environmental peacemaking dynamics, are factored in. As renewable resource scarcity mainly affects local, low-intensity conflicts, the associated migration flows are likely to be intra-state and short in distance.

Conclusion

This chapter makes three core arguments. First, with the increasing degradation of the natural environment, renewable resources are getting scarcer, especially for poor and marginalized regions and groups. Second, such scarcity increases the risk of (especially low-intensity) violent conflicts in certain contexts. Third, these conflicts are likely to increase (especially short-distance) migrations flows, but the relevant interconnections are complex and not well understood. Environmental peacemaking dynamics, the entrapment of populations and higher insecurity in target and transit regions may make migration a less attractive or viable option.

Due to these complex interrelations, renewable resource scarcity–violent conflict–migration linkages are governed by a variety of institutions and actors at different levels. As indicated

by environmental peacemaking approaches, local institutions such as elders or conflict resolution teams can be effective in mitigating environmental degradation and conflict escalation (Adano et al, 2012; Taher et al, 2012). Such institutions are frequently supported by non-governmental organizations (Palmer, 2015), but undermined by government actors seeking to expand state control, to enhance nature conservation and to further land privatization (Selby and Hoffmann, 2014; Van Leeuwen and Van der Haar, 2016). Neoliberal policies at the international level (for example, subsidies for biofuels, setting up land investment funds) and national level (for example, cutting subsidies for veterinary services or fertilizers), as well as ethnic or political discrimination, can further aggravate conflicts around renewable resources. In order to prevent an increase of renewable resource scarcity and the escalation of related conflicts, national governments (supported by international actors) should hence strengthen local institutions (while being aware that these can also reproduce inequalities), set up environmental peacemaking initiatives, and regulate the potential threats that national and international policy changes pose for local livelihoods.

When it comes to the impacts of renewable resource scarcity conflicts on migration, governance arrangements should primarily focus on the national, regional and local level as such migration is unlikely to take place over long distances. This migration is related to acute insecurity and hence should not be prevented, but governed in a decent way, for instance by supporting local initiatives to accommodate migrants (for example, in gyms, town halls or private flats) or preparing for the fast establishment of adequate refugee shelters. Two particularly acute problems to be avoided are migration into highly vulnerable and insecure (peri-)urban shanty towns (Saha, 2012) and conflicts between returning temporal migrants and new landholders (Thu, 2012).

In order to provide more nuanced suggestions for governance arrangements, further research on environment–conflict–migration interlinkages is needed (Hermans and Ide, 2019). To date, the interaction between peace and conflict research and migration studies is limited, but such encounters are necessary to disentangle the complex interactions between renewable resource scarcity, migration patterns and conflict dynamics (Freeman, 2017). Due to a lack of theoretical knowledge and quantitative data, such research would inevitably be explorative and based on qualitative case studies in the beginning. It is important to design such studies in a transparent way to enable comparisons and knowledge accumulation or, even better, to conduct medium-N, comparative analyses of several cases (Ide, 2017).

More empirically grounded and conceptual work would also enable scholars to specify theoretical considerations of the causal chains linking renewable resource scarcity, violent conflict and migration, and to identify relevant context factors and governance arrangements. Innovative methods such as agent-based modelling (Neumann and Hilderink, 2015) and scenario studies (WBGU, 2008) may provide a promising pathway here. In this context, it is highly important to focus on interactions and feedback loops that contribute to more positive societal outcomes as well (Scheffran et al, 2012). The literature on environmental peacemaking (Ide, 2019) and on migration as an adaptation strategy to environmental stress (Black et al, 2011) are promising first steps in this context.

Notes

- ¹ Sören Meier provided helpful feedback on earlier versions of this chapter and supported the creation of Figure 2.1. I also thank Michael Pregernig and the participants of the workshop ‘Environment, conflict, and migration: Exploring interdependencies’ (Freiburg, 21–22 June 2018) for valuable comments.
- ² A rising sea level can, for example, intensify coastal floods, which wash away soils, and cause saline seawater intrusion in groundwater reservoirs.
- ³ Virtual water/land refers to the amount of water/land used to cultivate or produce a certain product. One kilogramme of tomatoes, for instances, can contain around 184 litres of virtual water that was necessary to irrigate them.
- ⁴ This is not to imply that renewable resource scarcity is a positive state as it can induce cooperation, but rather that the interrelated problems of environmental degradation and (violent) conflict can be addressed simultaneously.
- ⁵ Pastoralism is a form of agriculture based on livestock and usually involves a high degree of mobility in order to move with herds in search of fodder and water.
- ⁶ Push factors drive people out of a certain region, while pull factors attract them to a certain place. Capability factors determine the ability of people to migrate between two places. Migration-related governance arrangements as discussed in Chapters 7, 8 and 9 are an important capability factor.

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Extractive Resources, Conflicts and Migration

Indra de Soysa

Introduction

Today, the question of migration from the South to the North unquestionably tops the agenda of almost all industrialized countries (Dancygier, 2010; Collier, 2013). However, it is not a new topic for populations that throughout history were subjected to both forced (slavery and imprisonment) and uncoerced migration across vast oceans. Nevertheless, the discussion on migration nowadays is portrayed as something new and immigrant states are dominated by questions regarding native jobs, crime, Islamophobia, racism and terrorism (from Islamists, right-wing extremists and others). These concerns have led to the ‘politics of fear’, which drives support for populist parties throughout the northern world (Wodak, 2015; Miller, 2016).¹ The popular understanding of why people from least developed countries might want to migrate to more economically developed countries is informed by many factors, but chiefly it is that they seek better opportunities abroad due to political persecution and economic scarcity. Economic scarcity is now also linked to natural resource scarcities brought about by climate change, dwindling renewable resources (for example, soil and water) and unpredictable weather-related disasters, or altered migratory patterns of pastoralists (see [Chapter 2](#) in this volume). This chapter argues differently, by stating that economic decay and scarcity are also likely to be present under conditions of natural resource abundance, particularly of non-renewables, where ‘unearned income’ from natural resource wealth drives poor governance and predatory

politics. These factors, in turn, generate ‘forced’ small- and large-scale migration, both indirectly due to economic hardship, and directly due to armed coercion, repression and civil war.

Theory and empirics support the propositions related to the ‘natural resource curse’ that view unearned income from resources as a path to socio-political and economic failure.² Apart from renewable resources, which may also create push factors for migration, there is a great deal of evidence suggesting that extractive economic activity, particularly of petroleum resources, can cause direct effects on forced migration due to what is termed here as ‘looting and uprooting’. This chapter argues that in contexts of natural resource abundance, rather than scarcity, failure of governance is far more likely to happen, as seen in cases like Venezuela or Nigeria today. Tackling the question of bad governance is likely to be critical for solving both small- and large-scale migration. While it is true that resource wealth invites net immigration because of the availability of jobs, such as unskilled migrant labour into the petroleum-rich Gulf States of the Middle East, many other aspects of the natural resource curse create socio-political and economic stagnation that potentially drives people out, not least due to violent conflict, political upheaval and deep corruption (Bearce and Laks Hutnick, 2011). Indeed, I know of no study that has addressed the question of natural resource wealth and outmigration, both indirectly because of bad governance and economic malaise as in countries such as Nigeria and Equatorial Guinea, and directly as a result of political chaos, in places such as Venezuela, Algeria, Iraq and Libya.

While several global initiatives have worked to constrain the most harmful effects of bad governance and state failure under extractive conditions, extremely predatory, corrupt and wrong-headed economic policies continue to create conditions that push people to emigrate in search of better economic conditions. Indeed, under conditions of abundance, corrupt leaders fight to stay in power by benefitting narrow coalitions that keep them in office, such as military leaders or their ethnic kin. Often, they also make policies that favour the development of monopolies for cronies, following malicious economic policies that increase the suffering of those under the low-income bracket. Resource wealth, particularly from energy resources, also drives powerful patronage politics. Corrupt leaders survive international sanctions because they are protected by great powers who depend on these resources. The pernicious effects of superpower interests in the Middle East and North African regions cannot be ignored.³ Thus, the global desire to secure valuable energy resources is also likely to

hamper real efforts to push political and social reforms that would allow tremendous natural resource wealth to reduce poverty (Wenar, 2016).

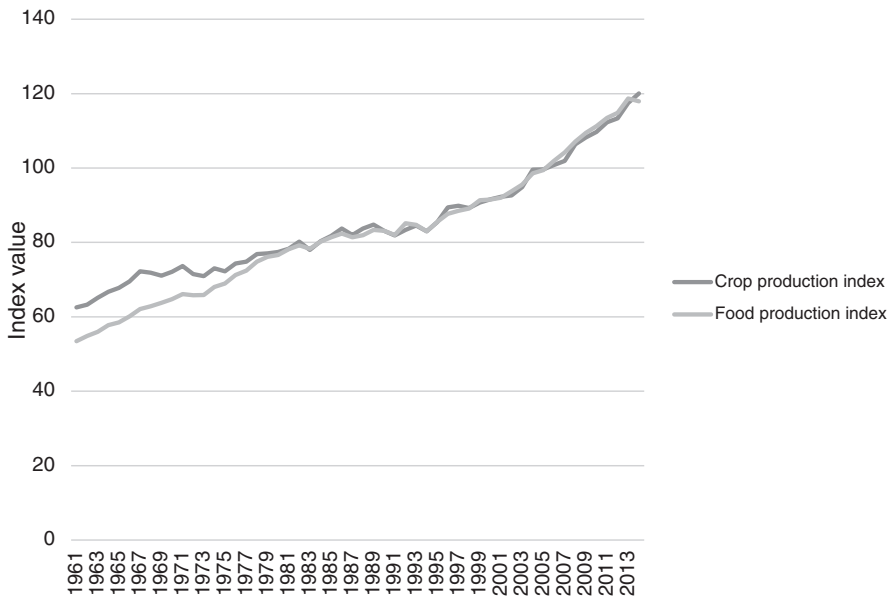
Scarcity of renewable resources, or scarcity of governance?

This section argues that in contrast to the scarcity of natural resources driven by environmental changes, access to valuable non-renewable resources, such as energy resources, can create crises of governance that drive both small- and large-scale migration. Arguments about economic hardship from natural resource scarcity go back to Thomas Malthus. In 1798, Malthus argued that the world was in a 'trap' between a population's food requirements and the finite nature of arable land. Centuries later, agricultural economists showed that the increase in agriculture productivity outstripped the demand for food. Esther Boserup (1965), a Danish agricultural economist, showed that people were capable of intensifying production on limited land, not only because of better inputs to production but also because institutions of property rights and other land tenure innovations lead to greater productivity. In other words, agricultural productivity depends much on governance and institutional change.

Others have argued that governance is not just important for productivity. Bad governance, for example, can account for why the production and distribution of food are thwarted. Extraction policies are particularly harmful to agricultural sectors when a government taxes agricultural produce to please urban interests, reducing food production as a consequence (Bates, 1988). Thus, governance affects how societies deal with and adapt to climate-induced vulnerabilities as well as the market activity that underpins production and distribution of goods. Today, the Malthus-Boserup debate continues in terms of the planetary implications of climate change and population growth, not to mention new conditions of consumption that may create 'peaks' for vital natural resources, such as oil and other minerals. Neo-Malthusian arguments about scarcity and the 'coming anarchy' clash with 'Cornucopians', who suggest that the human mind is the 'ultimate resource' and that shortage is substituted by productivity-enhancing technological innovations (Ehrlich and Ehrlich, 1990; Kaplan, 1994; Simon, 1998). For them, the problem of bad governance is thus likely to be associated with abundance rather than the scarcity of resources.

Simple scarcity arguments might suggest that global environmental change influences the out-migration of those depending on agriculture,

Figure 3.1: Global food and crop production indices from World Development Indicators, 1960–2016



Note: Index value = 100 in year 2005.

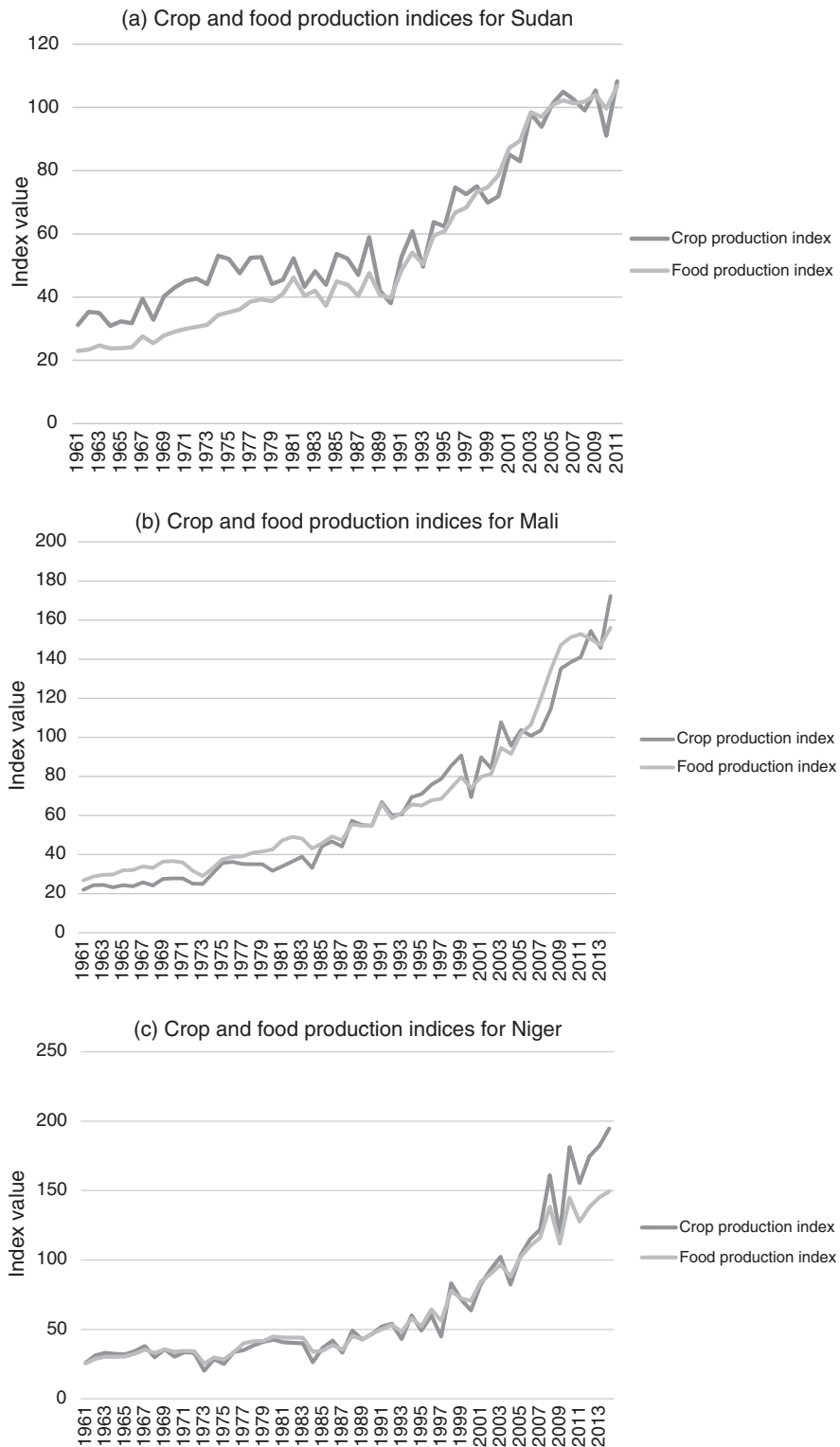
Source: Figure generated by author using the World Bank's *World Development Indicators* (online database).

as their livelihoods are affected by climate change. A somewhat rough but telling measure of whether farming is in fact affected by climatic conditions is indicators of production, as they reflect the availability of food. Figure 3.1 shows the trend in food and crop production across the globe.⁴

What Figure 3.1 shows is that the production of crops and food is steadily increasing across the globe, which could be interpreted as a positive sign for the countryside. However, the aggregate production numbers could hide problems faced by countries under harsh environmental vulnerability. Figure 3.2 shows the trends in three key Sahelian countries with the highest rates of population under the low-income bracket, namely Mali, Sudan and Niger.

As seen in Figure 3.2, all three of these Sahelian countries have increased their production since 1961. Thus, farmers in these areas should be gaining income, *ceteris paribus*. This rough assessment of how climatic factors might be affecting aggregate production, while revealing, does not invalidate the claim that variable climatic conditions affects some territories more than others and that in some areas local-level conditions do not operate at micro levels. For example, communal violence between ethnic groups or herder–farmer conflicts

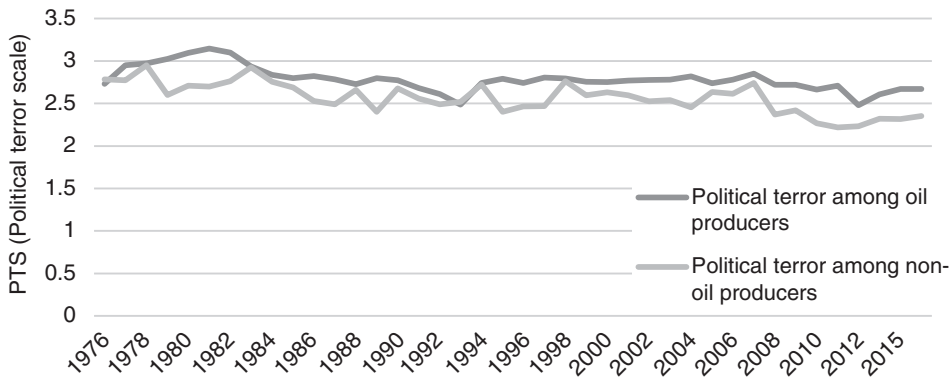
Figure 3.2: Food and crop production indices for (a) Sudan, (b) Mali and (c) Niger, 1960–2016



Note: Index = 100 in 2005.

Source: Figure generated by author using the World Bank’s *World Development Indicators* (online database).

Figure 3.3: State repression of human rights among oil-producing and non-oil-producing countries, 1975–2016



Source: Figure generated by author using the Political Terror Scale (<http://www.politicalterror scale.org>) and Ross-Mahdavy oil production data (<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/ZTPW0Y>).

might be due to shortages, whether or not they are related to climate (Fjelde and von Uexkull, 2012; Nordkvelle et al, 2017). As many claim, however, the way in which the state is engaged in safeguarding peace, how markets work to affect shortages through trade, and how authorities deal proactively with providing relief are likely to matter a great deal.⁵ In other words, fights between people within societies must be governed by these local institutions, regardless of where the shock comes from.

In other words, whether people flee because of conflict, or whether they leave in trickles because of shortages, the question of governance is critical. As argued earlier, the really pernicious governance failures are not likely to relate to the scarcity of resources, but mostly to the abundance of valuable resources, such as energy. Figure 3.3 uses data on political repression from the Political Terror Scale (PTS) and a measure of oil wealth based on per capita production of oil in US dollars.⁶

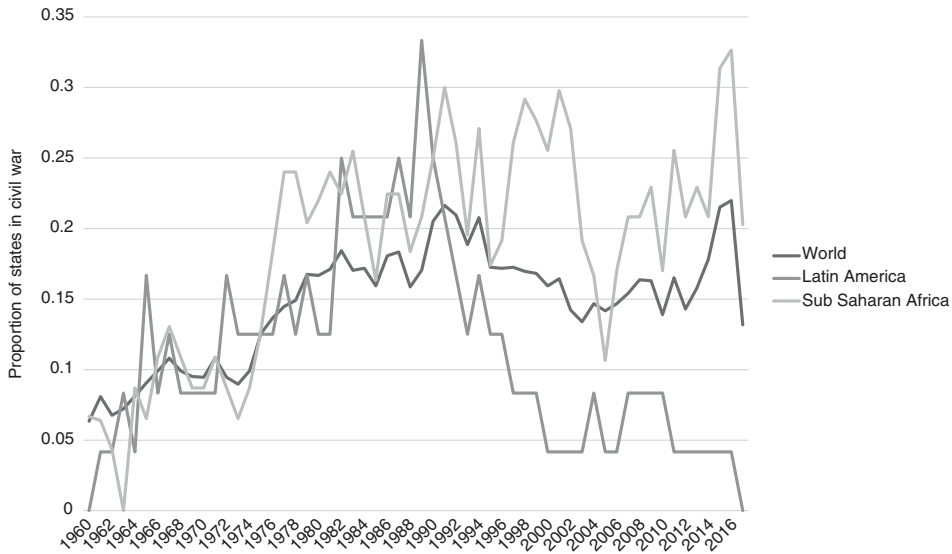
As seen, while human rights violations decrease among non-oil-producing countries, since the 1990s levels of political repression among oil-producing states is far greater than that of non-oil-producing states. Thus, the chapter now turns to the issue of extractive activity as a push factor often leading to large-scale migration relating to conflict and political repression. It then outlines the slow push factors that generate small-scale migration relating to lack of economic opportunities and hardship in oil-producing states. Rather than scarcity-generated conflicts, I argue that the ‘paradox of plenty’ creates perverse incentives for predation.⁷

Extractive economies and small- and large-scale migration

Extractive economic activity potentially relates to small- and large-scale migration of people. The most dramatic massive displacements of people occur as a result of violent conflict, genocide (such as in Syria and Myanmar) or large-scale natural disasters. Large-scale migration and suffering resulting from natural disasters, however, do not become a crisis where states and societies are able to cope with their sudden and often short-term consequences. Similar weather events that cause massive deaths and destruction in one place may have fewer negative effects in another (see [Chapter 5](#)). Thus, local capacities matter decisively for managing both man-made and natural disasters. In the case of violent conflict, those people forced to migrate across national boundaries automatically gain the international status of refugees and are protected by international conventions.

Of course, large, sudden displacement either internally or across an immediate border might, in fact, generate small-scale migration to more distant areas. However, refugee status grants special rights to victims of violent conflict and state repression, and refugees are governed by regimes that can deal with the modalities of arranging safety and repatriation when stability returns. The real issues arise with trickles of illegal migration, such as those currently occurring across the Mediterranean Sea and through Central America into the United States. These migrants are seen as ‘economic migrants’, who do not have a legal status for protection in receiver countries. These so-called ‘economic migrants’, however, might indeed be *de facto* displaced people for reasons both violent and non-violent, yet coerced, nevertheless. Consider that two million Venezuelans have fled to neighbouring countries in the past few years without active violence but simply because of economic need.

The most direct way in which extractive activity (for example, large-scale mining activities) causes displacement is through land grabs, environmental pollution, or communal and state-society conflicts over revenue questions raised by valuable resource extraction (Peluso and Watts, 2001; Ontiveros et al, 2018). High-value natural resources, such as gold, diamonds, coltan and other easily accessible minerals, are more prone to conflicts over rights, profits and organized smuggling (Le Billion, 2001; Lujala, 2010). Large-scale organized violence can happen where petroleum and gas extraction takes place – what some have called ‘petro-violence’ – often involving heavily armed groups and

Figure 3.4: The regional trend in the risk of civil war, 1946–2017

Note: Civil war data are taken from the Uppsala Data Conflict Program dataset. This defines armed conflict as a contested incompatibility between a state and an organized armed group where at least 25 battle-related deaths have occurred in a single year. These conflicts may or may not have foreign participation, such as troops from neighbouring countries or the international community. See Gleditsch et al (2002).

the state (Ibeanu, 1999; Peluso and Watts, 2001; Kaldor et al, 2007). Petroleum extraction, thus, is associated with large-scale violence that leads to civil war (Fearon and Laitin, 2003; de Soysa and Neumayer, 2007). These large conflicts are likely to be the most destructive in terms of the large-scale displacement of people, or uprooting. However, people are also likely to experience uprooting less dramatically as a result of failed governance in oil-wealthy countries. Thus, extractive economic activity, which under normal conditions should translate into ‘a blessing’ for society, ends up being a curse. Figure 3.4 examines the trends in armed conflict disaggregated by regions. If climate-related shortages should matter for how poor and vulnerable people organize costly violence, then drastic regional differences in the risk of armed violence should not exist, and the global pattern in conflict should, in general, be pointing upwards.

The global trend in the risk of armed conflict (even at very low levels) has steadily declined since the end of the Cold War, roughly around 1990. The differential trends over time by region, however, are revealing. Figure 3.4 shows how the risk of armed conflict in Latin America has declined dramatically since 1990 and the end of the Cold War. In other words, most of the governments of Latin America have monopolized the use of force effectively, so that by 2017 there was almost no country in civil war, after an all-time high in the mid-1980s.

This is not the case in Africa, despite a very recent decrease in the risk. It is unlikely that levels of poverty, inequality or exposure to natural resource scarcities have dramatically declined in Latin America and increased in Africa. The trend line for the Middle East and North Africa and Central Asia saw a dramatic shift upwards beginning with the 11 September 2001 terrorist attacks in the United States and the subsequent War on Terror. Indeed, the role of drought and natural resource scarcities in the ongoing conflict in Syria that began in 2011 remains a matter of heated debate (Selby et al, 2017).

At the heart of the scarcity versus abundance debate is whether or not grievances generate conflict, or whether the feasibility to engage in costly violence ultimately decides its occurrence.⁸ I argue, as many others do, that while grievances may exist about almost any facet of political and economic life, they are insufficient to generate large-scale, sustained violence without factors that make the organization of violence feasible. Grievances among ordinary people should not in general cause armed groups to willfully displace people (uprooting). When it comes to extractive resources, two main factors working in tandem explain feasibility: first, the availability of large finances for organizing war by opponents of a state, because they motivate and enable military organization; and second, the institutional capacity of the state's administrative and security sector resulting from predatory rule that weakens state–society relations. Naturally, violent conflicts are responsible for large-scale migration, but countries in such situations can also experience small-scale migration as a result of political and economic failure, which occasionally breaks down completely as we see currently occurring in Venezuela.

Looting, shooting and uprooting

Theories of civil war got an enormous lift when the World Bank's Development Economics Research Group headed by Paul Collier undertook research on civil war with an economic approach (Collier et al, 2003; Collier and Hoeffler, 2004). Hitherto, political scientists and sociologists had focused largely on grievance-based factors explained as ideological struggles between political groupings, or with heavy emphasis on neo-Marxist theories that saw civil war as class conflicts organized for the social emancipation of disadvantaged groups (relative deprivation). There was, however, poor empirical evidence for theories of relative deprivation (Tullock, 1971; Weede, 1989). Some of these theories were already challenged by others who argued that what mattered was not relative deprivation alone, but the ability of some

groups to mobilize adequate resources (Tilly, 1985). Collier and his team (2003) argued similarly that civil wars, because they were so costly, were not generated only because of grievances, but that these wars required, at a minimum, large amounts of financing to be generated. In other words, where civil wars are financially feasible, they occur, regardless of conditions that generate serious grievances, such as the lack of rights and social justice. These studies showed that the lack of democracy and other forms of relative deprivation, such as income inequality, were less significant for predicting conflict than factors that allowed the looting of resources for sustaining significant military organization. Where large payoffs to the organization are lacking, such as access to 'lootable' resources, civil war will be less likely since governments can monopolize the use of force.

The World Bank studies (Collier et al, 2003) show that countries with more extractive economic activity – measured as dependence on primary commodity exports – experience a higher risk of civil war outbreak. The explanation was simply that lootable resources, such as diamonds, oil, and valuable minerals, allowed rebels to finance war – for example, resources offered both the motive and the opportunity (feasibility) for rebelling even when the level of poverty was considered. Many of these rebellions, particularly those taking place in Sub-Saharan Africa (for example, in Sierra Leone, Liberia, the Democratic Republic of Congo, Côte d'Ivoire and the Niger Delta), can be characterized as conflicts where rebels and government forces forcibly displace people in order to extract high-value natural resources (such as diamonds or timber) for funding military and political activity. This also makes these wars more severe in terms of civilian casualties (Le Billon, 2001; Ross, 2004; Lujala, 2009).

Thus, looting conflicts are associated with uprooting people from their lands and places of origin to become internally displaced people or refugees because they are in the way of rebel interests. In many instances, uprooting is achieved very brutally because looting rebels want to be feared. Extractive conflicts and displacement can happen with or without the incidence of war and violence. This is particularly so when governments and large mining corporations are also involved in land grabs and mining-related pollution and environmental degradation, which affect the livelihoods of people. This can lead to small-scale migration. This form of quieter looting – without shooting – resulting in uprooting might be taking place without much notice, but is still worthy of attention by the international community (Oliver-Smith et al, 2009; Owen and Kemp, 2015).⁹ Further political ecology analyses can thus uncover the working of power that allows for

the exploitation of resources. In many cases, this might be coterminous with the exploitation and exclusion of an ethnic group that might be the rightful owner of such resources (Hunziker and Cederman, 2017).

Closer examination of how exactly extractive activity leads to conflict has yielded mixed results, with many arguing that the real culprit is oil, working through weak state institutions and predatory state formation (Fearon, 2005; Micheals and Lei, 2011). Oil wealth tends to dominate an economy because of the sheer quantities required by the world market and the relatively small number of producers (Ross, 2012). Oil extraction and marketing also tend to be dominantly in the hands of states, either in partnership with major oil companies or via national oil companies set up by the state. Thus, rulers of oil states enjoy a luxury of unearned income, which in turn tends to emasculate the development of state institutions around public goods provision and taxation (Jensen and Wantchekon, 2004). Strong states are made of taxation institutions that depend on the productivity of citizens, which in turn demand transparency, accountability and representation – for example, ‘no taxation without representation’ (Acemoglu and Robinson, 2012). Such features of unearned income also emasculate democracy because rulers of oil wealth can easily build systems of patronage that allow them to buy off opposition and delay reforms (Ross, 2001).

Indeed, oil wealth allows rulers the luxury of repression rather than making reforms because they placate key agents of support, such as the military, religious leaders and ethnic elites (Basedau and Lay, 2009; Albertsen and de Soysa, 2017). Extractive economies thus tend to lead to high levels of political repression, corruption, inequality and predatory governments. All of these factors can then cause small- or large-scale uprooting. Notice that the vast majority of people crossing the Mediterranean Sea are not fleeing violent conflict, but are economic refugees fleeing political repression and poverty. Neither are the people walking from Central America to the United States fleeing civil wars, which are now rare in Latin America (see Figure 3.4), but they seek economic opportunities because of repression, such as we have seen in oil-rich Venezuela in recent years (Cobb and Polanco, 2018). The next section examines how extractive economies spawn predatory governments that generate the economic push factors for migrants, sometimes a more forceful push than violent uprooting.

Extraction, predation, stagnation and exit

Equatorial Guinea and Venezuela currently exemplify economic stagnation and political failure due to predatory governments under

conditions of natural resource abundance. A large number of the almost 700 migrants recently rescued at sea, refused permission to land in Italy and Malta and then finally allowed entry into Spain, were in fact Guineans. Indeed, the Pew Research Center reports that 100,000 out of a total population of 1.3 million people live outside Equatorial Guinea (roughly eight per cent) despite the country's thriving oil industry (Pew Research Center, 2018). Venezuelans are fleeing in large numbers to neighbouring countries, such as Colombia (Cobb and Polanco, 2018). Why do resource-wealthy countries, whose natural resources should be a blessing, fail people so badly?

Economists recognized the paradox of natural resources and economic failure, namely the slowdown in economic growth, in the case of the Netherlands (Corden and Neary, 1982). After the Netherlands discovered natural gas in the 1970s, this formerly dynamic trading economy sporting relatively high growth rates began to slow down. The immediate economic effect of discovering 'unearned income' in a resource boom is to raise a country's real exchange rate relative to its trading partners, which affects the leading sectors of the economy. In the long run, high-tech, manufacturing and even agriculture sectors suffer (Auty, 2000). The resource economy thus also foregoes 'learning by doing' in the leading sectors, setting the country back in terms of competitiveness and growth (Sachs and Warner, 2001). This economic phenomenon came to be called the 'Dutch disease'. Subsequently, many others argued that the real problem was not from the immediate economic effects, which can be counteracted with appropriate adjustments, but in institutions, which determine the degree to which a state follows production-friendly policies over grabber-friendly policies (Mehlum et al, 2006).

The economic logic of extractive economies assumes that rulers of natural resources are unfamiliar with the technical fixes. They are seen as simply unwilling prisoners of their good fortune. Often, however, following sound economic policies that mitigate the harmful effects of the Dutch disease is bad politics, because good economic policies may unseat incumbent advantages. Sound economic policies may bring competition, from alternative sources of economic interests and power, or from new entrants. A more political logic suggests that rulers of resource wealth, who enjoy unearned resource streams, have both the luxury of following bad policy and the incentive to maintain themselves in office, so as not to lose their grip on future revenue streams (Acemoglu and Robinson, 2000). Good policies that promote transparency and competition could displace political elites. Predatory policies, therefore, become part of the strategy of political

survival, where markets are constrained by cronyism and predatory state policies, much of it designed for social control and expropriation. The logic of political survival suggests that a ruler with access to income from sources other than the productivity of citizens has an incentive to ignore the productivity of labour and industry (Smith, 2008). Such rulers thus also block entrepreneurial activity, thereby making sure that those monopolies that keep the ruler in power are well protected (Rajan and Zingales, 2003). Keeping the mass of people in a position of ‘prey’ (economically limited) also ensures few if any alternative economic bases from rising to challenge the main game in town – extraction. The result of these growth-negating, diversification-emasculating policies is economic stagnation for the many. In other words, bad policy is often purposeful, not mistaken (Bueno de Mesquita and Smith, 2011).

Indeed, while economic stagnation may lead at times to large-scale migration, as we have seen in recent times in countries such as Venezuela and Eritrea among others, it also leads to substantial trickles of people fleeing ‘stymied ambition’ (Meierrieks and Renner, 2017). The irony is that the conditions of stagnation are purely man-made in environments of economic plenty, particularly for the rulers. Many studies indeed report that one push factor is the lack of opportunities at home, so people emigrate from places with high economic repression to places where repression is limited and where entrepreneurial activity is encouraged.¹⁰ The lack of opportunities at home can also lead to the flight of human capital in the form of ‘brain drain’. The logic of political survival thus creates conditions for poverty and scarcity amid plenty, due to corruption by the powerful, which leads to out-migration (Dimant et al, 2013). Figure 3.5 displays the trend over time of the average level of economic freedom, which is often taken as a proxy for a sound, open, secure and inclusive economic policy environment, among both oil-producing states and non-oil-producing states.¹¹

As seen in Figure 3.5, oil-producing states seem to constantly underperform relative to non-oil-producing states. Interestingly, the oil producers briefly reached the levels of the non-oil-producing states only in the 1980s when oil prices globally were at record lows.

The economist Albert Hirschman, in a book entitled *Exit, Voice and Loyalty*, argued that markets remain efficient when consumers are able to reject products that are bad and show loyalty to those that are good (Hirschman, 1990). Markets remain efficient as long as people are able to give voice to choice. In political life, too, people are likely to voice their displeasure at bad policies, such as we have seen in terms of street demonstrations in Venezuela. However, states are likely to repress people who dissent openly in ways that threaten

Figure 3.5: Average economic freedom among oil-producing countries compared with the global average of economic freedom, 1975–2015



Source: Figure generated by author using the Fraser Institute's *Economic Freedom in the World* data (<https://www.fraserinstitute.org/studies/economic-freedom>) and the Ross-Mahdavy oil production data (see above).

incumbents, such as we have seen in Syria and countless other places. Since ordinary people have very large collective action problems, sustained voice for change under repressive conditions is not easy. Emigration, or exit, is a form of voice. But, unlike in markets, where consumers have the power to leave, in dictatorships, where people are not the taxable income, voice is likely to be met with violence. Voice is not going to prompt reform and one solution is to challenge the state by taking up arms. Unfortunately, violent opposition to predatory states, such as we have seen in Syria, takes on its own dynamics of suffering and flight.

Many states, particularly the small oil monarchies of the Persian Gulf region, have changed their political economies in the past few decades in ways that allow them to diversify away from their dependence on oil. These states are exceptions, but they exemplify the way out of the resource curse given political will, but more importantly, the realization that oil is running out. Many of these Gulf sheikdoms, such as Dubai and Bahrain, are liberalizing their economies. These states have opened up their economies to industry and encouraged entrepreneurial activity. However, there are limits to their success. These states are also net importers of migrant labourers, who according to most sources work

under highly exploitative conditions. While not everything is positive about these policies of temporary migration, the net effect on poor people who take these jobs at higher wages than they would receive in their much poorer home countries could be a positive thing in the long run. Countries such as Bahrain are now liberalizing their social policies, an effect also being felt in highly conservative states, such as Saudi Arabia. Apart from these kingdoms, however, few others are likely to emulate these policies, largely due to the logic of political survival.

Conclusion: what can be done?

As long as large wealth gaps exist between countries, the promise of a better life will always push people to emigrate. Of course, one does not have to think only about desperate people leaving least developed countries for more economically developed countries. In the past two decades, over 600,000 Irish people have left Ireland for elsewhere (Glynn, 2015). When those who are economically better off emigrate in search of greener pastures, the issue is never framed in terms of a crisis; these migrants do not have to cling to boats, nor do they need a ‘people smuggler’ as a travel agent. However, the point being made here is that where there is a strong possibility for improving the lot of the great many poor people in countries blessed with natural wealth, this wealth is going to waste rather than being utilized in ways that would alleviate poverty and generate real, sustainable development with the provision of public goods and improved governance (Wenar, 2016). The way out of the poverty emigration trap, therefore, is governance, where local and global actors can play a part in ensuring reform.

This chapter has argued that extractive activity can directly affect people simply because of land grabs, or negative externalities, such as pollution from extractive activity. To counter such instances, there are now very strict measures in place that aim to ensure that extractive industries supply social audits (Zadek, 1994). Many actors on the ground, such as civil society groups and non-governmental organizations, are aware of their rights and demand inclusion in decision making surrounding extractive activity. Many countries and companies, however, still find ways to get around such processes, but at least a process exists by which glaring violations of human rights and environmental standards can lead to legal action against powerful companies and states. Companies also fear global sanctions by consumers and other relevant bodies, such as certification authorities.

