

Cambridge University Press & Assessment 978-1-009-44959-5 — Migration and Displacement in a Changing Climate Kelsea Best , Kayly Ober , Robert A. McLeman Table of Contents More Information

Contents

Pref	Preface Preface		
Acki	owledgments	xvi	
1	People on the Move in a Changing Climate	1	
	.1 Introduction	1	
	.2 Climate Change: Physical Science, Impacts, and Risks	13	
	.3 Migration, Displacement, and Immobility: The Fundamentals	26	
	.4 Household-Level Factors That Influence Migration Outcomes	45	
	.5 Agency and the Decision to Migrate or Stay	46	
	.6 Climate Risk, Adaptation, and Migration: Bringing It All Together	48	
2	Migration and Displacement Associated with Extreme Weather		
	Events: Tropical Cyclones, Severe Storms, Heavy Rainfall Events,		
	and Flooding	51	
	2.1 Introduction	51	
	2.2 Projected Future Changes in Severity, Frequency, and/or Spatial		
	Patterns of Specific Sudden-Onset Weather Hazards under Climate		
	Change	52	
	2.3 Current and Future Exposure to Displacement-Inducing Extreme		
	Weather Events	55	
	2.4 Non-demographic Factors That Amplify Exposure to Extreme		
	Weather Events	58	
	2.5 How Social Inequality Affects Exposure to Extreme Weather		
	Events	62	
	2.6 Factors That Amplify Vulnerability to Extreme Weather	64	
	2.7 The Importance of Institutional Adaptive Capacity	64	
	2.8 Household <i>In Situ</i> Adaptation When Institutional Adaptation Fails	66	
	2.9 General Characteristics of Migration Outcomes in Response		
	to Extreme Weather, Regardless of Type of Event	68	

v



Cambridge University Press & Assessment 978-1-009-44959-5 — Migration and Displacement in a Changing Climate Kelsea Best , Kayly Ober , Robert A. McLeman Table of Contents More Information

vi Contents

	2.10 Migration Patterns Observed in the Wake of Tropical Cyclones	69
	2.11 Case Study: Migration from Puerto Rico to the Continental US	
	Following Hurricane Maria	75
	2.12 Migration Patterns Observed in the Wake of Tornadoes	
	and Derechos	79
	2.13 Migration Patterns Observed in the Wake of Floods	83
	2.14 Variability of Migration and Displacement Patterns Associated	
	with Floods	85
	2.15 Case Study: Pakistan Floods	91
	2.16 Case Study: Changing Flood Risks in China's Yangtze	
	River Basin	92
3	Migration and Displacement Associated with Aridity, Drought,	
	Heat, and Wildfires	95
	3.1 Introduction	95
	3.2 Migration Associated with Droughts, Increasing Aridity, and	
	Desertification	96
	3.3 Extreme Heat Events and Hotter Average Temperatures	121
	3.4 Migration and Displacement Associated with Wildfires	126
4	Migration and Displacement Risks Associated with Mean	
	Sea Level Rise	131
	4.1 Introduction	131
	4.2 Drivers of Sea Level Rise, Observed Changes in Mean Sea	
	Level, and Projected Future Changes	132
	4.3 Impacts of Sea Level Rise on Human Settlements, Land Use,	
	and Infrastructure	137
	4.4 How Many People Will Be Affected by Sea Level Rise?	140
	4.5 Adaptation Options for Mean Sea Level Rise	144
5	Data and Methods for Modeling Climate-Related Migration	162
	5.1 Goals of Modeling Climate-Related Migration	163
	5.2 Data Sources	167
	5.3 Modeling Methods	176
	5.4 Future Directions in Data and Modeling	183
6	Policy Considerations	189
	6.1 Key International Policies on Climate, Disasters, and	
	Development	190
	6.2 International Policies with Respect to Migration and Refugees	203



Cambridge University Press & Assessment 978-1-009-44959-5 — Migration and Displacement in a Changing Climate Kelsea Best , Kayly Ober , Robert A. McLeman Table of Contents More Information

	Contents	vii
	6.3 Regional Policy Solutions	211
	6.4 National-Level Policy Considerations	214
7	Emerging Issues and Future Directions	217
	7.1 Gendered Dimensions of Climate-Related Migration	217
	7.2 Indigenous Peoples and Cultural Heritage	222
	7.3 Climate-Related Migration and Human Health	223
	7.4 Research on Receiving Communities and Climate Destinations	226
	7.5 Thresholds in Climate–Migration Relationships	229
	7.6 Known Unknowns and Unknown Unknowns: Foreseeable and	
	Unforeseeable Futures in Climate-Related Migration	232
Glossary		239
References		
Index		