CONTENTS



vii
xi
xiv
1
3
4
6
13
17
29
30

iv CONTENTS

CHAPTER 2	
Evaluating the Distributional Impacts of Disasters and Climate Change, and the Development of Adaptation Roadmaps: Rethinking ASEAN Strategy, Policies, and Actions	39
Mely Caballero-Anthony, Jose Ma Luis Montesclaros, and Margareth Sembiring	
2.1 Introduction	40
2.2 Overview of National Climate Change Adaptation Initiatives in Southeast Asia	41
2.3 Distributional Effects: How Climate Change and Disasters Affect Food Security	50
2.4 Gaps at the Regional and Country Levels in Addressing the Distributional Impacts of Climate Change on Food Security	54
2.5 Conclusion and Way Forward	60
CHAPTER 3	
Addressing Disaster Risk, Climate Change, and Food Security Through Successful Structural and Non-Structural Measures in Country Adaptation Roadmaps Meinhard Breiling	72
	70
3.1 Introduction 3.2 Structural Measures	72 77
3.3 Non-Structural Measures	82
3.4 Control Measures	87
3.5 Improvement Measures	90
3.6 Conclusion	94

CHAPTER 4	
Tracking Climate Resiliency Actions in National Strategies: A Policy and Investment Framework and Application to Myanmar Suresh Chandra Babu, Venkatachalam Anbumozhi, Namita Paul, and Jieun Won	104
	105
4.1 Introduction	105
4.2 Climate Change Adaptation for Improved Food Security 4.3 Diagnostic Pavious of the Agriculture Dayslanment Strategy	106 107
4.3 Diagnostic Review of the Agriculture Development Strategy	113
4.4 Operational Framework 4.5 Conclusion	118
CHAPTER 5	
CHAPTERS	
Financing Adaptation Roadmap	137
Tomonori Sudo	
5.1 Introduction	137
5.2 Cost of Climate Change and Disasters	139
5.3 Estimated Cost of Climate Change and Disasters	144
5.4 Finance Sources for Disaster Risk Management and Climate Change Adaptation	148
5.5 Financial Instruments for Disaster Risk Management and Climate Change Adaptation	153
5.6 Roadmap Towards Developing an Adaptation and Disaster Risk Reduction Finance Market in Southeast Asia	165
5.7 Conclusion and Recommendations	169
CHAPTER 6	
Towards a Resilient Food System and Building Adaptation Roadmaps Venkatachalam Anbumozhi	174
6.1 Disaster and Climate Change Impacts on Food Security	174
6.2 Adaptation and Resilience Strategies	175
6.3 Opportunities to Enhance Adaptive Capacity	177
6.4 Building Adaptation Roadmaps	178

vi CONTENTS

PART II CAMBODIA, LAO PDR, MYANMAR AND VIET NAM (CLMV) ADAPTATION ROADMAPS	186
CHAPTER 7	
Roadmap of Climate Change Adaptation for Cambodia Paris Chuop and Meach Yaddy	188
 7.1 Background 7.2 Policy Responses to Climate Change 7.3 Nationally Determined Contribution 7.4 Adaptation Priority Actions 7.5 Financing Demand and Gap 	188 189 191 193 195
7.6 Institutional Arrangement	196
CHAPTER 8	
Climate Change Adaptation Roadmap of the Lao People's Democratic Republic Sonephet Phosalath and Changseng Phongpachith	197
 8.1 Introduction 8.2 Target Projects and Activities 8.3 Mitigation Contribution in the Lao People's Democratic Republic 8.4 Implementing Measures 	197 198 207 215
CHAPTER 9	
Indicative Actions, Institutions, and Timeframe for Building a Climate Change Adaptation, Disaster Risk Reduction, and Food Security Roadmap for Myanmar	220
9.1 Climate-Smart Agriculture, Fisheries, and Livestock for Food Security9.2 Sustainable Management of Natural Resources for Healthy Ecosystems	221 232

CONTENTS

9.3 Resilient and Low-Carbon Energy Transport and Industrial Systems for Sustainable Growth	241
9.4 Resilient, Inclusive, and Sustainable Cities and Towns Where People Can Live and Thrive	248
9.5 Climate Risk Management for People's Health and Wellbeing	255
9.6 Education, Science, and Technology for a Resilient Society	264
CHAPTER 10	
Disaster Resilience and Climate Change Adaptation in Viet Nam Nguyen Tuan Anh and Lai Van Manh	272
10.1 Background	272
10.2 Overview of Viet Nam's Current Policy System on Climate Change and Disaster	273
10.3 Organisational System and Relevant Stakeholders	277
10.4 Disaster Resilience and Climate Change Adaptation Roadmap in Viet Nam	278
PART III GUIDELINES FOR POLICY AND DECISION MAKERS AND OTHER KEY PLAYERS ON ADAPTATION ROADMAPS	286
Guidelines for Policy and Decision Makers and Other Key Players on Adaptation Roadmaps	288
Venkatachalam Anbumozhi, Meinhard Breiling, Tomonori Sudo, and Dian Lutfiana	
I Introduction	289
II Guidelines Relating to the Principles Underpinning Adaptation Roadmaps	295
III Indicative Actions for Developing Adaptation Roadmaps	301