The biggest problem that is not that easily affected from outside, however, is the internal logics relating to governance under

resource-wealthy conditions. Access to unearned income allows rulers to survive challenges by spending without accountability. Such leaders are also able to buy repression because of the importance of oil. The impoverishing policies of these rulers are in many ways the ‘luxury’ of unearned income. Notice how many of the Persian Gulf States and North African states, such as Algeria and Morocco, remained untouched by the Arab Spring in terms of large-scale anti-state demonstrations and other acts of dissent; nor have any great reform movements appeared in any of the oil-rich Central Asian states. There is good evidence to suggest that non-violent challenges of states succeed more often than do violent uprisings. However, we do not hear about non-violent movements that do not succeed or never evolve where we would expect them to occur (Chenoweth and Stephan, 2011). Many entrepreneurial-minded people do leave these countries, particularly from Central Asian states, where political repression is generally high and economic opportunities low. In the case of extractive economies, non-violent movements are rare because the concentration of wealth is firmly in the hands of rulers who buy off dissent or repress it. Such rulers also earn large geopolitical rents because of the external support they receive from oil-dependent superpowers. In many ways, the inordinate power of these states stems from their control of valuable resources. This makes many of us who benefit from these resources flowing into our markets complicit in supporting corrupt regimes and party to the theft of natural resources that rightfully belong to all citizens of these countries (Wenar, 2016). While the international community has a direct stake in influencing these issues, oil-rich rulers are likely to get away with much impunity, as the brutal murder of the Saudi journalist, Jamal Khashoggi, illustrates.¹²

Several global initiatives, however, have indeed helped to stem the worst abuses. The blood diamonds initiative seems to have worked to a large extent to curb the worst forms of looting and uprooting that we have seen in cases such as Sierra Leone and Liberia (see [Chapter 11](#)). In both cases, even leaders of states, such as the former President of Liberia, Charles Taylor, were apprehended and tried for war crimes. The Extractive Industries Transparency Initiative, which builds capacity among the citizenry and government to increase transparency and reduce corruption in countries dependent on natural resources, is also working well on many levels, although much more needs to be done in the future (Alstine, 2017). Unfortunately, however, in countries with large quantities of extremely valuable energy resources, governments have gained powerful patrons who are likely to intervene on behalf of their clients to ensure stable

supplies of energy sources. Consider the case of Saudi Arabia's unilateral actions in Yemen¹³, which have largely been ignored by the international community because of the oil power of Saudi and the support it gets from major powers, particularly the United States. The stability that such processes create, however, are often short-lived and counterproductive and fuel socio-political and economic underdevelopment, which ultimately are the main sources of migration. Building viable economies and policies that allow people to thrive in their home country are ultimately deeply endogenous processes. If well understood, these processes would allow the international community to support concerted efforts of reformers to win against corrupt governments that want to remain in power. For great powers, this might also mean sacrificing short-term strategic gains for the longer-term gains of prosperity and peace.

Notes

- ¹ Concerns over terrorism and crime due to increased immigration, particularly in terms of the recent influx of refugees from Syria, seem to be exaggerated. For the German case, see Gehrsitz and Ungerer (2017).
- ² For excellent reviews of the 'natural resource curse,' see van der Ploeg (2011). See also Frankel (2012).
- ³ The Middle East, particularly the oil-rich Gulf region, hosts a large number of Western military bases. These countries are also the largest market for Western arms.
- ⁴ Food and crop production indices data are calculated based on the United Nations Food and Agriculture Organization's data for production volumes and world market prices. See the World Bank's World Development Indicators online database for a complete description, <https://databank.worldbank.org/data/reports.aspx> (last accessed 27 June 2018).
- ⁵ For a critical view of climate conflict research, see Buhaug (2010).
- ⁶ The PTS is one of the most widely used measures of violence against human rights based on Amnesty International country reports (Gibney and Dalton, 1996). Oil-producing data are taken from oil rents per gross domestic product on the World Development Indicators online database (<https://databank.worldbank.org/data/reports.aspx>).
- ⁷ The term 'paradox of plenty' is borrowed from Terry Lynn Karl's examination of oil booms and subsequent failure of governance and development, particularly in Venezuela. See Karl (1997).
- ⁸ For a comprehensive review of the various mechanisms from natural resources to conflict and the empirical evidence in support of these propositions, see Nillesen and Bulte (2014).
- ⁹ See the many works in political ecology in Peluso and Watts (2001). See also Ballentine and Sherman (2003).
- ¹⁰ See, for example, Rios and Crabtree (2008) and Meierrieks and Renner (2017).
- ¹¹ The Economic Freedom Index is taken from the Fraser Institute's Economic Freedom in the World dataset (chain index). See Gwartney et al (2011). The data can be downloaded at www.freetheworld.org.

- ¹² It is widely believed that the prominent Saudi journalist Jamal Khashoggi was murdered in the Saudi embassy in Istanbul by Saudi state agents.
- ¹³ The Saudi-led war against the Houthi rebels in Yemen has resulted in massive civilian casualties, both directly as a result of bombing and indirectly as a result of the lack of food and medicine.

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Climate Change, Conflicts and Migration

Lisa Thalheimer and Christian Webersik

Introduction

Developing countries are among the most vulnerable to climate change and seasonal inter-annual climate variability. Societies living in violence and conflict-affected areas are particularly vulnerable to the physical impacts of climate change – although the magnitude and intensity of these impacts vary across geographical and climatological region (Adger et al, 2014). According to the Food and Agriculture Organization (FAO) (2017), droughts have affected about 363 million people in Sub-Saharan Africa over the past 20 years – 203 million of these in East Africa alone.

In spite of manifold discussions in academic literature, there has yet not been full consent on the role of climate change on security issues, political fragility and armed conflict (for example, Buhaug, 2016; Abel et al, 2019). This chapter hypothesizes that climate change effects on dry extremes at the local level help sustain prolonged armed conflicts and disrupt traditional migration patterns. Climate and conflict-related population movements in the presence of renewable resource scarcity are highly interconnected and undifferentiated (see [Chapter 2](#)). The chapter addresses the multifaceted legitimacy of the climate conflict discourse with respect to political fragility, climatic variability, and the social dimension. By doing so, it investigates different drivers of conflict and fragility over time. It then analyzes the relation of changing actors in conflict, environmental disruptions and mixed migration.¹ The chapter adopts a political economy perspective in an embedded

case study to investigate, first, conflicts and second, migration in the context of climate change. It discusses how main actors' interests and power relations are linked to the ongoing conflict in Somalia. The conclusion asks for streamlined, flexible governance measures to address climate conflicts.

Study context

Located in East Africa, Somalia is the fifth poorest country in the world. In 2016, 51% of the population lived on less than US\$1.9 a day at 2011 purchasing power parity, according to World Bank data (2017). Exports constitute only 14 per cent of the gross domestic product (GDP); livestock trading with the Gulf of Aden presents the mainstay of the Somali economy, constituting 80 per cent of foreign exchange earnings. With over 65 per cent of rural people dependent on traditionally mobile agricultural and pastoralist² livelihood strategies, its population is vulnerable to droughts, residual flooding and the loss of pastureland.

Somalia's (semi-)arid climate provides marginal land resources for nomadic pastoralism. To cope with unpredictable local rainfall, seasonal mobility of humans and livestock within the country and across the borders of Ethiopia and Kenya is a common feature, as well as fully embedded in the Somali culture and economy. However, the capacity to absorb climatic shocks through the means of pastoralism is limited. Pastoralists may move to avoid natural and social hazards, or, as in the case of Somalia, pervasive insecurity and fragility due to armed conflict. Indeed, for several decades, Somalia has been one of the poorest countries globally, having experienced political instability and ongoing fragility because of complex, interrelated factors, including ethnic and socio-political tensions.

More recently, policy makers alongside the international community have discussed Somalia's wellbeing in the context of the Arab Spring³ and the 2006 formation of the Somali Islamic group al-Shabaab, predominantly active in the south of the country. The impact of local disruptive actors is of concern for Somalia's trajectory towards sustainable development. Since the toppling of the Barre regime in 1991, the Somali civil war, endemic climatological disasters and a humanitarian crisis have underpinned a dynamically changing political economy towards a fully embedded 'war economy', sustaining economic activities in situ.

Climate change is likely to exacerbate existing mobility limitations and conflicts over grazing land and other renewable resources in situ. Resulting impacts of climate change and conflicts, in tandem, could

lead to the disruption of formerly adaptive strategies of seasonal migration, altering traditional migration patterns.

The climate and conflict nexus: empirical insights

Conflict is both a process and an inherent feature of human interaction with a raft of expressions, stages, locations, arenas and effects (Galtung, 2008). But its emergence and evolution are always ‘the result of an individual context-specific mixture of interconnected factors’ (Schleussner et al, 2016: 9216). Often, the factors causing conflict in the first place are reshaped in its course. Those factors sustaining conflict are often distinct from the original causes. The review of the empirical evidence in the Intergovernmental Panel on Climate Change (IPCC) report in 2014 concluded that climate change can affect known drivers of violent conflict, such as unstable institutions, or loss in economic incomes due to droughts, yet sees little agreement on direct causal pathways or a strong relationship with armed conflict (Nordas and Gleditsch, 2007; Adger et al, 2014).

Climate change is a long-term shift in the earth’s weather patterns and average temperatures (IPCC, 2014). Theories on the climate and conflict nexus hypothesize that climate change will drive or exacerbate conflicts through, for example, pressure on renewable resources, disasters and climate change adaptation measures. An ongoing academic and policy debate has argued that climate change impacts will adversely affect poor people, threaten livelihoods, increase competition and intensify cleavages, reduce state capability and legitimacy, trigger poorly designed climate action with unintended consequences, and lead to mass movements that may aggravate impacts in receiving areas (Buhaug et al, 2008). Another argument is around the impacts of climate change. Temperature increases or changes in rainfall can lead to armed conflict (for example, Miguel et al, 2004; Burke et al, 2009; Hsiang et al, 2011). However, several studies have challenged this view, and this chapter follows this line of argument, that armed conflict rather weakens the capacity of public institutions, civil society organizations and the public to prepare, respond and adapt to climate change impacts on the magnitude and frequency of droughts and floods (for example, Buhaug, 2016; see also [Chapter 3](#) in this volume). In regions with protracted civil armed conflict, such as Syria, Somalia and Pakistan, the conflict itself has weakened and destroyed mechanisms to cope with natural hazards such as droughts and floods – hazards that can be linked to long-term anthropogenic climate change (for example, Kelley et al, 2015).

There is some agreement that existing patterns of conflict could be reinforced under climate change, for instance in already fragile regions or those with ethnic divides (Buhaug, 2016; Schleussner et al, 2016). Major security actors such as the United States Department of Defense (2014) and in recent years, intergovernmental organizations such as the United Nations (UN) (2018a), tend to frame climate change as a *threat multiplier* that can aggravate existing risks. Climate change impacts are considered as some of the explanatory variables of armed conflict, together with poor governance, bad neighbours, a history of conflict, income inequalities, youth unemployment, corruption and poverty, to name but a few other intervening factors (CNA, 2007). Nonetheless, the development and sustainability trajectory of the world has significant implications in how these risks evolve (Hegre et al, 2016).

Cross-case quantitative studies have argued that there are significant statistical correlations between climate change and violence or conflict (for example, Burke et al, 2015; Carleton et al, 2016; Mares and Moffett, 2016). They posit that, if future human responses to climate change remain unchanged, climate change has the potential to increase violence and conflict, while emphasizing that climate is probably neither the sole nor the most influential trigger and that not all climate impacts affect all forms of conflict. These large-scale quantitative works have come in for criticism, among other things on the definition of conflict, sample selection, statistical methods, and lack of explanation of causal mechanisms at work (for example, Buhaug, 2010, 2014; Buhaug et al, 2014; Selby, 2014). Observational data indicate a strong linkage between increases in temperature and civil war in Africa (for example, Burke et al, 2009; Hsiang et al, 2011), with economic factors accelerating the likelihood of civil conflict occurrence (for example, Collier and Hoeffler, 1998).

Other empirical work and quantitative analyses challenge these correlations (for example, Buhaug, 2010; O’Loughlin et al, 2012; Bergholt and Lujala, 2012; Bernauer et al, 2012; Slettebak 2012; Klomp and Bulte, 2013; Burrows and Kinney, 2016). These analyses argue that adaptation capacity, institutions and existing vulnerabilities mediate the effects of climate change on factors that may drive conflict, often with non-environmental factors playing a more important role in igniting conflict.

In other words, climate change is likely to undermine human security in some dimensions. Despite the role of climate change in conflict being researched for over 30 years (Brzoska and Fröhlich, 2016), research results are contested and remain inconclusive (for example Webersik,

2010; Adger et al, 2014). Some qualitative studies have examined the influence of environmental stress on specific conflicts, such as insurgencies in Assam in India (for example, Homer-Dixon, 2010; Burrows and Kinney, 2016). Explanatory factors of conflict change over time, highlighting the notion that conflict is highly dynamic and follows historical trajectories. Somalia is well suited as a case study because of the ongoing conflict and its many actors, which illustrates the dynamics of climate conflicts. In addition, external intervention and the geopolitical links of armed groups sustain violence and often play an important role in ending civil conflict.

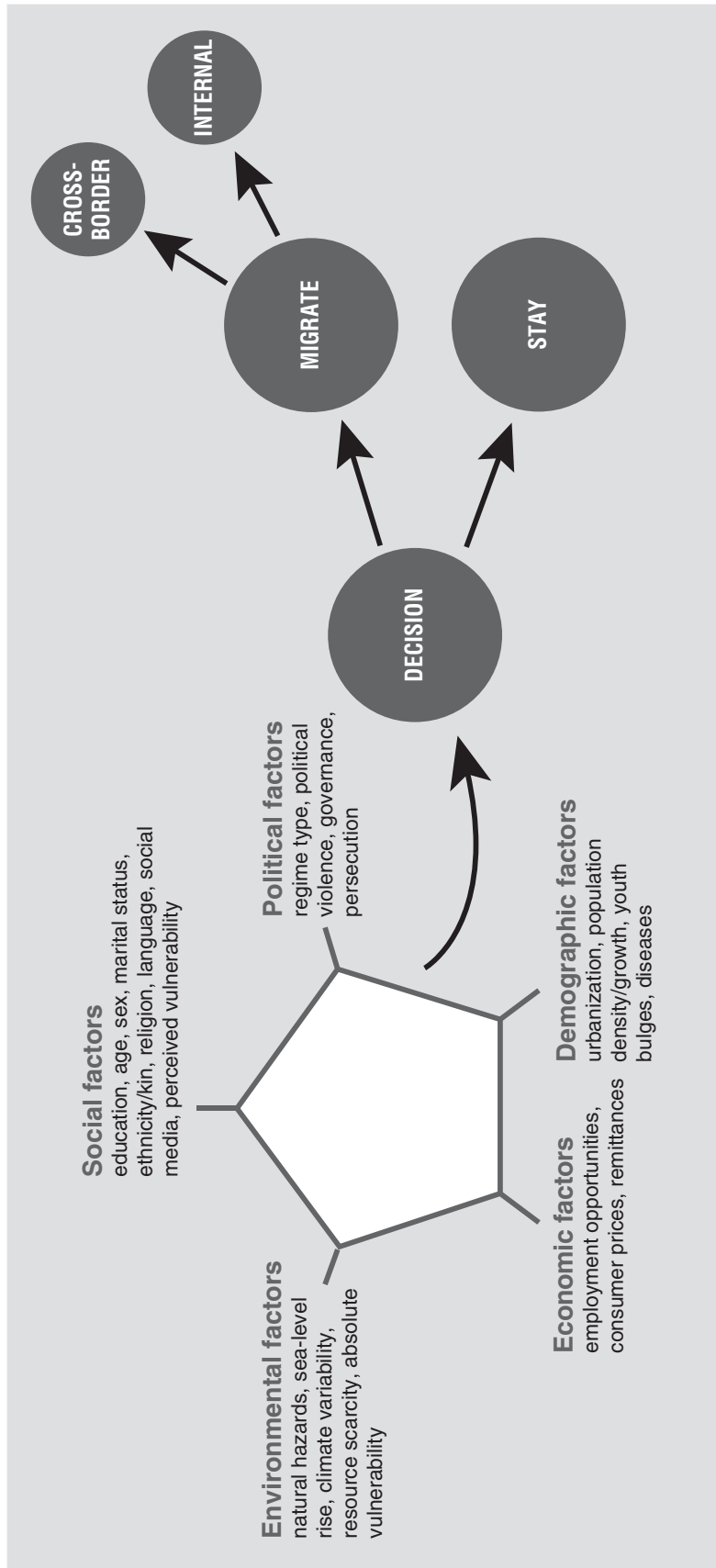
Climate and migration: nuances in and current state of research

The drivers of human mobility in the context of climate change are complex and interrelated. The Foresight Report (Black et al, 2011) conceptualized human mobility as a multi-causal phenomenon with several interacting political, demographic and socioeconomic dimensions influencing the decision-making process of migration. Several studies acknowledge the range and complexity of the interactions between variables in migration systems, whereas they seldom pinpoint conflict or environmental factors as the sole drivers of human mobility (for example, Beine and Jeusette, 2018). Bakewell and colleagues (2012) critically point out that literature has widely employed the terminus ‘migration system’. However, it lacks further conceptual refinement and theorization to disentangle various migration dynamics, such as environmental and climatological dynamics that influence migration systems.

Impacts of climatic variability on decisions to *voluntarily* migrate are multi-causal and interconnected with other, non-environmental factors (Figure 4.1) (see also Chapter 5). Existing environmental vulnerabilities, the exposure of assets, livelihoods, and lives determine the impact on a national and sub-national level (Black et al, 2011).

Extreme weather events, floods and droughts, in particular, can lead to people’s *involuntary* movements. Displacement remains largely internal and cross-border displacement is rather an exception. Recent climate-induced displacement events have stirred up feelings and perceptions of insecurity brought by migration. There is the fear of the ‘other’, paired with the perceptions that people from conflict-affected societies bring violence with them even to destination areas (see Chapter 10). Statistical evidence, however, contradicts this. This notion is no different with regard to (voluntary) migration-related decisions. Often, these

Figure 4.1: Environmental migration



Source: Adapted from Foresight Report (Black et al., 2011).

migration decisions are based on perceptions of relative economic deprivation, seemingly better-living conditions at the receiving end, rumours about national migration policies, or perceptions of people's own vulnerability (see [Chapter 6](#)).

We argue that perceptions and assessments of climate change impacts not only adjust and change over time but also differ in space and time and diverge among affected communities and those assessing and communicating the risk (the trained experts or policy makers). Local communities' perceptions shape their own vulnerabilities as they are embedded in the here and now, in other words, framed through 'topophilia' (here) and 'tempophilia' (now).

Somalia's political situation: background

Since the 1990s, Somalia has been marred by cycles of political instability and violent events, paired with a systematic expansion of violent groups. Myriad violent groups dominate the country – al-Shabaab being at the forefront of the disruptive actors. The UN recognizes the militant group al-Shabaab as the most immediate threat to Somalia's peace as well as the adverse effects from climate change, extreme weather events and ecological changes as drivers of fragility (UN, [2018b](#)). In fact, Somalia has been among the top four countries of the Fragile States Index several times between 2007 and 2018. Currently ranked as the second most fragile, the country is on a positive trajectory (Fund for Peace, [2018](#)). In 2017 alone, the Armed Conflict Location and Event Data Project (ACLED) ([2017](#)) reports 1,537 organized violent events.

Over the years, the proliferation of arms and weapons in Somalia has contributed to an increased propensity of rival clans using armed violence in any kind of dispute. Al-Shabaab contributes heavily to a highly insecure south-central Somalia and takes on the function of defending these clans, which are left marginalized and coerced. Locals experience travel restrictions through an efficient taxation system on roads and checkpoints run by al-Shabaab, leaving trapped those parts of the population that would otherwise migrate. In a scarce natural environment with frequent droughts, mobility has been traditionally used as a coping mechanism for pastoral communities, a dominant livelihood form in south-central Somalia. By and large, illegal activities finance clan militias and al-Shabaab. Conflict provides a convenient instrument for extorting high amounts of protection money for virtually all commercial activities (ACLED, [2017](#)).

A Balkanization-like structure of six governments characterizes Somali political dynamics; among these are the central Federal Government of Somalia (FGS), alongside the partially self-governing regional states of Somaliland, Puntland, Jubba and Baidoa, and several other non-state actors. However, some of these restrict population movements within government borders, thereby entrapping people. The topic of state creation has been contentious due to geographical and clan considerations and violent border disputes that have been common alongside state formation. Unrecognized by the international community, Somaliland declared its independence in May 1991. To date, Somaliland shows the greatest success as a breakaway state with a functioning government; its legal system recognizes internally displaced people (IDPs) originating outside of its borders as foreign refugees, even though they face discrimination by officials (Lewis, 2015).

In Somalia, all legal, social, economic and environmental, and security arrangements underlie the polycentric *xeer* system, a legal system that is more than 1,000 years old (for example, Webersik, 2008; United Kingdom: Home Office, 2017). Somali history shows a deep-rooted, chronic ambivalence towards a central Somali government, as the notion of state is contrary to Somali nomadic worldview (Menkhaus, 2014). Arid climate conditions paired with a harsh natural environment have formed the foundation for a unique dependence on clan groups for survival. Inter- and intra-clan conflicts over the country's scarce natural resources are an everyday affair. The Darod, Hawiye, Isaw, Dir, Rahanwayn and Digil form the six main clans. It is noteworthy to mention that clan distribution extends across political borders and allegiance supersedes loyalty to Islam, which supersedes loyalty to the Somali state. Allegiances are formed at different levels, ranging from sub- to sub-sub-clans, functioning like extended families with shifts adapting to necessities. Today, Somali cleavages between clans are stronger than ever (Webersik, 2010; Kapteijns, 2013); literature often further refers to clan cleansing in this context. Since the early 2010s, however, the formation of political elites has gained more momentum than ever. Characterized as clannish and corrupt, these groups follow their own interests with considerable ramifications for land usage and management treading the path to uncontrolled land degradation.

Somalis are caught in a system of competing claims over rapidly diminishing renewable land and natural resources. To access public goods such as health services, education or security, bribes or 'fees'

need to be paid. In fact, this has led to corruption becoming the norm on all political levels today. Power and resources are not centralized in contemporary Somalia but divided among powerful formal and informal actors. Islamist groups, the diaspora, the federal state administrations, the FGS and powerful clan militias all struggle for power and legitimacy. Whoever controls the ports, the aid delivery contracts, the import and export business and the numerous checkpoints is in a position to gain from this war economy. The business community has great leverage on political decisions, as political offices are seen as vehicles to accumulate personal wealth.

It appears that clan violence is a push factor for migration and clan allegiance a pull factor. In the context of IDPs, clan affiliation is a vital source of protection and a determinant for access to humanitarian aid and services. Where possible, displaced Somalis move to areas where they can enjoy the support and social acceptance of their own clan and clan family. Moving to an area outside a clan family's majority could mean exposure to serious security risks (Lindley, 2013).

Environmental conflict leading to economic and humanitarian crisis?

Population movements can occur as a result of extreme weather events, largely droughts and floods, with conflict in destination areas exacerbating the situation. Across Somalia, the United Nations High Commissioner for Refugees (UNHCR) estimates that 1.4 million additional people have been displaced internally as of October 2017 (FEWS NET, 2017). The country finds itself in the midst of a humanitarian crisis, facing deteriorating food security levels in the context of an ongoing drought. Sustained conflict and political fragility over the past two decades have left many people in the country vulnerable to the consecutive below-average seasonal rainfall (van Oldenborgh et al, 2017).

According to estimates of the FAO's Food Security Nutrition Analysis Unit, over 2.3 million people were in crisis state (IPC3) and 802,000 in emergency state (IPC4) in December 2017, totalling over 3.1 million people in need of urgent humanitarian assistance (OCHA, 2017). Although the number of IDPs eased off at the beginning of 2018, a significant percentage of the total population (2.7 million out of 12.4 million) is considered to be in crisis or emergency state (OCHA, 2018b). During 2017, the total number of people in crisis more than doubled in the short rain season (*Deyr*), compared with 2015 and 2016 figures (Table 4.1).

Table 4.1: Correlation between Somali seasonal climate and the humanitarian crisis between 2015 and 2017

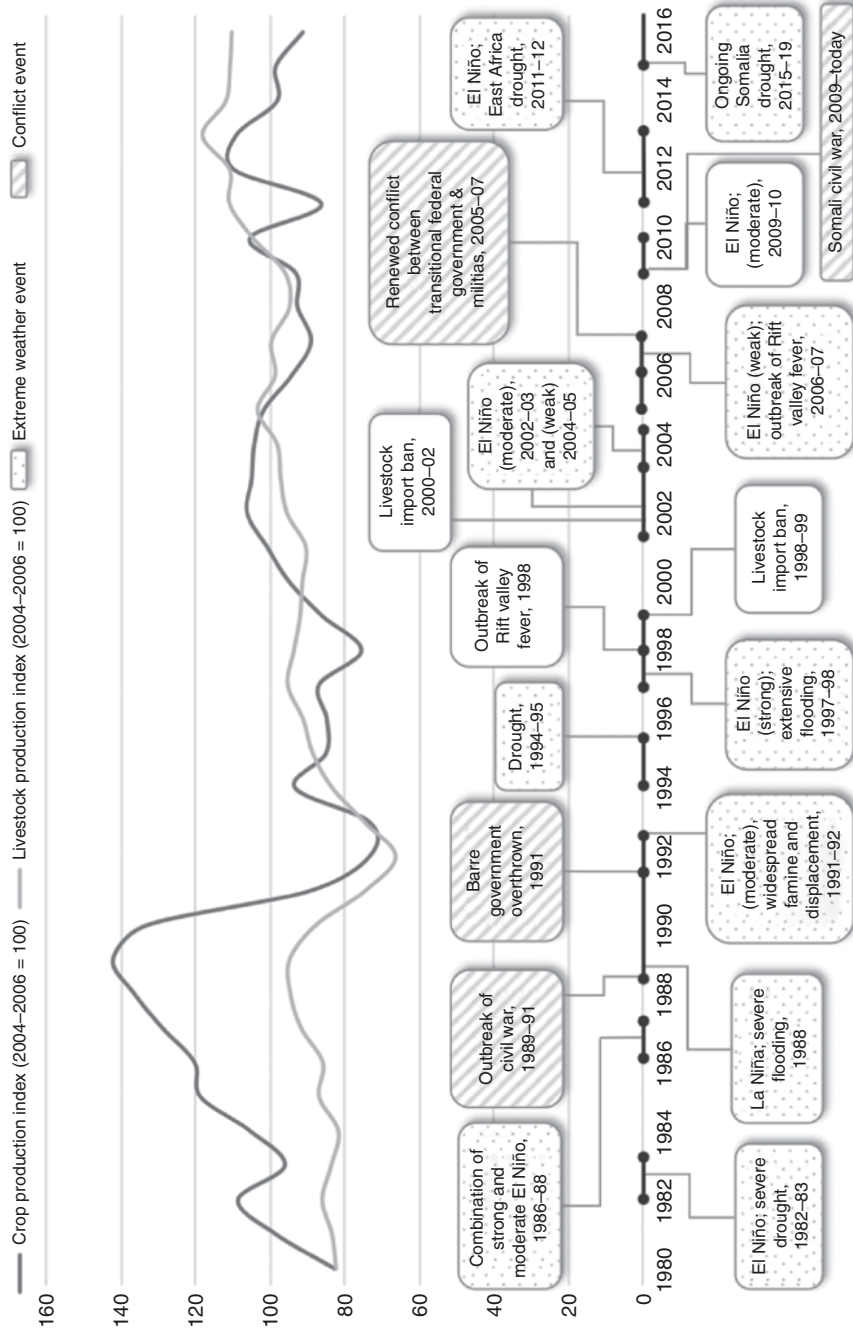
Season	Month	Description	Number of people in crisis (IPC3)
<i>Jilaal</i>	Dec/Jan–Mar	Driest season of the year	2,500,000 (2017)
<i>Gu</i>	Apr–May/Jun	Main rainy season	1,096,000 (2016) 2,341,000 (2017)
<i>Xagaa</i>	Jun/Jul–Sep	Second dry season	948,000 (2016) 2,444,000 (2017)
<i>Deyr</i>	Oct–Nov/Dec	Short rain season with high uncertainty of rainfall	931,000 (2015–16) 2,473,000 (2016–17)

Source: OCHA (2018a).

Typically, around 50 per cent of *Deyr* rainfall occurs in October, making it the key month of the rainy season. For the onset of the drought, historical rainfall data indicate that areas of no rainfall are mainly located in Somalia's heartland. North Puntland (Baria and the Dharoor block of the Al Medo Basin) experienced above-average rainfall levels. In October 2017, however, most areas received less than 50 per cent of normal rainfall, signifying a very poor, uncertain start to the rainy season. Most of Bakool, parts of the south, and areas along the Ethiopian border received erratically distributed, below-normal levels of rainfall.

Severe droughts are almost the norm for Somalia; the Centre for Research on the Epidemiology of Disasters (CRED, 2019) database counts nine droughts in a 30-year period from 1980. Three more droughts have occurred from 2010 to today. Illustrating the effects of extreme weather events and conflict on agricultural output, it becomes evident that climate shocks have a much smaller impact on crop and livestock production (Figure 4.2). The flooding at the end of the 1980s cut crop production drastically – slumping 50 points over the following three years after the flood event. The 1991 collapse of the dictatorial Barre regime appears to have contributed to the decrease in agricultural output. Somalia is still recovering from the 2011 East African drought. The resulting famine hit the areas around the Bay, Bakool and Lower Shabelle regions most severely and cost an estimated 258,000 lives (Checchi and Robinson, 2013). Crop production levels collapsed with the onset of the drought, but recovered soon in 2012. Anthropogenic climate change, together with the 2016/17 El Niño climate-warming cycle, was suspected to have contributed to the severe humanitarian impacts of ongoing drought. However, studies find only marginal effects of climate change on dry extremes in Somalia and

Figure 4.2: Timeline of major climate conflict shocks in the context of agricultural output



Source: World Bank livestock production index (2004-2006 = 100) and Crop production index (2004-2006 = 100) and Webersik (2010).

Somaliland in the *Deyr* rainy season (for example, van Oldenborgh, 2017). Overall, the effects of climate shocks appear to be rather insignificant for the overall economic activity. Climate-related shocks, droughts, and floods, in particular, worsen the security concerns of vulnerable populations – with a view to Somalia, notably those forced to travel further to collect food and water.

Traditionally, the Somali economy has its roots in livestock and crop production, which dominate the sector and form the backbone of economic performance. Value-added agriculture as a percentage of total gross domestic product was 65.5 per cent in 1990 and above 60 per cent in 2012, over 20 years later. Most Somalis rely on rainfall for their nomadic agriculture activities, with water being crucial for livestock and rain-fed, largely subsistence, agriculture. Since the 1960s, however, severe droughts have contributed to the unsustainable use of already limited water supplies. Given an overall trend in increases of climatic variability across Somalia and rainfall uncertainties during the rainy season, food security remains a major problem.

Somalia's nomads, in contrast to nomads in most other countries, connect to urban centres, politicians and government employees (Pham, 2011). Pastoralism is a highly respected profession. There are an estimated 2.4 million mainly crop-dependent agro-pastoralists and riverine people across Somalia (20 per cent of the total population).

In Somalia, harvest seasons are shaped as follows: the January to February *Deyr* harvest is paired with an off-harvest season from March to April, and the *Gu* harvest season from July to August is paired with a September to October off-season. The months of March to mid-May and September to mid-November mark the two main planting seasons just before the rain seasons start (Table 4.1). Crops grown include sorghum, millet, maize, groundnuts and sesame, as well as beans and vegetables, produced for both human consumption and animal fodder. Most of the country cannot support rain-fed agriculture, but some river valley areas in the south-central region host irrigated agriculture. Historically, the Shabelle and Juba River valleys in the south formed the breadbasket of Somalia. Over the past 100 years, nomads west of Hargeisa in the Togdeer region have turned into agro-pastoralists, cropping sorghum and maize (Lewis, 2003; Martin et al, 2014). The two crop-growing seasons coincide with the *Gu* and *Deyr* rainy season. The majority of these farmers also own livestock herds, tended by family members, which graze far afield but return in the dry season to the home wells. By the start of the drought in 2015, more than half of the northern territories' populations were pastoralists or agro-pastoralists.

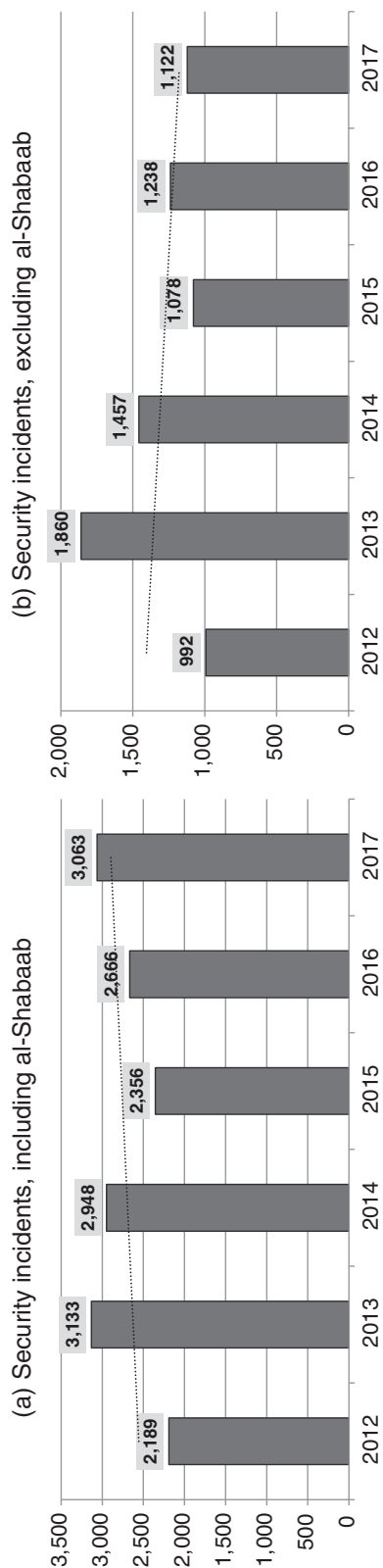
Somali pastoralists use circular migration⁴ as a traditional response to rainfall variability. In the absence of droughts, normal migration patterns coincide roughly with clan distribution and cross-political borders (Pham, 2011). Pastoralists' viability depends on their ability to migrate with their livestock to adequate pastures year-round. As the impacts of drought and conflict accumulate, pastoralists change their migration patterns, moving into unfamiliar, non-clan-family territories, often controlled by hostile clans. Sharing common resources among Somali rival clans becomes an exception to the norm, with conflict easily turning to violent acts. During the 2011 East Africa drought, there were abnormal migration patterns towards the west (FAO, 2011). As a result, competition for the already scarce pasture and water resources substantially increased. In Somalia, poverty and population growth contribute to extremely unsustainable land-management practices, which exacerbate the ongoing adverse effects of drought on land productivity, further deepening the state of fragility (Pape, 2017).

Disruptive actors: al-Shabaab and other actors of conflict

Somalia's political economy comprises an overlapping patchwork of formal domestic actors, informal domestic actors, formal external actors and informal external actors. Disruptive actors comprise militias, armed groups and regional forces, of vastly different capabilities and levels of effectiveness, and opposed by al-Shabaab to varying degrees (Webersik et al, 2018). A common denominator is the competing claims over rights and renewable resources between disruptive actors and formal actors such as the FGS and the regional federal states. Presently, the Somali National Army lacks the capability to effectively deal with al-Shabaab on its own and heavily relies on the African Union Mission in Somalia (AMISOM) peacekeeping force, which currently comprises 21,524 troops from six Troop Contributing Countries. A phased handover or 'draw down' from AMISOM to Somali forces is envisaged to build a capable, accountable, acceptable and affordable Somali-led security sector. A review by the UN (2018b) on troop levels resulted in a vote to reduce this number to 20,626 by March 2019.

The number of violent incidents perpetrated by all actors in Somalia has fluctuated since 2012 but remains high, and these incidents are manifold in nature. Over the same period, the number of related fatalities has shown an increasing trend. The number of recorded incidents peaked in mid-2013 and has since declined. Al-Shabaab contributes to almost half of the total number of incidents (Figure 4.3).

Figure 4.3: Trends in conflict events, 2012–17



Note: Based on ACLED data (2018). Incidences vary in intensity depending on the conflict party.

ACLED data (2018) show that despite some geographic shifts in conflict hotspots within Somalia's south-central areas, the majority of large-scale violence is concentrated around the region of Bandir, which includes the capital Mogadishu, and the neighbouring regions of Lower Juba and Lower Shabelle. Since 2016, Hiiraan, Middle Shabelle, Middle Juba and particularly Mudug have seen significant increases in conflict intensity.

Since 2015, AMISOM, together with the Somalia National Army, has operated major offensive missions against al-Shabaab. However, the group is – to date – in control of much of Somalia's south territory in the Juba Valley region, including the towns of Jilib, Jamame and Bu'ale. Al-Shabaab collects taxes from farms on agricultural products⁵ in the area, which accounts for a major source of its revenue. Both clan militias and al-Shabaab vie for control over the country's scarce natural resources, systematically taking control of aid ships from non-governmental organizations and the international aid community, and of ports, roads and natural capital (UN, 2017). The dynamics of conflict groups exacerbate land degradation and illegal charcoal exports rates (Bolognesi et al, 2015).

Conflict and displacement in recent years

The Protection and Return Monitoring Network (PRMN) project collects sub-national data on different drivers of internal displacement across Somalia (UNHCR, 2018a). Selected IDPs are interviewed about their departure point and the main reason for their displacement. The methodology allows for a rapid displacement analysis on monthly trends of recent years, but a major drawback is that it impedes a long-term time series analysis, for instance over the pre-civil war period. It does, however, allow for real-time displacement identification in the context of conflict and natural disaster drivers, covering all 18 regions in Somalia (UNHCR, 2018b).

Between 2016 and 2018, regional displacement occurred as a result of numerous conflict events and prevailing drought conditions. Looking at the geographical distribution of conflict, it appears that it is less of a driver of sudden, large-scale displacement, instead representing a constant element in displacement dynamics across the country (Figure 4.4).

