MIGRATION AND CLIMATE CHANGE

Migration and Climate Change provides the first authoritative overview of the relationship between climate change and migration, bringing together both case studies and syntheses from different parts of the world. It discusses policy responses, normative issues and critical perspectives from the point of view of human rights, international law, political science, and ethics, and addresses the concepts, notions and methods most suited to confronting this complex issue. The book constitutes a unique and thorough introduction to one of the most discussed but least understood consequences of climate change and brings together experts from different disciplines, including anthropology, climatology, demography, geography, law, political science and sociology, providing a valuable synthesis of research and debate.

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MIGRATION AND CLIMATE CHANGE

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UNESCO Publishing
United Nations Educational, Scientific and Cultural Organization

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Tokyo, Mexico City

Published jointly by the United Nations Educational, Scientific and Cultural Organization, 7 Place de Fontenoy, 75352 Paris 07 SP and Cambridge University Press, The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9781107014855

First published in 2011

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data
Migration and climate change / edited by Etienne Piguet, Antoine Pécoud, Paul de Guchteneire.
p. cm.
ISBN 978-1-107-01485-5 (hardback)
1. Climatic changes – Social aspects. 2. Global environmental change – Social aspects. 3. Migration, Internal – Environmental aspects. 4. Emigration and immigration – Environmental aspects. I. Piguet, Etienne. II. Pécoud, Antoine. III. Guchteneire, P. F. A. de (Paul F. A. de) IV. Title.
QC903.M54 2011
304.8–dc22
2011011605

ISBN 978-1-107-01485-5 Hardback
ISBN 978-1-107-66225-4 Paperback

CONTENTS

FIGURES

TABLES

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PART 2

Policy responses, normative issues and critical perspectives

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16

Concluding remarks on the climate change–migration nexus

STEPHEN CASTLES

Introduction

Climate change has become part of *high politics*. Political parties outdo each other in claiming to be 'green' while yet safeguarding 'vital national interests'; governments issue sustainability policies and regulations; and states and international agencies seek to establish international cooperation on emission control. But the contradiction between environmental protection and economic growth – especially for poorer nations seeking to catch up with the old industrial powers – has proved intractable, and the general lack of real progress in international negotiations on climate change means that serious international collaboration is probably off the agenda for the time being. This implies that the poorer and more vulnerable areas of the world are to be left alone to struggle with the consequences of the global carbon economy, which has been at the root of rapid growth and prosperity for some, but also of environmental degradation and threatening change for many, especially in poorer regions.

At the same time, one part of the climate change debate has become part of *low politics*. Headlines such as 'millions will flee degradation', coupled with the assertion that 'there will be as many as 50 million environmental refugees in the world in five years' time'[1] reinforce existing fears of uncontrollable migration flows.[2] In the UK mass-circulation tabloids have for years run almost daily anti-immigrant – and especially anti-asylum seeker – stories. Alarmist accounts by environmentalists,

[1] BBC News, 11 October 2005. http://news.bbc.co.uk/go/pr/fr/-/1/hi/sci/tech/4326666.stm

[2] A web search for the term 'climate refugees' in early 2010 brought up over 700,000 items, many of which sought to outbid each other with claims about the many millions of expected displacees.

warning of tens or even hundreds of millions of displaced persons in the future, support stereotypes of migration as intrinsically bad – part of the 'sedentary bias' which has become so dominant in discourses on migration (Bakewell, 2008). Moreover, such accounts put forward apocalyptic visions of third world poverty and disease swamping the rich parts of the world (Myers, 1997; Myers and Kent, 1995). All the more regrettable then, that Myers' dubious figures (based apparently on the idea that anyone living in an area affected by sea level rise would become an 'environmental refugee'), were taken over as factual by the authoritative Stern review on the economics of climate change prepared for the UK Treasury in 2006 (Stern, 2007).

