# TABLES, FIGURES, & BOXES



### TABLES

#### **PART I**

1.1	The Long-Term Climate Risk Index of the 10 Countries Most Affected from 1997 to 2016 (Annual Averages)	12
1.2	Loss of Agricultural Area from Sea-Level Rise in ASEAN Countries	16
1.3	Options for Adaptation to Climate Change at the Farm Level	27
2.1	Assessment of Climate-Induced Risks in Seven Areas in Indonesia	43
4.1	Agriculture Development Strategy Pillars, Objectives, and Outcomes	110
5.1	Characteristics, Potential, and Risks of Finance Sources	150
5.2	Pros and Cons of Financial Instruments (for Precautionary Actions)	164
5.3	Pros and Cons of Financial Instruments (for Post-Disaster Actions)	164
6.1	Key Proposed Actions for Improving the Adaptative Capacity and the Role of Different Stakeholders	182
PARTII		
7.1	NDC's Priority Actions	192
7.2	Climate Change Adaptation Priority Actions	193
7.3	Climate Change Adaptation Financing Demand and Gap	195
8.1	Focus of Climate Change Adaptation Projects in Key Sectors	201
8.2	Key Sectors for Climate Change Adaptation to 2030	202

**8.3** Climate Change Mitigation through the Reduction of 208 Greenhouse Gas Emissions in 2015–2030

(the Lao PDR's Intended Nationally Determined Contribution, 2015)

Implementation of 'Forestry Strategy to the Year 2020' of the Lao People's Democratic Republic	209
Implementation of Renewable Energy Development Strategy	211
Expansion in the Use of Large-Scale Hydroelectricity	213
Rural Electrification Programme	214
Implementation of Transport-Focused Nationally Appropriate Mitigation Actions	216
Expected Results and Strategic Indicators	221
Expected Results and Indicators	232
Expected Results and Indicators	242
Expected Results and Indicators	249
Expected Results and Indicators	256
Expected Results and Indicators	264
ти П	
Indicative Actions, Institutions, and Timeframe for Building Adaptation Roadmaps	301
	Lao People's Democratic Republic Implementation of Renewable Energy Development Strategy Expansion in the Use of Large-Scale Hydroelectricity Rural Electrification Programme Implementation of Transport-Focused Nationally Appropriate Mitigation Actions Expected Results and Strategic Indicators Expected Results and Indicators

## FIGURES

### **PART I**

1.1	Food Security and its Components	6
1.2	Overview of Impacts of Natural Disasters and Climate Change on Food Security	7
1.3	The Impact of Disasters from 1997 to March 2018 on Different Continents	9
1.4	Percentages of Crop, Livestock, Fishery, and Forestry Losses Due to Storms, Earthquakes, Floods, Droughts, and Tsunamis (2006–2016)	10
1.5	Total Crop and Livestock Production Losses Due to Natural Disasters in Developing Countries in Asia (2005–2015)	11
1.6	Estimated Output Reduction in Crop Yields Due to Climate Change (2010–2109)	15

1.7	Climate Change Adaptation and Disaster Risk Reduction Adaptation Integration	18
1.8	Risk-Based Approach – Planned Risk Characterisation and Management Procedures	19
1.9	Adaptation Strategies for Disaster Risk Reduction and Climate Change	20
1.10	Desired Adaptation Strategies by Smallholder Farmers	26
2.1	Institutional Framework of the Association of Southeast Asian Nations Cooperation on Environment	47
2.2	How Climate Change and Disasters Affect Food Security	51
2.3	Research Roadmap for Assessing Climate Impacts on Vulnerability and the Distributional Impacts of Climate-Induced Food Disasters	63
3.1	Process of Designing Country Adaptation Roadmaps in the Association of Southeast Asian Nations	74
3.2	Timeline of Designing Country Adaptation Roadmaps in the Association of Southeast Asian Nations	76
3.3	Diagram of Requirements for Successful Adaptation Roadmaps	83
3.4	Overview of Measures for Association of Southeast Asian Nations Country Adaptation Roadmap	95
3.5	Sample Adaptation Roadmap for Association of Southeast Asian Nations Countries, 2019–2030	96
4.1	AIT Operational Framework	114
4.2	Food Systems Approach to Climate Resiliency	114
5.1	Development Path Disturbed by Disasters	140
5.2	Number of Disasters by Region (1950–2015)	141
5.3	Total Damage from Weather-Related Disasters in Asia	141
5.4	Costs of Disaster	142
5.5	Disaster-Related Aid Commitments	143
5.6	Mean Impact under the A2 Scenario	145
5.7	Infrastructure Investments by Region, 2016–2030	146
5.8	Trend of Total Damage Due to Climate-Related Disasters in Asia	147
5.9	Trends in Finance to Developing Countries, 2002–2011	148
5.10	Variations in the Composition of Finance by Level of Income	149

Ċ.

5.11	Financial Instruments for Disaster Risk Management and Climate Change Adaptation by Stage of Actions	153
5.12	Annual and Accumulated Commitments by the Adaptation Fund	157
5.13	Receipt of Funds by Resources	158
5.14	The Catastrophe Bond Scheme	159
5.15	Catastrophe Bond and Insurance-Linked Securities Risk Capital, Issued and Outstanding, by Year	160
5.16	Transaction of the Catastrophe Deferred Drawdown Option	161
5.17	Roadmap Towards Developing an Adaptation and Disaster Risk Reduction Finance Market in Southeast Asia	165
PAR	ru	
10.1	Principles and Steps to Develop the Draft of Viet Nam's Roadmap	278
PAR	r III	
1	Optimal Response to Disaster and Climate Risks	291
2	Linkages Between Longer Term Policies and Short-Term Projects	292
3	Multiple Dimensions of Adapting to Disaster Risks and Climate Variability	294
4	A Decision Support Tool – Risk Assessment Framework	297
5	Hypothetical Cost-Benefit Analysis of an Adaptation Measure	299
6	A Monitoring Framework for Enhanced Resilience	300

### BOXES

### **PART III**

1	Existing Decision-Support Tools	296
2	Examples of Inadequate and Unsustainable Practices	298
3	Adaptation Roadmaps Built by Network Groups	299

-

------

xi