In October 2016, the south experienced larger numbers of IDPs. Conflict-related displacement marks an outlier in the dataset. Drought conditions, on the other hand, seem to be much more of a driver of

Figure 4.4: Regional conflict-related displacement in destination regions between January 2016 and April 2018



Source: UNHCR (2018c).

both total numbers of internal displacement and regional short-time peaks in IDPs (Figure 4.5).

It is interesting to note the timing of conflict and drought-related displacement. For example, Banadir, a small region that includes the capital Mogadishu, received a large number of drought-related IDPs in March and April 2017. Only one month later, conflict-related displacement increased significantly, doubling in July 2017. Lagged dynamics of drought-related displacement turning into conflict-related displacement reoccur in the time March and April 2018.

Discussion and conclusion

This chapter provides a renewed, critical analysis of climate conflicts as a sub-category of environmental conflicts in the context of migration. It shows how political conflicts and those over renewable resources affect migration patterns in an embedded country case study, more specifically southern Somalia, to advance the understanding of the climate and conflict relationship, theoretically introduced in Chapter 1 of this volume. The Somalia case study exemplifies a country heavily dependent on its natural capital, and under stress from climate shocks, overexploitation of renewable resources, and a deficit of governance in the sector. We conclude with two core findings.

First, armed conflict in Somalia is dynamic and complex, shaped by the vested interests of powerful individuals acting independently of environmental and climate factors, benefitting from poor or absent formal governance structures. By contrast, competing non-state actors instrumentally use renewable resources for financial gains, in the presence and absence of slow and sudden onset disasters. Forced migration is an outcome of this fragility. Previously effective coping mechanisms of pastoral and farming communities have been destroyed by conflict, which confirms the hypothesis that at the local level armed conflict and poor governance reduce the capacity of society to cope with extreme weather, thus contributing to migration.

Second, climate-related and conflict-related migration are highly interconnected and therefore not differentiable with currently available empirical data. Temporal, spatial and causal changes in mobility itself shape climate conflict complexities.

These findings reinforce an argument of complex interrelations (see Chapter 1), with drought conditions appearing to become more frequent and greater in intensity as a result of climate change. The resulting humanitarian crisis sustains the prevailing conflict situation in situ, with vulnerable populations moving to conflict-prone areas,

Figure 4.5: Regional drought-related displacement in destination regions between January 2016 and April 2018



Source: UNHCR (2018c).

such as the riverine agricultural areas to the city of Mogadishu, where they become exposed to renewed violence and instability.

We conclude that the environmental drivers of conflict or migration cannot be disentangled from the economic, political, governmental or cultural drivers thereof. This fundamentally challenges a common assumption that ‘environmental migration’ constitutes a specific, discrete category of migration assuming a causal relationship. The establishment of such migration categories would distinguish between different migration motives and create different legal regimes and protection policies on the basis of the motive of migration, and do not hold against empirical realities. In the face of climate change, environmental, economic and political drivers will increasingly be tied together, influencing each other.

In the context of Somalia, pastoralism is a form of economic migration. This voluntary form of migration, together with large-scale involuntary displacement, has uprooted substantial parts of the society, distorting local economic and political institutions (see [Chapter 3](#)). Governance challenges remain as a result of asymmetric federal structures, weak central government capacity, and the dynamics of changing disruptive actors that form and maintain the Somali ‘war economy’. From a governance angle, change should involve moving towards improving the governance around natural and renewable resources, with the aim of reducing conflicts over pastureland and water rights and tackling land ownership.

Addressing climate conflicts should incorporate uncertainties in the mechanisms that catalyze conflicts; among others, cooperation mechanisms should prevent competition over rarefied natural resources. Under the influence of climate change, arable land, food and water resources are projected to become increasingly sparse. Governance mechanisms advocating for joint renewable resources management and the provision of public goods such as security will need to be reinforced to reinstate trust and cooperation at the local and national level (see [Chapter 2](#)). All this can assist in addressing migration at its source. In the context of disaster relief in Somalia, governance mechanisms should facilitate non-state actors in mobilizing funding from, for example, the Somali diaspora residing in the United States and elsewhere abroad, assuring that these reach the regions most affected by climatological disasters.

Notes

- ¹ The term ‘mixed migration’ is often used by governments and international organizations to refer to the complexity of migration motivations and streams, and their interrelatedness.
- ² Pastoralism refers to a livelihood strategy based on moving livestock to seasonal pastures primarily to convert grasses, forbs, tree leaves or crop residues into human food.

- ³ Originating from late-2010 anti-government protests in Tunisia, the term ‘Arab Spring’ refers to a series of protest events, civil unrest and uprisings which became violent over a short period of time across Arabic-speaking regions in North Africa and the Middle East.
- ⁴ Circular migration is a form of temporary and often repetitive movement of a migrant worker between home and host areas, usually related to the availability of labour.
- ⁵ In interviews conducted by the UN, it became evident that the group justifies taxation of agricultural production and livestock as *zakat*, a customary religious tax on wealth and property typically collected on an annual basis. The group’s efforts to collect *zakat* have become increasingly aggressive in terms of the quantity of goods confiscated, the frequency of collection and the coercive methods employed.

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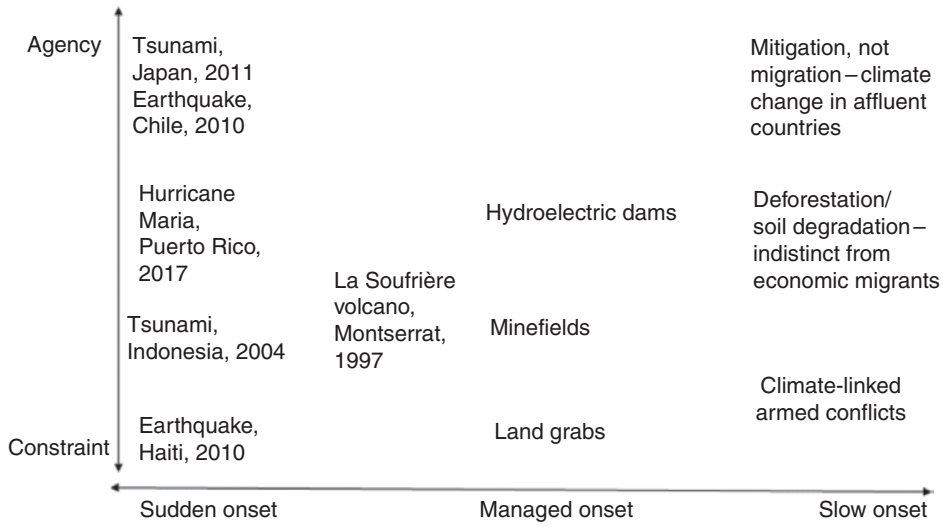
The Individual Level: Selection Effects

Diane C. Bates

Introduction

This chapter considers how environmental change is both a cause and an effect of human migration, with an emphasis on the former. Specifically, this chapter helps explain how environmental migrants are ‘selected’ at the individual and small-group level, but it is attentive to the fact that dislocated populations create conditions in destinations that aggravate existing social and environmental vulnerabilities, and consequently generate conditions for increased levels of human migration. In other words, environmental change and human migration are linked in a feedback loop, where environmental migrants may create conditions that generate more environmental migrants. It is somewhat arbitrary to determine where the causal chain begins; consequently, this chapter diverges from other chapters in categorizing migrants based on the type of environmental change that is the proximate cause of human migration (see, for example, Chapters 2 and 3). This is conceptually useful because the institutional responses to migrations, including the governance of these human migration flows, vary by whether these changes are based on disasters, planned destruction, or gradual degradation of environments.

The crux of determining how environmental change affects human migration involves two interrelated considerations: the type of environmental change and the level of control that migrants have over their own movement (see [Figure 5.1](#)). Environmental migrants include those who have a great deal of control over the timing and process of

Figure 5.1: Agency and pace of onset in migration caused by environmental change

relocation, as well as the choice of destination; other environmental migrants may have very little control over the process of relocation. In general, the more agency, or capacity to intentionally act, that an individual has in everyday life, the more agency he or she will exert over migration decisions, although this will be generally less for unplanned disruptions (‘disasters’) and greater for planned disruptions (‘managed onset’) or slow-onset degradation. Individual agency is determined by intersectional social positions that vary dramatically by local context, but some general patterns exist. Younger, relatively affluent, unencumbered, skilled workers who can draw on individual or group-held resources and social networks typically enjoy higher levels of agency in migration, and even when compelled by sudden, unplanned environmental change, they are often indistinguishable from other types of voluntary migrants. These migrants control more aspects of the relocation process, including when they relocate, how they relocate, and where they go. In contrast, more vulnerable populations – children, the elderly, the disabled, caretakers, the very poor, and socially isolated or disempowered groups – are less likely to migrate voluntarily, and often do so only when displaced by disaster or by compelled human relocation. Regardless of the type of environmental change, migrants’ agency varies considerably.

Agency in human migration reflects a set of characteristics at the place of origin and the place of destination, and the burdens associated with the physical change in location. These have historically been called push factors, pull factors, and transaction costs, although recent research has

decentred the individual in favour of households and social networks and their capacity to act vis-à-vis larger institutional structures and confirms that the causes of migration – and particularly environmental migration – are complex and interrelated (Hugo, 2013; Hunter et al, 2015; McLeman et al, 2016; Betts and Pilath, 2017; de Haas and Fransen, 2018). While these factors are analyzed separately for analytic purposes later in the chapter, in truth, prospective migrants usually consider all simultaneously when deciding to relocate. For example, the lack of economic opportunity in the place of origin is considered a push factor, while the availability of economic opportunity in the destination is a pull factor, and these opportunities must outweigh the expenses and dangers associated with the actual move. Environmental risk and degradation, whether sudden or gradual, will push people out of some locations, while environmental quality will pull people into others (see Chapters 2 and 4). Transaction costs vary by physical and social distance, whether the move involves international changes, how institutionalized migration streams are, and the quality of the migrant's social networks, as well as international policies that encourage some migrants and trap others (Carling, 2002; Foresight, 2011). How migrants calculate the relative benefits of remaining or migrating will also be affected by the difficulties incurred by leaving – and the higher the financial, social, emotional, and other costs of migration, the more likely people will choose to remain in place. These burdens are reflected in social power, with those with greater intersectional disadvantage more likely to experience higher relative transaction costs of migration.

Individuals and small groups are also subject to political institutional regimes that create and reinforce push and pull factors and raise or lower transaction costs. Historically, states are in part defined by their ability to control both emigration from and immigration to the geographic territory they control. At one extreme, political regimes can create new flows of environmental migrants by targeting disempowered minorities for expulsion from their land (see Chapter 3), such as with the Rohingya in Myanmar, or can exercise its internal power to control the direction of sudden-onset migratory flows, such as the resettlement of the nearly 50,000 residents of the city of Pripjat following the Chernobyl nuclear disaster. In such conditions, institutional regimes greatly reduce the agency of individuals and small groups in migration. Alternately, political regimes can adopt laissez-faire policies that decline to restrict human movement across borders or states can weaken and fail, limiting their institutional capacity to enforce policies regulating human movement, allowing individuals and small groups to express higher levels of agency. In between, governance structures can facilitate

or create barriers to migration, directly through migration management (see Chapters 7 and 9) and indirectly through environmental protection policies.

While it may be tempting to consider all environmental migration to result from push factors – namely that the place of origin becomes inhospitable to human habitation – few environmental changes genuinely appear out of nowhere, and people have highly developed risk calculations when determining where to live. Most people are aware of natural hazards and assets (and to a lesser degree, human and institutional hazards and assets) in their own environments and will factor environmental risks and opportunities into their migration decision well before an individual move occurs. Emergency preparedness, conservation and environmental mitigation are essential governance responsibilities in contemporary risk societies, although the ability of societies to devote public resources to risk mitigation enhances or curtails the agency that individuals within that society have to enact their own migration decisions. In these ways, environmental protection policy is in part designed to prevent human migration, but environmental quality can also then come to attract people living in riskier or less desirable environments.

Environmental disruptions vary in their level of impact on human communities, partly because of the natural variation in severity, and partly because of the social organization of the people affected by the disruption. Resources that make it possible for people to stay in their homes when faced with environmental disruption include a variety of assets, such as mitigation technologies, economic reserves, and the resilience of social fabric and social institutions. High levels of social conflict, inequality and poverty lessen the ability of people to prevent disruptions or recover in place and frequently combine with environmental disruptions to hasten out-migration. Conceptually, the relationship between human migration and environmental changes varies by type of environmental change, specifically, if the disruption results from disasters, managed destruction, or gradual depletion.

Migration caused by sudden-onset environmental changes (disasters)

While the term is somewhat inadequate, a common type of environmental disruption is a disaster, an acute and unplanned change in the local environment, which renders it unsuitable for human habitation in the short or long term. The United Nations Environment Programme (UNEP) and Office for the Coordination

of Humanitarian Affairs (OCHA) formed a joint Environmental Unit in 1993 specifically to respond to ‘environmental emergencies’: ‘the sudden onset of a disaster or an accident as a result of natural, technological or human-induced factors that cause – or threaten to cause – severe environmental damage’ (UNEP/OCHA, 2009: 8). Acute disruptions in the environment that cause unplanned human migration constitute disasters; these usually produce short-term refugees from a geographically limited area, usually within national boundaries. These disruptions include both natural and technological disasters that occur in a discrete ‘sudden-onset’ event that can divide social activity (including migration) into clear temporal order: before the disaster, during the disaster, and after the disaster. Migrations caused by disasters are the most visible in the study of environmental migrants, with institutionalized national and international support for disaster victims, through such organizations as the International Red Cross Red Crescent Movement and *Médecins Sans Frontières*. The working assumption for most disasters is that migration will not be permanent following a disaster. Thus, for individuals to return to the site of disaster, it must return to a state in which residents feel safe enough that they will not seek to permanently relocate. In 2016, the Internal Displacement Monitoring Centre (IDMC) recorded 24.2 million new displacements caused by natural disasters (IDMC, 2017: 10), although it estimates that only about one third of displaced people cross international borders (IDMC, 2017: 25). The same report indicates that there has been an average of 25.3 million annual displacements from ‘sudden-onset natural hazards’ since 2008 (IDMC, 2017: 31).

While analytically neat, disasters belie a more complex migration pattern that reflects the ability of individuals to calculate push and pull factors, as well as transaction costs and institutional capacities. Anticipatory migration that occurs before the disaster, such as in the path of a hurricane, can be deliberately shaped into temporary evacuations by building resilient social and physical infrastructures that bounce back after acute disruptions. In the absence of such resilience, some individuals will permanently leave risk-prone areas, although they would be functionally indistinguishable from other migrants, and environmental concerns would likely be one of many, possibly interrelated, reasons that a migrant decides to leave. As a consequence, anticipatory migrants are more affected by pull factors, especially economic opportunities, than by a direct push, and are thus more likely to be younger and in possession of skills valued at the destination. They also must be able to bear the costs of migration themselves, so these migrants are differentially single and relatively affluent. In rare

situations, and generally only in advanced economies, anticipatory environmental migration can be incentivized by public funds, such as the Blue Acres buyouts for floodplains in the United States (US), but these programmes are very expensive and not widespread even within the US.

Once a disaster is imminent or occurs, migrants often have less ability to control their migration decisions. These migrations often occur as emergency evacuations; a much larger segment of the population living in affected geographic areas will relocate, including many who have limited control over the process, reflecting variations in level of agency prior to the disaster. More affluent evacuees are able to activate both financial resources and social networks to navigate the dislocation (Elliot et al, 2010), while institutional actors will often take over decision making for disadvantaged groups and individuals. Evacuations are particularly difficult for vulnerable populations, leading to an increase in indirect deaths, particularly among sick and elderly people, even within fairly affluent societies. For example, after the Japanese earthquake and tsunami of 2011, 'health problems brought on or worsened by prolonged displacement, especially among older people, caused more deaths than the direct impacts of the earthquake, such as collapsing buildings' (IDMC, 2017: 32).

Even so, evacuations do not usually cause permanent relocation. Once the disaster and immediate recovery period have ended, repopulation occurs as people return to damaged areas. At the same time, if future risks are not perceived to be addressed, long-term, permanent out-migration will occur as people re-evaluate the risk of remaining in an environmentally and socially disrupted and degraded place, even if they had no intention to migrate before the disaster. As with anticipatory migrants, people who decide to relocate after experiencing a disaster are displaced by the disaster, but their longer-term decision to relocate can be influenced by pull factors. For example, the Centre for Puerto Rican Studies (CPRS) at Hunter College in New York calls the migration of Puerto Ricans from the island six months after the landfall of Hurricane Maria in September 2017 a 'massive exodus', using American Community Survey data to estimate that 135,000 people relocated to the mainland US (CPRS, 2018: 4). While thousands of post-Maria migrants have settled in parts of the US with historic Puerto Rican communities, such as New York and Philadelphia, they have significantly redirected migration to Central Florida, where between 35,000 and 50,000 migrants are estimated to have resettled (Brinkmann, 2018). This redirection indicates that migrants are not entirely relying on existing social networks in the

northeast of the country but are able to manifest a preference in their destination; a University of Central Florida professor explained in the local media: ‘Those who were thinking about resettling in Florida accelerated their departure’ (cited in Brinkmann, 2018). In contrast, Haitian migration from 2011–15 (following the 2010 earthquake) has primarily gone to the Miami and New York metropolitan areas (41 percent and 32 per cent respectively), both home to historic Haitian communities, while less than 8 per cent went to the rapidly growing Central Florida metropolitan areas of Orlando (6 per cent) and Tampa (1 per cent) (Schulz and Batalova, 2017).

The degree and duration of dislocation varies considerably based on the resources of the affected population and the capacity of the local governmental and non-governmental organizations. Not surprisingly, nations with stronger domestic economies, less social and economic inequality, better organized governments and better disaster preparation (including higher quality construction) are better able to internally assist displaced people, as a brief comparison between the 2010 earthquakes in Haiti and Chile demonstrates. On 12 January, an earthquake registering 7.0 on the Richter scale struck ten miles southwest of Port-au-Prince, eventually causing more than 220,000 deaths and displacing an estimated 1.2 million Haitians. Nearly ten months later, and despite millions of dollars from international aid sources, the United States Agency for International Development (USAID) reported that 49 per cent of structures in earthquake-affected areas remained unsafe for habitation (USAID, 2010b: 1). In contrast, about a month later, on 27 February, a much larger, 8.8 magnitude earthquake struck just off the Chilean coast, roughly 200 miles southwest of the capital of Santiago and near the port city of Concepción. The United States Geological Survey (USGS) reported only 523 deaths and 800,000 displaced people stemming from the quake and related tsunami (USGS, 2010). While many of the differences between the two quakes stem from the proximity of the smaller quake to the larger population centres in Haiti, the ability of the Chilean government and established non-governmental organizations (such as Un Techo Para Chile [2010, 8], which had built over 20,000 homes in the affected region within three months) underscores that vulnerability of displacement by disasters is less a result of the scale of the disaster than a function of the social systems that those disasters affect.

Formal international political regimes also affect how domestic governments respond to disaster. For example, in July 1995, the La Soufrière volcano began to erupt in Montserrat, a self-governing overseas territory of the United Kingdom (UK) and member of the

Caribbean Community (CARICOM). The British Department for International Development's (DID) evaluation of governmental response notes that prior to the eruption, Montserrat was a 'country of emigration', as a result of its relatively weak economy (Clay et al, 1999). When the eruption began, an unknown number of Montserratians left the island, tapping into pre-existing migration networks (including kin and employment networks). Early residents who were forced to leave their homes because of the eruptions relocated off-island at their own expense or received limited assistance from the Montserratian government. A year later, in April 1996, continuing eruptions led to the evacuation of most of the southern portion of the island, including the capital of Plymouth. The Montserratian government re-established itself on the northern end of the island and attempted to provide shelter and assistance to other evacuees. The British government implemented the Voluntary Evacuation Scheme for Montserratians migrating at their own expense, which loosened restrictions to the UK and allowed evacuees access to the British welfare system. Virtually all economic activity on the island ceased, as residents crowded into temporary shelters in the north end of the island and relied principally on British aid for sustenance. In June 1997, pyroclastic flows emanating from the eruptions spread north, killing 19 people. Subsequently, the UK began to offer relocation assistance to those Montserratians who could not afford their own passage and additional resettlement aid. The policy changes led to the eventual relocation of over 60% of the pre-eruption population, mainly to the UK and other CARICOM nations, especially Antigua, where most evacuees rely on some form of public assistance, either directly from the UK or through additional aid granted by the UK to CARICOM states that received Montserratians. Despite this outcome, this case highlights the direct advantages of its relationship with the UK and CARICOM.

Not all disasters fall neatly into the categories of 'natural' or 'technological' but reflect a combination of human and natural causes. Jacobson (1988: 16) refers to these as unnatural disasters: 'normal events whose effects are exacerbated by human activities'. An illustrative example comes from Nicaragua in a coffee-producing community in the Department of Matagalpa. Settled as part of the land reform process during the first Sandinista government in the 1980s, this community relied entirely on two wells near the turn-off to the community from the main road. Already distant from the centre of the community and downhill from all but a couple of households, the wells were inconvenient to most residents. Conflict with a neighbouring large landowner threatened to permanently close the road access to town,

further peripheralizing the wells. To rectify this situation, residents negotiated with great difficulty (and with the intervention of the government) to locate a large rainwater collection tank on a nearby hilltop owned by another large landowner. Just as the pipework was completed, heavy rainfall caused by Hurricane Mitch in 1998 washed away the pipes and foundation for the cistern. The community lacked the funds to replace the pipes and the current local government declined to assist. Considering these circumstances, and despite careful erosion control in the agricultural fields that protected their commercial and food crops, several families have since chosen to sell their land and relocate.

Rather than providing security, migration caused by environmental disasters may increase vulnerability in new destinations. For example, following the 2004 earthquake and tsunami in Indonesian Sumatra, a survey of over 20,000 residents in the affected area found that people from disadvantaged households (poor, female-headed, and with lower levels of education) were significantly more likely to have relocated into an emergency camp rather than into a private home (Gray et al, 2014). Camps have long been suspected of creating or aggravating social and environmental problems for host populations – a 1998 UNHCR report starts with the premise: ‘Ample evidence exists to demonstrate that large-scale dislocation of people, characteristic of many recent refugee crises creates adverse environmental impacts’ (UNHCR, 1998: 3). More systematic analysis, such as a mixed-methods study of two East African refugee camps in 2016, found that the impact of new migrants was less than expected due to the fact that the camps were located in places that are already degraded and/or environmentally vulnerable before the arrival of new migrants (Martin et al, 2017; see also [Chapter 10](#) of this volume). Whether new migrants *create* new environmental vulnerability to disasters thus may be less important than the post-disaster increase in the number and concentration of people in an already precarious environment, as well as the likelihood that the people in those situations often have the least amount of agency when faced with future disasters.

Migration caused by managed-onset environmental changes (destruction)

Migration stemming from environmental change may also result from planned human activities, such as the creation of a hydroelectric dam or the deliberate expulsion of human populations to allow for a new environmental use (as opposed to expulsion for other reasons, such

as ethnic or political cleansing). Planned relocations may also occur through environmental warfare, such as the creation of minefields or defoliation. Although control over the process is best considered on a continuum, generally people who migrate under these circumstances have limited capacity to control their migration decisions or are encouraged (or ‘coerced’, following Peluso, 1993; see also [Chapter 3](#) of this volume) to make certain migration decisions, sometimes to receive benefits as part of relocation plans. Individual migrants and social groups with greater levels of agency are often able to make more advantageous, anticipatory migration decisions before planned relocations occur, while those with lower levels of agency are often the last to move, have fewer opportunities to make decisions about where and how they relocate, and are the most reliant on institutional resources (compare Randell, 2016). They are thus more subject to coercive institutions, and less able to mount resistance to overt conflict. It should be noted, however, that individual attributes are often secondary to social group membership when decisions about planned relocations are made – and in most cases, the decision to relocate human populations is made by a more powerful social group.

People forced to leave their residences as land is appropriated for the ‘development’ of resources constitute the first sub-type of environmental destruction migrants. In some cases, the compulsion to abandon homes is moderated by compensation from the government or other agency. However, displaced populations are rarely granted adequate compensation and may face a variety of incommensurable losses, including the destruction of social ties, informal support networks and meaningful cultural resources. The archetypical example of involuntary migration linked to development occurs when areas are flooded for the construction of hydroelectric dams, such as the Three Gorges Dam in China, which reportedly displaced more than one million people. But displacement by development continues to occur on smaller scales, such as when the government buys out residents in a proposed nature park or invokes eminent domain to construct public works projects. The number of large-scale displacements may drop in the future, particularly as most areas with hydroelectric potential have already been developed; the exception here may be in the Brazilian Amazon, where projects like the proposed Belo Monte Dam on the Xingu River may expel between 20,000 and 40,000 mainly indigenous people from traditional lands (Electrobrás estimates, cited in Randell, 2016: 548; IADB, 1998). Even so, displacement has been a major feature of development schemes in the modern era. For example, the Inter-American Development Bank

(IADB) prepared a working paper on resettlement (IADB, 1998) that detailed the types of project that produce involuntary migration (IADB, 1998). As of December 1997, 75 bank projects had caused, were in the process of causing, or were planned to the resettlement of over 650,000 people; the bank had no information at all regarding resettlement for a further 45 projects and therefore estimates that the number of people involuntarily resettled as a consequence of bank-funded projects is actually ‘much higher’ (IADB, 1998: 15). An initial trend identified by the IADB was a movement away from large ‘hydroelectric schemes’ towards urban infrastructure projects; the former displaced large numbers of people from a single pre-determined geographic region, while the latter produces involuntary resettlement that affects smaller numbers of people but is more difficult to determine at the outset of the project (IADB, 1998: 16–17). In either case, the people most likely to be displaced tend to be poor and disempowered (IADB, 1998: 18). In only five of the 23 completed projects where the impact of resettlement was documented was the outcome described as satisfactory, with the living conditions of those displaced being restored or improved. In the remaining 18 projects, the impact on the affected population has been reported as negative, with long-term outcomes that included downward social mobility and the collapse of the communities’ socioeconomic networks (IADB, 1998: 20). The result is that development projects like these are likely to continue to cause environmental migration in the present and future, although those displaced will be more difficult to identify, as they are coming from smaller projects in urban areas already characterized by population instability, informal economies and unregulated housing.

A distinct type of managed environmental migration occurs during warfare. Ecocide is the wanton destruction of human environments as a means of achieving strategic, war-related ends. The most cited case of environmental refugees from ecocidal destruction of the environment is the massive displacement of rural Vietnamese following the use of defoliants by the US in the 1960s and 1970s. The application of biocides such as Agent Orange destroyed Vietnamese crops and forest resources and compelled rural people to migrate to cities to survive. Another major example of ecocide involves the placement of land mines. Warring parties – governmental and otherwise – use land mines to undermine agricultural production and force the rural population from their land and into cities or refugee camps. The International Campaign to Ban Landmines (ICBL) estimates that 61 countries still had active mine ‘contamination’ as of the end of 2016, with at least

ten countries having more than 100 square kilometres of minefields each (ICBL, 2017: 33). Efforts to clear minefields have made progress in some countries, especially in Europe and Latin America, but many countries in Africa and Asia remain at risk and new minefields have been noted as late as 2017 in 19 countries, almost all in Africa or Asia (Afghanistan, Cameroon, Chad, India, Iran, Iraq, Libya, Mali, Myanmar, Niger, Nigeria, North Korea, Pakistan, Philippines, Saudi Arabia, Syria, Tunisia, Ukraine, and Yemen) (ICBL, 2017: 32). Migrants leaving areas with minefields are not usually considered environmental migrants. However, ecocide must be considered another driver of environmental migration, often involving vulnerable non-combatants who are nonetheless forced to abandon their homes due to deliberate environmental modifications.

The role of political institutions is paramount in migration caused by managed displacement. The restriction of access of some to land or key resources while allowing others to benefit is inherently a political decision and reflects differential social and institutional power. Predictably, the level of agency of involuntary migrants varies by the relative social power of the group targeted for relocation. In places where liberal rights are central to governance, involuntary migrants should have greater ability to negotiate the terms of their resettlement, including individual and group compensation, as well as destination. These rights are reflected in much of the formal global financial regime for development projects, as evidenced by the World Bank's *Involuntary Resettlement Sourcebook* (IBRD, 2004) and *Handbook for Preparing a Resettlement Action Plan* (IFC, 2002). On the other hand, in weak and failing states and among less democratic regimes, forced relocations may occur without any consultation or compensation, and migrants are forced and/or coerced into socially and environmentally inferior institutional solutions or left to fend for themselves. Alternately, in less democratic contexts, populations may become 'trapped' in environmentally vulnerable locations, unable to exercise agency to relocate (Foresight, 2011). Additionally, Krieger and Meierrieks (2016) found in a cross-national study of 'land-grabs' that forced displacement increases local, often ethnic tensions, particularly in undemocratic states, potentially leading to *additional* displacement as inter-group tensions escalate. In sum, agency for migrants facing a managed change in land use or access to resources is essentially a function of that group's level of political power; the more inclusive and democratic the system of governance is, the greater chance that migrants will have to control the process of migration.

Migration caused by slow-onset environmental changes (degradation)

The final conceptual category of migration caused by environmental change involves people who respond to gradual changes to their environment, such that there is no direct compulsion to move from a specific location at a specific time. People who move under these circumstances are virtually indistinguishable from other types of economic migrants, particularly since the change in the environment to which migrants respond is usually linked to livelihood. Most people interact principally with their environment as either a place to live or a place to work, and people tend to live near where they work, across time and space. For example, in the Greek National Statistical Office's 2011 survey of international migrants, the most commonly cited reasons for migration were work (58 per cent), family (34 per cent), and education (6 per cent) (Minnesota Population Center, 2018), with the latter two categories reflecting where family members have found work and formal preparation for work. For an environmental migrant, something in their home situation changes to make it less attractive to remain than it is to overcome the transaction costs of migration. Even so, there is variation in the level of agency that individuals and social groups have in terms of the pull of migration destinations, the push of undesirable environmental change, and the absorption of transaction costs, including governance-based barriers to immigration and emigration.

Gradual degradation of the environment, including climate change, is projected to produce the largest number of environmental migrants, in no small part because degradation may be explicitly linked to past and future disasters and conflict over land use that results in displacement (destruction). The gradual degradation of the environment, either through pollution or depletion, renders an environment less suitable for continued habitation (see [Chapter 2](#)). Individuals, households and communities faced with a degrading environment generally have a fair amount of control over migration decisions and include environmental change as one among many reasons to migrate, and therefore, rarely define themselves or are defined by others as environmental migrants *per se*. On the contrary, migrants who leave degrading environments are typically classified as economic migrants (or in extreme cases, economic refugees). In fact, there may be little reason to suggest that people who leave gradually degrading environments are qualitatively different from other types of economic migrants.

Thus, patterns found in economic migration also apply to people leaving a degraded environment. To a great extent, migration reflects uneven labour markets, both inside countries and within a global labour market. The predominant patterns of migration streams are from rural to urban areas, from domestic secondary to primary cities, and towards higher-waged international labour markets with regional, historic ties (often colonial to Europe and within former European empires). For example, people leaving Anglophone Caribbean often migrate within the CARICOM states, or to Canada or the UK rather than the US (Olwig, 2007). The value of labour in degrading rural areas cannot compete with that in areas of labor scarcity; as one young migrant from rural Ecuador explained to me: “I can make in an hour [in the US] what I make in a day [in Ecuador]”. Degraded land, low and unstable prices for agricultural commodities, and landlessness make rural areas less attractive to young workers, particularly when exposed to national and international culture via spreading information technology. Even young people raised in rural areas and those with a preference for rural lifestyles recognize the futility of upward mobility in degrading rural areas, and with both trepidation and a sense of adventure, they leave rural areas for cities, larger cities and international destinations (compare Calvo-Solano et al, 2018).

While most of these migrants follow established migration networks, others follow much more chaotic patterns. That is, the development of migration networks reveals random or unpredictable initial conditions, often dependent on the luck and caprice of early, pioneering migrants. Successful pioneers encourage others from their places of origin to follow them and establish daughter communities in places of destination (see Chapter 6). As more migrants follow and join the daughter communities, goods, services and institutions that facilitate both the process of migration and the process of settlement develop. Migration becomes institutionalized and transaction costs associated with migration drop. In this way, migration becomes easier for less flexible migrants, such as women, children and complete families. Institutionalized migration streams are more governable, although governance may be exploitative or participatory.

Finally, although migrants (and especially migrants early in a new, international network) tend to be young men travelling independently, most are embedded in social networks that both make migration possible and require the migrant to channel resources back into the sending community. Early migration theory focused on the rational decision making of individual migrants, but more detailed and sophisticated studies of migration have repeatedly demonstrated that migrants rely

heavily on social networks in sending regions, particularly when the migrant travels to international destinations clandestinely (Hunter et al, 2015; Randell, 2016; de Haas and Fransen, 2018). Because the cost of early migration is high, few individuals from the economic sectors that produce the most migrants in rural or urban areas can afford to migrate without help from family and friends. Thus, families pool money to help migrants pay for the cost of migration, both in transit and for settling at the destination. In turn, migrants send impressive sums back to their places of origin. These remittances both repay the debts incurred to migrate and provide much-needed cash income. Although remittance income has not yet been demonstrated to spur unequivocal capital investment and growth, it has certainly provided for families in poor urban and rural areas where few other alternatives exist.

New migrant streams that respond to climate change will more likely than not follow the patterns discussed previously and will be essentially indistinguishable from other types of economic migrants. Climate change in rural areas has been linked to deforestation, desertification, flooding, invasive species, saltwater intrusion and inundation, all of which undermine the likelihood that small producers will be able to do much other than eke out a subsistence living in increasingly burdened agricultural regions. Leaving these areas, migrants will concentrate in rapidly expanding cities, with the better resourced and luckier finding success in their new homes, but many others simply facing new risks, without the advantage of traditional support systems. Recent and poor migrants are often forced to reside in the most precarious of urban environments, such as the steep and mudslide-prone hillsides surrounding cities (like Freetown, Sierra Leone, where more than 500 were killed in August 2017 landslide), flood-prone lowlands and waterways, low-elevation coastal zones, and contaminated areas associated with industrial effluence and colossal municipal dumps.

Migration can be the mechanism through which the gradual degradation of one environment directly causes conflict and degradation in another, as well as increasing exposure to disasters. Migrants who leave one degraded location for dense, unregulated, urban neighbourhoods are acutely vulnerable to natural disasters, and the growth of urban slums has undoubtedly increased the human mortality and increasing property damages associated with hurricanes, floods, mudslides, earthquakes and other ‘natural’ disasters worldwide. The concentration of people into urban areas also generates greater conflict over land and resource use within and around growing cities, both as living space and as a resource hinterland. Competition exerts upward pressure on the economic value of resources (including land),

making them more attractive for capitalist exploitation and autocratic resource ‘grabs’, which, in turn, may displace additional vulnerable groups. In short, whether proximately caused by disasters, the intentional destruction of previous land uses or gradual degradation, environmental migration tends to feed back on itself, increasing the likelihood and severity of future disasters, land and resource conflicts, and degradation.

Governance and environmental migration: dystopia rising?

On 6 October 2018, the Intergovernmental Panel on Climate Change (IPCC) released a report on expected levels of global warming that includes a special Summary for Policymakers (SPM) (IPCC, 2018). This report confirms international scientific consensus (‘high confidence’) that anthropogenic carbon emissions are the main driver of increasing global mean temperatures, which will almost certainly increase by 1.5°C from the pre-industrial period sometime between 2030 and 2052 (IPCC, 2018). The IPCC also asserts with high confidence that the impacts of climate change are already affecting human populations (IPCC, 2018, SPM, Section A3.3: 8), and that ‘currently stated national ambitions’ laid out in the Paris Agreement ‘would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030’ (IPCC, 2018, SPM, Section D1: 24). The report then lays out an apocalyptic vision of the near future involving sea-level rise, droughts, floods, biodiversity loss, poverty, the collapse of fisheries, crop failures, widespread hunger, communicable plagues, invasive species, and reduced ecosystem functions – each of which could start armed conflict and unmoor millions of people from their current places of residence. The report warns that ‘the large majority of modelling studies could not construct pathways characterized by lack of international cooperation, inequality and poverty that were able to limit global warming to 1.5°C’ (IPCC, 2018, SPM, Section D6.3: 30). In other words, without concerted, global action to reduce emissions and promote a more equitable distribution of risks and benefits, the climate system is more or less doomed to destabilize, with virtually no advantage for humanity over the long term.

Like climate change – and in part, because of climate change – environmental migration is a self-reinforcing process, and it will not likely change without deliberate and drastic efforts that result from contentious domestic and international governance (see Chapters 8 and 9;

see also Perkiss and Handley, 2017). While most countries already have domestic policies designed to manage their resources and environment and to control immigration (and sometimes emigration), these have been unable to address the scope of either human migration or environmental change within their own borders. Voluntary, global organizations have limited capacity to enforce international norms and non-binding international accords are inadequate to meet the social pressures created by either international migration or environmental change, much less their complex interactions.

Reflecting back to Figure 5.1, governance can limit migration caused by environmental change, but this will vary by both axes: agency and speed of onset. Governance systems reflect and reinforce migrants' agency, with democratic regimes affording migrants greater agency and autocratic ones more constraints. Sudden-onset disasters often require hierarchical decision making, as emergency responses outweigh the principles of democratic participation, as evidenced by the common practice of using military personnel as emergency relief workers. Managed and slow-onset environmental change may be more compatible with democratic governance, but democratic governance can also fail to halt or reverse environmental change. As the IPCC report indicates, international compacts like the Paris Agreement have not yet created incentives for fundamental, structural change, even when facing unprecedented environmental conflict and degradation, leading to the displacement of tens of millions of people. Historically, resource degradation and scarcity may just as likely embolden a powerful group to systematically restrict or deny a subaltern access as moderate its own use (Foresight, 2011). Thus, the challenge in the coming years will be to devise a system of governance that balances powerful, vested interests with social and environmental sustainability or risk a global environmental emergency that obliges autocratic solutions.