Thus the international debate on the relationship between climate change and migration has been bedevilled by a rather unproductive confrontation: in the one corner have been environmentalists, aid and advocacy organizations (both governmental and non-governmental); in the other have been scholars of refugee movements and migration. The disagreements have disciplinary, methodological and political dimensions. The *disciplinary divide* is between environmentalists, who see global warming-induced climate change as a powerful new force in population displacement, and migration scholars, who regard environmental factors as just one part of a wider constellation of economic, social and political relationships that motivate people to move. The *methodological divide* is between the use of deductive methods, through which projected changes (such as sea level rise or desertification) can simply be mapped onto settlement patterns to predict future displacement; and the call for inductive micro-level research to examine the interactions between climate change and patterns of vulnerability and resilience. The *political divide* is between those who portray 'environmental refugees' as a threat to welfare and security in developed countries (and thus tend to stigmatize all refugees), and those who seek to defend international legal notions of refugee protection.

Today, we are hopefully in a position to move on from these divisions, partly because of the increased availability of credible empirical research on the theme, and partly because of the experience of increasingly frequent environmental events and their consequences. The time is ripe for interdisciplinary approaches, in which environmental scientists and social researchers should work together to map climate change-induced environmental changes, their effects on living conditions and livelihoods, and the range of responses by affected communities. This requires analysis of past and current experiences at local and regional

levels, as a basis for elaborating possible future scenarios, and planning appropriate strategies, policies and legal frameworks.

This volume makes an important contribution to advancing the debate by presenting empirical evidence derived from a variety of contexts and approaches, as well as analyses of policies and normative perspectives. In this brief afterword, I first touch on the past politicization of the climate change displacement debate; second, draw attention to some facets of the growing research-based knowledge of the phenomenon; third, point to the apparent acceleration in climate change and events linked to it in recent years; and finally, talk about the possible contours of a more inclusive and cooperative approach.

History of a controversy

The old argument about the existence of 'environmental refugees' and the extent of climate change-induced displacement has been repeated *ad nauseam*. It seems a waste of time to warm it up yet again, yet unfortunately we are still at a stage of the debate where it is necessary to emphasize the politicization of issues of climate change migration. Perhaps it will soon be possible to write about the topic without retracing these steps.

The discussion goes back at least to the mid-1980s. A much-cited paper published by the United Nations Environment Programme (UNEP) argued that large numbers of people, especially in poor countries, would be displaced by environmental change. The author coined (or at least popularized) a term that was to become a core theme of contention: *environmental refugees* (El-Hinnawi, 1985). There were two reasons why this concept was so controversial.

The first problem was the use of the label 'refugees' for people who moved because of environmental factors. As refugee scholars pointed out, this was a misnomer: in international law, the term 'refugee' refers only to people who have crossed inter-state borders to seek protection from persecution based on a range of factors clearly defined in the 1951 UN Refugee Convention (see Piguet et al. in the introduction to this volume). Environmental or climate change was not included in the Convention. The background to this seeming formalism of the refugee lawyers was the fact that, at the turn of the century, some refugee-receiving states were making serious efforts to water down the Refugee Convention. There was a justified fear that any 'reform' in the Convention would actually mean a reduction in the duty of states to

protect refugees. Lawyers therefore argued either for *supplementary instruments* to protect all displaced persons, including those forced from their homes by development projects such as dams and disasters as well as by climate change, or they argued for *better use of existing legal instruments* to protect these groups. These normative issues are thoroughly analysed here by McAdam, Koser, Cournil, and Epiney.

The second problem with the term 'environmental refugee' related to the environmental part. Migration scholars pointed out that environmental factors (both positive and negative) have played a part in migration throughout history. Environmental migration should not be equated with forced displacement. In any case, it is important to distinguish between the wide range of environmental factors that have always interacted with economic, social, cultural and political factors, and the specific issue of climate change brought about by the greenhouse gases resulting from the growing spread of carbon-based industries over the last half-century or so. Migration researchers argued that changes in the environmental conditions for work and life should be seen as a factor in migration, but hardly ever the only or even the predominant cause. Migration scholars emphasized the *multicausality* of migration decisions, and accused environmentalists of postulating environmental *monocausality* for political reasons.

