

PREFACE



One aspect of disasters that has been studied in less detail so far is that related to the distributional economic and social impacts. This is due, perhaps, to the intrinsic complexity that characterises long-term social and economic predictions, because they involve unprecedented productivity situations; or may be due to the variety of material, organisational, and cultural reactions of human society to food security.

The global interdependence of food supply chains is well known. When one part of the agricultural production network is affected by natural hazards or climate-induced disasters, the consequences reverberate globally: supply decreases and food prices increase. In agricultural production systems, food supply, supply chain infrastructure, and transport to and from local markets are vulnerable to natural hazards. These reduce the availability and affordability of food in the region.

In the developing countries of Asia, for example, 22% of the total economic impact of natural disasters was in the agriculture sector: crops, livestock, fisheries, and forestry. Data, however, are scarce, so little is known about the substantial impact of natural disasters and climate change on the agricultural value chains and the disproportionate burden placed on people who rely on agriculture for their livelihood. No consistent accounting for direct and indirect agriculture losses from natural hazards exist in any of the primary global hazard databases, although some national databases separately record losses in agriculture.

To further understand the distributional impacts of disasters on food security and to assess policy implications from this understanding, the Economic Research Institute for ASEAN and East Asia (ERIA) organised a study, that brought together leading academics from across the globe and policymakers from the ASEAN to describe several approaches for building resilience into food value chains, share knowledge, and better understand risk reduction from different disciplinary perspectives.

The two volumes of this book are the outcome of that study, and addresses the differential vulnerability of people, places, and sub-sectors, introducing concepts and methods for analysis, and illustrate the impacts on food security at the local, national, and regional level. The chapters in the first volume set the stage by focusing on the relationship between natural disasters and climate change and by broadly exploring their economic and social aftermaths. The chapters in the second volume discuss the resilience measures and adaptation road maps in terms of information sharing, preparedness, enhancing decision making capacity – particularly the relevance of improving the roles of markets through investments and insurance to face the financial challenges.

These two volumes complement each other in clarifying resilient pathways in the vital process of disaster risk management and adaptation to climate change. As the authors continue to research, debate, analyse, and propose an enabling environment to enhance resilience, new publications like this bring fresh insights into policy development.

Here we emphasise the need for holistic actions: for improved resilience of global food security rather than narrowly drawn sectoral approaches, for innovative disaster risk management measures rather than reliance on established patterns, and ensuring that governments and the private sector take a powerful lead in implementing robust institutional frameworks rather than entrusting the task to communities and international agencies. I am confident that this book will contribute to policy development and academic understanding in an area where new acumen is urgently needed.



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