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The Individual Level: Sorting Effects

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Introduction

Environmental, resource and climate conflicts have been named as important individual-level triggers of migration. People leave their home countries when soil degradation, extreme weather conditions, natural disasters, and the existence of valuable mineral resources result in domestic conflicts. These conflicts may stem from, for example, general resource scarcity, ethnic groups fighting over scarce resources such as fresh water, or rebel groups trying to get hold of valuable minerals to fund their activities, all of which often harm the population (see Chapters 2 and 3).

In the face of such conflicts, individuals – or specific groups of individuals – may decide to leave their home countries and move elsewhere. Where exactly migrants head to is an open question, given that there are dozens of potential destinations. What drives the decision of an individual to choose a particular destination, move, and settle there? How do individual decisions aggregate to migration flows into a destination? The concept of ‘migrant sorting’ provides insights into these questions.

The sorting of migrants is the last step of the larger process of migration. In the first step, in response to environmental conflict, a sub-set of potential migrants becomes actual migrants by deciding to leave their home countries (see [Chapter 5](#)). Often, these migrants are not a random draw from the source-country population, but some part of the population that finds migration more important than other

parts of the population. For example, migrants might come from an ethnic minority that is forcefully blocked from using a scarce resource by the majority. Finally, this specific group of migrants, or parts of this group, not only decide to sort into a specific destination, but are also allowed to enter it. That is, migration governance does not prevent them from doing so. This is not always the case. For instance, migrants who flee because of slowly changing climate conditions may simply be considered economic migrants according to national immigration legislation and not be allowed in (see [Chapter 7](#)).

This chapter focuses on the last link in this chain and explores the mechanisms, empirical evidence and policy implications of migrant sorting in the context of environmental conflict-induced migration. In a first step, the chapter lays out the theoretical foundations of migrant sorting, followed by a discussion of empirical approaches and challenges. It then applies the (general) findings to the environment–conflict–migration nexus before turning to the question of how migration governance reshapes the individual preferences for sorting into specific destinations.

Theoretical foundations of migrant sorting

Since Borjas (1987), analysis of the selection of migrants has become an important topic in (empirical) migration economics. One reason is that in the standard economic migration model, income-maximizing individuals weigh the costs and benefits of migrating. More specifically, utility-maximizing individuals decide to migrate to a different location if, and only if, the benefits of migration exceed migration costs (Sjaastad, 1962). The costs and benefits of migration differ across individuals and can be both monetary and non-monetary. For instance, individual skill level is an important factor in determining (expected) income at home and abroad (Borjas, 2014). Typically, the net gains of migration are higher for better-skilled individuals. This is because of, for example, higher skill premia in the destination country or lower costs of migration (such as lower search and information costs, or lower legal hurdles to settle in a destination country). Thus, migrants are not a random draw from the source country population, but differ (measurably) in terms of skills (Borjas, 2014) and (presumably) also in other characteristics such as risk aversion (Bauernschuster et al, 2014).

The selection of migrants is, however, only one aspect within a broader framework for analyzing individual migration decisions. For the full picture, two further dimensions of the migration decision must be added. Grogger and Hanson (2011) aggregate individual

migration decisions along the following lines to characterize, and make predictions about, international migration flows. First, the *scale* of migration indicates how many people decide to leave a country (or more precisely, the fraction of the population that emigrates) once some migration trigger occurs. Second, the *selection* of migrants provides information on the composition of a group of emigrants with respect to an individual characteristic (for example, the skill level) relative to the population left behind. Third, the *sorting* of migrants refers to the composition of emigrants by characteristic and by destination. In the following, the focus is on the latter, but the discussion relates it to the other two dimensions frequently.

The distinction between scale, selection and sorting is, however, less clear-cut than it appears at first glance. Rather, it is distorted by the fact that each step in the migration process (from scale to sorting) depends on the previous one. Selection occurs only if people have previously decided to migrate at all. Even more importantly for this chapter is that the sorting of migrants is closely tied to their selection. Selection concerns which people leave their home country and differentiates people by skill, gender, risk aversion and other characteristics, including – possibly – vulnerability to environmental hazard, climate change and the resulting conflicts (see [Chapter 5](#)). Individuals with different characteristics may also prefer different destinations and thus may sort into different destinations.

For closer inspection, let us first turn to source countries to discuss a reoccurring question in the public and academic discourse on migration policy, namely whether migrants are a ‘positive’ selection or a ‘negative’ one (for example, Hatton and Williamson, 2006). From the perspective of the source country, a positive selection with respect to skills indicates that the education level of the migrating population is higher than that of the residents staying behind. Conversely, a negative selection implies that the migrants are less skilled than the population staying behind. Hence, a positive selection of emigrants implies a ‘brain drain’ from the source country. Recent research shows, however, that emigration of skilled workers could also trigger a ‘brain gain’. This could be the case, for example, when chances of leaving an unattractive home country depend on investment in one’s human capital (Docquier and Rapoport, 2012) so that more people invest in education.

The issue of positive versus negative selection proves equally relevant for destination countries, one that often turns highly political. This is because the location choice of migrants, their sorting into destinations, obviously depends – at least partly – on the immigration policies of destination countries and these, in turn, depend on whether the

arriving migrants are a positive or negative selection (see [Chapter 7](#)). Typically, destination-country policy makers prefer skilled and positively selected immigrants (Haupt et al, 2014, 2016). However, a high skill level and positive selection may not be the same. While migrants may be a positive selection from the perspective of the source country (because they have better skills than those left behind), the ‘quality’ of arriving migrants (Hatton and Williamson, 2006) in terms of their skills may be insufficient from the perspective of the destination country.

Two reasons may explain why destinations might be sceptical about migrants who are a positive selection (only) from the perspective of the source country. First, most migration flows occur between less developed and developed countries, with – on average – large skill differentials between them. Therefore, it is *a priori* not clear whether a ‘positive selection’ (source-country perspective) also leads to a beneficial sorting (destination-country perspective) of migrants. This is simply because arriving migrants may not possess the skills required for fast (economic) integration and dynamic labour market performance, turning them into a burden, not a boon for the destination country. Second, while attractive migrants may have left their home countries, they could as well choose not to come to a specific destination and instead go elsewhere. Here, the sorting process does not lead to the desired outcome for this destination country. This could also be the case when attractive migrants are scared away by negative ‘signals’ (for example, restrictive immigration laws or xenophobia) they receive from a destination.

We can conclude that whether the sorting turns out to be positive or negative from the perspective of the destination country is a matter of previous individual migration decisions and thereby closely connected to selection. As the previous discussion shows, the difference between selection and sorting is small and sometimes hard to disentangle, as the questions are intertwined. This is probably the reason why the term ‘selection’ is often used in discussions of the location decision (for example, sorting) of migrants when their self-selection is included (see Czaika and Parsons, 2017). Here, we refer to ‘sorting’ whenever we consider the perspective of a destination country that receives migrants who have chosen to come to this destination and who exhibit certain (selective) characteristics.

The push–pull theory of migration (Lee, 1966) provides another angle on migrant sorting. While push factors are specific to the country of origin, pull factors attract individuals to a destination country. These factors enter the cost–benefit calculus of individuals

and their effects might differ with personal characteristics. For the migration decision both sides matter: migration is only an option if individual gains from pull factors (such as income gains or living in peaceful or environmentally clean surroundings) as well as from push factors (such as by avoiding political repression) outweigh the costs of migration (Mayda, 2010). Thus, push factors are related to the scale as well as selection of migrants, and thereby *indirectly* to the sorting across destinations. Push factors lead to a specific selection of migrants whose choice of destination is not arbitrary, but depends on a set of destination–country characteristics (pull factors). These characteristics affect a migrant’s cost–benefit calculus to different degrees and shape the decision for a destination. For instance, there may be physical attributes of a given source–destination pair, such as distance, which increase migration costs. At the same time, socioeconomic wellbeing and economic growth, peace and stability, environmental factors (such as a milder climate), or pre-existing ties based on prior migration or geographic proximity can serve as pull factors for migration (Docquier et al, 2014).

In terms of migrants’ cost–benefit considerations, one group of migrants may find it easier to cope with these costs than some other group (or enjoy a new location more than yet another group). For example, according to Krieger and colleagues (2018), skilled migrants can overcome cultural barriers between countries more easily. Belot and Hatton (2012) find that poverty constraints increase positive selection among emigrants, as poverty is more likely to hinder low-skilled migrants. Again, selection and sorting of migrants cannot easily be separated, as many barriers hamper entry of low-skilled migrants, who – if they are the relevant selection – may decide to move to another, culturally more related country. In these cases, the individual cost–benefit calculus drives the observed pattern of migration.

In the same vein, migration governance has the potential to affect individual migration decisions by changing one’s cost–benefit calculus. Economically, politically induced barriers to immigration simply raise migration costs (Mayda, 2010; Ortega and Peri, 2013). While immigration policies that are restrictive across the board ought to cause a negative scale effect (see Ortega and Peri, 2013), selective migration policies may decrease the costs of migration for some and increase it for others (Czaika and Parsons, 2017). That is, one expects a direct effect on the sorting of migrants (based on specific selections of migrants) into the available destinations. This mechanism is even more complex in reality as immigration policy is – most likely – endogenous. For example, any decisions by destination countries to keep borders open or closed

may also depend on the expected immigration flows. Unfortunately, there is hardly any scientific empirical evidence on this issue, as Hatton (2014) points out. In turn, these policies signal to potential immigrants whether they are welcome or not. As countries have different policy preferences over immigration, migration governance has a strong impact on international migration flows and may provide incentives for countries to act strategically (see Facchini and Mayda, 2008; Giordani and Ruta, 2013). We investigate the problem of uncoordinated policy choices in the following section.

Turning to the question at hand, environmental conflict acts as a push factor that decreases the benefit of staying compared to migrating. As a push factor, its main effect is on the scale and selection of migration flows. Depending on who is hurt most by such a conflict, the composition of the migration population with respect to skills might not be random. These selected migration flows translate into the sorting of migrants across destinations. The composition with respect to specific characteristics (such as skills) across destinations will be further influenced by migration costs such as distance or immigration policies that affect migrants differently depending on their characteristics.

Empirical approaches to migrant sorting

In technical terms, the previously discussed blurring of migrant selection and sorting has consequences for empirical analysis, too. Additional questions concern the choice of variables, data needs, and the estimation strategy. In order to better understand the relevant empirical strategies and the connected challenges, let us consider the scale, selection, and sorting of migrants separately.

To analyze drivers for the scale of migration, home-country characteristics matter, such as (per-capita) income, but also the quality of institutions, including personal security (see Dreher et al, 2011), level of corruption (Dimant et al, 2013) and (economic) freedom (Meierrieks and Renner, 2017). To assess the scale and the skill composition of migration flows from one country to another, the differences between home and destination matter (for example, wage differences). Similarly, factors connected to migration costs such as distance or networks of earlier migrants in the destination are important (see Bertoli, 2010; Mayda, 2010; see also Chapter 5 of this volume). In order to capture whether an individual only leaves if he or she is better off in the destination, a dataset including bilateral source and destination country-specific variables is necessary. At the same time, for the sorting across destinations, home-country factors are less

important. Technically, they could be captured by entering source-country fixed effects to account for any time-invariant characteristics such as geography or long-term cultural beliefs (see Grogger and Hanson, 2011; Beine and Parsons, 2015).

Applying source-country fixed effects while controlling for potential pull factors at the destination-country level can give information on what shapes the individual destination choice. For this location decision, the features of the destination country and any bilateral factors connected to migration costs (related to, for example, migration governance) are of interest. Examples for the first are a destination country's economic attractiveness (see Mayda, 2010; Grogger and Hanson, 2011) or – capturing network effects – the size of the diaspora originating from a given source country (Bertoli, 2010; Beine et al, 2011; Bertoli and Ruysen, 2018).

Regarding bilateral factors associated with migration costs, a key factor for the destination choice is immigration policy (see Chapter 7). For one, it matters how open destination countries are with respect to asylum seekers (Grogger and Hanson, 2011), whether they apply skill-specific immigration policies (Czaika and Parsons, 2017; Krieger et al, 2018) or bilateral immigration policies for related countries (Krieger et al, 2018). For migration into countries belonging to the Organisation for Economic Co-operation and Development, Czaika and Parsons (2017) show that skill-specific policies such as points systems increase positive sorting (and selection) while occupation-specific policies have little or slightly negative effects on the skill composition.

In addition to this direct effect on sorting patterns, migration policies may enforce (weaken) other pull (push) effects. For example, Mayda (2010) finds that demographic pressure in the source country has a stronger positive effect when immigration laws become less restrictive. Furthermore, what matters for sorting is not so much the absolute restrictiveness of a country's immigration policy, but how its policy compares with that of other destination countries (Bertoli and Moraga, 2015). The picture gets further complicated when one immigration policy applies to several potential destination countries (such as in the European Union). Here, different intended destinations by different migrant groups meet different preferences of destination countries for allowing immigration. This intermingling of different interests and strategic incentives of several actors (migrants, governments) complicates proper statistical identification of the sorting decision.

Bertoli and colleagues (2013) provide one of the most advanced studies incorporating many of these challenges. The authors consider

the interconnectedness of effects by modelling and estimating the decision for a destination, thereby incorporating selection into migration itself. Looking at one source country (Ecuador) and two destination countries (Spain versus the United States), they find that higher earnings in the destination country increase the individual propensity to migrate into this destination. If earnings increase in one destination relative to the other destination, this increases the migration propensity into this specific country as its relative attractiveness has increased. However, this increase does not come from an increase in total migration from Ecuador, but from a relatively lower attractiveness of the other destination. Thus, one could say that the relative wage matters for the destination choice, conditional on migration in the first place (Bertoli et al, 2013).

Migrant sorting and environmental conflict

The discussion in the previous section does not specifically refer to migrant sorting in the context of environmental conflict-induced migration. The simple reason is that very few studies consider and empirically test this issue due to a lack of appropriate data. The necessary data require information on conflicts that have their origin in environmental issues; for example, conflicts that arise after a natural disaster or conflicts over dwindling sources of fresh water due to droughts or environmental degradation. Often, these types of conflicts arise slowly and are long-lasting. This makes it even more difficult to identify migration movements that could be triggered by a particular dispute (Carius et al, 2007; see also [Chapter 2](#) in this volume).

Ideally, geo-coded data on environmental hazards resulting in local conflicts and migrants from these locations could be employed. If this information were available for every migrant arriving in a given destination country, bilateral migration flows could be investigated with respect to selection and sorting behaviour. However, available data on migration suffers from several shortcomings. First, data are only available for a limited number of country pairs, and often fail to cover migration movements between countries of the Global South. This is problematic because it is very likely that environmental conflict-induced migration occurs precisely in this region of the world, and most migration flows are directed towards neighbouring countries (mainly due to almost prohibitively high migration costs for migrating into more economically developed countries). Hence, any analysis of sorting behaviour is necessarily incomplete (Barrios et al, 2006; Ruysen and Rayp, 2014; Rügger and Bohnet, 2018).

Second, most data are only available for large time intervals, such as five-year periods or decades. Not only does this result in imprecise estimations in general, but it also means that sudden events such as conflicts arising in the aftermath of natural disasters like earthquakes (Brancati, 2007) can hardly be analyzed with respect to their effect on migration patterns. Third, data mostly come from national censuses and countries exhibit substantial variation in how they collect and process their data. In order to establish a comprehensive dataset, imputed data is often added. Concerning existing datasets on conflicts, the Peace Research Institute Oslo provides a comprehensive and detailed database on armed conflict; however, environmental distress as a trigger for conflict is not included and cannot be identified.

Nevertheless, we can transfer the existing evidence from the – more traditional – selection and sorting literature to environmental conflict-induced migration to make predictions about migrants' likely sorting behavior and patterns. Considering the destination choice in the case of environmental or climate-induced conflict implies a non-trivial relation similar to the one analyzed by Bertoli and colleagues (2013). Environmental problems, resource extraction and climate change may work both as direct and – via conflict – indirect triggers of migration, as they are by definition push factors affecting the home country (see Reuveny and Moore, 2009; Naudé, 2010). Depending on their skill or income (or age, gender, or health), different parts of the population can be affected differentially. A further aspect that affects migrant selection in the case of environmental conflict might be the type of conflict onset or the time period within which environmental change occurs. Slow or quick onset of the conflict or the environmental problem changes the characteristics of migrants and their decisions (see Chapter 5). Taken together, these migration decisions result in a selected migrant population. For the sorting into different destinations, any measures making some destinations more attractive than others (such as less restrictive immigration policies, distance, ease of integration/assimilation) matter (see Chapter 7). The relative safety (in terms of environmental or climate-induced conflict) of a destination country could also be a pull factor.

To get a better understanding of the potential sorting patterns conditional on previous migrant selection caused by environmentally induced conflict, let us briefly summarize some key findings on selection and investigate which sorting patterns we can expect. For the moment, we ignore the influence of migration governance, but return to this issue later. As argued previously, specific (macro-level) push factors, such as different types of environmental, resource and

climate distress – and the resulting conflicts – may produce different types of migrants and migration decisions (Bates, 2002). These push factors, which affect individuals differently, have to be combined with further personal characteristics such as skills, income and gender in order to understand how potential migrants shape their migration and/or destination choices. In [Chapter 5](#) of this volume, Diane C. Bates (2019) emphasizes that it is migrants' 'level of agency' that ultimately determines their selection and sorting behaviour. For sorting, this implies that there does not exist one general sorting pattern of environmental migrants. Rather, sorting depends on the type of environmental crisis as well as one's individual characteristics regarding the ability to cope with, or vulnerability to, environmental conflict.

Environmental distress can take various forms. For instance, the onset character seems to play a large role in determining the selection – and therefore the sorting – of migrants. Bates, in [Chapter 5](#) of this volume, distinguishes between sudden-onset events such as natural disasters, which cause immediate flight (such as refugee migration or internal displacement of people), and slow-onset events such as soil degradation. In reality, of course, there is no 'either ... or'. Nevertheless, distinguishing between the polar cases of sudden- versus slow-onset events highlights the effects on the cost-benefit calculus underlying migration decisions. The resulting selection in these distinct scenarios can be characterized as follows.

Sudden onset leads to forced migration where return intentions are relatively more pronounced, while slow onset leaves people time to consider their options more carefully. Here long-term migration intentions and choices play a larger role. Hence, in the first case, migration costs (especially transport costs) weigh more heavily in the migrants' decisions than in the second case. At the same time, economic or political (pull) factors do not play a big role in their location decisions. Neither does selection into migration with respect to skill or ability, which may not matter much when there is no option of staying. However, sorting patterns may still depend to some extent on the individuals' characteristics. Typically, this implies that the sorting pattern includes the most vulnerable individuals heading mainly to neighbouring countries in the first place (or migrating internally), while better-off individuals' behaviour often depends on their ability to cope with, or their actual vulnerability to, the disaster (Black et al, 2011: 448–9).

When it comes to slow environmental change that allows migrants a longer decision process, economic opportunities, political freedom

and strong institutions become more important in destination choices. Here, sorting is much more dependent on previous selection. Factors such as individual ability or skill level start to play a larger role in the migration decision and choice of destination. For instance, high-skilled migrants are more willing and able to migrate longer distances to reach the destinations that best match their abilities (Borjas, 1992) – places where their skills are in demand and well rewarded, for example. These destinations often lie in more economically developed countries, where income is not only higher, but environmental and climatic conditions are also more favourable. At the same time, the hurdles to settling in these countries are particularly high and high-skilled migrants can overcome them more easily (legally).

More generally, when comparing sudden-onset and slow-onset events, in the latter case the decision to leave the home country (at a specific point in time) is of relatively lower importance than the decision of where to settle in the future. Hence, pull factors of potential destination countries (also relative to each other) are of fundamental importance. In a similar vein, the presumed consequences of environmental conflict may influence migrants' location decisions. Where people expect that a disaster will destroy all their property, or they will not be able to return soon (for example, because of a long-lasting drought), they might consider their migration destination more carefully. In any case, the type of environmental distress or conflict is an essential determinant of the selection of migrants, which in turn may have a major impact on their sorting patterns.

Migration governance as a factor in migrant sorting and its consequences

The ultimate sorting of migrants into destinations cannot solely be explained by the location choices of migrants. One also needs to take into account migrants' success in settling in their most preferred destination. Whether or not migrants will be able to do so also depends on the destination country's willingness or obligation to accept them (see [Chapter 7](#)). Willingness refers to cases in which national immigration policy may be more or less restrictive, while obligation applies when, for example, international law requires a country to accept an immigrant for humanitarian reasons (in the case of refugees, for example). Therefore, migration governance both at the national and international level ought to have a relevant impact on the ultimate sorting outcome. What is more, migrants' sorting preferences may also affect migration governance, as argued earlier.

Despite some efforts to establish the notion of ‘environmental refugees’ in international law, this categorization is not yet recognized as such (Williams, 2008). At the same time, refugees who flee from internal conflict and civil war are granted protection in many countries with reference to the 1951 Refugee Convention and the 1967 Protocol Relating to the Status of Refugees (Goodwin-Gill and McAdam, 2007). At first glance, it appears that environmental conflict-induced migration may fall under this provision due to conflicts being triggers of flight. However, protection is usually granted only when refugees fulfil the strict requirements of the Convention. This requires a ‘well-founded fear of being persecuted’ and the reasons for persecution must be related to ‘race, religion, nationality, membership of a particular social group or political opinion’. While this may sometimes be the case, for example, when environmental conflict occurs along ethnic or religious lines and results in the oppression of minorities, most migrants do not fall in this category.

As a consequence, migrants who leave their home countries because of environmentally induced conflicts are usually not granted any preferential status in their destinations. Thus, they are treated according to national (rather than international) (im)migration law. In particular, in cases of slow onset (such as climate change), migrants are typically treated as – unwelcomed – ‘economic’ refugees (which is indeed often a correct description of their situation, given that their subsistence deteriorates with environmental change). Only if these refugees or migrants have characteristics considered beneficial to the destination country may they be treated more accommodatingly. In cases of sudden onset, temporary residence status may be granted with the clear expectation that migrants return home after the environmental situation normalizes.

While some countries are more willing to accept migrants for environmental and conflict reasons, others tend to be restrictive. Since any migration flow generates costs to the destination countries (which are weighed against the benefits of these inflows), countries want to be in control of their immigration policy; but in the international context, this is not always easy to achieve. When migrants are not allowed to sort into their preferred destination, they choose the next best alternative. Technically, this implies that one country’s restrictive immigration policy generates a negative externality on other countries. According to standard externality theory (see Cornes and Sandler, 1996), immigration policy in the first country is then too restrictive and globally inefficient because the country does not internalize the redirection of migrants (in addition, migrants do not achieve maximum

utility). At the same time, a generous immigration policy will come at the cost of excessive inflows, reducing the burden of immigration on other countries. In their attempt to keep the costs of immigration in check, destination countries enter an ‘arms race’ of increasingly restrictive immigration policies. Only international policy coordination or even harmonization could bring this development to a halt (see Boeri et al, 2002; Hatton, 2004; Facchini et al, 2006; Hatton and Williamson, 2006; Minter, 2015), but sovereign nation states have few incentives to cooperate on this issue.

Related problems can be observed in the European Union (EU), where there is hardly any common, coordinated immigration and asylum policy. Rather, the current legal situation allows each member state to determine the stringency of its immigration and asylum policy as well as its efforts in securing the EU’s external borders (for example, through providing resources to the common border protection agency Frontex). Within the Schengen area, where no internal border controls between EU member states exist, national policies cause externalities on other countries (Boeri and Brücker, 2005; Haake et al, 2010). For instance, too little effort in securing the EU external border in one country leads to a weakest-link problem because illegal immigrants may enter through this (transit) country and move on to their preferred destination. This is because the port-of-entry country does not experience long-run costs of immigration when migrants inevitably move on. At the same time, they do not internalize the costs migrants generate in their ultimate destination (Krieger and Minter, 2007; Mayr et al, 2012; Haake et al, 2013). Legally, immigrants are not allowed to do so according to the Dublin Regulation (Regulation No. 604/2013) and member states are required to hinder them from moving on. Practically, the lack of barriers to onward migration due to the Schengen Agreement precludes this.

Based on the observation that environmental conflict-induced migration is often generated in the Global South, the previous discussion provides some hints at how actual sorting behavior is shaped by individual preferences interacting with migration governance. Legal entry to economically developed countries is typically limited to rich or high-skilled individuals, as national and international migration governance does not support migration of other types. Illegal migration to these countries, for example, by climate refugees, requires certain characteristics and skills, leading to a specific group of migrants entering the destination. This leaves much migration to neighbouring countries and internal displacement as the main outcome of the sorting process. Economically, due to relatively low migration costs, and politically, due

to less restrictive migration governance, these places are the preferred destinations of poor and low-skilled migrants who leave home because of environmental or resource- and climate-induced conflicts. That is, this specific type of migration is – as most other types of migration – heavily influenced by economic considerations as well.

Conclusion

Policy makers in many countries are concerned with the inflow of migrants from all over the world. Whether or not these migrants are beneficial or detrimental to a destination country is a topic of hot political debate. Therefore, the analysis of the sorting patterns of migrants is a most helpful instrument to provide informed predictions about expected inflows. The purpose of this chapter has been to provide such insights by exploring the underlying theoretical mechanisms, empirical evidence, and policy implications of migrant sorting in the context of environmental conflict-induced migration. In doing so, the chapter has also considered how migration governance (possibly based on information about sorting patterns) reshapes individuals' decisions on sorting into specific destinations.

The chapter argues that sorting is the final link in a chain of migration processes. First, people must decide to actually leave their home country once some migration trigger occurs. Second, some groups in society are more likely to leave depending on the trigger of migration, leading to a specific selection of migrants. Finally, those population groups that actually migrate must choose into which of many potential destinations they want to sort. This last step depends on existing migration governance, which is shaped by the anticipated sorting of migrants.

Hence, predicting the sorting outcome of migration processes that start with individuals being harmed by environmental conflict is highly complex. Many factors play a role: the type of environmental hazard, the type of conflict, the individual propensity to migrate among different groups of society, the selection pattern of migrants, the attractiveness of destinations with respect to various characteristics (relevant to a given selection of migrants), and national and international migration governance.

While this analysis suggests that one cannot easily disentangle individual sorting behaviour from migration governance, some predictions can nevertheless be made on where environmental conflict-induced migration will end up. Due to the lack of an encompassing coordination of immigration policies internationally,

most migrants – especially the poor and low-skilled – will not be able to enter those countries that would fit their needs best; for example, peaceful countries without environmental or climate hazards. For both economic and political reasons, they will instead migrate to neighbouring countries or resettle internally. Individuals with a higher level of agency, such as rich or high-skilled persons, have better chances of sorting themselves into their preferred country of destination. However, in addition to personal characteristics, the type of environmental conflict has a substantial effect on the destination choice of migrants.

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Migration Governance at the State Level: Policy Developments and Effects

Marc Helbling

Introduction

Whether or not environmental migrants can move to other countries may heavily depend on the immigration policies of those countries. Such policies constitute a core aspect of national sovereignty and the question of the composition of the national community. To understand how migration flows caused by climate change may develop, one needs to understand what actual migration policies look like and how they function. It is still an open question to what extent nation states have introduced more restrictive or liberal policies over the last decades and are able to control migration flows.¹

The first goal of this chapter is therefore to investigate the extent to which immigration policies have become more liberal or restrictive. As there is no legal category of environmental migrants, there are no policies that specifically address this particular migrant group (McAdam, 2012; see also [Chapter 9](#) of this volume for a discussion of the development of policies at the global level). It can, therefore, be assumed that existing immigration regulations will be relevant in a similar way for the new immigration group of environmental migrants. This might, even more, be the case as it is debated whether or not environmental migrants can be distinguished from economic migrants as climate change affects the economy, which in turn leads to emigration (Beine and Parsons, 2015; Falco et al, 2018).

To understand how immigration policies affect migration flows (that may consist of environmental migrants), the second goal of this chapter is to test several arguments regarding how immigration regulations affect migrant inflows. It has been argued that the capacity to control immigration is more and more constrained by the high number of people who want to get access to a new country and, thus, that ‘borders are beyond control’ (Bhagwati, 2003: 98). On the other hand, it has also been emphasized that democracies have more and better means to control their borders than in earlier times (Freeman, 1994: 29). Besides the question of whether or not immigration policies matter, it is important to investigate how they matter, and under which circumstances they are more efficient.

To analyze immigration policies, this chapter draws on the newly built Immigration Policies in Comparison (IMPIC) dataset that covers immigration policies in 33 member countries of the OECD for the period 1980–2010 (Helbling et al, 2017). Within the IMPIC project, more than 70 items have been coded for different policy dimensions and policy fields. The dataset distinguishes between eligibility requirements, conditions that need to be fulfilled, security of status and the rights that are associated with the respective status. Eligibility concerns the question of which types of applicants are able to get access (which nationalities, which kind of refugees, which family members and so on). The conditions then define the aspects that need to be fulfilled by these groups (economic and cultural requirements, formal application procedures and so on). Security of status concerns the duration of residence and the possibility of renewing permits, and the associated rights include aspects that go beyond the benefits of special status, such as vocational training rights for labour migrants or labour rights for refugees and so on (for a list of all items included in the indices, see [Table 7.A](#) in the Annex at the end of this chapter).

How migration policies developed

In the context of economic crises in particular, most states in Western Europe have aimed to decrease or even halt migration inflows since the mid-1970s. It is often argued that policies have become increasingly restrictive, especially towards low-skilled and non-Western migrants (Messina, 2007). It has also been debated to what extent security concerns have affected the perception and regulation of migration issues (Boswell, 2007; Givens et al, 2009). Moreover, it has been discussed whether or not growing right-wing populist parties and

general hostility towards immigrants among the electorate have affected migration policies (Norris, 2005; Mudde, 2007).

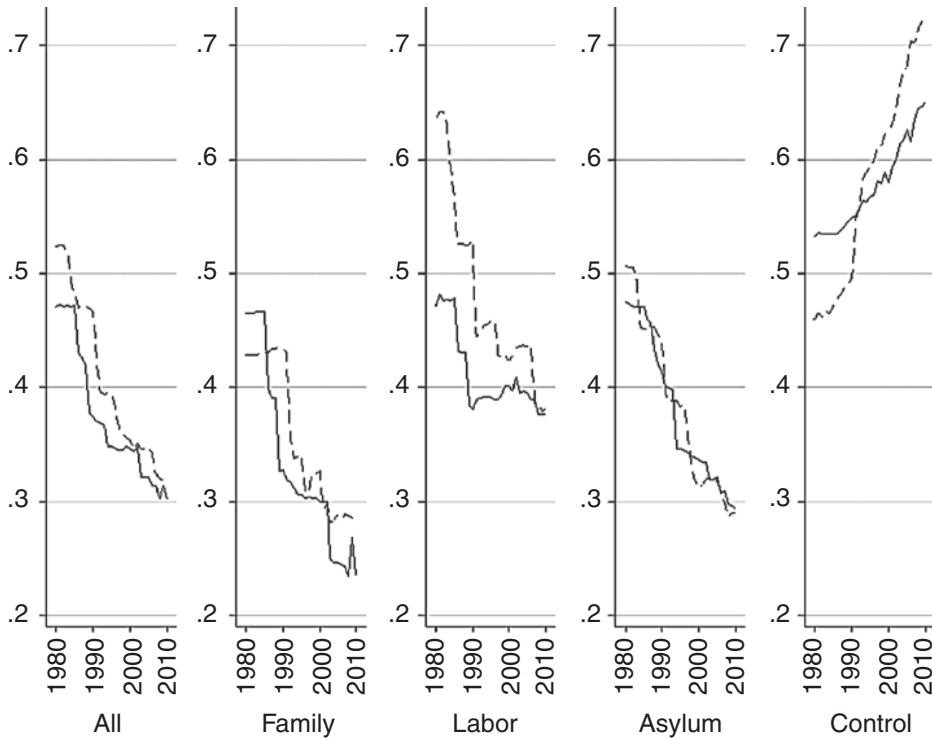
While the intention to make policies more restrictive may be very strong, it is still an open question to what extent states actually adopt such policies. More than two decades ago, Freeman (1994: 29) argued that democracies have more and better means available to control their borders than in earlier times. According to him, '[t]he long-term trend is undeniably toward greater, not less, government effort and capacity to control international migration'.

Others have argued, however, that Western states are hardly able to close their borders to migrants (Joppke, 1998). Due in part to social and human rights concerns, it has been difficult for many states to prevent migrants' family members and asylum seekers from crossing their borders. This phenomenon has also been described as the 'control gap hypothesis', by which Cornelius and colleagues (1994) understand the gap between the intention to adopt restrictive policies and the continuing inflow of migrants.

So far, there is very little systematic evidence indicating whether or not policies have become more restrictive. Only de Haas and colleagues (2015) have investigated these questions in a comprehensive way for different immigration policy fields in 45 countries and during the period of 1946–2013. They find that border controls became more restrictive in the second half of the 20th century, whereas entry and integration policies became less restrictive. Beine and colleagues (2016) studied policy changes in the fields of labour, family and asylum migration, but only for nine countries and for the years 1999 and 2008. They found liberalization processes favouring high-skilled workers, but no clear trends applicable to semi- and low-skilled workers. In the field of family reunification policies, they discovered that regulations for partner reunification became more restrictive and those for child reunification more liberal. Finally, they identified a general trend towards more restrictive regulations for asylum seekers.

Other studies have mainly analyzed the causes of liberal and restrictive changes to immigration policy and discussed their general development (and often only specific policy fields) (Thielemann, 2003; Hatton, 2004; Givens and Luedtke, 2005; Cerna, 2016). As a result of the limitations in methodology and data, as well as the focus of existing studies, very little is known about the general development of migration policies over the last decades.

The IMPIC data allow us to fill this gap and to take a closer look at how immigration policies have developed over the last decades. The first panel in [Figure 7.1](#) depicts the development of the three policy fields,

Figure 7.1: Development of migration policies

Notes: Development of migration policies between 0 (liberal) and 1 (restrictive). Dashed lines are EU member countries, and continuous lines are other OECD countries (author's own analyses).

namely family, labour and asylum policy. Taking into account that the index varies between the minimum of 0 (very liberal) and the maximum of 1 (very restrictive), a 0.2 liberalization change corresponds to a 20-percentage-point change between 1980 and 2010. As it appears in panel 1 of [Figure 7.1](#), policies became more liberal between 1980 and 2010, and the development of European Union (EU) and non-EU countries are very similar (for more details see Helbling and Kalkum, 2018).

An examination of the development of the migration policy index, which includes more than 70 specific policies, may hide more particular opposing trends. To what extent distinguishing between policy fields leads to different results becomes clear when one looks at panels 2–5 in [Figure 7.1](#). It appears that there is a liberalization trend in the three policy fields of family reunification, labour migration and asylum. The strength of the overall trend varies, however, across decades and fields. The liberalization of family reunification policies was strongest in EU countries in the 1990s and in non-EU countries in the 1980s. Labour migration policies were liberalized in EU countries in the 1980s and 1990s and in the non-EU countries mostly in the 1980s. In the asylum policy field, liberalization trends were strongest in the 1990s.

These general trends are similar in EU and non-EU countries, particularly regarding asylum policies. This approach may indicate how important international norms and policies are in this field for all countries. The findings reflect liberalization measures such as the introduction of temporary protection. Regarding labour migration policies, it appears that the commonly held expectation that European states have aimed to close their borders cannot be confirmed (Messina, 2007).

When one looks at the development of control mechanisms, an opposite trend is observed: policies in this field became more restrictive between 1980 and 2010, especially in the second half of the period under investigation. The increase in control mechanisms is much stronger for EU than for non-EU countries. While control mechanisms were more liberal among EU member states in the 1980s, compared with non-member states they became more restrictive in the 2000s. The general trend towards more restrictive control mechanisms is reflected by the investment in border controls and the introduction of new control instruments, such as penalties for airlines and carriers that bring in passengers lacking relevant documentation or measures to prevent marriage of convenience.

How migration policies affect migration flows

Having shown that there are opposing trends in migration policies, it is also important to know how effective these policies are and to analyze whether or not restrictive policies lead to reduced migration inflows. The index of immigration policies that includes regulations regarding labour migration, asylum and family reunification is embedded into a gravity model of global migration that allows us to identify a set of origin, a set of destination, and a set of bilateral factors that drive the cross-border flow of legal migrants (Fitzgerald et al, 2014). The gravity model is estimated via ordinary least squares, and heteroskedasticity-robust standard errors clustered by country dyad are reported below parameter estimates. The dependent variable is the log of migrant flows from a country of origin (o) to a destination (d) country at time t that is measured by means of data from national statistical agencies (both their personnel and their websites), the United Nations Population Division, and the OECD (for more details see Helbling and Leblang, 2018).

Model 1 in [Table 7.1](#) includes the measure of policy restrictiveness along with a series of control variables. It appears that the parameter estimate for immigration policies is negative and statistically significant at conventional levels, which confirms the argument that restrictive

Table 7.1: Policy effects on bilateral migration flows

	Model 1	Model 2	Model 3	Model 4
Policy restrictiveness (lagged)	-1.738** (0.135)	-1.282** (0.258)	-0.421** (0.166)	-1.619** (0.134)
Migrant stock (ln)	0.445** (0.013)	0.444** (0.013)	0.546** (0.019)	0.443** (0.013)
Distance (ln)	-0.552** (0.046)	-0.553** (0.046)	-0.543** (0.046)	-0.551** (0.046)
Colonial heritage	0.999** (0.160)	1.002** (0.160)	0.997** (0.161)	1.754** (0.302)
GDP per capita (ln, lagged)	-4.074** (0.320)	-4.061** (0.321)	-3.800** (0.319)	-4.060** (0.319)
Unemployment rate (lagged)	-0.107** (0.006)	-0.0903** (0.010)	-0.104** (0.006)	-0.106** (0.006)
Shared border	0.107 (0.320)	0.106 (0.320)	0.140 (0.327)	0.132 (0.322)
Common language	0.213** (0.072)	0.214** (0.072)	0.205** (0.073)	0.223** (0.073)
Radical Right support (lagged)	-0.005** (0.001)	-0.005** (0.001)	-0.005** (0.001)	-0.005** (0.001)
Population (ln, lagged)	-7.694** (0.521)	-7.518** (0.547)	-7.694** (0.516)	-7.606** (0.524)
Unemployment (lagged)* Policy (lagged)		-0.0464** (0.023)		
Migrant stock (ln)* Policy (lagged)			-0.296** (0.043)	
Colonial heritage* Policy (lagged)				-2.245** (0.731)
Constant	177.4** (10.88)	174.2** (11.38)	174.0** (10.78)	175.7** (10.93)
Observations	75400	75400	75400	75400
R^2	0.714	0.714	0.716	0.715

Notes: Robust standard errors clustered by dyad in parentheses.