Environmentalists countered this critique by arguing that their emphasis on climate change had a very good purpose: that of awakening the world to the dangers of global warming, by making politicians and the public think about the consequences of large-scale human displacement. Leading proponents of this approach (such as Norman Myers, cited above) warned of tens or even hundreds of millions of displaced persons in the future. Others put forward scenarios of mass displacements as a cause of future global insecurity (Homer-Dixon and Percival, 1996), while certain non-governmental organizations even escalated forecasts of future population displacements up to 1 billion by 2050 (Christian Aid, 2007). It seems that aid and development NGOs saw neo-Malthusian warnings about the 'human tide' of refugees as a way of mobilizing public support for their fundraising. Some intergovernmental organizations have also been eager to climb on the environmental refugee bandwagon, which is one explanation for the spate of reports and books on the topic.

However well intentioned, such shock tactics are risky: not only do they present questionable data, which might undermine public trust in environmental predictions. More seriously, they reinforce existing

negative images of refugees as a threat to the security, prosperity and public health of rich countries in the global North. Thus the doomsday prophecies of environmentalists may have done more to stigmatize refugees and migrants and to support repressive state measures against them, than to raise environmental awareness. In response, refugee and migration scholars have argued that such neo-Malthusian visions are based on dubious assumptions and that it is virtually impossible to identify individuals or groups forced to move by environmental factors alone (Black, 2001; Wood, 2001).

In retrospect it seems clear that the politicization and polarization of the debate on migration and the environment has had quite negative consequences. Environmentalists may have been misguided in using exaggerated and threatening images of mass displacement to raise public awareness of public change, but the defensive postures adopted by refugee and migration scholars have also held back scientific analysis and thus probably the development of appropriate strategies to respond to the challenges of climate change-induced displacement. The failure so far of international negotiations on climate change means that we are entering a dangerous new phase, in which polarized positions on the causes and consequences of migration have become distinctly unhelpful. Migration scholars must recognize the potential of climate change to bring fundamental changes in the nature of human mobility, just as environmentalists need to recognize the complex factors that lead some people to adopt migration as part of their survival strategies.

The growing empirical basis

Attention was drawn above to the *methodological divide* characteristic of the early years of the climate change displacement debate: prominent environmentalists confidently asserted that expected climate change-induced developments (such as sea level rise, drought or desertification) could be mapped onto settlement patterns to predict future human displacement, whereas migration and refugee scholars called for micro-level research to examine actual experiences of how communities coped with modifications in their living conditions and economic opportunities resulting from climate change. Knowledge has indeed moved on compared with the turn of the century: researchers have begun to carry out studies at the local and regional levels, and the empirical basis for understanding the effects of climate change is being enhanced.

This does not imply that all the research questions necessary for full understanding and for appropriate policy-making have been addressed: as several contributors point out, there are still major knowledge gaps and important unresolved controversies. For example, Hunter and David draw attention to the deficiencies of gender-blind research, which obscures the ways in which climate change-shaped migratory experiences differ for men and women. Leighton points to wide gaps in the research concerning how and why drought and desertification become a primary driver of migration, as well as on scale and methodology, and on frameworks for migration management. Nonetheless, we are now in a position to go beyond some of the simplistic and often confrontational statements of the past. It is still too early to speak of scientific consensus about the causes, extent and impacts of climate change, but certain ideas seem to be gaining acceptance as pointers for further research and action.

To start with, climate change-induced migration should not be analysed in isolation from other forms of movement – especially economic migration and forced migration. The latter results from conflict, persecution and the effects of development projects (such as dams, airports, industrial areas and middle-class housing complexes). Development-induced displacement is actually the largest single form of forced migration, predominantly leading to internal displacement of 10 million to 15 million people per year, and mainly affecting disempowered groups such as indigenous peoples, other ethnic minorities and slum-dwellers (Cernea and McDowell, 2000). The causality of migration is often complex, with many factors playing a part. Moreover, climate change-induced migration is often closely linked to other aspects of environmental change. The effects of changing farming practices (e.g. mechanization, use of fertilizers and pesticides, monocultures, irrigation, concentration of land ownership) on the environment may be hard to distinguish from cyclical weather variations and long-term climate change. Rural–urban migration and the growth of cities are key social-change processes of our times. All too often this means that people leaving the land end up in urban slums (Davis, 2006), but this cannot be seen simply or even mainly as a result of climate change. Migration scholars now emphasize that environmental factors have been significant in driving migration throughout history – even though such factors have often been neglected in the past. In other words, we should generally look for *multicausality* when studying migration processes and include climate change as one of the factors to be analysed.