All models include a set of destination dummy variables along with a set of origin*year fixed effects. Degrees of significance: * $p < 0.10$, ** $p < 0.05$

Source: author's own analyses.

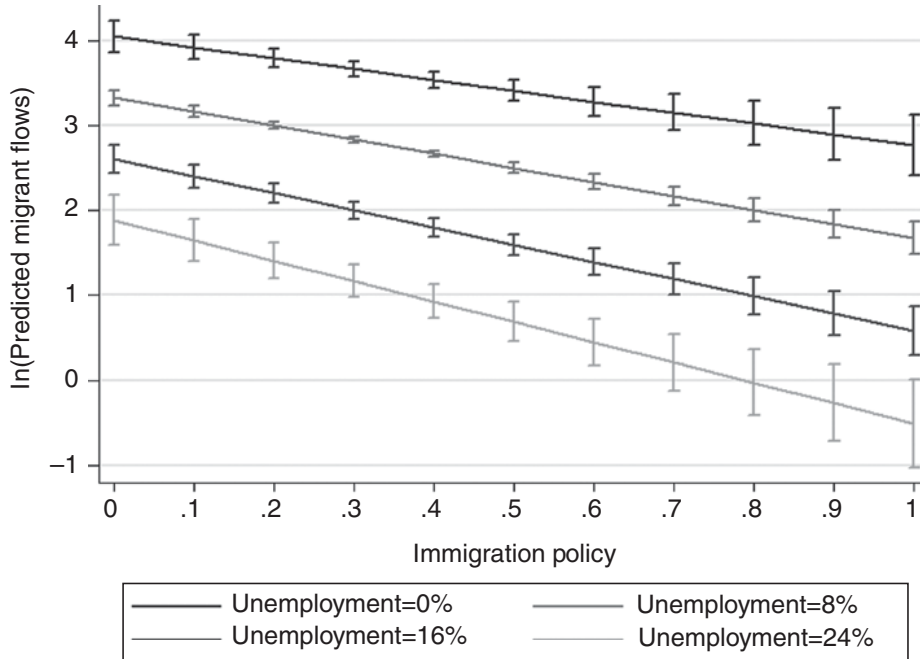
immigration policies reduce immigration flows. The coefficient of -1.7 suggests that an increase in restrictiveness of 10 per cent from the mean of .31 results, all else equal, results in a decrease in migration flows of approximately 17%. In more substantive terms, the average bilateral migrant flow annually is almost 890. Increasing migration restrictions by 10 per cent reduces flows to approximately 750 per migration

corridor. Most destination countries receive migrants from over 100 origin countries, so a 10 per cent increase in restrictions results in a very large decrease in migrants overall.

It can be argued, however, that the effect of migration policy restrictiveness is not unconditional. Rather, the impact of restrictions is conditioned by other determinants of cross-border migration. In Model 2 of [Table 7.1](#), policy restrictiveness interacts with unemployment in the destination country measured with data from the World Bank's World Development Indicators. All three of these variables – unemployment, policy restrictiveness and their interaction – are statistically significant and negative. It thus appears that political factors become more relevant when a country becomes economically less attractive. In these circumstances, migration pressure decreases, which makes it easier to control borders. Moreover, states are more inclined to implement restrictive regulations to protect their economy and their workforce. Thus, unemployment and policy restriction are mutually reinforcing in dissuading migration. [Figure 7.2](#) plots this conditional relationship, setting unemployment at its sample minimum and maximum as well as at its first, second and third. For all levels of restrictiveness, there is a negative effect of unemployment on bilateral migration flows; a result that is consistent with existing theorizing as well as prior empirical results.

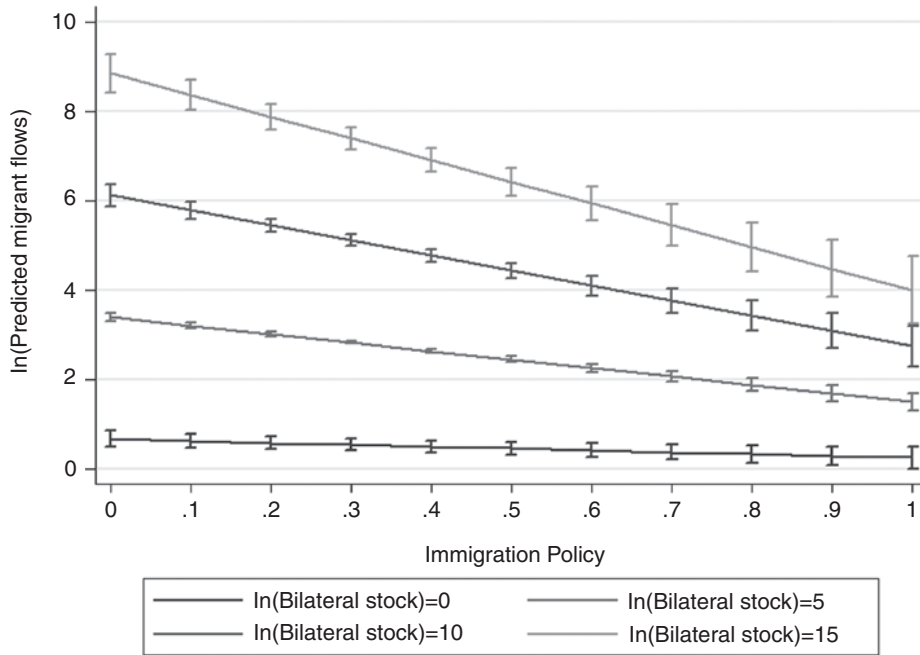
In order to balance other factors, potential immigrants need to know how restrictive or liberal policies are. It is therefore important to examine whether an increase in the effectiveness of migrant regulations is related to migrants becoming better informed. The visibility of policies affects the information potential migrants have about a destination's regulatory regime (Gingrich, 2014). The literature on chain migration shows that having social networks – networks of friends and family – with migratory experience helps the potential migrant to receive information about their intended journey, and makes job searching more efficient and successful (Aguilera and Massey, 2003; Garip, 2008). Such interpersonal networks can be seen as an embodiment of social capital, and they provide knowledge, assistance and other resources to potential migrants (Massey and Espinosa, 1997; see also [Chapter 5](#) in this volume). For the specific group of Mexican immigrants who are entering the US illegally for the first time, Massey and colleagues (1987) show how important it is to get information about border patrols, INS agents and blackmailers from earlier migrants.

Model 3 in [Table 7.1](#) and [Figure 7.3](#) attempt to get at the information mechanism and the interaction between migration

Figure 7.2: Conditional effect of unemployment (author's own analyses)

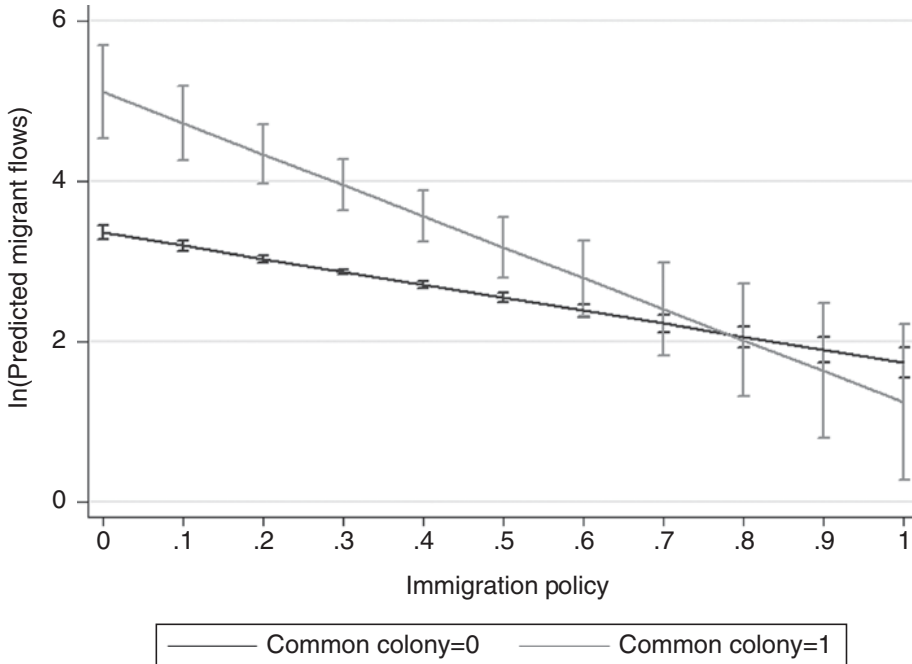
policy restrictiveness and the bilateral stock of migrants from the same origin country residing in the destination country. The interaction between migration policy restrictions and the bilateral migrant stock is negative and is also substantively larger. This confirms the argument that the stock of migrants from a country of origin also increases the amount of information future immigrants have about immigration policies of the destination country, which in turn makes these policies more effective.

Figure 7.3 reveals an interesting pattern of effects. Consider the case when the bilateral migrant stock is zero – there are no pre-existing migrants from origin i residing in country j . In that case, an increase in policy restrictiveness has no demonstrable effect – the conditional slope is approximately zero. When no networks exist, there is no way for potential migrants to learn about the policy environment available in a particular destination. The negative slope of the other conditional effects in Figure 7.3 support this argument: as migrant networks get larger and stronger, potential migrants are deterred from entering a potential destination as that destination increases the intensity of its restrictions. Note, however, that for any given level of migration policy restrictions, increasing the size of the migrant network increases migrant

Figure 7.3: Conditional effect of migration stock (author's own analyses)

flows. However, for a given level of stock, increasing restrictions ultimately reduces subsequent flows.

Potential migrants also obtain information from sources other than personal ties. It can be argued that these ways of gaining information are facilitated through historical and cultural proximities. More specifically, it can be expected that the effectiveness of policies increases if the country of origin constitutes a former colony or if the same language is spoken in both the origin and destination countries (see [Chapter 6](#)). Prior colonial links may increase the likelihood that potential migrants have family members or co-nationals living in former colonial powers, which in turn should increase the exchange of information. Consider, for example, the fact that labour migration into Western European countries reflects prior colonial relationships (Portes and Böröcz, 1989). Historical and cultural relationships have been found to play a role in migration flows as well as in the selection of destinations for asylum seekers (Böcker and Havinga, 1998; Moore and Shellman, 2007). Former colonial powers and colonies may also have common legal, education and welfare systems as well as shared cultural reference points. As Robinson and Seagrott (2002: 30–2) have shown, these commonalities often lead migrants to think that it

Figure 7.4: Conditional effect of colonial origin (author's own analyses)

is easier to integrate in these countries (see also Böcker and Havinga, 1998: 16–17; see, however, Riley and Emigh, 2002).

In Model 4 of Table 7.1, the policy restriction index interacts with the dummy variable measuring whether the origin and destination countries have a common colonial heritage. Both unconditional coefficients are statistically significant and remain consistently signed; the interaction is negative and is also statistically significant. Figure 7.4 shows, all else being equal, the effect of immigration policy restrictiveness on the expected value of bilateral migration flows (logged) for dyads where there is a common colonial history and where such a relationship does not exist. As expected, for almost all levels of policy restrictiveness, higher migration flows are predicted between countries that share a colonial history than those that do not. That difference disappears – it is no longer statistically significant – once a level of restrictiveness equal to .65 is reached, which is approximately three standard deviations above the mean. What is more interesting is that the slope of the line for colonial country pairs is far steeper than the slope of the line for countries that were not colonial partners. The interpretation of this effect is consistent with the argument that migrant networks and connections help disseminate information about the policy environment in a destination country. Given the similarity of institutions and networks

that exist between and among countries with a similar colonial past, it is not surprising that potential migrants in origin countries would have more (or more accurate) information about the prospects of entry into a former colony.

Conclusion

By means of two new datasets, it has been possible to study the effects of immigration policies on immigration flows in a comprehensive way. The immigration policy data allow us to measure all relevant dimensions and sub-policy fields of immigration regulations and the bilateral migration flow data makes it possible to account for both country of destination and country of origin effects. Results show that immigration policies matter and that more restrictive regulations indeed lead to lower migration inflows.

Finding such a clear policy effect is not as obvious as it might appear. The control capacities of Western nation states have been questioned for a long time. These doubts have become even more prominent over the last years in the light of the increasing inflows of asylum seekers in Western Europe. More generally, it has been argued that increasing globalization leads to more flexible national boundaries and a loss of state sovereignty (Kriesi et al, 2012). Increasing immigration flows and liberal norms may make it very difficult to implement policies that aim at reducing these flows.

Even after showing that immigration policies play an important role, nation states cannot simply open or close borders as they wish. Thus, the aim of the second part of this chapter has been to show how the effectiveness of immigration policies depends on other factors. The findings show how political and economic aspects relate to immigration policies, even though economic factors are often considered the most relevant factors driving migration. While it appears that both aspects play an important role, immigration policies become more effective when unemployment rates increase. In these circumstances, countries become economically less attractive and migration pressure decreases. Moreover, states implement their regulations more effectively to protect their workforce. Finally, the chapter has shown that the dissemination of information about border regulations is facilitated when a group of migrants from a certain country of origin is already relatively large and when the country of origin constitutes a former colony. Through these mechanisms, regulations become more visible and thus more effective.

While there is still a lot of debate on how to define a person migrating due to environmental causes, there are still no data that allow us to measure how many people leave their countries for such reasons. Accordingly, there are no regulations addressing this particular migrant group. It has therefore not been possible in this chapter to specifically look at how policies affect environmental migrant flows. If it is however assumed that environmental migrants leave their countries for economic reasons, they could be equated with labour migrants. Thus, the findings of this study could shed light into how this migrant group could possibly be regulated.

Comparing immigration policies across all OECD countries for three decades allows us to draw a very broad picture and to systematically investigate arguments that have remained uncontested for a long time. However, it does not allow for an in-depth analysis of the proclaimed mechanisms. More information is needed, for example, on how future or potential migrants make their decisions to migrate to a certain country rather than another or not to migrate at all (see Chapters 5 and 6). Surveying this target group in a large number of origin countries is very difficult for obvious reasons, especially if one also wants to include people who have not yet decided to leave their country. Moreover, one would also need to know more about the ways in which information about border regulations are transmitted.

A final missing piece of the puzzle is the implementation processes. Data only include information on the quantified formal regulations, the policy outputs, and not on how they have actually been implemented. As is known from other policy fields, concrete implementation depends on a large number of factors that are almost impossible to measure quantitatively (Czaika and de Haas, 2011: 11–21). Factors such as right-wing populist success, public opinion and economic considerations do not only influence policy outputs or attract or deter migrants. They may also have an effect on whether policies are implemented in such a liberal or restrictive way (see Ellerman, 2009). A crucial issue in this regard concerns the relationship between states and their bureaucracies (Lahav and Guiraudon, 2006: 214–15). State interests may be the same, but bureaucracies make use of their discretionary power depending on how autonomous they are and to what extent immigration control is delegated to third parties (other public services or private actors).

Annex

Table 7.A: Items of the IMPIC immigration policy regulations

<i>Labour migration</i>	<i>Family reunification</i>	<i>Asylum and refugees</i>
Skill levels	Residence requirements	Existence of subsidiary/ humanitarian protection
Labour quotas	Family members	Nationality
Age limits	Age limits	Asylum quotas
Young age beneficial	Family	Safe third country
Specific income	reunification quotas	Safe countries of origin
per month	Financial requirements	Resettlement agreements
Specific financial funds	Accommodation	Place of application
Language skills	requirements	Permit validity
Application fee	Language skills	Permit renewal
Job offer	Application fees	Permanent permit
Equal work conditions	Residence permit validity	Right to appeal
List of occupations	Autonomous	Status when crisis resolved
Labour market tests	residence permit	Free movement
Work permit validity	(Self-)employment	(Self-)employment
Renewal of permit		Form of benefits
Transition temporary		
permanent		
Loss of employment		
Flexibility of permit		

Notes: For more details and codebook, see Bjerre et al (2016).

Note

¹ This chapter brings together the discussions and analyses presented in Helbling and Kalkum (2018) as well as Helbling and Leblang (2019).

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Environmental Migration Governance at the Regional Level

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Introduction

The diverse impacts of environmental changes on human beings are increasingly being documented. The effects of such changes can be difficult to isolate from the multiple factors that may increase voluntary or forced movement at the domestic or international level (OHCHR, 2018). These movements can be related to severe weather events, as regularly reported by the Internal Displacement Monitoring Centre (IDMC), which can result in temporary and/or internal displacement (IDMC, 2018). Indeed, the impacts of sudden-onset events on internal displacements are constantly increasing; on average, 21.7 million people were internally displaced each year in the period 2008–16 by weather-related events (IDMC, 2017: 32), while by the end of 2017, 18.8 million people had been displaced by disasters in almost 135 regions (IDMC, 2018: 6). Also, slow-onset processes can lead to temporary mobility and then be followed by permanent mobility if the conditions do not improve. The World Bank recently issued the first report to offer projections of internal climate migration over large areas, with a particular focus on Sub-Saharan Africa, South Asia and Latin America, produced by combining socioeconomic and climate data (Rigaud et al, 2018; UNHRC, 2018).

While the majority of displacements in the context of climate change are internal, increasing numbers of people may be forced to move

across borders (see [Chapter 5](#)). In particular, the exposure to slow-onset events, such as sea-level rise or desertification, can contribute to cross-border migration – although it is quite difficult to estimate the number of people involved.³ The recent report issued by the United Nations Human Rights Council (UNHRC) called attention to four regions (South Asia, Pacific Island States, the Sahel and Central America) where the risks posed by slow-onset events are progressively affecting vulnerable populations and mobility appears as a ‘a common response to changing conditions’ (UNHRC, 2018, para 7).

Central America is frequently subject to sudden-onset events like hurricanes, tropical storms and floods. On the other hand, the so-called Dry Corridor of the region, which includes Guatemala, Honduras, Nicaragua, El Salvador and Panama, is prone to droughts, but extreme weather events, like cyclones, are also increasing.

Brazil has been included in the list of the 20 countries that recorded the largest numbers of disaster displacements in the period 2008–14 (IDMC, 2016: 14). Cross-border displacements occurred from Bolivia to Brazil and from Colombia to Ecuador as a result of floods (The Nansen Initiative, 2015a) and, after the 2010 Haitian earthquake, around 100,000 individuals moved from Haiti to South America (IPPDH, 2017).

In the absence of a comprehensive legal framework to provide protection to the vulnerable population that crosses international borders because of climate change-related factors, the regional level is emerging as ‘a particularly promising approach’ (PDD, 2018). There is a growing awareness of the key role of regional actors and initiatives in such situations. Indeed, while countries have been reluctant to address the question of migrants fleeing generalized conflict or natural disasters through classic forms of multilateral cooperation and binding international agreements, regional institutions can provide an alternative level for institutionalizing ‘soft’ or ‘hard law’ initiatives (Ferris and Bergmann, 2017; see also Chapters 7 and 9 of this volume).

In addition, the regional level has the advantage of relying on pre-existing (and in some cases, well-consolidated) regulatory frameworks in several key areas that have proliferated in particular since the 1990s (Lavenex, 2018). Thus, despite being hitherto little coordinated and highly partial, provisions potentially relevant for conflict and environmentally induced migration have been developed in regional human rights, refugee and free movement regimes.

This chapter first introduces regionalism as a dynamic level of international migration governance. Migration governance is conceived

from a fragmented set of institutions addressing human rights, mobility, refugee and migration control issues that influence how states respond to cross-border flows of people (Betts, 2011; Lahav and Lavenex, 2012). The chapter then turns to the specific case of environmentally induced migration and discusses how regional institutions have responded to these flows and how overarching international initiatives have drawn on and stimulated these regional responses. The chapter identifies domestic and international drivers behind the emergence of regional responses and focuses on the current development of one selected regional case study: Latin America. After having reviewed the role of regional institutions in the governance of resources and environmentally induced migration, the chapter concludes that regions play a pre-eminent role as a forum for experimental responses on the one hand, and for the consolidation, institutionalization and implementation of ‘soft law’ guidelines and non-binding frameworks elaborated at the global level, on the other hand.

The role of regions in migration governance

Regional approaches have a long tradition in migration governance and are at the origins of today’s international institutions. The United Nations High Commissioner for Refugees’ (UNHCR) predecessor, the United Nations Relief and Rehabilitation Administration, was established in 1944 to deal with the millions of people displaced across Europe as a result of the Second World War. The 1951 Geneva Convention, forming the core of the international refugee regime, was initially limited to events in Europe. Today’s International Organization for Migration (IOM) was set up in the same year as the Intergovernmental Committee for European Migration to help resettle people displaced by the Second World War. After the war, other regions also developed cooperative instruments in response to large movements of migrants and refugees. Yet only a few of these have fed back to the global level so far.

With the exception of Europe, where the human rights, mobility, refugee and migration control aspects of migration governance have gradually clustered within the framework of the European Union (EU), regional cooperation tends to be highly fragmented and functionally diversified. A plethora of settings has emerged addressing different aspects of migration governance and taking different institutional forms. At the more formal and firmly institutionalized end of the spectrum, we find two types of institutions: regional human rights and refugee treaties, on the one hand, and regional integration

frameworks/regional economic communities on the other. While human rights treaties contain general provisions, which are potentially relevant to environmental migrants' civil, social and economic rights, refugee treaties may provide more specific entitlements depending on whether they apply to grounds for displacement induced by environmental hazards. Regional integration frameworks or economic communities, in contrast, are not specifically designed to protect human or migrants' rights. These are more encompassing political projects geared towards economic integration, and frequently also towards cooperation in security and other matters, through common regional institutions. These cooperative frameworks offer the possibility to address common concerns through pre-existing consultative and decision-making bodies. Their particular pertinence in the case of environmentally induced migration flows stems from the fact that they usually provide for some facilitation of movement for the citizens of participating countries, which can be expanded to include these vulnerable populations. What regional integration frameworks and human rights/refugee treaties have in common is that they are based on a formal intergovernmental agreement, and they have decision-making and/or enforcement mechanisms encouraging cooperation between the participating countries. Besides these formal provisions, we find less formal, sometimes ad hoc and fully voluntary regional initiatives that have also proliferated, in particular since the 1990s. These are either ad hoc arrangements adopted in response to specific migratory challenges that then develop certain cooperative guideposts for action, such as 'declarations', or platforms introduced to promote dialogue and exchange on migration in general, such as the 'regional consultation processes'.

As a result, various institutions that are relevant to migration management coexist within regions, frequently with overlapping but not congruent memberships, and often having no formal institutional links. Together, they provide fertile ground for the anchoring of cooperation on hitherto unregulated forms of forced migration, such as those resulting from conflict, environmental degradation or natural disasters. In particular, the proliferation of free movement provisions coupled to regional integration frameworks constitutes important anchors for facilitating the cross-border movement of vulnerable persons irrespective of their motive (political persecution, natural disaster, or conflict) provided that they are citizens of a member state.

Such inclusive free movement regimes exist beyond the EU in Eurasia (Eurasian Economic Union), South America (within the trade bloc

Mercosur and associated countries), West Africa (within Ecowas, the Economic Community of West African States) and – although less well implemented – also in a few other African sub-regions (Lavenex, 2018). In South-East Asia, selective mobility rules have been adopted for highly skilled migrants within the Association of Southeast Asian Nations (ASEAN), and more far-reaching cooperation on intra-regional migration has been envisaged (Jurje and Lavenex, 2018).

Apart from establishing the right to enter and reside in another state, regional human rights and refugee protection instruments play a prominent role in addressing forced migration. In this regard, several instruments have been adopted at the regional level that go beyond international measures, and cover protection in the case of generalized violence and, sometimes, natural disasters.

Table 8.1 summarizes the proliferation of regional migration governance institutions since the 1950s. The next section reviews the place of regional approaches towards conflict and environmentally induced migration in the context of the weakness of global regulations and of recent initiatives.

Table 8.1: Broad overview of regional migration institution by sector and continent

	Africa	Americas	Asia	Eurasia	Europe
Human rights	African Charter	Inter-American Charter	ASEAN Declaration		ECHR
Facilitation/freedom of movement	Regional economic communities such as Ecowas, EAC	Mercosur, Andean Community,, CSME,NAFTA (only highly skilled and business-related mobility)	ASEAN (only highly skilled and business-related mobility)	Eurasian Economic Union	European Union
Refugee/IDP protection	OAU Convention, Kampala Convention	Cartagena Declaration and Process	Jakarta Declaration		Common European Asylum System

Notes: CSME: Caribbean Single Market and Economy; EAC: East African Community; ECHR: European Convention on Human Rights; IDP: Internally Displaced Persons; NAFTA: North American Free Trade AREA; OAU: Organization of African Unity.

Source: Lavenex (2018).

Drivers of regional approaches

When talking about a multilayered approach to the governance of environmentally induced migration, we identify the following three levels of agency: the international level, which normally serves as a platform for discussion and consultation – as in the case of state-led initiatives, such as The Nansen Initiative; the regional level, which should be the space where actual responses and solutions are framed; and the national level of the states, which are responsible for the final implementation of the instruments discussed and adopted at the regional and international level.

The regional level has the advantage over the national level that it is able to contribute to fostering human rights protection and (cross-border) free movement of individuals among neighbouring countries in a given regional space. Furthermore, the regional level can be the stage for shaping (political and legislative) solutions and coordinating the relevant actions among states.

The importance of the regional level within the aforementioned multilayered approach to the governance of environmentally induced migration was also highlighted by the 2015 Nansen Initiative Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change.⁴

Indeed, the Nansen Agenda and the ensuing work of the Platform on Disaster Displacement (PDD), which succeeded The Nansen Initiative, has placed great emphasis on the role of the regional level in the implementation of this agenda (PDD, 2018), for example, in the framework of the regulation of the relevant humanitarian protection mechanisms (The Nansen Initiative 2015a: 28, paras 59 and 120 pp. 47–48).

Most recently, the final draft of the Global Compact for Safe, Orderly and Regular Migration (GCM) of 13 July 2018 (see [Chapter 9](#) for a broader discussion on the issue), in its Objective 2 (‘Minimize the adverse drivers and structural factors that compel people to leave their country of origin’), expressly emphasizes the key role of the regional level in tackling the issues related to environmentally induced migration, making clear the need to:

[h]armonize and develop approaches and mechanisms at subregional and regional levels to address the vulnerabilities of persons affected by sudden-onset and slow-onset natural disasters.... (GCM, 2018, Ob.2, lett. k)

It follows a ‘progressive role of regionalism in moving the legal borders, in particular those of the domestic domain’ and in ‘facilitat[ing] the

adoption of new solutions that the sovereign state is not capable of implementing by itself' (Fornalé, 2017: 3–4). Indeed, regionalism has been described as 'a strategic option that can provide an open dialogue among states and non-state actors' and promote cooperation among all stakeholders (Jubilut and Pires Ramos, 2014: 67).

Accordingly, the regional level seems to be the privileged place for stimulating the discussion and putting forward normative proposals on cross-border disaster displacement issues; however, several (legal and political) lacunae persist, as discussed in more detail in the next section.

Regional instruments for the governance of (environmentally induced) migration: the Latin American approach

Latin America is gaining a prominent role in the recognition of the connections between human mobility, climate change and regional organizations. Initiatives in the region are increasingly keen to tackle environmentally induced migration (RESAMA, 2018). This issue is carving a normative and political space at both the national and regional level. The experience of two major natural disasters in the region has been the catalyst for these national and regional responses: the 1998 Hurricane Mitch and the 2010 Haiti earthquake. National and regional initiatives and relevant instruments have influenced each other in developing – at least – a common understanding among the states involved on the necessity of finding both legislative and political answers to the phenomenon of environmentally induced migration.

National-level developments

At the national level, a number of states have already expressly envisaged, in their own legislation, ad hoc provisions that grant temporary protection to people affected by environmentally induced disasters. For instance, the 2008 Decree of Panama⁵ (Cantor, 2015: 51), the national migration law of 2016 of Guatemala,⁶ and the most recent migration laws of 2017 of Brazil⁷, Peru⁸ and Ecuador,⁹ offer the possibility to enter the country on humanitarian grounds to people who are forced to leave their own countries because of natural disasters. Furthermore, in Ecuador, the national constitution also makes it clear that the state should protect people in the case of natural disasters.¹⁰

In Argentina, the relevant provisions on migration allow the granting of ‘special treatment’ of those people who, although not in need of international protection,¹¹ ‘temporarily cannot return to their countries of origin ... due to the consequences generated by natural or man-made environmental disasters’ (The Nansen Initiative, 2015b: 40).

In Mexico, even though the 2011 migration law¹² allows entry of people on ‘humanitarian grounds’ – without any further specification on the possibility of also considering people fleeing from natural disasters – an administrative decree adopted in 2014 expressly refers to the possibility of granting a visa to a foreigner who has a relative in Mexico and is migrating due to a natural disaster¹³ (Cantor, 2015: 32, 54; The Nansen Initiative, 2015b: 41).

Most interestingly, Bolivia has included in its national migration law a definition of ‘environmental migrants’ as persons who are forced to leave for another country due to climatic factors that constitute a risk or threat to their life. In this respect, the law enumerates natural causes and environmental, nuclear or chemical disasters, as well as famine.¹⁴

Other countries have addressed the issue in more programmatic documents or ad hoc legislation. Haiti, in its national migration strategy, mentions migration as a positive adaptation strategy, with reference to the relationship between climate change and migration.¹⁵ Furthermore, Colombia¹⁶ and Peru¹⁷ have adopted displacement related provisions in ad hoc legislation, which also cover situations of environmentally induced displacement. Finally, worth mentioning is the new environmental law of Peru of April 2018¹⁸, which includes the notion of the forced ‘climate migrant’ (*migrante por causas ambientales*).

Based on these new provisions, several states, such as Mexico, Venezuela, Peru, Brazil¹⁹ and Ecuador,²⁰ have granted temporary humanitarian visas to Haitian citizens, in the form of one-off regularization (Weiss Fagen, 2013). Argentina has been granting temporary residence status to Haitians,²¹ while Bolivia has granted temporary tourist visas to Haitian children (The Nansen Initiative, 2015b: 43).

Within the framework of all this legislation, the granting of humanitarian visas in the aftermath of natural disasters should be smoother in the future – since the relevant circumstances are already envisaged by the laws themselves – rather than being left to the (merely) discretionary power of the relevant national executive organs. However, the scope of administrative discretion is still very wide in those countries whose national legislation allows the granting of temporary and special residence permits for ‘humanitarian reasons’. The relevant political

organ also retains the discretion to decide whether or not to include people migrating from natural disasters, as in the case of Honduras,²² Nicaragua,²³ Costa Rica,²⁴ Chile,²⁵ Venezuela²⁶ and Uruguay²⁷ (Cantor, 2015: 21, 46–7, 49, 67; The Nansen Initiative, 2015b: 50).

The concern over the discretionary nature of the adoption of such measures is expressed by The Nansen Initiative, which highlights that

[e]xisting mechanisms at the national level are largely unpredictable, because they generally rely upon the discretionary power of relevant authorities as opposed to a legal obligation to admit or permit the stay of disaster displaced persons. (The Nansen Initiative, 2015a: 28, paras 58–9)

Regional responses

Regional coordination not only helps to overcome collective action problems by encouraging member states to adopt national measures allowing them to react to environmentally induced immigration, but it can also play a crucial role in promoting the implementation of such measures.

Regional responses to migration and challenges relating to refugees in Latin America have traditionally taken the form of more ad hoc, informal and non-legally binding consultations and declarations. Increasingly, however, formal institutions dedicated to broader regional integration are also addressing the issue and have adopted provisions relevant to environmentally induced migration.

At the time of Hurricane Mitch in 1998, regional responses were still weak and primarily ad hoc. For instance, Costa Rica issued a one-off regularization measure that provided temporary residence to almost 150,000 Central American nationals,²⁸ mainly from Nicaragua (Cantor, 2015: 37). This was then emulated by Nicaragua²⁹ and Panama³⁰ with one-off regularization measures granting temporary residence (Cantor, 2015: 37). One regional institution in which the common challenges were addressed was the Sistema de la Integración Centroamericana, which is a rather loose intergovernmental framework promoting stability and democracy among its eight member states. The latter adopted the Strategic Framework for the Reduction of Vulnerabilities and Disasters in Central America – Guatemala Declaration, which addressed the need for regional cooperation in order to deal with, among others, people in vulnerable situations stemming from natural disasters. The issue was also addressed by the local Regional Consultation Process (RCP or Puebla Process) with

the 1999 Joint Communiqué of the Fourth Regional Conference on Migration. The framework focused on the ‘the impact on migration caused by Hurricane Mitch in Central America’.³¹

The issue also made it on to the agenda of the much larger Organization of American States (OAS), whose 2008 resolution on internally displaced people made express reference to displacement following natural disasters. It called for states to protect the rights of people in those situations.³² After that, the OAS progressively increased the attention paid to the links between migration and environmental changes. Hence it highlighted the focus on the legal framework to be developed and the increasing vulnerability of individuals affected by environmental changes (OAS, 2009).

In the aftermath of the 2010 Haiti earthquake, these and many other regional bodies have intensified the attention paid to the links between migration and climate. The Bolivarian Alliance for the Peoples of Our America – Peoples’ Trade Treaty (ALBA–TCP) issued a plan for the reconstruction of Haiti³³ (Cantor, 2015: 36), while the Union of South American Nations expressed its solidarity with Haiti on 9 February 2010, calling on member states to adopt coordinated action to address the situation.³⁴

A further attempt to promote a harmonized regional response was made with the 2012 Mercosur Declaration of Principles on International Protection of Refugees, which pointed out the need to enhance regional humanitarian cooperation. This Declaration explicitly refers to an earlier regional instrument, the 1984 Cartagena Declaration, adopted to address the needs of refugees and internally displaced people in Central America.³⁵ The Cartagena Declaration, which many countries in the region have incorporated into their national law, adopts an extended definition for the term refugee that could eventually cover those fleeing from natural disasters (Jubilut and Pires Ramos, 2014). However, at the national level, no member of Mercosur has yet adopted such a broad definition of refugees.³⁶ Nonetheless, as a follow-up to this initiative, the 2014 Brazil Declaration and Plan of Action, adopted within the Cartagena +30 process, recognized the challenges posed by climate change and natural disasters, and the associated (cross-border) displacement effects.³⁷ The Brazil Declaration mandated the UNHCR

... to prepare a study on the subject [the challenges posed by climate change and natural disasters, as well as by the displacement of persons across borders that these phenomena

may cause] with the aim of supporting the adoption of appropriate national and regional measures, tools and guidelines, including response strategies for countries in the region, contingency plans, integrated responses for disaster risk management and humanitarian visa programmes, within the framework of its mandate. (Cartegena +30, 2014, Brazil Declaration and Plan of Action, p 18)

Also, in 2015 the Regional Certification Mechanism (RCM) held a Regional Workshop on Temporary Protection Status and/or Humanitarian Visas in Situations of Disaster. This process, adopted in November 2016, facilitated a major step, namely the development of common guidelines (The Nansen Initiative, 2016: 8). These guidelines built on a series of best practices collected in the region and aimed at guiding which law, policy and practice to follow in case of natural disasters³⁸ (Kälin and Cantor, 2017: 58). Even though the instrument is not binding, it has proven successful so far and has been effectively used by RCM countries. An example is the workshop on disaster displacement organized by Costa Rica and Panama in March 2017, where the RCM guidelines were the starting document for the preparation of a draft on standard operating procedures for the collaboration between the two countries in case of natural disasters.³⁹

The RCM guidelines can be regarded as the most tangible output of regional consultation on environmental migration in Latin America. Moreover, this regionalization is also visible in many other less concrete initiatives across regional bodies. At the overarching level of pan-continental cooperation, in 2016, the OAS adopted the Declaration on Climate Change, Food Security and Migration in the Americas.⁴⁰

In 2015, the South American Conference on Migration (CSM) adopted the Santiago Declaration, which noted the importance of the relationship between migration and climate change.⁴¹ Most recently, during the 17th CSM of 2017, there was a call for the participant states, among others, to send information regarding migration practices and climate change issues to the Secretary of the CSM by mid-2018.⁴²

The direct and indirect impacts of environmental changes, including the sociological aspects related to migration, have also been analyzed by the Economic Commission for Latin America and the Caribbean (ECLAC) (2014). Most recently, within the framework of the regional consultations on the preparation of the GCM, ECLAC, together with the UN Population Division of the Department of Economic and Social Affairs and the IOM, jointly organized the Latin American and

Caribbean Regional Preparatory Meeting of International Migration Experts from 30–31 August 2017 in Santiago (Chile). In the final report, issued on 6 March 2018, the link between climate change and migration is mentioned among the ‘global issues’ that emerged during the consultations.⁴³

Beyond these targeted regional initiatives, it should be recalled that free movement agreements adopted within wider regional integration initiatives are gaining momentum in a move to permit entry and residence of individuals displaced in the context of environmental changes – even though they were negotiated and adopted mainly for economic purposes and not for the primary purpose of humanitarian protection (The Nansen Initiative, 2014). Among the key advantages, free movement agreements can guarantee broad eligibility – even if not universal eligibility – the relevant criterion being the citizenship of another member state of the same regional group.

In the Latin American region, this is true of Mercosur, which has developed several instruments regulating and setting standards for free movement of people (including with neighbouring countries) and labour-related issues (Fornalé, 2017: 12–13; Acosta 2018). Furthermore, the Andean Community, which was originally established as a trade bloc of four countries (Bolivia, Colombia, Ecuador and Peru), has issued – alongside trade-related instruments – several decisions regarding labour mobility and free movement of people that form part of the Andean Community through one of its member states. Finally, the Revised Treaty of Chaguaramas establishing the Caribbean Community including the CARICOM Single Market and Economy – an initiative of the Caribbean Community (CARICOM) – also includes labour-related provisions.⁴⁴

Even though these regional instruments have not been developed specifically for dealing with environmentally induced migration, they can still be used as a reference framework for adopting solutions in such cases. In particular, they can be a starting point for developing long-term solutions, within the framework of migration as a positive adaptation strategy. Hence, they offer a means of overriding (and coping with the limitations of) short-term solutions – based on temporary protection measures that are normally adopted at the national level in order to deal with the mass influx of people as a result of environmentally related disasters.

Alongside regional agreements, bilateral agreements can also be useful tools for providing medium- and long-term solutions to issues raised by natural disasters.

Conclusion

This chapter has shown that Latin American countries are becoming ever more sensitive to the (legal and political) implications of environmentally induced migration and have agreed on the need to cooperate in order to effectively face the challenges posed by climate change, (natural) disasters and migration.

The problem in Latin America does not seem to be the lack of awareness of the challenges, nor of declared regional solidarity. Rather, it is a problem of proliferation and fragmentation, and lack of reliable enforcement structures. Indeed, a plethora of organizations and initiatives are taking action on climate change, migration and disasters, but there is little or no coordination.

Certainly, the regional level can become the privileged forum for discussing and putting forward medium- and long-term solutions that can (accompany and maybe also) overcome the already-existing, short-term solutions that have been adopted at the national level. Regional approaches offer the advantage of proximity to the national level, which can favour dialogue and mutual development of (normative and political) solutions. Accordingly, the need to support and foster ‘regional governance’ in matters pertaining to environmentally induced migration has become increasingly important (RESAMA, 2018). In this sense, Latin America certainly welcomes the call made by RESAMA to the Task Force on Displacement of the United Nations Framework Convention on Climate Change (UNFCCC)⁴⁵ in May 2018 to, among other measures:

[p]romote the engagement of all South American institutions in identifying regional normative and institutional gaps to address human mobility in the context of the adverse effects of climate change. Strengthen legal frameworks through the promotion and adaptation of existing instruments. (RESAMA, 2018: 6)

Thus, the need for greater coordination, institutionalization and enforcement has been recognized – and the future will show how far regional governance will translate into real practice.

At least for the region analyzed in this chapter, Latin America, the environmental disasters that have triggered regional responses to migration flows have not been linked to an upsurge in violent conflicts. The link between environmental degradation and migration

governance thus need not involve ‘environmental conflicts’ per se, as the title of this edited volume suggests. To some extent the nexus between environmental problems, conflict and migration should depend on the types of environmental problem at issue and whether they could generate conflicts over scarce resources, such as water, or whether we are talking about sudden natural disasters such as hurricanes and floods. As other chapters in this book also show, the links between different types of environmental issues and migration – be it induced by environmental degradation or by ensuing conflicts – are complex and more research is needed to understand them.

Regional institutions, in any case, are likely to play a key role in addressing migratory movements induced by environmental challenges and subsequent related conflicts. This is because all continents have developed regional rules on mobility – with the exception perhaps of Asia where states and regional organizations such as ASEAN have been more hesitant. Yet, the Latin American experience traced in this chapter cannot be easily extrapolated to other regions. First, the countries in the region have a long history of regional solidarity, which is also based on relatively close cultural and linguistic ties. Second, migratory movements in Latin America are to a great extent intra-regional and the sub-continent has remained relatively shielded from migratory flows from further afield. Geography, cultural proximity and climatic hazards play out differently in other regions, thus calling for a different perspective.

Notes

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- ² The author acknowledges the support of the Swiss National Foundation NCCR On the Move.
- ³ Even though the IDMC is currently working in order to finalize the best instruments that could close this gap.
- ⁴ The Nansen Initiative was launched in October 2012 in an attempt to address the protection gap for persons fleeing natural degradation and environmental disasters. The Nansen Initiative Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change that was endorsed by more than 100 governments in 2015 draws on consultations in seven sub-regions of the world, the Pacific, Central America, South America, Greater Horn of Africa, Southern Africa, Southeast Asia and South Asia.
- ⁵ Executive Decree N. 320 of 8 August 2008, Chapter VI, Section 6, Article 56.
- ⁶ Decree N. 44 of 20 September 2016, Article 68: *Ingreso de personas por razones humanitarias ...: a) Por catástrofe natural en los países vecinos, que obliga a las personas o grupo de personas a salvar sus vidas.*

- ⁷ Law N. 13.445 of 24 May 2017, Article 14: ... § 3° *O visto temporário para acolhida humanitária poderá ser concedido ao apátrida ou ao nacional de qualquer país em situação de grave ou iminente instabilidade institucional, de conflito armado, de calamidade de grande proporção, de desastre ambiental.*
- ⁸ Decree N. 1350 of 7 January 2017, Article 29(2), lett. K.
- ⁹ *Ley Orgánica de Movilidad Humana*, 5 January 2017, Article 58.
- ¹⁰ *Constitución de la República del Ecuador*, 20 October 2008, Article 389.
- ¹¹ Decree N. 616, 3 May 2010, Article 24, para 3(h).
- ¹² *Ley de migración*, 29 April 2011, Article 52.
- ¹³ *Lineamientos Generales para la expedición de visas que emiten las secretarías de Gobernación y de Relaciones Exteriores*, 8 October 2014, General provision XV-Tramite 1: “*Causa humanitaria*” ... (3) ... *En el caso de razones humanitarias: ... 3. Acredite que la persona extranjera para el que se requiere visa se encuentra en situación de peligro a su vida o integridad por violencia o desastre natural ...*’.
- ¹⁴ ‘[g]rupos de personas que se ven obligadas a desplazarse de un Estado a otro por efectos climáticos, cuando existe riesgo o amenaza a su vida, sea por causas naturales, desastres medioambientales, nucleares, químicos o hambruna’, Law N. 370, 8 May 2013, Article 4.
- ¹⁵ *Politique migratoire d’HAÏTI 2015–2030 – Document de politique*, 3 August 2015, p 26.
- ¹⁶ Law N. 387, 18 July 1997, Article 1.
- ¹⁷ Law N. 28223, 19 May 2004, Article 2.
- ¹⁸ Law N. 30754 of 2 April 2018.
- ¹⁹ See *Resolução normativa N. 97/2012. Dispõe sobre a concessão do visto permanente previsto no art. 16 da Lei nº 6.815, de 19 de agosto de 1980, a nacionais do Haiti*, 12 January 2012, Article 1.
- ²⁰ Executive Decree N. 248, 9 February 2010.
- ²¹ *Disposición DI-2017-1143-APN-DNM#MI – Expediente N° S02:0021456/2016*, 15 March 2017.
- ²² Decree N. 208–200, 31 December 2003, Article 39.
- ²³ Decree N. 31, 20 September 2012, Article 50.
- ²⁴ Law N. 8764, 19 August 2009, and Decree N. 37112-G, 21 March 2012, Article 2.
- ²⁵ Decree N. 597, 14 June 1984, Article 49.
- ²⁶ Law of 13 September 2001, Articles 32 f.
- ²⁷ Law N. 18250, 6 January 2008, Article 44.
- ²⁸ Decree N. 27457-G-RE, 24 November 1998.
- ²⁹ Decree N. 94–98, 21 December 1998.
- ³⁰ Executive Decree N. 34, 5 February 1999.
- ³¹ Joint Communiqué of the IV Regional Conference on Migration, 29 January 1999.
- ³² *Resolución OAS*, 3 June 2008, AG/RES 2417 (XXXVIII/O/08), Point 7.
- ³³ The Bolivarian Alliance for the Peoples of Our America – Peoples’ Trade Treaty (ALBA–TCP), *Plan para la contribución de los países del ALBA al esfuerzo de reconstrucción de Haití*, 25 January 2010.
- ³⁴ *Solidaridad de UNASUR con Haití. Decision de Quito*, 9 February 2010, Preamble and para 6.
- ³⁵ Mercosur Declaration of Principles on International Protection of Refugees, 23 November 2012, p 4.
- ³⁶ So far only Cuba expressly includes in the notion of ‘refugee’ those people who are forced to leave their own countries after natural disasters; see Decree N. 26, 19 July 1978, Article 80. It is also worth mentioning that the national refugee policy of Trinidad and Tobago leaves the power to decide whether to include in the notion

- of ‘refugees’ also the case of ‘refugees from natural disasters’ to the discretionary (political) decision of the competent political organ.
- ³⁷ Brazil Declaration, A Framework for Cooperation and Regional Solidarity to Strengthen the International Protection of Refugees, Displaced and Stateless Persons in Latin America and the Caribbean, adopted on 3 December 2014 during the Cartagena +30 commemorative process.
- ³⁸ It describes which humanitarian protection measures RCM member countries may apply on a temporary basis in case of natural disasters.
- ³⁹ See the workshop report at <https://disasterdisplacement.org/first-disaster-displacement-bi-national-workshop-in-central-america>
- ⁴⁰ General Assembly of the OAS, Declaration on Climate Change, Food Security, and Migration in the Americas, AG/DEC. 88 (XLVI-O/16), 14 June 2016.
- ⁴¹ *XV Conferencia Suramericana sobre Migraciones. Declaración de Santiago. Con justicia e igualdad hacia una gobernanza migratoria*, 10 September 2015, Preamble and pp 6–7.
- ⁴² *Conferencia Suramericana sobre Migraciones. Declaración Final. La inclusión e integración de las personas migrantes más allá de las fronteras territoriales*, 16 November 2017, p 4.
- ⁴³ Final report [of] the Latin American and Caribbean Regional Preparatory Meeting of International Migration Experts on the Global Compact for Safe, Orderly and Regular Migration, Santiago, 30–31 August 2017, LC/TS.2018/15, 6 March 2018, p 80.
- ⁴⁴ Revised Treaty of Chaguaramas establishing the Caribbean Community including the CARICOM Single Market and Economy, 6 July 2001, Article 73, see also [Chapter 3](#) of this volume.
- ⁴⁵ Established in September 2016 by the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts within the framework of the UNFCCC.

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Migration Governance at the Global Level: Intergovernmental Organizations and Environmental Change-Induced Migration

Martin Geiger

Introduction: management as an alternative to governance

There has been an important transformation of migration politics over the past two decades. Similar developments have also taken place in other fields, including in development and environmental politics (Loescher, 1993; Meadowcroft, 2010; Geiger, 2013; Hall, 2015, 2016; Bradley, 2017). While there has been a growing realization of the cross-border character of migration, refugee movements, conflicts and environmental changes, the repeated calls for stronger cooperation and global governance have in most cases failed to result in effective inter-state governance. Instead, there has been increasing involvement of so-called actors 'beyond the state' (Jachtenfuchs, 2003) in global policy collaboration and implementation (Ghosh, 2000; Hollifield, 2004).

In the field of migration, in particular, intergovernmental organizations (IGOs) have gained agency, relevance and influence. Already in the 1950s, stronger interest in norms addressing migrants' rights emerged (Loescher, 1993; Betts, 2011; Geiger and Pécoud, 2014). A crucial step in the early 1990s was the United Nation's (UN) creation of a Commission on Global Governance (Ghosh, 1993,

2000; Commission on Global Governance, 1995). The Commission was inspired by the general realization and emerging global consensus that migration and refugee movements require collective solutions. This Commission paved the way several years later for a thematically specific UN expert panel on migration, the Global Commission on International Migration (GCIM), in 2003. The GCIM's work resulted in a widely debated final report (GCIM, 2005), but due to the resistance of many states, there was no real progress towards a genuine international framework on migration. There have been various attempts at other discussion forums, both at the global level as well as at the level of regional consultative forums (Thouez and Channac, 2005; see also Chapter 8 of this volume).

An important common feature of these intergovernmental discussions was that these processes avoided, almost completely, the term and any direct reference to, global governance, while at the same time strongly emphasizing the completely voluntary and non-binding nature of their meetings (Georgi 2010; Kalm, 2010; Geiger 2013, 2016). States and IGOs deliberately referred to and used a different terminology of 'management of migration', instead of governance. The concept of migration management has seen wide use over the years, and also faced outspoken criticism (see Andrijasevic and Walters, 2010; Geiger and Pécoud, 2010; Georgi, 2010; Kalm, 2010; Ashutosh and Mountz, 2011; Geiger, 2013, 2016; Heller, 2014). As a phrase, 'migration management' is a direct outcome of the Commission on Global Governance (Commission on Global Governance, 1995). Bimal Gosh, a senior UN expert on migration, appointed by this Commission to propose principles of a New International Regime for Orderly Movements of People (NIROMP), tried to employ the term governance in relation to migration, but only found strong resistance among states (Ghosh, 1993, 2000, 2012; Geiger, 2013, 2016). In response, he coined the vague term 'migration management', which gained in popularity. This was largely due to the International Organization for Migration's (IOM) involvement as the lead agency in the NIROMP project, and the fact that the IOM made the term and concept very much its own (Ghosh, 2000, 2012; Geiger, 2013; Swing, 2012), for example, by issuing manuals such as the *Essentials of Migration Management*, on how to manage migration (IOM, 2004).

Migration management is attractive for its ability to depoliticize migration by making discussions and interventions pragmatic and technocratic. Management does not raise concerns of losing national sovereignty, nor is there the worry that multilateral cooperation or actors beyond the state would adopt government-like roles. The concept is

purposely vague and open to interpretation. This allows diverse groups of stakeholders that would otherwise have little in common to engage in discussions and activities (Geiger and Pécoud, 2010; Kalm, 2010; Ghosh, 2012; Geiger, 2016). The ‘narrative’ of migration management has been very successful (Pécoud, 2015), albeit deeply problematic given the failure of the inter-state system to meaningfully engage and agree on genuine global governance and reach effective and tangible solutions. Migration management also very much became its own industry, with standardized ‘tools’ marketed globally by the IOM for purchase by states and other donors, including so-called information campaigns, or ‘voluntary assisted return programmes’ (Webber, 2011; Dünnwald, 2013; Geiger, 2016).

Environmental change and intergovernmental organizations

Mapping existing organizations and their activities

In the absence of binding agreements, multiple international organizations have also become involved in the sub-field of managing migration, displacement and refugee movements caused or triggered by environmental or climate change. The Intergovernmental Panel on Climate Change (IPCC) and other panels have evidenced that the intensifying change of the climate will likely cause large numbers of people to migrate and flee in future decades (see El-Hinnawi, 1985; Brown, 2007; Adger et al, 2014). Mapping the IGOs that are relevant for the management of displacement and migration of people forced by environmental and climate change to relocate are the IOM and the United Nations High Commissioner for Refugees (UNHCR), as well as the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

The IOM claims to be at the ‘forefront of operational, research, policy and advocacy efforts, seeking to bring environmental migration to the heart of international, regional and national concerns’ (IOM, 2018a). The IOM started to work in the 2000s on migration, environment and climate change, and has since created a specific division dedicated to these areas. Its Migration, Environment and Climate Change Division renders support and guidance to states in developing and implementing policies (Hall, 2015, 2016). Perhaps more importantly, the IOM has also started to make environmental and developmental factors causing migration and displacement integral components of its migration management activities (IOM, 2018b). Therefore, the IOM in relation

to environmental/climate change-induced migration even works in the area of border control, and other restrictive and punitive elements of migration policy, including, for example, assisting states in ‘voluntary’ assisted returns of rejected asylum seekers and irregular migrants.

The first key objective stated by the IOM is notably ‘to prevent forced migration that results from environmental factors to the extent possible’ (IOM, 2018b), which also includes restrictive measures and assisting states in addressing unwanted flows. Scholarship that has empirically examined the IOM has been mostly critical about the IOM and its migration management, and a common theme connecting most of the existing literature is that the IOM will do whatever member states or other donors are asking and paying the IOM to do (Andrijasevic and Walters, 2010; Georgi, 2010; Kalm, 2010; Ashutosh and Mountz, 2011; Geiger, 2016). The objectives ‘to provide assistance and protection to affected populations ... and to seek durable solutions to their situation’ and to ‘facilitate migration in the context of climate change adaptation and enhance the resilience of affected communities’ (IOM, 2018b) are notably only second- and third-ranked objectives for the IOM. Since 1998, the IOM claims to have already implemented more than 1,000 projects worldwide. As the UN’s lead agency on migration, the IOM even works in the fields of reducing greenhouse gas emissions and water and waste management, all activities that one would assume are the domain of development and environmental protection agencies, IGOs such as UNDP or UNEP, and probably private companies (IOM, 2018a, 2018b).

Equipped with the mandate to assist persecuted individuals, UNHCR already in the 1990s started to work on ‘policy development and operational responses around the provision of protection and assistance to persons displaced in disaster and climate change contexts’ (UNHCR, 2017: 5). Since then, UNHCR has become actively involved in carrying out field operations to address internal and cross-border disaster displacement; providing advice and guidance to support the protection of displaced populations; and conducting research to form a basis for informed policies and legal advice. There is an ongoing debate whether to expand the refugee definition as laid down in the 1951 Refugee Convention to also include environmentally or disaster-displaced ‘refugees’. UNHCR, as the agency entrusted with monitoring and safeguarding the Convention, is opposed to this expansion, while there have been attempts by other entities (El-Hinnawi, 1985; Black, 1994; Bates, 2002; UNEP, 2016) to introduce and use the label of ‘environmental/climate refugees’. The expansion of the refugee label is contested by many states that would consequently have to accept

environmentally displaced populations into their asylum systems (Black, 1994; Bates, 2002; Zetter, 2007). While the IOM has also expanded considerably into the domain of politically persecuted refugees and asylum seekers, there has, for some time, been a tacit agreement that the IOM assists additional categories of people, unrecognized under the Convention. It renders assistance to, for example, ‘environmental/climate migrants’. However, lines and portfolios have become blurred, simply due to the fact that in reality it is often very difficult to differentiate between categories, and it can be problematic to single out only one factor among many typically coming together and leading to displacement or migration (Richmond, 1988; Black, 1994; Bates, 2002; Zetter, 2007).

UNDP works to foster economic development (UNDP, 2016, 2018b). While its original description of responsibilities did not include migration and environmental/climate change, UNDP has become a relevant stakeholder in these domains as well. By 1994, the organization shifted its focus towards human development, addressing individual wellbeing rather than national economic growth (UNDP, 1994). However, it was not until mid-2000s that UNDP also began to address environmental issues (Stokke, 2009; Hall, 2016). Together with the IOM, UNDP was a main force in starting to discuss and frame the ‘migration and development’ nexus and levelling narratives such as ‘managing migration for development’ (Pécoud, 2015). In its activities, UNDP stresses the necessity of long-term development approaches to migration and displacement and providing sustainable solutions. UNDP is involved in all of the important global frameworks on migration, refugees and environmental and climate change. UNDP and the IOM have a particularly close collaboration, while UNDP and UNHCR collaborate far less. UNDP’s activities on environmental and climate change-induced migration focus mainly on less economically developed states, which are considered more vulnerable and in need of assistance because they have less developed infrastructure, inadequate financial means to respond to climate change, and greater reliance on climate-dependent natural resources (UNDP, 1994, 2018a). It has been an interesting development that UNDP – and not UNEP – has become a leader in the area of environmental/climate change, and even the factual leader of climate action in the UN (for example, lobbying for stronger adaptation and resilience; reducing emissions, promoting clean energy, and protecting forests; and strengthening climate policy, dialogues and processes; UNDP, 2018a). In very much the same way, UNDP has also become an important migration agency, implementing a growing number of projects, including restrictive projects to strengthen border management.

While UNEP is a clear leader on environmental and climate change-related discussions, it has as of yet not developed its own focal area on migration or forced displacement (UNEP, 2018). Instead, UNEP collaborates with specialized agencies on these issues, first and foremost, the IOM, and, to a lesser extent, also with UNHCR and UNDP. UNEP is a close follower of the IOM's and other agencies' joint work on migration and displacement caused and forced by environmental and climate change. For instance, one of its recent website reports had the rather peculiar title 'Curbing environmentally unsafe, irregular and disorderly migration', and provided a short summary and link to a project of the IOM in partnership with the World Food Programme, the Organization of American States, and several other donor and partner agencies (UNEP, 2018). Overall, UNEP's work differs quite strongly from that of UNDP, the IOM and UNHCR. UNEP perceives migration as an outcome and cross-cutting issue, and instead of directly focusing on migration, refugee movements or displacement, it concentrates on things like proper waste management, access to safe water, the protection of threatened ecosystems – these being the more fundamental drivers and systems affected by environmental and climate change.

Involvement of the IOM, UNHCR, UNDP and UNEP in the UN global compacts

The UN's separate but interlinked global compacts on migration and refugees were adopted at the end of 2018 (UN, 2018a, 2018b). Both agreements trace back to a seminal UN General Assembly meeting in December 2016 when the international community, with strong backing from the United States (US) and the outgoing Obama administration, adopted the New York Declaration for Refugees and Migrants, recognizing the need for a comprehensive approach to human mobility and enhanced cooperation at the global level (UN, 2016). Under the auspices of the UN, two separate intergovernmental negotiation processes started: the Global Compact for Safe, Regular and Orderly Migration (GCM), and the Global Compact for Refugees (GCR). UNHCR was appointed the lead agency for the latter, and the IOM became the lead agency for the GCM. The two compacts are intertwined with several other UN initiatives (UN, 2018c; UN, 2018d), including the 2030 Agenda for Sustainable Development (UN 2015: 8, para 29), which also includes a commitment by UN member states to cooperate in facilitating safe, orderly, and regular migration.

The GCR starts off with the interesting statement that while ‘not in themselves causes of refugee movements, climate, environmental degradation and natural disasters increasingly interact with the drivers of refugee movements’ (UN, 2018d: 3, para 8). The text continues by stating that ‘population movements are not necessarily homogenous and may be of a composite character [and that] in certain situations, external forced displacement may result from sudden-onset natural disasters and environmental degradation’ (UN, 2018d: 4, para 12). Interestingly, the GCR calls not on the UN’s member states or the global community to act, but instead informs and refers to ‘affected States’ and asks them to ‘seek support’; support they could receive building ‘on the operational partnerships between relevant actors, including UNHCR and the International Organization for Migration (IOM) [and] engaging their respective mandates, roles and expertise as appropriate to ensure a coordinated approach’ (UN, 2018d: 4, para 12). These are strong indications that environmentally caused migrant or refugee flows have been largely side-lined in the GCR – meaning also that the Comprehensive Refugee Response Framework, which is part of the GCR, is not comprehensive at all.

The GCM on the contrary not only discusses environmental and climate change-induced flows, but even devotes a specific subsection to detailed explanations of how natural disasters and adverse effects of climate change and environmental degradation can cause migration (UN, 2018c: 9; see also UN, 2018b). The terms refugee and displacement are, however, ignored in the GCM as well. One of the sub-objectives asks the international community to enhance the ‘availability and flexibility of pathways for regular migration’ (UN, 2018c: 5) and calls on states to also cooperate on identifying, developing and strengthening solutions for migrants compelled to leave their countries of origin due to slow-onset natural disasters, the adverse effects of climate change, and environmental degradation, such as desertification, land degradation, drought and sea level rise, including by devising planned relocation and visa options, in cases where adaptation in or return to their country of origin is not possible (UN, 2018c: 5 and 11-12).

According to a commentary issued by two staff members of the IOM’s Migration, Environment and Climate Change Division (IOM, 2018c), there are ten key messages to be taken from the overall GCM process, as outlined in the final version of the GCM. First, according to these IOM’s experts, slow-onset degradation, disasters and other climate change impacts have now finally been identified as drivers of migration. Second, environmental drivers often interact with other

factors, such as political, economic and demographic causation factors. Third, the GCM calls for comprehensive political responses to address all drivers of migration, including environmental and climate change. The IOM staff members point out that the overarching goal is to address environmental and climate change-induced movements with the aim of making migration ‘a choice rather than a desperate necessity’, with the underlying but hidden message that there is a strong interest from the international community to avoid any form of unwanted and unplanned movements due to environmental and climate change. Nevertheless, it is still important that the ‘facilitation’ of population movements is mentioned in this context.

Fourth, according to the IOM staff members’ interpretation of the GCM negotiations, ‘mitigation and adaptation measures in countries of origin need to be prioritized to minimize drivers of migration’ to prevent additional flows, keeping migrants within the country affected by environmental/climate change. The fifth, and important, observation of the IOM staff, is that the GCM recognizes that ‘regular migration pathways’ through planned relocation and visas ‘need to be part of migration management tools’. Sixth, there is a ‘need for *states* [emphasis added] to cooperate to identify, develop and strengthen solutions’, as well as, seventh, to recognize the importance of working at the regional level to address environmental drivers of migration. Eighth, there is recognition of the commitment to policy coherence, with the GCM connected to several other environmental and climate change-related frameworks, such as the United Nations Framework Convention on Climate Change, the Paris Climate Agreement, the United Nations Convention to Combat Desertification, the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction. Ninth, the IOM staff members point to the connection of the GCM to relevant frameworks outside the UN system, including the Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change and the Platform on Disaster Displacement, as well as the Migrants in Countries in Crisis Initiative (MICIC). The tenth important message from the perspective of the IOM (being an IGO that is itself strongly invested in data generation and knowledge production on migration), is the GCM’s recognition that there is a need for ‘more investments in strengthened evidence, data and research to address environmental migration challenges’. Interestingly, while the IOM commentary is enthusiastic about the GCM and its possible outcomes, it clearly points out that the ‘challenges of translating global policy into national and regional practices should not be underestimated’. The IOM is aware of

states' perception that environmental migration is still a relatively new topic and the overall low level of awareness among states. Therefore, IOM expects that 'achieving the ambitious commitments set out in the Global Compact will be contingent on robust political will, adequate funding resources, and the successful development of new coalitions of actors' (IOM, 2018c), which also directly refers to its role in the process of implementation.

In its responses to the GCM and the GCR, it is interesting to notice that UNDP on its website (UNDP, 2018a) and its most recent report on climate change and displacement (UNDP, 2018b) has discussed and responded only to the GCM, making no reference at all to the GCR. Further, when responding to the GCM UNDP staff members clearly invoke the language of 'managed migration' that characterizes the GCM and the decade-long work of the IOM. Such language is evident in the UNDP's discussion of the GCM, with its recognition of the 'need to maximize the benefits of orderly, productive forms of migration', while at the same time 'not tolerat[ing] the abuses and prejudice that make life unbearable' for migrants (UNDP, 2018a). UNDP sees its main task as ensuring that people do not have to flee or migrate due to environmental and climate change. It is necessary, in UNDP's view, to mitigate the 'adverse drivers and structural factors that hinder people from attaining sustainable livelihoods in their home countries, and ... compel them to move [, and by doing this] reduce the risks and vulnerabilities migrants face and [to] protect their human rights' (UNDP, 2018a). UNDP sees the GCM as clearly aligned with its organizational interests and expertise, and promises to play a critical role in assisting countries not only to reach the UN Sustainable Development Goals (a process for which UNDP is the lead agency), but also the GCM. UNDP proposes to assist states concentrating on efforts to minimize drivers of migration, including 'building resilience in crisis and post-crisis situations' and 'supporting conditions for sustainable reintegration ... of internally displaced people and refugees' (UNDP, 2018a). This is very interesting, given that this commitment clearly overlaps with activities of UNHCR (and also the IOM). The return and reintegration of refugees and displaced populations is certainly a separate issue, and, interestingly, in the GCM this topic is not linked or mentioned in relation to environmental or climate change-induced migration.

What is important to note in terms of UNDP's commitment is that it has supported the GCM negotiation very strongly. It also made clear promises to the international community prior to the negotiation of the GCM, in a direct follow-up to the New York Declaration (UNDP,

2016). UNDP's promises included a commitment to support 'at least 30 programme countries in effectively analyzing and addressing the drivers and the root causes of migration and forced displacement, including violent conflicts, climate change and environmental degradation, poverty and lack of good governance', and to assist them in measures to 'collect, analyse, share and act on early warning information' to avoid uncontrolled large flows of populations (UNDP, 2016: 14, paras III and IV). There is also a commitment to support 'strengthened policy and legal frameworks to protect and foster inclusion of refugees, IDPs [internally displaced people] and migrants (UNDP, 2016: 15, para V.d), which again directly overlaps with activities usually assumed by UNHCR. UNDP, much like the IOM, clearly aims to undertake a leading role in the GCM's implementation, and to widely reach out into the portfolios of the UNHCR (and the IOM) by assisting 'refugees' and 'displaced populations'. Interestingly, UNDP, contrary to UNHCR, is labelling populations affected by environmental and climate change as 'displaced populations' and 'refugees', while the IOM avoids these terms and speaks instead of environmental/climate migration/migrants.

Much less directly engaging with the GCM, by comparison, is UNEP. With the exception of a joint statement by UNEP's Executive Director and the former Director General of the IOM (IOM and UNEP, 2018), there are very few reports, website articles or news releases relating to the GCM available from UNEP. This is quite different from the responses of the IOM and UNDP. In their joint statement on the adoption of the GCM (IOM and UNEP, 2018), Erik Solheim (UNEP) and William L. Swing (IOM) stress their organizations' willingness to collaborate closely in the GCM implementation. The joint statement stresses that people migrate for a 'variety of complex reasons, including population pressure, a lack of economic opportunities [and] environmental degradation', and that these factors combined could be 'contributing to human displacement and unsafe migration on an unprecedented scale'. Both leaders predict that 'the levels of both [displacement and unsafe migration] will only rise as the effects of climate change gradually erode millions of people's livelihoods', and that as the 'abnormal becomes the new normal, scarcities, zero-sum competition, and mass displacements will become more common' (IOM and UNEP, 2018). The 'good news', according to the two leaders, is that the international community and the IOM and UNEP 'are getting better at coping with disasters' (IOM and UNEP, 2018). Both leaders point out the need for restrictions, that population movements remain under control, and how they expect a

proper implementation of the GCM to ensure that the ‘new framework maximizes the benefits of international travel and exchange, while also addressing the concerns that many people have with unregulated migration’ (IOM and UNEP, 2018). This clearly evokes the impression that the overarching goal of the IOM and UNEP to become engaged in environmental and climate change-induced migration and to act lies, at least to a considerable extent, in preventing and controlling migration, although there are no concrete proposals about how to avoid and mitigate further deterioration of the environmental and climate situation.

Finally, considering the responses and reactions of the three IGOs discussed so far, the case of UNHCR is highly interesting. The first observation is that in the weeks before the GCM’s and GCR’s adoption, UNHCR’s website did not contain any updated information on how UNHCR would be addressing population movements caused by environmental or climate change (UNHCR, 2018). UNHCR refuses, it seems, to participate in discussions that use the terminology of environmental ‘refugees’ and conflates affected populations with so-called ‘Convention refugees’ (such as political refugees) for which UNHCR has the mandate. Similarly, the GCR avoids terminologies of ‘environmental or climate refugees’ or ‘displacement caused by changing environments and climate’. In this sense, the UNHCR line is consistent with that of GCR and its avoidance of the topic of environmental/climate ‘refugees’. The truth seems to be that the so-called ‘comprehensive refugee response framework’ that the GCR was tasked to entail and implement has from the onset already excluded those people displaced and forced to leave for reasons relating to environmental/climate change. The only ‘updated’ document available on UNHCR’s website at the time the two compacts were adopted was dated October 2015. Other statements issued by UNHCR on the compact process and the topic of ‘climate change, disaster and displacement’ stopped at around the end of 2017, this being before the final round of negotiations and discussions started for both the GCM and GCR (UNHCR, 2017). This might be an indication of the UNHCR’s lead role in the GCR and its concentration and efforts to keep the definition of refugees ‘sharp’ and reduced to politically persecuted populations. At the same time, the topic of environmental migration has been more strongly integrated and ‘taken over’ – or perhaps even tacitly ‘handed over’ by the UNHCR and the international community to the IOM, the GCM process and other agencies, including the UNDP.

The UN global compacts: already over before even started?

In their comments on the GCM, the chief officer of the UNEP and former leader of the IOM pointed out that the implementation of the GCM (as well as the GCR) would require ‘far-sighted’ leaders ‘with the will to fix a problem that is already upon us, and that is entirely of our own making’ (IOM and UNEP, 2018). As this chapter has pointed out, there is currently more ‘management’ (for example, much stronger attempts of states to ‘manage through’ – on the basis of keeping the ‘status quo’ – with the help of IGOs and other agencies) than there is genuine rule-based and more progressive and long-term oriented ‘governance’. The joint statement of the leaders of IOM and UNEP is symptomatic of the deficiencies within the current approaches to (environmental) migration; nevertheless, it is a clear message to state leaders to finally start engaging in the search and implementation of more effective and long-term approaches. Based on their own organizational experience, the two leaders sense that there are too few far-sighted leaders with the necessary ‘will to fix’. Despite their organizations’ capacities to assist states, the issue of environmental and climate change-induced migration is too complex to be left to be ‘managed’ by IGOs, including their own agencies, alone. There is a strong need for binding rules and measures to address environmental and climate change more effectively, along with the multiple factors causing migratory movements. However, there is very little likelihood that such rules or measures will be agreed and implemented by state governments, as the Kyoto Protocol and its follow-up process clearly demonstrate. The world’s population is today lacking ‘far-sighted leaders’ and genuine state interest. It is left alone in grappling with continued environmental and climate change leading to deteriorating environmental conditions, which will likely increase migration and displacement.

Led by the United States, several countries (including Hungary, Croatia, Czech Republic, Poland, Austria and Israel) withdrew from the negotiation of the two global compacts early on, or at the end of 2018 opted not to adopt the compacts when they were presented to the UN’s General Assembly (UN, 2018a, 2018b). In particular, the US has taken a hard line on the two compacts and although the previous government at the end of 2016 under President Obama was supportive of a new, explicitly non-binding, international framework on migration and refugees, the new administration under President Trump took direct aim at the two compacts and the UN as a whole.

President Trump claimed that the compacts would infringe on the sovereignty of the US and other countries. The US subsequently pulled out of the two compact processes based on the argument that ‘decisions on immigration policies must always be made by Americans and Americans alone’ (United States Mission to the United Nations, 2018), which was utilized and adapted mainly by countries that share a (highly) restrictive approach to migration (such as, Hungary which directly followed the US withdrawal), or have been formally requested by the Trump administration not to sign the compacts (for example, Israel and Poland).

The extent to which the refusal of these countries, particularly the US, to adopt the GCM and GCR will affect the compacts’ implementation and outcomes is still an open question. Both global compacts in their final versions are rather ‘modest’ in the formulation of goals and objectives, which is already the result of the strong opposition they received during the consultation process. While the early withdrawals of the US and Hungary initially created a spirit of ‘now more than ever’ among the UN and its remaining member states, there was increasing pressure from more moderate critics throughout the final stage of ratification to avoid any more binding and formally committing language. Some states, including EU member states such as Germany, albeit willing to sign the agreements, tried during the final stages of negotiations to shape the two compacts into a less ‘liberal’ and ‘far-reaching’ form. The case of migration caused by environmental and climate change is a clear example of how one increasingly relevant global challenge has been almost entirely side-lined and ignored by the GCR. Although it is still included in the GCM, it has become paired with interests relating to controlling and limiting such flows. Since the two compacts are not able, nor designed, to address the underlying root causes of environmental and climate change, the objective to mitigate these drivers inevitably remains vague. It is therefore also rather unrealistic to expect that these two compacts will lead to the effective management of environmental and climate change-induced migration flows. What is additionally harmful to these particular issues is the growing number and prominence of climate change deniers, including those in current government positions, and the diminishing number of ‘far-sighted leaders’ worldwide. This significantly hinders genuine progress regarding global carbon emission goals and other objectives proposed and agreed by UN member states, as well as the goals set out in the two global compacts.

Despite growing pessimism, and the notion that the two compacts might already be doomed to fail, there is still the possibility that

during the implementation phase they will result in more genuine collaboration and ‘governance’ in the area of environmental and climate change-induced migration. Provided there is strong(er) interest among at least some states to engage in genuine collaboration, the two compacts offer the possibility for bilateral and multilateral pilot projects to establish best practice insights and examples for other states that may later want to join the initiatives. This can be supported by the existing specialized organizations of IOM, UNDP, UNEP and UNHCR, which ‘now more than ever’ will need to lead and assist the implementation of activities. The modest likelihood that some pilot projects will be implemented and (at least) something will happen as a result of the two compacts still gives hope in terms of the global ability to address the increasing impacts of environmental and climate change worldwide, and the need to urgently respond to migration and displacement triggered and provoked by increasing temperatures, rising sea levels, and worsening and unpredictable weather conditions across the globe.

While scholarship on the role of IGOs in migration governance and in relation to developmentally or environmentally induced migration and displacement has expanded, there is still an absolute gap in research questioning the precise interlinkages between migration and displacement, and climate/environmental change and development. In fact, the knowledge currently produced on the complex interplay and relationship between migration/displacement, environmental/climate change and development is mainly produced and disseminated by IGOs and their ‘in-house’ experts (for example, IOM 2018a, 2018b, 2018c; IOM and UNEP, 2018). Moreover, there is a pronounced knowledge gap concerning the involvement and role of IGOs within the complex triangle of migration, development and climate/environmental change. A similar knowledge gap also certainly exists concerning the strongly related questions of rights- and rule-based governance, state sovereignty and security, as well as issues of policy effectiveness or shortcomings of global policy making in general. Considering the very recent launch of the GCM and GCR implementation phase and the importance of the issue, it seems timely to begin focusing imminent research also on the implementation of these two new global frameworks and their approach to the challenges of climate/environmental change and development. Without sound knowledge and better academic understanding of the challenges posed by climate/environmental change and (under) development, it will be very difficult and perhaps impossible to find more effective and long-term political solutions. The risk is that existing and looming challenges will not be addressed in the future, and states will

continue to try to simply ‘manage’ through these challenges, which may cause an increasingly difficult and uncertain future.