The recognition of multicausality in migration clearly implies the need for *multi-* or *interdisciplinarity* in research. The best research on migration includes insights from political economy, economics, geography, demography, sociology, anthropology, law, psychology and cultural studies – and to those we must consciously add environmental sciences. Most of the studies reported here are based on the methodologies of one or a few disciplines. Combining them in a reflexive way within a single work is an important step towards multidisciplinarity – but is aggregative rather than integrative. True interdisciplinarity means going further by developing and applying common conceptual frameworks and methodologies, involving a broad range of natural and social sciences. Steps in this direction are still rare (see e.g. Kniveton et al., 2008), but should be encouraged by both universities and research institutes, and by the official bodies and foundations that help to fund them.

Migration and refugee issues have become heavily politicized. This applies – as argued above – even more strongly to climate change-induced migration. This means that when assessing claims made about climate change displacement, we need to analyse the politics that may be behind them. This need is so pressing that the authors of many empirical studies on the topic feel compelled to start by summarizing the global debate on the topic. There is a clear need for a *political science analysis* of the whole discourse. François Gemenne's thesis (2009) provides an in-depth treatment of the politics of climate change migration, summarized in this volume.

As already pointed out, major advances have been made in *empirical research* on climate change-induced migration, but such studies are still at an early stage and a great deal remains to be done. The most ambitious effort so far has been the Environmental Change and Forced Migration Scenarios (EACH-FOR) project funded by the European Union under its Sixth Framework Research mechanism. Twenty-three research projects were carried out all over the world from 2007 to 2009 (EACH-FOR, 2009). Key members of the EACH-FOR team summarize their experience and findings in their contributions to this volume (Chapter 8). EACH-FOR is an important step forward in empirical research, but some concern has been expressed over the short-term nature of the research and about the rather narrow focus of some projects on perceived environmental 'push' factors (see Jónsson, 2010, for a critical discussion of EACH-FOR African research). Studies focusing specifically on displacement as a problem may be misleading. It is important to link such research with more general studies on environmental and developmental issues in various regions, and to build on the considerable

existing expertise of development sociologists, human geographers, anthropologists and area studies specialists.

This volume presents a wealth of empirical studies of migration experiences, in which climate change appears to play a significant part: the chapters by Barbieri and Confalonieri, Bohra-Mishra and Massey, Findlay and Geddes, and Oliver-Smith, all provide important insights from the field. Even studies focusing on legal and normative issues, such as those of McAdam and of Leighton (among others) reflect on significant experiences from real-life cases. Several chapters (Koser, Hugo, Hunter and David) argue that lessons can be learned from other types of migration and from the normative frameworks which have evolved in response to these. Perhaps the most significant contribution in methodological terms is made by Bohra-Mishra and Massey's study on Nepal. This study uses longitudinal data on a range of social indicators (such as class, religion, gender, livelihood patterns and environmental factors) from the Chitwan Valley study. The findings demonstrate the complexity of linkages between climate change and local, internal and international migration.

Recent research indicates that there is still little evidence that climate change has so far caused large increases in migration. Despite worrying prognoses put forward in the past, it is virtually impossible to identify groups of people already displaced by climate change alone. There are certainly groups that have been affected by climatic (or broader environmental) factors, but economic, political, social and cultural factors are also at work. Even the cases portrayed in the media as most clear-cut become more complex when looked at closely. For example, Bangladesh is often seen as an 'obvious example' of mass displacement due to sea level rise, but Findlay and Geddes question this conventional view, showing that longer-term migration is related to differential patterns of poverty, access to social networks, and household and community structures. McAdam challenges another, even more obvious example: that of the 'sinking islands' of Kiribati and Tuvalu. Field research in these places indicates that movements cannot be seen as exclusively due to climate change, and needs to be analysed in the context of policy approaches and migration management models at regional and international levels.