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The Link between Forced Migration and Conflict

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Introduction

Ethiopia suffers from considerable deforestation in almost all areas around refugee camps, as the people living there, sometimes for protracted periods over several decades, rely on firewood for cooking. This has increased insecurity for both the refugees and the local population (Salih, 1999; Bacchi, 2017). Clashes between refugees and the local population over natural resources, particularly firewood, leading to several deaths and many injured people, were reported in neighbouring southern Sudan, where the locals consequently demanded the closure of refugee camps, and similar confrontations have occurred in Nepal (Doki, 2017; IRIN, 2017). Countries all over the world are thus sceptical about forced migration, as in these examples. Owing to security concerns, many states are reluctant to accept refugees without reservations. Yet how can refugees affect the security situation and conflict dynamics of a host country? A better understanding of the link between refugees, conflict and security is necessary to prevent potential protection gaps regarding both the host population and refugees.

This chapter therefore addresses the following question: how does forced migration affect conflict dynamics in host countries? This is answered from a political science perspective. Many countries debate limitations for refugees and migrants for fear of environmental degradation, economic pressures and increased insecurity. Also, the academic literature has identified refugee movements as a factor

contributing to the regional clustering of civil war. Case-based evidence suggests that refugees may increase ecological and economic resource scarcity (see [Chapter 2](#)), induce pressures on public health, disturb the demographic balance in the host country, or diffuse rebel networks and import weapons, thereby triggering instability.

For example, despite continuing insecurity in Syria and a halted peace process, several refugee-hosting countries, including in Europe and neighbouring countries of Syria, push for the return of Syrian refugees. Lebanon's army forcefully has closed camps (Bolliger, 2017). According to one survey, more than half of the Lebanese population fear that the Syrian refugees threaten the fragile national security and stability in Lebanon or challenge the employment market (Bolliger, 2013). Similarly, the several hundred thousand refugees from Sierra Leone and Liberia hosted by Guinea in 2000 and living in camp settlements close to the border suffered cross-border attacks. The Guinean government blamed the refugees for these attacks and accused them of collaborating with rebel groups. Consequently, Guinea closed its border with Sierra Leone and left many refugees in limbo (Reilly, 2000). In 2016, Kenya also pushed for the closure of one of its largest camps, Dadaab (*The Guardian*, 2017).

To enhance the yet limited systematic understanding of the link(s) between forced migration and conflicts in host countries, this chapter reviews existing research on migration as a reason for conflict, with a particular focus on refugees. The chapter is organized as follows. First, it examines the causal mechanisms through which forced migrants may cause conflict within host countries and shows which factors have already been tested and which ones remain understudied (on the relationship between natural resources, conflict and migration, see Chapters 2, 3 and [Chapter 4](#)). Second, it discusses the effect of forced displacement on different types of violence, including social unrest, terrorist attacks and indiscriminate violence against civilians, communal conflict and intra-state war. In this regard, recent attempts to collect comparative datasets on various refugee characteristics have increased the possibility of conducting large-N analyses and drawing generalized inference. Third, based on these previous findings, the chapter highlights solutions for national and international (forced) migration governance to reduce the risk of conflict. In sum, scholarship agrees that forced migration alone does not consistently influence violence; rather, conflict occurs only where refugees are socially and economically marginalized and when aid services are unequally distributed to refugees and host communities. Hence, governments should pursue inclusionary socioeconomic policies for their population

and refugees to prevent dangerous tensions, rather than closing borders or blaming forced migrants for internal problems, as is the case in some European countries and the United States. Finally, the chapter presents the limitations of current knowledge and indicates where there is still room for further research to solve the challenges associated with record high levels of forced displacement in today's world.

Potential effects of forced migrants on host countries

This section reviews the various, possibly negative, externalities associated with forced migrants for host countries that are commonly stated by politicians, international and non-governmental organizations, and academics. Yet, before investigating the various negative effects of refugees, it briefly discusses the positive impacts of forced migration on host countries and societies.

Migration, whether forced or voluntary, potentially has several positive effects on the host state. Immigrants are a resource, constitute human capital and often bring intelligence, knowledge and new skills. For instance, 'in Guinea, refugees brought new agricultural techniques to bear on vacant land, introducing swamp land rice. In Nepal, refugees have introduced new ways to cultivate the cash crop cardamom' (Large, 2013). Further, refugees may boost economic activities, thanks to stimulated local markets, higher demand and consumption, create job opportunities and boost development owing to the influx of resources from international humanitarian assistance and improved infrastructure (Baez, 2011; Alix-Garcia et al, 2017; D'Albis et al, 2018). For example, during the Kosovo crisis, the United Nations High Commissioner for Refugees (UNHCR) made agreements with local businesses in Albania to produce blankets and asked local bakeries to bake bread (UNHCR, 1999). Forced migrants also contribute to the cultural diversity of the asylum state (Refugee Council of Australia, 2010).

Notwithstanding these positive effects, attitudes towards refugees are often less benevolent. In some countries, especially across Europe, governments and political parties among others have reacted harshly to sharp increases in forced migration from places such as Syria, Afghanistan and Somalia. Many of the responses are restrictive, such as intensifying border control, building fences, barring access and refusing to provide asylum (for a discussion on state policies, see Chapter 7). Such restrictions are premised on risks of negative externalities associated with refugees. In particular, refugees, despite their displacement being involuntary, have been portrayed as both a

consequence and a cause of conflict, as in the case of Palestinians in Lebanon in the 1970s and Rwandan refugees in Uganda and Zaire in the 1990s. Moreover, scientific research points out that refugee movements, albeit the consequence of violent conflict, may entail negative consequences for the receiving country, the sending country and the relationship between the two countries (Whitaker, 1998; Stedman and Tanner, 2003; Moore and Shellman, 2004; Lischer, 2005; Salehyan and Gleditsch, 2006). The following negative effects threatening law and order and increasing insecurity are commonly attributed to refugee influxes.

First, refugee presence may have a negative effect on the environment in the asylum state, primarily as a result of ‘rapid population expansion and poverty’ (Martin, 2005). Black (1994) highlights three types of environmental changes that are significantly affected by refugees: deforestation, land degradation and water supply and quality. The UNHCR is well aware of these issues:

The spontaneous movement and displacement of large numbers of people may have significant impacts on the environment. Arriving in an alien situation, refugees face hunger, fatigue, humiliation and grief. Their first concern is to look after themselves, most often to find food and shelter. Trees are felled to provide support for rudimentary shelters. Dead wood is collected to build a fire for warmth and as fuel for cooking. With only a few families involved, the environmental impacts are unlikely to be too serious or long-lasting. With thousands of desperate people, however, the results can be disastrous for the environment. What is bad for the environment is ultimately bad for human welfare. (UNHCR, 2001)

Baez (2011: 406) mentions the example of refugees from Rwanda and Burundi who chopped thousands of trees in the Kagera region of Tanzania for personal and commercial purposes, resulting in local children having to travel much longer and dangerous distances in search of wood. In this regard, academics and policy makers debate which type of refugee settlement – concentration in camps versus self-settlement where refugees are more integrated among the local population – reduces the environmental damage that is often associated with large refugee numbers (Jacobsen, 1997). After all, refugees themselves are affected by the environmental degradation (Shepherd, 1995 and Chapter 4 of this volume), in that they experience higher

levels of disease and malnutrition owing to poor water quality and lack of firewood.

In this regard, a refugee influx might entail negative public health consequences, such as the spread or outbreak of disease. During conflict times, healthcare usually breaks down, as is currently the case in Syria, contributing to a rise in infectious diseases that then spread to asylum countries. For instance, an increase in cases of measles, tuberculosis and polio has been documented in countries hosting refugees from Syria (Petersen et al, 2013; Crudo Blackburn and Lenze Jr, 2017). Another example is the cholera outbreak among Bengali refugees in India in the 1970s, owing to poor conditions in camp settings, especially the lack of proper sanitation (Khan and Shahidullah, 1982). In addition, many refugees need medical assistance, which challenges healthcare facilities.

Moreover, refugees are accused of being a burden for the local economy and state budgets. Refugee flows often inflict economic disruption because refugees need to be provided with space, shelter, food and social services (Weiner, 1992; World Bank, 2011). This might result in competition over scarce resources between refugees and the host population. Large refugee influxes in particular imply economic pressures for the host state (Goldstone, 2002; Martin, 2005). Such economic competition may result in increased criminality (Baez, 2011: 391). For instance, the Jordanian government is currently concerned that the high influx of refugees from Syria is exacerbating the country's already severe economic problems (Phillips, 2012).

Furthermore, refugees can threaten the cultural identity, which may lead to xenophobic reactions, and imperil the ethnic balance of the asylum state, that is the political equilibrium of ethnic groups living in a country (Weiner, 1992; Newland, 1993; Loescher and Milner, 2004; Adamson, 2006; Salehyan and Gleditsch, 2006, Rüegger, 2019). A high number of refugees changes the composition of people populating the asylum country (Lake and Rothchild, 1998: 25), which is particularly important in multi-ethnic states with already existing tensions. For instance, in the late 1970s, 'Malaysia was upset by the high percentage of ethnic Chinese from Vietnam amongst the recent boat [refugees], the acceptance of whom could disturb Malaysia's delicate internal ethnic balance between Malays and Chinese' (Stein, 1979: 717). Belize's ethnic Creole–Mestizo balance and the related debate as to whether the country is more Caribbean or Latin American was complicated by the influx of Salvadorian refugees (McCommon, 1989). In Zaire, the arrival of over one million Hutus from Rwanda in 1994 led to a deterioration of the relationship among local Hutus, Tutsi and other groups (Lischer, 2005: 13).

In addition, refugees may carry weapons when they cross state borders (Mogire, 2004: 5), or acquire weapons while in asylum and store them for future use, as did refugees from Burundi in Tanzania (Nahm, 2006: 226–7). Temporary settlements may be used for the storage and trafficking of small arms (Weiner, 1992; Muggah and Mogire, 2006). Refugees may also import ideologies that encourage the opposition in the host country (Salehyan and Gleditsch, 2006: 343). Stein (1979: 717), for instance, argues that Thailand feared that the refugees from Cambodia ‘were predominantly Khmer Rouge who might be a subversive element in the Thai border provinces’. Some refugee movements even entail the expansion of rebel networks because refugee camps may be used by insurgent groups as sanctuaries or to recruit fighters among the refugees (Barber, 1997; Lischer, 2003; Salehyan and Gleditsch, 2006; Salehyan, 2007). This may ultimately cause the sending country to attack the asylum state if it perceives these rebel hideouts among refugees as a threat (Lake and Rothchild, 1998: 25). The Rwandan Patriotic Front, for example, was founded by Rwandan Tutsi refugees in Uganda, and, in 2008, armed members of the Justice and Equality Movement fighting against the Sudanese government infiltrated refugee camps in Chad and heavily recruited among the ethnic Zaghawa refugee population (USCRI, 2008).

Indeed, many political leaders who oppose hosting refugees base their claims on these arguments and case examples. Thus, it is crucial to ask whether these cases are exceptions to a broader pattern of positive or null effects on stability, or if refugee inflows increase the risk of violent outcomes on average. Hence, the next section reviews existing research on the link between forced migrants and conflict.

The link between forced migration and conflict

Scholarly literature has focused on various forms of conflict that occur in refugee-receiving countries. Presenting different violence types, this section reviews the current knowledge on the link between refugees and communal conflict, protests, terrorism, indiscriminate violence against civilians and civil war. Before engaging with the different conflict types, it is important to distinguish between, on the one hand, instances where refugees directly and actively engage in violent activities and, on the other hand, indirect threats to the host state, such as environmental damage and ethnic shifts, where the passive presence of refugees increases the conflict risk. We must also distinguish whether refugees are the victims or perpetrators of violent activities.

High refugee concentration may lead to resource competition, for example over water, food and land, and eventually to communal conflict with host communities, particularly where resources are already scarce (Crisp, 2000; Bohnet, 2015). Developing countries often are affected by resource scarcity, and these happen to be the countries where more than 80 per cent of global refugees settle. Despite the fact that findings from the resource scarcity and conflict literature are not conclusive, environmental stress has been associated in some specific cases with violence (Bernauer et al, 2012; Abrahams and Carr, 2017). Nevertheless, only low levels of violence, such as communal violence, are likely (Fjelde and von Uexkull, 2012; Hendrix and Salehyan, 2012). Because people have limited livelihood opportunities in these areas, there is a risk of competition over resources and conflict. Examples of such communal conflicts are found in northern Kenya between local pastoralists and in Ethiopia, where water scarcity has been a particular issue, and conflict arises at limited water points (UNOCHA, 2017). The tensions are exacerbated when host communities perceive that refugees receive more aid to overcome the shortages than they do themselves (UNHCR, 2006).

In the context of increasing refugee inflows, many Western countries experience social unrest and a rise in mobilization and protests against these refugees. Scholarship agrees that immigration is closely associated with consequent increasing right-wing extremism and xenophobia (see Willems, 1995; Della Porta, 2000; Fetzer, 2000). While scholarly attention was already being paid to these topics in the early 1990s, owing to the increase in refugee numbers after the end of the Cold War, academic research has since systematically examined these processes in various countries since the outbreak of the war in Syria, including Turkey (International Crisis Group, 2017), the United Kingdom (Grillo, 2005) and Germany (Benček and Strasheim, 2016; Rucht, 2018). For instance, the German cities Cottbus and Chemnitz have been the subject of increased media coverage owing to a surge in violent attacks involving refugees in 2018. Attacks against refugees often occur as a result of increasing popularity of right-wing political movements, when the local population perceives itself to be economically disadvantaged, is alienated from the political regime and fears cultural marginalization (Rucht, 2018: 239–40), and when political elites have opportunities to instrumentalize these grievances and accordingly shape the political debate around asylum legislation (Koopmans, 1996). Moreover, refugees may themselves mobilize and protest in the asylum state, for instance to denounce insufficient humanitarian assistance. In Rwanda in February 2018, at least five

refugees were killed and 20 injured when a protest over a cut in food rations turned violent (Uwiringiyimana, 2018).

Addressing the frequently raised claim in right-wing protests that refugees are prone to engage in terrorist activities in the host state, several scholarly articles have examined the link between refugees and terrorism with large-N analyses. First, they find that terrorist attacks, similar to other forms of political violence, are more common among poorly treated refugee groups (Milton et al, 2013), and that terrorist groups tend to misuse humanitarian aid that is intended to help refugees (Choi and Salehyan, 2013). Second, they show that, in contrast to security fears by host governments, refugees and immigrants are not associated with a higher risk of terrorism (Bove and Böhmelt, 2016).

Yet case studies have shown that refugees may become militarized. The refugee crisis in the Great Lakes Region in the 1990s raised public and scientific awareness that refugees can become active actors in conflict: perpetrators of the genocide in Rwanda mixed with refugees in Zaire and recruited in the refugee camps, which finally led to the outbreak of civil war in the years that followed (Whitaker, 2003: 212). However, it must be borne in mind that refugees are not necessarily willingly recruited, but rather forced. In another example, the Kurdistan Workers' Party recruited among Kurdish refugees in North Iraq in the 1990s, causing highly militarized refugee settlements (Marcus, 2007). An extensive qualitative literature uses case studies to pinpoint the conditions under which forced migrants militarize in the asylum state. These studies commonly find that the host state's willingness and capacity to prevent refugee manipulation play a decisive role in determining whether rebels recruit refugees (Zolberg et al, 1989; Adelman, 1998; Lischer, 2005; Gerdes, 2006; Lebson, 2013). A lack of assistance and neglect from the host government increases discontent and grievances among refugees and is one of the main sources of insecurity and violence among refugees (Crisp, 2000: 70). For refugees living in settlements that are insecure and poorly equipped, the opportunity costs of fighting or joining a rebel group are lower. Participating in an insurgent movement may offer young refugees self-esteem, payment and more security. Rebel organizations are an alternative to a desperate life in a refugee camp (Salehyan, 2009: 40–1). Furthermore, the origin of the refugee crisis determines the chance of conflict diffusion in that 'refugees who flee targeted persecution or defeat in civil war have higher level of political and military organization than refugees who escape general chaos or destruction' (Lischer, 2005: 18). Also, non-committed humanitarian relief provided in refugee camps may attract foreign fighters (Barber, 1997; Terry, 2002;

Lischer, 2005). Refugees may also reinforce instability by spreading weapons or military skills across borders (Weiner, 1992; Mogire, 2004; Muggah and Mogire, 2006).

Hence, refugees may become active in violent activities in the host state as combatants and supporters of local rebel groups, such as the Rwandan Tutsi refugees who aligned with insurgents in the Mulelist uprising in Zaire in the 1960s (Gerdes, 2006: 39) or the Somali refugees who collaborated with the Somali separatist movement in the Ogaden region of Ethiopia (Salehyan and Gleditsch, 2006: 343). Similarly, refugees may fight for the host government, for example, Rwandan refugees who supported the Museveni government in the Ugandan war in the 1980s (Gerdes, 2006: 39). A comparative global study by Salehyan and Gleditsch (2006) links refugees to the onset of intra-state conflict in the host country. They find that states receiving refugees from neighbouring countries have a higher risk of experiencing civil war. As a potential explanation for these statistical findings, they argue that refugees diffuse rebel networks, import weapons and ideologies, increase economic problems and change the ethnic structure. This work has no doubt considerably advanced the literature on refugees and conflict, yet it has not engaged in actual testing of the causal mechanisms, which has been the focus of more recent studies that draw on novel sub-national datasets. Examining the ethnicity of refugees with novel data (see Rüegger and Bohnet, 2018), Rüegger (2017, 2019) finds that ethnic alien refugees have no significant effect on the conflict risk in asylum states, which disproves the argument that refugees generally disturb the ethnic balance and threaten the cultural identity of a country. Yet, if refugees have ethnic ties to marginalized groups in states with pre-existing ethnic instabilities, these tensions may intensify after refugee arrivals. Similarly, case-based evidence suggests that states where refugees disturb the ethnic balance owing to connections between the refugees and a politically excluded local minority are more prone to experiencing conflict (Weiner, 1992; Newland, 1993; Goldstone, 2002; Loescher and Milner, 2005; Adamson, 2006). Concentrating on the geographic location of refugee or internally displaced person (IDP) settlements in Africa, both Fisk (2014) and Bohnet and colleagues (2018) find an increased risk of conflict onset around these locations, as well as a higher likelihood of communal conflict and indiscriminate violence against civilians (Fisk, 2018, 2019), which both are determined by the type of refugee settlement, in that violence is more likely among clustered or concentrated refugee communities.

With regard to the refugee origin state, studies suggest that refugees can prolong civil conflicts in their origin country (Salehyan, 2007), make a peace agreement more difficult (Doyle and Sambanis, 2000) or make peace less stable, thereby contributing to the reoccurrence of conflict (Derouen and Barutciski, 2007). Furthermore, refugee movements may have a detrimental effect on the relations between the country of origin and the country of asylum. Salehyan (2008: 790–1) found that refugees increase the risk of militarized interstate disputes in country dyads experiencing refugee movements. Kathman (2011: 18) argues that as refugee numbers rise, third parties become more likely to intervene in a civil conflict. Host states usually initiate violence in order to prevent future negative externalities ascribed to the refugee influx. Home states start conflicts when they cross borders to fight transnational rebel groups associated with refugee movements.

Having examined how refugees may cause different forms of conflict, the question of how these violent instances can be prevented must be addressed. The next section therefore focuses on implications of the aforementioned findings for (forced) migration governance and draws general conclusions.

Conclusion and implications for (forced) migration governance

The question of whether refugees cause conflict in host states holds considerable importance for national and international (forced) migration governance. Knowing how to anticipate and prevent tensions in the context of refugee inflows helps states to identify where refugee protection is most needed and helps advance a more efficient international refugee response regime. ‘Refugees cannot be expected to put environmental considerations ahead of their own safety and welfare’ (UNHCR, 2001). Therefore, host regimes, along with agencies such as UNHCR, must develop strategies to mitigate the negative externalities of refugees. In its *Environmental Guidelines* (UNHCR, 1996), UNHCR professes to prevent, minimize and reverse environmental damage caused by large refugee groups. For example, in Ethiopia, UNHCR has promoted the planting of a million trees around camps to fight deforestation (Bacchi, 2017).

Scholarship studying the link between refugees and conflict reveals divergent types of conflict such as protest, communal conflict and civil war. Yet, the conflict and refugee literature also indicates that overall such incidents are uncommon, and that refugee militarization and terrorist linkages are only recorded in extreme cases. Even in these cases,

refugees do not necessarily engage willingly, but are often recruited forcefully. The reasons for all types of conflict, furthermore, do not correlate with refugee numbers, but rather reflect the political context of the receiving country, which determines the response to refugee inflows (see [Chapter 6](#)). Case studies reveal that conflict involving refugees is only likely when refugees are confronted with exclusionary policies, which makes them more aggrieved and motivated to engage in violence. As Lischer (2005) underlines, the extent to which the host regime is willing and able to host and assist refugees affects the incidence of violence in refugee-receiving states. Service provisions by governments and aid agencies are only effective if equal access to both refugees and host communities is guaranteed.

Although scientific findings suggest that refugees increase conflict and political instability in some situations, they differ from public opinions that depict forced migrant inflows as inherently harmful. Most academic research presents a disaggregated and more balanced framework that shows that the impact of refugees on the host's security is very limited. In addition, while heated debates about refugee admission policies, particularly in Europe and the United States, are ongoing, the vast majority of refugees indeed remain in developing countries. Onward movements towards Europe only happen when forced migrants are confronted with limited livelihood opportunities and social exclusion in the countries of first asylum. Thus, Western countries should provide support in regions bordering conflict zones and take responsibility for sharing the burden of those countries by providing, for example, higher resettlement quotas and assisting host governments in creating more long-term livelihood opportunities and sustainable integration possibilities for the displaced population.

Conflicts cluster in certain world regions, but refugees are not liable for the spread of civil war to neighbouring countries. Refugees only exacerbate the risk of violent conflict when they arrive in already tense settings. Consequently, we suggest that governments in refugee-receiving countries can reduce the risk of resentment and consequent conflict among their populations by providing relief and security to refugees and the local population and by including political minorities in state decision making. Those refugees without protection are particularly vulnerable and exposed to rebel manipulation. Hence, in cases where refugees lack support from political leaders in the host state, the international community and humanitarian organizations must mobilize to maintain safety and impartially assist all refugees regardless of their national, religious or ethnic background.

Limitations and prospects for future research

This decade has witnessed heightened political debate surrounding the effects of refugee inflows on security and conflict. Simultaneously, research on the risks associated with forced migration have gained practical relevance. To date, however, the literature on refugees and conflict does not offer a clear answer to the question of how refugees affect security. In particular, this is because the literature consists mainly of qualitative studies that focus on a few prominent cases (Newland, 1993; Whitaker, 1998; Lischer, 2005; Loescher and Milner, 2005; Adamson, 2006; Krcmaric, 2014). In a frequently cited comparative study, Salehyan and Gleditsch (2006) find that refugee-receiving countries have a higher risk of experiencing civil war, owing to the destabilizing consequences for the host state's economy, society and security. More recently, the effect of internal and cross-border displacement on the risk of terrorist attacks has received academic attention (Choi and Salehyan, 2013; Milton et al, 2013; Bove and Böhmelt, 2016; Choi and Piazza, 2016). Yet, previous scholarship on forced displacement and violence suffers from several shortcomings that complicate the formulation of effective governance recommendations on how to prevent conflict and violence in refugee-receiving countries. A better insight into these dynamics is critical to help governments understand that the actual risk of accepting refugees is far lower than is often perceived. This chapter therefore identifies three broad areas where future research is pivotal.

First, further systematic analysis is critical to understanding how the negative mechanisms attributed to refugee groups actually relate to violent conflict, such as rebel network diffusion or impacts on the local economy and environment. Second, research on specific refugee identities should be advanced to deepen the knowledge on refugee manipulation in conflict, including the settlement location beyond Africa, gender or age (see Johnson, 2011). Such analysis will require improved quantitative refugee data, that is, data based on more precise figures and categorizations, as well as longer time frames. In this regard, comparative researchers should be aware that behind each refugee number in their analysis is an individual story. Research that promotes better protection of internally displaced people should also be advanced. Third, while researchers have started to focus on various types of violence involving refugees as victims or as perpetrators, such as riots, communal strife and terrorist attacks, there is still a need for a better systematic understanding of how insecurity caused during

conflicts in neighbouring countries and consequent refugee inflows manifests in different forms of political violence.

For now, we conclude that the public debate has overstated the effect of refugees on political violence in host countries. Refugee-hostile governments blame refugees for internal problems without solid cause, claiming that refugees affect the host country's environment, healthcare services, economy and ethnic balances. Yet the scale and type of these potential effects is not always the same. Negative externalities causing violent outcomes seem only to be likely when refugees are marginalized or unequally treated compared with the host population. In sum, the forced migration literature so far indicates that refugees are most likely to find safety in countries that pursue inclusionary policies towards their population, including local minorities and forced migrants.

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Conflict-Prone Minerals, Forced Migration and Norm Dynamics in the Kimberley Process and ICGLR

J. Andrew Grant

Introduction

Scholars of environmental studies have devoted increasing attention to linkages between natural resource conflict and migration. This recognizes the interdependencies of environmental and resource-related conflicts in relation to migration, as well as the governance responses to attendant human security challenges. These scholarly trends are generating a small yet growing literature that examines how norm dynamics influence governance regimes that mitigate the likelihood of violent conflicts, which in turn reduces sources of forced migration in the form of internally displaced persons (IDPs) and refugees. In regional terms, Africa has been a predominant focus of such studies – especially in the continent’s extractive sectors (see, for example, [Chapter 4](#) in this volume for a relevant study on Somalia, and Mitchell, 2018 for additional cases). Throughout the 1990s, countries such as Sierra Leone, Angola, Liberia and the Democratic Republic of Congo (DRC) experienced severe and lengthy natural resource-related conflicts, which resulted in the forced migration of hundreds of thousands of IDPs and refugees. Although broader institutionalized regimes like the United Nations (UN) and the International Organization for Migration (IOM) counted peacekeeping and migration challenges under their

purview, respectively, specific global or regional governance regimes that might address the underlying resource-related dynamics of violent conflict did not exist at the time. While it was recognized that migration that takes place in reaction to sustained violence such as inter-state or intra-state warfare was costly in terms of infrastructure, economic disruption, and the maintenance of IDP and refugee camps, no global or regional governance regime focused on the migration dimension of resource-related conflicts in fragile states (Grant, 2010; Grant et al, 2012). By the end of the 1990s, however, conditions began to change. Scholars, practitioners, media and civil society groups started to focus on how natural resources – minerals in particular – were sustaining the aforementioned civil wars in Africa (Le Billon, 2001; Grant et al, 2003; Mehler and Basedau, 2005; Alao, 2007; Lujala and Rustad, 2011; Wynberg and Sowman, 2014). At the start of the 2000s, this diverse set of actors provided the epistemic and normative environments that enabled the Kimberley Process (KP) – and later the International Conference on the Great Lakes Region (ICGLR) – to be established and further developed as a means of mitigating conflict via regulatory governance of the supply chains of conflict-prone minerals, which would make it more difficult for belligerents to use minerals to fund sustained violence. In turn, the restriction of the financial ability to fund armed conflict meant less fighting and greater security, conditions that reduce the need for civilians to migrate.

Although the KP and ICGLR are neither environmental nor migration regimes in the strictest sense, they *are* nonetheless a pair of regimes that *respond to the governance challenges* associated with the extraction of mineral resources from the *natural environment*. Specifically, the KP and ICGLR aim to prevent the trade of conflict-prone minerals – rough diamonds, tin, coltan, gold and tungsten – thereby removing the financial ability of non-state armed groups (NSAGs) to wage war and therefore generate forced migration and environmental destruction. Ultimately, both natural resource governance regimes aim to promote and protect human security – a concept that includes protecting the health and safety of individuals residing in and around mining areas by keeping environmental degradation to a minimum. Moreover, and most critically, *both governance regimes seek to prevent the conditions* that result in sustained violence (such as civil wars) *that drive forced migration* – by implementing and strengthening regulations, certifications and transparency in mining sectors.

Despite the growth of scholarly interest in the interplay between natural resources, violent conflict and migration in Africa, relatively little attention has been allocated to understanding how *African* state

and non-state actors have participated in the KP and ICGLR. This gap is somewhat surprising given that African state and non-state actors have first-hand experience when it comes to witnessing the need for governance initiatives that mitigate the conditions that subsequently result in forced migration flows. Since norms are vital components of all facets of governance regimes – ranging from constitutive norms that led to the creation of the regime to how regimes subsequently produce more specific norms linked to their objectives – it is important to incorporate a normative conceptual approach in this study. Hence, in accordance with the methodology described later, this chapter adopts an agential constructivist approach in order to help fill in the gaps in the literature by highlighting the role that African state and non-state actors have performed in the development and execution of the KP and ICGLR’s governance efforts.

The chapter is structured in the following manner. After this introductory section, the methodology and conceptual approach are elucidated. Next, the chapter analyzes each case study (KP and ICGLR), which includes an examination of the normative elements of each natural resource governance regime, the central rules and policies created by each regime, and whether each regime ‘works’ (for example, the extent to which each regime achieves its goals of conflict mitigation and, ultimately, forced migration). The chapter concludes by describing some of the challenges that the current governance arrangements within each regime are facing as well as offering some suggestions on how to strengthen these regimes in order to improve the situation ‘on the ground’.

Methodology

This chapter focuses on two primary case studies – the natural governance regimes known as the KP and the ICGLR. Each case study is examined using the same analytical criteria in order to assess how successful they are in practice. ‘Success’ is understood to mean the extent to which the number of civil wars funded in part by conflict-prone minerals *and* attendant flows of forced migration (IDPs and refugees) have *decreased* since these regimes have come into effect. While gaining insights into the degree of success (or failure) of the KP and ICGLR are useful, this chapter goes further by helping scholars understand the norm dynamics that underpin the robustness of these regimes. Thus, the chapter also elucidates how the *constitutive* norms (such as human rights, rule of law, transparency) served to create the governance regime; and how the robustness (strength of the regulatory

scheme) of the governance regime influences the degree to which the generated norm – otherwise known as the *definitive* norm – (for example, conflict-free mineral norm) affects actor behaviour in a manner that mitigates the conditions for violent conflict and attendant forced migration. This methodology allows us to indirectly measure the extent to which compliance with the governance regime is occurring, as it is notoriously difficult to measure flows of illegal goods with any precision as well as interview participants engaged in (or directly observe) the illegal trade of goods (such as conflict-prone minerals). The analyses provided by the chapter are based on a review of secondary sources as well as primary sources collected or facilitated by the author including the terms of reference, written decisions, speeches and communications of the KP and ICGLR, field work, in-person interviews, and participant observations in KP and ICGLR member states from 2003 to 2018.

As regards case selection, there are a growing number of governance regimes that promote norms like greater transparency and respect for human rights in natural resource sectors. Some examples are the Extractive Industries Transparency Initiative, Voluntary Principles on Security and Human Rights, and United Nations Guiding Principles on Business and Human Rights (see, for example, Alorse et al, 2015; Alorse, 2019; Enns 2019). However, the KP and ICGLR were selected for the present study because they focus explicitly on stemming the outbreak of *sustained violent conflict* (such as civil wars) that is not only funded by natural resources, but also results in the *forced migration* of civilians.

Conceptual approach

In order to unpack and reveal the norm dynamics that underpin the robustness of the KP and ICGLR, the chapter adopts an agential constructivist approach. Constructivism offers a valuable way in which to study how norms influence actors. Norms are infused with ideas, and these ideas are implemented by regimes and their institutions. The KP and ICGLR are not merely regimes; rather, they also have physical institutions with secretariats and individuals who operate on their behalf, backed by national legislation and global declarations (for example, UN General Assembly resolutions, UN Security Council [UNSC] sanctions and so on) that facilitate the implementation of the ideas and diffuse the norms related to their respective issue areas. While constructivism tends to place much emphasis on structures (and how these account for relative power imbalances among actors), its

agential variant emphasizes how seemingly ‘weak’ actors actually possess significant influence as part of the ‘glocal networks’ that constitute norm dynamics (Grant, 2018a: 257).¹ Agential constructivism illustrates how actors – such as African post-colonial states, civil society organizations and commercial entities (firms, traders, and so on) – are emancipating themselves from historical power imbalances via governance networks in order to exert influence on issue areas of global, regional, national and local importance.

Agential constructivism builds on the extant literature on norm dynamics that scholars such as Finnemore (1996), Finnemore and Sikkink (1998), Wendt (1999), Guzzini (2000), Acharya (2011), Sikkink (2011), Panke and Petersohn (2012, 2017), Bloomfield (2016), Brazys et al (2017) and Jinnah (2017) have established over the past two-and-a-half decades. A common thread that connects these scholars is the way in which they define norms; that is, norms are considered ‘shared expectations about *appropriate behavior* held by a [specific] community of actors’ (Finnemore, 1996: 22, emphasis added). Another common theme among these scholars is that the norm (or norms) that they examine is applied to a human security issue area that ultimately aims to protect or ameliorate human rights either generally or specifically. Hence, the focus of the present study on the constitutive norm of protecting human rights and the definitive norm of trading only conflict-free minerals in the context of the human security issue of forced migration is particularly apt. By ‘appropriate behaviour’, scholars of norms mean that they are concerned about the extent to which the actors in question adhere to (or comply with) a particular standard of behaviour that is understood by the relevant stakeholders.

In the forthcoming analyses of the KP and ICGLR, the chapter assesses the extent to which there is ‘buy-in’ or adherence by relevant actors in the mineral supply chain to the definitive norm’s standard of behaviour of trading or purchasing only conflict-free minerals (such as rough diamonds, tin, coltan, gold and tungsten). The relevant actors (or stakeholders) in this issue area are mineral diggers, small-scale traders, ‘tributors’, middlemen (including *négociants* and *comptoirs*), companies, exporters, importers, wholesalers, refiners/smelters, jewelry retailers and consumers. To be sure, the behavioural dynamics associated with the trade of conflict-prone minerals can vary – from the relatively straightforward (for example, a large-scale industrialized mining company exporting its production directly to wholesalers on a regular basis) or relatively complex (for example, a combination of small to medium-sized commercial entrepreneurs that are dividing and mixing groupings of a particular mineral over a sporadic trading

schedule with numerous participants). In the case of the latter, a conflict-free mineral could become a conflict-prone mineral at a later stage in the supply chain. The framers of the KP and ICGLR have recognized this possibility and have therefore sought to educate, sensitize and incentivize stakeholders at each part of the mineral supply chain, respectively.

The Kimberley Process

Throughout the 1990s, the illicit trade of diamonds from Sierra Leone and Angola – and to a lesser extent from Liberia and the DRC – provided an incisive form of financial support for the rebels and other types of NSAGs operating in these countries. By the end of the decade, the role of diamonds in these civil wars – often in conjunction with the brutal human rights abuses perpetrated by NSAGs – were being featured in media reports on these countries. Although civil society organizations were calling for action on the conflict-diamond issue, relatively little progress was made until 2000. In May of that year, South Africa organized a stakeholder meeting in the historic diamond-mining city of Kimberley. This meeting, and a dozen subsequent meetings held over the next three years across the globe (but often in African countries, such as Angola), quickly became known as the ‘Kimberley Process’, and benefitted from the instrumental efforts of the South African Minister of Minerals and Energy, Phumzile Mlambo-Ngcuka (Smillie, 2010; Grant, 2018a). Minister Mlambo-Ngcuka was able to cultivate the governance networks and reconcile the constitutive, norm-promoting interests of various stakeholder groups ranging from African and transnational non-governmental organizations (such as human rights, transparency) to governments (such as rule of law, human rights) to diamond mining and commercial associations (such as corporate social responsibility [CSR], rule of law) that aimed to prevent the trade of rough diamonds. South African mining sector veteran, Abbey Chikane, served as Chair for these meetings and guided proceedings among stakeholders who came from different backgrounds and perspectives on the diamond sector. Minister Mlambo-Ngcuka was able to garner support for what was in effect a conflict-free mineral norm – a prescribed standard of behaviour that would not only satisfy all three aforementioned stakeholder groups, but also appeal to important international organizations, such as the UN, the World Trade Organization and the Group of Eight (known as G-8),² which led them to place the conflict-diamond issue on their agendas.

While those influential organizations with global reach provided institutional backing and additional legitimacy to what was coalescing into a definitive conflict-free mineral norm via resolutions, trade waivers, declarations, and official statements, the meetings generated a global regulatory framework that gave the natural resource governance regime its rules and policies. That is, in 2003, the Kimberley Process Certification Scheme (KPCS) came into effect. The KPCS (2003 [2013]) is a regulatory framework that sets out the rules and policies for the production, exportation and importation of rough diamonds.³ These rules and policies strengthen oversight and increase transparency in the way in which rough diamonds are traded, with the ultimate objective of strictly prohibiting the trade of conflict diamonds – defined as trading rough diamonds that provide financial support for NSAGs (Grant and Taylor, 2004; Paes, 2005; Bieri, 2010; Grant, 2012, 2017; Santiago, 2014). Prior to the establishment of the KCPS, there was very little oversight and transparency concerning the trade of diamonds, and the strength of the related national legislation on the production, exportation and importation of rough diamonds varied quite widely from country to country. This previous state of affairs meant that conflict diamonds could enter the world market as easy as any illicit good. Since 2003, however, global governance conditions in the diamond sector have changed. Although each member of the KCPS maintains its own national legislation on the trade of diamonds, this legislation is reviewed by the KP. In order to become a member of the KPCS, the relevant legislation must demonstrate a strong set of governance rules and policies overseeing the rough-diamond supply chain within – and entry to – its borders. KP Certificates containing information on origin, number of carats, value and other information must accompany each tamper-proof shipment of rough diamonds, which thwarts illicit diamonds from entering the licit market. Information gathered from the KP Certificates also generates statistics that help detect anomalies indicating illicit intrusions into the global trade of rough diamonds. Industry experts also advise the KP on tracing potential geographical sources of conflict diamonds. If commercial entities are found to be trading conflict diamonds, they face expulsion from the global diamond sector by the World Diamond Council. If KP members are found to be in non-compliance, they face suspension from the KPCS, which means they can no longer export (or import) rough diamonds (see cases of suspension detailed in Grant, 2013a, 2013b).