Acceleration of climate change

Yet the absence of the displaced millions predicted by Myers and others just a few years ago should not be taken as a reason for complacency. It seems probable that the forecast acceleration of climate change over the next few decades will have major effects on production, livelihoods and human security. As Hugo discusses in this volume, it is already possible to identify 'hot spot areas which will experience the greatest impact'. Significant changes in communities' ability to earn a livelihood will lead to a range of adaptation strategies, much of which will not involve migration. However, certain families and communities are likely to adapt through temporary or permanent migration of some of their members, while in extreme cases it may become impossible to remain in current home areas, so that forced displacement will ensue.

It is customary in the climate change-induced migration field to distinguish between slow-onset processes and rapid-onset events. For example, trends to higher or lower rainfall in certain areas take place over quite long periods, giving affected groups time to adapt in various ways. Rapid-onset events include cyclones, floods and similar catastrophes that require sudden flight in order for people to survive. Their effect is similar to natural disasters such as volcanoes, earthquakes and tsunamis, which cause similar unpredictable exoduses. Yet extreme-weather events are not altogether unpredictable: global warming seems to be leading to an increased incidence of such events, presumably due to long-term impacts on weather patterns. Similarly, periodic floods in places such as Bangladesh may well be exacerbated by higher sea levels. Yet even in such cases, it is hard to disentangle various factors. Findlay and Geddes, for example, here point to the role of water management policies in neighbouring countries in causing floods in Bangladesh. The human losses caused by the 2004 tsunami in Sri Lanka may have been compounded by settlement policies that involved use of land previously seen as marginal or hazardous. Taking this even further could involve exploring links with ethnic inequality and conflict in the region concerned.

In future, then, migration will continue to be the result of multiple factors in both origin and destination areas, but *the climate change component is likely to become increasingly significant*. Migration is not an inevitable result of climate change, but one possible adaptation strategy of many. It is crucial to understand the factors that lead to differing strategies and varying degrees of vulnerability and resilience in individuals and communities. Moreover, migration should not generally be seen as negative: people have always moved in search of better livelihoods, and this can bring benefits both for origin and destination areas (UNDP, 2009). In their search for better livelihoods and opportunities, migrants should not be seen as passive victims; they have some degree of *agency*, even under the most difficult conditions. Strategies that

treat them as passive victims are counterproductive, and protection of rights should also be about giving people the chance to deploy their agency. The objective of public policy should not be to prevent migration, but rather to ensure that it can take place in appropriate ways and under conditions of safety, security and legality (Zetter, 2010).

Towards new approaches?

It is time to move forward from the unproductive confrontations of the last twenty years. This book is an important contribution with its focus on the state of empirical evidence about the relationship between climate change and migration, and on policy responses and normative issues. There is clearly still much to be done in both these areas, in order to achieve appropriate strategies for addressing climate change-induced migration and – even more important – the political willingness to implement such strategies.

In this situation, it is important for researchers to take on the challenge of developing the knowledge base needed for strategic planning, and for research-funding bodies to give priority to such work. An interdisciplinary approach would require migration scholars to recognize that environmental change has often been an important (if much neglected) factor in human mobility, and that global warming is increasing the significance of this factor. Environmental scholars would have to recognize that macro-level forecasts need to be complemented by local studies, in which climate change is only one factor among many shaping livelihood strategies. Putting environmental change into migration studies and human mobility into environmental studies could lead to a new synthesis, which recognizes both the complexity of human responses and the urgent need for understanding and action.