The KP arose from a confluence of constitutive norm-promoting interests such as human rights, rule of law, transparency and

CSR – which generated a natural resource governance regime (the KPCS) and a definitive norm (a conflict-free mineral norm). The regime draws robustness not only from these constitutive norms but also from international hard law (such as past and future UNSC sanctions on transgressors), national laws of more than 99 per cent of the world’s diamond-producing or trading countries, and international soft law (such as declarations,⁴ decisions and other actions by ‘global governors’⁵ that might impel compliance with the conflict-free mineral norm). Is the conflict-free mineral norm associated with the KP regime successful as measured by its ability to influence actor behaviour such that civil warfare funded by conflict minerals (such as rough diamonds) and resultant numbers of forced migrants have decreased? By and large, the answer is ‘yes’. Civil wars in which rough diamonds once provided a significant level of financial support for NSAGs – Sierra Leone, Angola, Liberia and Côte d’Ivoire – have all ended. And although parts of the DRC and Central Africa Republic (CAR) are still subject to sporadic episodes of violence and observers correctly question whether their respective civil wars are truly over, diamonds no longer provide financial support for NSAGs aside from an occasional, peripheral illicit transaction. Circa 1998, estimates of the proportion of the annual trade of rough diamonds considered conflict diamonds was in the range of 5 per cent to 20 per cent. By 2008, this proportion had fallen to below 0.2 per cent, and by mid-2019 the trade of conflict diamonds had decreased to virtually nil.⁶ As regards forced migration, these ‘conflict-diamond’ countries⁷ – along with neighbouring states Guinea, Ghana, Namibia, and Botswana – were home to a total of nearly 760,000 refugees in 1998.⁸ By 2008, this number had declined to approximately 92,500. By December 2018, the total number of refugees still residing in camps in these countries was roughly 20,000. In 1998, Sierra Leone, Angola, Liberia and Côte d’Ivoire were home to millions of IDPs – a figure that dropped to 621,000 in 2008, and then to nil by December 2017 before growing to 3,700 over the course of 2018 due to a series of violent clashes in Côte d’Ivoire and Sierra Leone (IDMC, 2008: 2, 2019).

The International Conference on the Great Lakes Region

The Great Lakes Region Africa has been the site of civil wars and home to numerous cross-border NSAGs over the past three decades. While the 1990s was a particularly dire time for human security – ranging from the Rwandan genocide to the ‘first’ DRC civil war to

sustained violence by NSAGs in Burundi and Uganda – the 2000s was not much better as civilians continued to be caught in cross-fire. Perhaps having grown too fatigued by the violence and regional instability (Grant, 2019; Grant et al, 2019) by the mid-2000s, 11 countries in the region⁹ participated in a regional forum to promote security. Concomitantly, the Group of Friends – comprising several intergovernmental and multilateral organizations and more than two dozen states – helped bring the aforementioned countries in the region to sign the Pact on Peace, Stability, and Development in the Great Lakes Region, in December 2006. The Pact – which underpins the security governance regime known as the ICGLR – seeks to promote regional security by focusing on five themes: safe movement of people, human security, economic development, peacebuilding and post-conflict reconstruction, and good governance. In the preamble of the Pact, efforts associated with *protecting and assisting refugees and IDPs* appears prominently (ICGLR, 2006 [2012]: 1, emphasis added). Human rights and the rule of law are the most apparent constitutive norms evident among the five themes and reflect the norm-promoting interests of the 11 state signatories and the Group of Friends.

Shortly thereafter, signatories established a secretariat in Bujumbura, Burundi, that coordinates and advises on the logistics of the protocols and the themes of the Pact (Bøås et al, 2009). The Pact also contains ten protocols, one of which (Article 9) specifies the role of conflict-prone minerals as a source of violent conflict across the ICGLR member states – that is, the Protocol Against the Illegal Exploitation of Natural Resources. Importantly, the Protocol included a provision that called for the establishment of ‘a regional certification mechanism for the exploitation, monitoring and verification of natural resources within the Great Lakes Region’ (ICGLR, 2006 [2012]: 6). The Protocol also called for the certification mechanism to ‘comply with harmonized national legislation as well as the principles of transparency, responsibility, equity, and respect for the environment and human settlements’ (ICGLR, 2006 [2012]: 6). Once the Pact came into force in June 2008, stakeholders could therefore be explicit about how this regional certification mechanism would transform norm-promoting interests into rules and policies to prevent the trade of conflict-prone minerals.

Empowered by these normative goals and a strong mandate from the Pact signatories, ICGLR states collaborated with civil society participants¹⁰ and other stakeholders including the private sector¹¹ to devise a governance regime that would regulate the regional trade of tungsten, tin, coltan and gold (rough diamonds were already covered by

the KPCS). Some of the participants looked to the KPCS and adapted some of its regulatory elements and more innovative governance approaches (Grant, 2014; 2018b: 65). The participants finalized the regulatory and governance regime – known as the Regional Certification Mechanism (RCM) – by the end of 2010. Shortly thereafter, the RCM was approved by all member states of the ICGLR. The RCM was a welcome and innovative way to move the ICGLR in a positive direction to address its core mandates relating to human security and regional security by tackling the complex trade links associated with conflict-prone minerals and the attendant generation of forced migration flows. Hence, like the KP, the ICGLR's Protocol Against the Illegal Exploitation of Natural Resources represents a confluence of constitutive norm-promoting interests such as human rights, rule of law and transparency. While the developmental phase of the KP contained CSR as a constitutive norm-promoting interest (instead of respect for the environment in the ICGLR's Protocol Against the Illegal Exploitation of Natural Resources), *mutatis mutandis*, the ICGLR generated a natural resource governance regime (for example, the Protocol supported by the RCM) and the same type of definitive norm, the conflict-free mineral norm.

The regime also benefits from the ICGLR-RCM's reference documents, where there is a listing of 'key international legal instruments and norms' (ICGLR, n.d: 50, emphasis added) that includes headings that seek to promote human rights (for example, the Universal Declaration of Human Rights) and CSR (for example, the Organisation for Economic Co-operation and Development's [OECD] Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas), as well as prevent conflict-related sexual violence and ensure that women can participate in peace processes (for example, UNSC Resolution 1325 [2000]; ICGLR, n.d: 50–1). This reflects the norm-promoting interests of the stakeholders in establishing the ICGLR, and adds the complementary constitutive norm of CSR – all of which sustain the definitive, conflict-free mineral norm. As regards robustness, the ICGLR's Protocol Against the Illegal Exploitation of Natural Resources regime benefits from the above constitutive norms as well as instruments of international hard law (such as the ICGLR itself and current UNSC sanctions), national laws (for example, associated legislation in all 12 ICGLR member states on the trade of gold, coltan, tin and tungsten), and international soft law (such as declarations of the ICGLR-OECD-UN Group of Expert Forum on Responsible Mineral Supply Chains). In 2013, the first RCM

certificates were issued by Rwanda and the DRC, a trend that continues as of mid-2019.¹²

While the constitutive norms are well supported institutionally by national legislation and international hard and soft law would seem to indicate a robustness of the ICGLR's Protocol via its RCM to regulate the mineral supply chain, it is unclear whether this is translating into compliant behaviour by all stakeholders on the ground. Consumers, retailers and large mining firms have become aware of the deleterious effects of the trade of conflict-prone minerals, but this has not necessarily translated into the prescribed standard of behaviour in the first stages of the supply chain. In August 2017, a Congolese officer (a major with the *Forces armées de la République démocratique du Congo* [FARDC]) was caught smuggling 580 kg of undocumented tantalum, concealed in various compartments of his vehicle, out of the country (UNSC, 2017: 11). Additionally, the NSAG known as Mai-Mai Yakutumba has been earning income from mining activities in and around the Misisi region of the DRC (UNSC, 2018: 13). Even though hundreds of RCM certificates are reportedly being issued, one might reasonably expect the annual number of RCM certificates to be in the thousands given the estimated production and export of the four minerals. Aside from Rwanda and the DRC, the members of the ICGLR have been slow to issue their own RCM certificates. Though primarily a transit country, Uganda is nonetheless home of all four minerals – yet it is still a few years away from issuing its own RCM certificates.¹³ Moreover, in 2017, 50 RCM certificates were stolen from the government agency responsible for their issuance in the DRC. While some staff members of the government agency (Centre for the Evaluation, Appraisal and Certification of Precious and Semi-Precious Mineral Substances) were arrested, the RCM certificates were not recovered. While the theft of the RCM certificates indicates that they are perceived as a valuable and necessary means to trade gold and the '3T' minerals¹⁴, these certificates could be obtained and used by NSAGs in the region – a possibility that should not be ruled out. There are reports that the *Forces démocratiques de libération du Rwanda* and Congolese NSAGs are funding themselves via the trade of charcoal and hardwood planks sourced from the Virunga National Park (UNSC, 2017: 6). Trading gold or one of the 3Ts would be more lucrative than these other natural resource-based commodities. Although the ICGLR Protocol regime has had a positive influence on the behaviour of some actors, it cannot be considered a success – at least circa 2019. The civil wars in the DRC and CAR continue to ebb and flow between periods of near-peace and extreme violence, and forced migration continues in

a correlating manner. Given their geographical proximity, the civil wars in the DRC and CAR generated refugees who relocated to each other's territory. Neighbouring countries have also absorbed large numbers of their refugees since 1998 – Tanzania, Republic of Congo (ROC), Kenya, Uganda, Zambia, Burundi, Rwanda and Angola. Hence, these 10 countries hosted a total of approximately 1,535,000 refugees in 1998.¹⁵ By 2008, these numbers had declined to approximately 1,164,000. By December 2018, however, the total number of refugees still residing in camps in these countries was nearly 2,500,000. Even if one were to remove Uganda's total of 1,165,653 refugees as of December 2018 – which is nearly a ten-fold jump from its figures a decade earlier and represents inflows from South Sudan and other East African countries – the forced migration numbers are still high. Although slightly better in comparative terms, the figures for IDPs are telling. In 1998, the DRC, ROC, CAR, Kenya, Uganda and Burundi were home to a total of approximately 6,000,000 IDPs. In 2008, these six countries hosted 2,934,800 IDPs, but by December 2018, these numbers approached levels witnessed two decades ago, rising to 4,072,000 (IDMC, 2008: 2, 2019: 118–20) – with 1,840,000 'new' IDPs being forced to migrate within the DRC in the 2018 calendar year alone (IDMC, 2019: 118).

Conclusion

The scholarship on environmental studies is expanding in a more holistic and comprehensive manner by drawing attention to the human rights dynamics between natural resource conflicts and migration. This expansion in the literature also encompasses concerns for improving governance regimes that promote human security and sustainable development. Even during periods of relative peace, grievances could once again spur systematic violent conflict over the control and trade of natural resources that often results in forced migration. The importance of addressing these intertwined dynamics are well captured by the 2018 Chair of the Kimberley Process, Hilde Hardeman: '... the record of the Kimberley Process is impressive. It has been a driving force for peace and prosperity, *tying in closely with the 2030 Agenda for Sustainable Development*. Together, we demonstrated that the Kimberley Process can fulfil its role as a *unique tool for conflict prevention*'.¹⁶ At the beginning of Section 1, when describing its purpose, the ICGLR's Protocol RCM uses similar terminology regarding the need to remove grievance-fomenting conditions and to promote human security and sustainable development:

[t]he purpose of the ICGLR Mineral Tracking and Certification Scheme is to provide for *sustainable* conflict-free mineral chains in and between Member States of the International Conference on the Great Lakes Region with a view to eliminating support to armed groups that sustain or prolong conflict, and/or otherwise engage in serious *human rights* abuses. (ICGLR, n.d: 4, emphasis added)

The KP and ICGLR are natural resource governance regimes whose institutional activities are infused by constitutive norms such as human rights/human security, rule of law, transparency, CSR and sustainable development/respect for the environment. These regimes have sought to transform these constitutive norms into a definitive norm; that is, the conflict-free mineral norm. Through education, sensitization and incentivization – backed by international hard and soft law as well as national legislation – the KP and ICGLR have produced a standard of behaviour whereby relevant actors do not dig, trade or purchase a mineral from one of the five conflict-prone mineral categories. Compliance with this standard of behaviour as set out by the conflict-free mineral norm is consistent with the overarching effort to regulate global supply chains in order prevent illegal extractive activities in mineral resource sectors – with knock-on effects relating not only to environmental considerations, but especially to grievance-producing violent conflict that generates forced migration flows.

Given the physical and logistical limitations that prevent one from observing all possible episodes of direct compliance (or non-compliance) with this standard of behaviour impelled by the regimes' conflict-free mineral norm, this chapter has employed indirect methods. In the aggregate, one can gain insights into the degree of success (or failure) of the KP and ICGLR by comparing how the number of civil wars funded at least in some way by conflict-prone minerals and associated flows of forced migration have changed once these regimes have had a chance to operate for a few years. In the case of the KP, four of the six civil wars involving rough diamonds as a conflict-prone mineral have ended, and in the countries where the civil wars are still active (such as the DRC and CAR), the role of diamonds is quite minimal. In a similar vein, refugees and IDPs from conflict-diamond regions dropped from a few million in 1998 to less than 35,000 nearly two decades later. In the case of the ICGLR, both of the civil wars involving at least one of the non-diamond conflict-prone minerals – gold, coltan, tin or tungsten – are arguably ongoing. While experiencing a modest

dip a decade ago, forced migration flows in the form of refugees and IDPs have returned to the levels witnessed two decades ago.

It would be easy to declare the KP a ‘moderate success’ and the ICGLR a ‘failure’. However, both governance regimes issue thousands of ‘certificates of origin’ each year, and have increased transparency tremendously where none existed before. They have brought industry ‘to the table’ and worked ‘with’ industry instead of against it, ultimately making it much more difficult to trade in conflict-prone minerals via greater regulatory oversight and reducing the number of potential customers through a combination of norms, international hard and soft law, and fortified national legislation. Moreover, it is important to keep in mind that the civil wars in the DRC and CAR are subject to myriad, long-standing causal factors, and the financial attractiveness of conflict-prone minerals is just one factor among many. Even completely removing conflict-prone minerals from the equation would not necessarily end these two civil wars.

As the editors of this volume correctly assert, the relationships, interdependencies and interlinkages between violent conflict and migration are complex phenomena. This chapter has focused on these constellations as they relate to forced migration, and the transnational governance responses that have arisen to address the attendant human security challenges. This chapter therefore speaks to the core themes and questions of this volume and specifically elucidates how governance regimes on natural resources can reduce the chances of conflicts and forced migration emerging. In so doing, the chapter traces the trajectories of the KP and ICGLR natural resource governance regimes, which offers insights into areas of future research on transnational governance initiatives addressing environmental, resource-related and migration-inducing conflicts. That said, there are limitations concerning the environmental–conflict–mineral nexus. The scholarly literature on the governance of natural resources offers very little in terms of a specific set of analyses of how sustained episodes of conflict mineral-based violence affects the environment. Future research, carried out in a systematic fashion on this facet of environmental–conflict–mineral relationships, is vital to understanding whether non-state armed groups heed broader norms about preventing environmental degradation. Furthermore, such findings would have implications for post-conflict reconstruction efforts, as environmental degradation in mining areas has negative impacts on farming, access to potable water, and general household safety. Future research endeavours on the environmental–conflict–mineral constellation would also be of relevance to scholars, observers and policy makers focusing on

governance regimes and responsible supply chains in Africa – as well as other regions of the globe.

It is also important to hold a clear-eyed, balanced view that is neither overly optimistic nor pessimistic concerning the prospects for natural resource governance regimes, which nonetheless emphasizes the accomplishments and shortcomings of the KP and ICGLR. While African state and non-state actors have played a significant role in the norms dynamics, establishment and implementation of these regimes, they have also sought to weaken these governance initiatives. In the case of the KP, the ‘Zimbabwe crisis’ is the most pertinent whereby current governance arrangements resulted in a loophole as agents of the government benefitted from the trade of illicit – if not strictly conflict – diamonds in the late 2000s (Human Rights Watch, 2009; Partnership Africa Canada, 2009, 2010, 2012; Global Witness, 2010, 2012; Grant 2013a, 2013b, 2018b; Munier, 2016). In the case of the ICGLR and its current governance arrangement, the Electronic Industry Citizenship Coalition–Global e–Sustainability Initiative (EICC–GeSI) auditing of the ICGLR mineral supply chain resulted in largely preventing African participants from offering competing services. In addition, the UN panel of experts is perhaps the most regular chronicler of state and non-state actors still trying to locate blind-spots in the ICGLR RCM by attempting to trade non-diamond conflict-prone minerals in the DRC (see, for example UNSC, 2017, 2018).

Nevertheless, it is much more difficult to trade in conflict-prone minerals now than 20 years ago. And, on balance, the situation on the ground has witnessed more benefits to human security (including reducing the likelihood of forced migration) through the implementation and strengthening of regulations, certifications and transparency in these mineral supply chains of over the past two decades – even if this has led to conditions whereby some observers feel that industry benefits from a more centralized market for these minerals. That said, more work needs to be done in terms of strengthening the overall governance performance of these regimes – and African state and non-state actors are expected to continue to play a central role in shaping future developments.

Notes

- ¹ Although Compaoré (2018) does not employ the term ‘agential constructivism’, she nonetheless employs an analysis of norm dynamics that is arguably consistent with such a conceptual approach as part of her study of the underappreciated power and influence of African states in global politics. Grant et al (2013, 2015, 2016), Djomo et al (2018), Grant (2018b) and Collins et al (2019) examine how African

actors draw upon *glocal* networks to exert agency in global governance approaches to forestry, land use and climate change in Africa.

- ² Now the Group of Seven (G-7).
- ³ For the most recent terms of reference for the KPCS, see www.kimberleyprocess.com/en/system/files/documents/20131122_kpcs_core_document_with_amending_ads.pdf
- ⁴ The Kimberley Process Final Communiqués, agreed to by consensus at the end of each annual plenary meeting, are very important soft law documents indicating decisions and other actions by KP stakeholders. Some of the more notable Final Communiqués that make reference to human rights are the declarations from Moscow (Kimberley Process, 2005), Jerusalem (Kimberley Process, 2010), Washington (Kimberley Process, 2012) and Johannesburg (Kimberley Process, 2013).
- ⁵ See, for example, the contributors to Avant et al (2010).
- ⁶ As of mid-2019, any rough diamonds that fall under the official definition of conflict diamonds would likely originate from Central African Republic, and, albeit highly unlikely, the DRC.
- ⁷ Angola is not included in this count because it has been home to Congolese refugees. To avoid duplication, the refugees located in Angola are tabulated as part of the other conflict-prone mineral drivers from the DRC and its civil wars.
- ⁸ All statistics on refugees are derived from the UNHCR's Statistics Database, www.unhcr.org/en-us/refugees.html
- ⁹ Participant countries were Angola, Kenya, Burundi, CAR, DRC, Republic of Congo, Rwanda, Uganda, Sudan, Tanzania and Zambia. South Sudan later joined the ICGLR in 2012.
- ¹⁰ Partnership Africa Canada/IMPACT was one of the leading participants in the efforts to create what became known as the Regional Certification Mechanism and advised the ICGLR extensively. Author interviews with a member of Partnership Africa Canada/IMPACT, in Swakopmund, Namibia, on 2 November 2009, and in Ottawa, Canada, on 8 July 2016. See also Partnership Africa Canada (2009).
- ¹¹ See for example Blore and Smillie (2011: 5), who quote the ICGLR's executive secretary, Ambassador Liberata Mulamula.
- ¹² The following ICGLR resource provides a detailed overview of how the RCM works: www.icglr-rinr.org/index.php/en/certification
- ¹³ According to the Ugandan Chair of the Audit Committee of the ICGLR, as mentioned in an interview by Oil in Uganda (2017).
- ¹⁴ Following tungsten and tin, the third 'T' refers to tantalum, which is derived from coltan (though the latter is more commonly invoked in discussions describing conflict-prone mineral dynamics in the DRC and elsewhere).
- ¹⁵ All statistics on refugees are drawn from the UNHCR's Statistics Database, www.unhcr.org/en-us/refugees.html
- ¹⁶ Speech delivered by Hilde Hardeman, Chair of the KP, as part of the High Level Side Event on the Kimberley Process, Sustaining Peace and the 2030 Agenda for Sustainable Development, New York (7 March 2018), emphasis added.

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On the Nexus Between Environmental Conflict, Migration and Governance: Concluding Remarks

Günther G. Schulze

Introduction

This volume sets out to shed new light on the nexus between environmental and resource-related problems that lead to conflict and migration; it has throughout emphasized the importance of governance. The starting point of the analyses has been the environmental or natural resource problem. Natural resource problems can take the form of either resource scarcity or resource abundance, the latter of which leads to political resource-curse phenomena (corruption, rent seeking and deteriorating institutional quality). Environmental problems include, among others, natural or man-made disasters, crop failures and environmental degradation, which may be related to climate change. These issues have been argued to lead to conflict, which in turn triggers out-migration (Krieger et al, 2019, in this edition. See [Chapter 1, Figure 1.1 in this volume](#)). This environmental conflict–migration nexus is the focus of this book. To be sure, not all environmental and natural resource issues lead to conflict, not all conflicts caused by environmental and natural resource issues lead to significant out-migration, and migration may be caused by a host of other reasons besides environmental conflicts, including many that are

not conflict-related at all. Yet, the environmental conflict–migration nexus studied in this volume is undoubtedly relevant and deserves our attention. The chances are that it will increase in significance in the years to come.

This concluding chapter highlights the key insights of the book and emphasizes the importance of governance for environmental conflicts and for migration. It argues that it is essential to model the interplay between governance, environmental problems, induced conflict and out-migration correctly, comprehensively and context-specifically. Moreover, it raises methodological issues of analyzing the environmental conflict–migration nexus, which puts the importance of this nexus into perspective.

What have we learnt?

This volume covers a wide array of relevant questions on the environmental conflict–migration nexus. So, what is the essence of what we have learnt from these contributions?

Based on an extensive literature review, Tobias Ide ([Chapter 2](#)) argues that renewable resources have become scarcer and that this increased *renewable* resource scarcity is not likely to lead to *inter*-state conflict, but will rather fuel low-intensity *intra*-state conflicts. Pathways leading to conflict are not well understood, and empirical evidence is mixed; renewable resource scarcity may not be the main driver of conflicts but may exacerbate pre-existing ones. Ide sees renewable resource scarcity and a possibly ensuing conflict to be unlikely to trigger large-scale migration flows. Since renewable resource scarcity mostly affects low-intensity conflicts, migration is more likely to be intra-state and short-distance. This is why understanding such a relationship is very complex and context-dependent.

Indra de Soysa ([Chapter 3](#)) starts from the well-known political resource–curse phenomenon (van der Ploeg, 2011), which describes how the abundance of *non-renewable* resources in a country with only moderately functioning institutions can lead to a severe deterioration of governance, an increase in rent seeking, and corruption. Thus, these factors can generate small- and large-scale migration, both directly through repression or armed conflict, and indirectly through economic hardship. Political repression is higher and economic freedom is lower in oil-producing countries than in non-oil-producing countries and natural resource rents may create and fuel conflicts. Poor governance performance and conflict, concludes De Soysa, may lead to significant out-migration, through what he calls ‘looting and uprooting’. Thus,

tackling the issue of bad governance is critical in order to solve population movements related to the types of conflict studied by the author.

Lisa Thalheimer and Christian Webersik ([Chapter 4](#)) posit that there is no sound empirical basis to support the claim that climate change will cause more conflicts and that these conflicts will create large migration flows. They underscore their argument with a case study of Somalia and show that conflict, not climate change, is the chief reason for migration. Conflict, however, exacerbates environmental problems as it makes traditional mechanisms to cope with natural disasters, including traditional migration patterns, more difficult. The authors argue that due to the high interrelatedness, conflict-induced and climate-related migration cannot be clearly disentangled empirically.

Diane C. Bates ([Chapter 5](#)) distinguishes between sudden-onset environmental problems (such as natural disasters) and slow-onset environmental problems (such as climate change) and their impact on an individual's decision to migrate. The more sudden the onset, the more important are the push factors, whereas pull factors become more important for slow onsets. Those who migrate as a result of slow-onset environmental problems are virtually indistinguishable from other migrants and have more decision power concerning where to go and when to migrate (more 'agency' in Bates' terminology). Migrants due to disasters (and to a lesser extent due to managed-onset environmental problems) have less power over their decision to migrate and thus include more vulnerable population groups, such as those with low levels of education, women, elderly people and children. Migration governance matters in all these migration types as governments can facilitate or restrict movements and provide infrastructure and disaster relief, which may keep migration at bay. Moreover, migration may exacerbate environmental problems in destination countries. Bates emphasizes the importance of governance in the light of dystopian projections on climate change and the induced migration flows.

Tim Krieger, Lena Schmid and Laura Renner ([Chapter 6](#)) describe how economists using cost-benefit analysis think about sorting – that is, the question of who migrates where. The authors first note that sorting and the usual push and pull factors depend on the characteristics of the individuals and on the migration governance of the receiving countries, which may not accept certain types of migrants (for example, low-skilled migrants). They note that there is very little empirical evidence on the sorting of environmental conflict-induced migration because of the lack of appropriate data. The authors then hypothesize that sorting effects depend on the type of environmental crisis (slow versus sudden

onset), the personal characteristics of the migrants (especially wealth), and the type of governance in the destination countries.

Using the recent Immigration Policies in Comparison (IMPIC) database for 33 countries belong to the Organisation for Economic Co-operation and Development, Marc Helbling (Chapter 7) shows that immigration policies on family reunion, labour migration and asylum became more liberal between 1980 and 2010, whereas the control of these policies became more restrictive, especially in the European Union. The migration restrictions are effective, and they are even more effective if the unemployment rate is higher and if the stock of migrants from a given origin country in the destination country is high. Policies are more effective for migrant flows from countries with the same colonial heritage. Helbling analyzes migration flows in general and argues that while it is not (yet) possible to study environmental migration separately, it should follow the same pattern.

Federica Cristani, Elisa Fornalé and Sandra Lavenex (Chapter 8) argue that *regional* migration governance plays an important role. The authors show how governments in Latin America have created (and codified) national and regional responses to environmental refugees from the region and point out that regional cooperation initiatives with other motives may help accommodate environmentally induced migration in the region.

Martin Geiger (Chapter 9) maps the *international* migration governance regime dealing with questions of migration in general as well as with resource- or environmentally induced migration specifically. He portrays a complex regime with overlapping mandates and memberships, such as those of the International Organization for Migration, the organization of the United Nations High Commissioner of Refugees, the United Nations Development Programme and the United Nations Environment Programme. The chapter sheds light on the policies of these organizations and shows how they are involved in the negotiation of United Nations (UN) global compacts, such as the Global Compact for Safe, Orderly and Regular Migration and the Global Compact on Refugees. The chapter concludes with a discussion of the impact of global migration governance in general and the potential problem-solving effectiveness of the UN global compacts in this respect. It becomes clear that international cooperation on migration issues is hampered by nation states' unwillingness to cede national sovereignty on migration issues.

Seraina Rüeegger and Heidrun Bohnet (Chapter 10) study how forced migration can affect conflict dynamics and the security situation in host countries. They argue that forced migration may, under certain

circumstances, induce conflict in the host countries as migrants may cause environmental problems, exacerbate resource scarcity, burden the public health system, put a strain on public budgets, bring along arms, and threaten cultural identity in the host country. Especially if treated poorly, refugees can induce or prolong civil conflict and make peace settlement more difficult. Unequal distribution of aid to migrants that sidelines the local population can stir resentments and lead to conflict. This is why governments should pursue inclusionary policies that prevent instability.

J. Andrew Grant ([Chapter 11](#)) focuses on governance regimes that strive to mitigate the likelihood of violent conflicts and related migration effects. For that, he analyses two natural resource governance regimes, that is the Kimberley Process (which aims to stop trade with conflict diamonds) and the International Conference on the Great Lakes Region, focusing on the norm dynamics that underpin the robustness of those regimes. In his analysis, he comes to differentiated, moderately optimistic conclusions as regards the effectiveness of those regimes.

Taken together, these chapters provide a good account of various aspects of the environmental conflict–migration nexus. To put these insights into perspective, the following section comments on the importance of governance in this respect and makes three methodological observations.

The importance of governance

Throughout this volume, the importance of governance has been emphasized repeatedly. Marc Helbling ([Chapter 7](#)), in particular, brings an empirical argument demonstrating that immigration policies matter. Federica Cristani and colleagues ([Chapter 8](#)) show the multitude of regional agreements in Latin America to regulate cross-border environmental migration. Krieger and colleagues ([Chapter 6](#)) argue that migration policies are important for the sorting of migrants into different host countries. Seraina Rüegger and Heidrun Bohnet ([Chapter 10](#)) show that the governance of migration inflows in the host country is decisive for the prevention or creation of conflict. In short, governance matters. Good governance is a complex and context-specific issue; four additional aspects should be considered that are important for the environmental conflict–migration nexus.

First, in order to understand how governance shapes migration flows, we need to understand how migration policies are formed, what their (domestic) political and economic determinants are, and

why migration policies around the world are so different. This would take due account of the endogenous nature of migration policies and consider the political system in which political decisions are reached. Second, immigration policies are set in strategic interdependence of potential host countries and thus the strategic interaction needs to be understood (compare Czaika, 2009). Third, migration policies may be effective (Chapter 7 of this volume; see also Czaika and de Haas, 2013), but restrictions may give rise to illegal behaviour, which undermines the intended effect (Czaika and Hobolth, 2016). Such behaviour may not be easily measurable, and thus empirical results may suggest higher effectiveness. Fourth, most of the governance issues discussed in the contributions to this book are related to migration governance. Yet, the environmental conflict and migration nexus provides entry points for good governance at each of the elements in the environmental and migration nexus, as spelled out in Chapter 1, Figure 1.1. For instance, government policies can address the cause of this nexus, the environmental problem, and can mitigate its fallout, thus preventing conflict from arising.¹ Conflict can be mitigated through conflict-reducing governance responses, such as national disaster relief measures or foreign aid (Czaika, 2009), and out-migration and immigration can be regulated through governance measures. Thus, each link in the chain from environmental problems to conflict to migration could be influenced by governance. Measures at various entry points could reinforce each other, be complementary, or act as substitutes. Migration could also be used as a lever to pursue other goals. The study of these complex interdependencies of government policies and their endogenous nature is an important avenue for future research and should receive further scholarly attention.

The environmental conflict–migration nexus: the nature of the beast

Direction of causality

The analyses in this book start from the occurrence of an environmental conflict. Conflict can be caused by natural resource scarcity or abundance, as well as natural disasters, bad harvests, land degradation, deforestation, or other negative manifestations of climate change. As these environmental issues increase the possibility of conflict, it is implied that public responses to these environmental issues are insufficient and ill governed. These conflicts can then trigger migration movements, which again may be a reflection not only of the underlying

conflict, but also of the governance of the migration pressure building up (compare Chapter 1, Figure 1.1). In short, environmental problems (E) lead to conflict (C), which, in turn, leads to migration (M).

First, we may ask under which circumstances these links are prevalent, and in which situations the links are broken. Environmental issues may, for example, lead to conflict, but not to migration, or environmental issues may be severe, but do not trigger considerable conflict.² Second, we may ask whether this is the only direction of causality and how important it is. In principle, we could establish a number of possible causality chains, as shown in Table 12.1.

Tim Krieger, Diana Panke and Michael Pregernig (KPP, Chapter 1) focus on case 1 in Table 12.1, as do many others (Gleditsch et al, 2007; Gleditsch, 2011), but how important are cases 2 to 6? In addition, the chain of causality could have two links rather than three: $C \Rightarrow E$, $E \Rightarrow C$, $M \Rightarrow E$, and so on. Which of the 12 possible causality chains is the most relevant? All of them seem plausible. The following section outlines a few examples of alternative causality chains.

Burrows and Kinney (2016) address case 2 and analyze how climate change may lead to migration and subsequent conflict (see also Reuveny, 2007; Raleigh et al, 2008; Brzoska and Fröhlich, 2016; Freeman, 2017; Selby et al, 2017). Alshoubaki and Harris (2018) address case 3 and analyze how the Syrian conflict led to mass migration into Jordan and caused environmental and social problems there. Selby and Hoffmann (2012) look at the impact of conflict and (subsequent) migration on water scarcity (see also Skanavis and Kounani, 2016). Case 5 is discussed by Diegues (1992), who describes how a resettlement programme in Brazil led to massive deforestation of the tropical rainforest and subsequent land conflicts. The case $M \Rightarrow E$ is addressed by Black (1994), among others, especially with regards to the effects of migration on deforestation, land degradation and water scarcity.³

Table 12.1: Possible causality chains between environmental problems, conflict and migration

Case 1 KPP	E	\Rightarrow	C	\Rightarrow	M	
Case 2	E	\Rightarrow	M	\Rightarrow	C	
Case 3	C	\Rightarrow	M	\Rightarrow	E	
Case 4	C	\Rightarrow	E	\Rightarrow	M	
Case 5	M	\Rightarrow	E	\Rightarrow	C	
Case 6	M	\Rightarrow	C	\Rightarrow	M	

Of course, there are also ancient examples of conflict–environment nexus: for example, shipbuilding, especially for military purposes in ancient Greece, led to sustained deforestation and soil erosion on the Greek peninsula (Thirgood, 1981; van Andel et al, 1990).

Overall, the most important direction(s) of causality is not entirely clear. However, it seems clear that the linkage analyzed in this volume – $E \Rightarrow C \Rightarrow M$ – is but one case out of many others, albeit an important one.

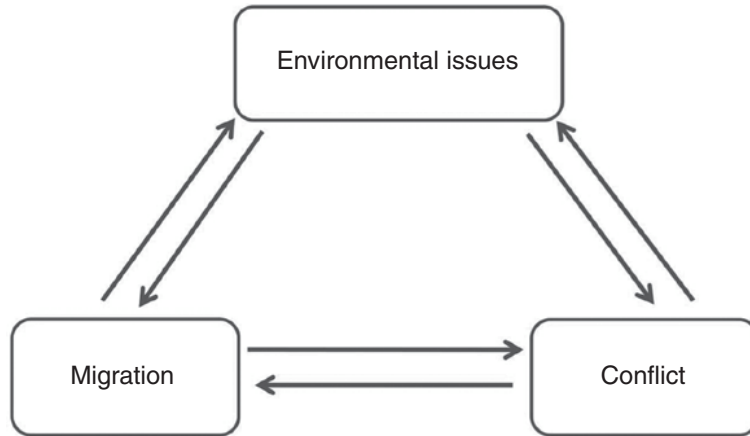
Linear causality versus cybernetics

Obviously, the underlying premise of such an analysis as in Krieger et al. this volume is that the causality chain is linear. This may be a useful approximation for approaching the very complex interdependencies between environmental issues, conflict and migration. Yet, it is evident, and acknowledged in a number of contributions in this book, that multiple feedback effects exist, which makes the interdependencies non-linear in nature. Social sciences in general and economics in particular understand that social systems are complex and include a plethora of feedback effects. The environmental conflict and migration nexus is a case in point. Starting from the linear $E \Rightarrow C \Rightarrow M$ idea, one possible feedback loop is that emigration may alleviate the environmental problem that has led to conflict as resource scarcity may not be as severe as before. Likewise, migrants could contribute to problem alleviation through their remittances. The conflict as such may exacerbate the environmental problems that led to the conflict because strategies to mitigate the problem may no longer be feasible. Many other feedback loops come to mind.

A cybernetic approach, such as that demonstrated in [Figure 12.1](#), is thus required. Such an approach, however, requires careful selection of the most important feedback loops, as analytical tractability would soon be in jeopardy with growing complexity.

The limits of empirical research

The endogenous nature of many, if not most, variables makes the empirical analysis of causal effects highly challenging. Results from the regression of, say, C on E (and controls) would capture not only the causal effect of E on C, but also all kinds of feedback effects and confounding factors. Causality would be very hard to establish. Of course, empirical research in social sciences has designed strategies to address the endogeneity problem, yet many of these methods are not applicable to the E–C–M nexus. Randomized control trials on

Figure 12.1: Causality revisited

deforestation or land degradation are inconceivable, instrumental variables strategies for environmental migration are hard to come by, and experiments on conflict and migration behaviour may lack external validity.⁴ Often, we may have to settle for interesting correlations rather than for causal analyses.

What may be even more important in our context is that current evidence-based knowledge on the E–C–M nexus is based on the analysis of current and past data, which may be irrelevant for the future. To predict future outcomes, we need to assume that the ecological and social systems are *structurally similar* to the current ones. In the context of climate change, under some scenarios, this *could* be an unreasonable assumption. If temperatures rise by more than 3 or 5 degrees Celsius above preindustrial levels, the ecological system may turn into something fundamentally different from the existing one, with qualitatively different interdependencies. Therefore, our ability to predict outcomes may be severely compromised. Pindyck (2013) and Stern (2013) provide an impressive account of the shortcomings of our knowledge. We would venture in uncharted territory.

Environmental problems could have dimensions qualitatively different from the current ones. The rise of sea levels, for instance, could drown major urban agglomerations; desertification could turn fertile land into inhospitable terrain leading to migration flows of unknown magnitudes; environmental conflicts of unprecedented scales could arise. Without seeking to entertain apocalyptic scenarios, we have to acknowledge that without appropriate policies to combat climate change, we might find ourselves in a situation in which current knowledge has little predictive power for the environmental conflict–migration nexus, which poses a severe challenge for effective (migration) governance on national,

regional and global levels. We would know least when that knowledge would be needed most.

Notes

- ¹ The environmental policy formation would have to be regarded as a result of a political optimization process (for example, Fredriksson, 1997), which takes into account the strategic interdependencies of countries (Conconi, 2003; Fünfgelt and Schulze, 2016).
- ² For a methodological review on the environment and conflict linkage, see Ide (2017).
- ³ For $E \Rightarrow M$, see Black et al (2011), Findley (1994), Naser (2012); for $M \Rightarrow C$, see Salehyan and Gleditsch (2006).
- ⁴ Natural disasters are an exception, as they may not be anticipated and truly exogenous in nature.

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“A major contribution to debates on climate change, resources, conflicts and migrations, putting governance failure rather than environmental determinism at the heart of contemporary concerns over mass migration.”

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The era of globalization is characterized by interconnectedness across borders and continents and this includes human migration. Migration flows have led to new governance challenges and, at times, populist political backlashes. A key driver of migration is environmental conflict and this is only likely to increase with the effects of climate change.

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