This means addressing normative issues of historical causality and responsibility. Climate change is experienced at the local level, but it has global causes. The ability of individuals, communities and states to respond to such changes is strongly linked to political and economic factors. The causes of climate change lie in the production systems and the consumer-oriented lifestyles of rich countries of the global North – although newly industrializing economies of the South are also beginning to play a major part. It is people in the poorest parts of the world who are most affected by climate change, yet who lack the resources for effective adaptation strategies. Weak states are not a fact of nature, but a result of the inequality arising historically from colonialism and continued today through neoliberal globalization. Decrying potential climate

change migration as a threat to the security of developed countries misses the point that such migration is a consequence of the human insecurity imposed on the South in the current global order. This understanding of the inequality that underpins climate change-induced migration can be an important starting point for normative debates about the responsibility of rich nations and the 'international community'.

The main purpose of such debates has to be to galvanize the willingness to act. If interdisciplinary scientific cooperation provides deeper understanding of environmental challenges, vulnerability and resilience, and normative analyses help enhance awareness of the crucial legal and political factors, then there could be a new basis for effective action. It is clear that immigration control – that is the tightening or even militarization of borders to keep out unwanted migrants – will do nothing to address the fundamental causes of displacement. Instead, a whole range of strategies is needed, at a range of socio-spatial levels.

At *local* level, better understanding of challenges to the livelihoods and habitats of specific communities, as well as enhanced knowledge of their resources and capabilities, could provide the basis for local activities, ranging from construction measures (e.g. dykes, wetland conservation, cyclone shelters), through diversification of economic activities to community preparedness measures. Migration may often be a part of local strategies: research shows that many families have used the temporary migration of one or more members to sustain and diversify their livelihoods, while permanent migration (both rural–rural and rural–urban) may be an appropriate response when certain livelihoods and habitats become unviable. Although such activities need to be shaped by local needs, they may also affect national and international policy and funding priorities.

At *national* level, practical interventions to support people affected (or likely to be affected) by climate change are needed in many areas of social action. This may require states to change their attitudes towards rural–urban and cross-border migration, by abandoning restriction and criminalization, and helping people to move in conditions of safety and dignity. Employment policies need to be reshaped to ensure economic inclusion of hitherto marginal groups, while housing strategies must be based on recognition of traditional tenure as well as informal settlements and provision of adequate services. Welfare policies should provide support for climate change-affected populations together with measures for long-term social inclusion. Provision of adequate schooling and educational opportunities is part of this process. Health is clearly a crucial area (see Barbieri and Confalonieri in this volume): climate

change can lead to many types of risk, including direct impacts of climatic events, increased incidence of vector-borne diseases (such as malaria or dengue fever), illnesses resulting from malnutrition, and diseases and accidents linked to the displacement process. The stress and uncertainty caused by the anticipation and the experience of climate change threats can also have far-reaching effects for the mental health of affected populations (see health issues in McAdam, 2010).

At *international* level, the key debate of recent years has been between the advocates of mitigation (action to drastically reduce greenhouse gas emissions to slow down climate change) and of adaptation (strategies to help affected communities cope with changes to their livelihoods and habitats). Lack of substantial progress in international action means that it will be too late for mitigation strategies to prevent or even slow down imminent changes – although it remains crucial that emissions be limited as soon as possible to reduce long-term damage. This means that the major polluters – both the old industrial states and the emerging ones – need to recognize their responsibility to work together globally to provide financial, scientific and logistical support for adaptation strategies at local and national levels, especially in the poorer regions that will bear the brunt of change, while lacking the resources for effective action on their own.

In retrospect, past political confrontations about climate change migration have probably done more to hinder than to help the development of such multilevel action strategies. By creating fears of mass influxes of the 'misery of the world' to the rich countries, politicians and the media have encouraged racist and restrictionist responses which offer nothing to address the issues. The defensive reactions of migration and refugee scholars have been understandable, but have also done little to develop understanding and capabilities for action. That debate should end now, and be replaced by a new and fine-grained collaborative effort to understand the real challenges and to find solutions. The current international climate may be hardly propitious to such endeavours, but perhaps this publication will be a contribution to creating a new global public ready to campaign for action.

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