Disasters undermine societal well-being, causing loss of lives and damage to social and economic infrastructures. Disaster resilience is central to achieving the 2030 Sustainable Development Goals, especially in regions where extreme inequality combines with the increasing frequency and intensity of natural disasters. Disaster risk reduction and resilience requires participation of wide array of stakeholders ranging from academicians to policy makers to disaster managers. Disaster Resilient Cities: Adaptation for Sustainable Development offers evidence-based, problem-solving techniques from social, natural, engineering and other disciplinary perspectives. It connects data, research, conceptual work with practical cases on disaster risk management, capturing the multi-sectoral aspects of disaster resilience, adaptation strategy and sustainability. The book links disaster risk management with sustainable development under a common umbrella, showing that effective disaster resilience strategies and practices lead to achieving broader sustainable development goals. Provides foundational knowledge on integrated disaster risk reduction and management to show how resilience and its associated concept such as adaptive and transformative strategies can foster sustainable development. Brings together disaster risk reduction and resilience scientists, policy-makers and practitioners from different disciplines. Case studies on disaster risk management from natural science, social science, engineering and other relevant disciplinary perspectives.
This book announces the new, interdisciplinary field of critical disaster studies. Unlike most existing approaches to disaster, critical disaster studies begins with the idea that disasters are not objective facts, but rather are interpretive fictions—and they shape the way people see the world. By questioning the concept of disaster itself, critical disaster studies reveals the stakes of defining people or places as vulnerable, resilient, or at risk. As social constructs, disaster, vulnerability, resilience, and risk shape and are shaped by contests over power. Managers and technocrats often herald the goals of disaster response and recovery as objective, quantifiable, or self-evident. In reality, the goals are subjective, and usually contested. Critical disaster studies attends to the ways powerful people often use claims of technocratic expertise to maintain power. Moreover, rather than existing as isolated events, disasters take place over time. People commonly imagine disasters to be unexpected and sudden, making structural conditions appear contingent, widespread conditions appear local, and chronic conditions appear acute. By placing disasters in broader contexts, critical disaster studies peels away that veneer. With chapters by scholars of five continents and seven disciplines, Critical Disaster Studies asks how disasters come to be known as disasters, how disasters are used as tools of governance and politics, and how people imagine and anticipate disasters. The volume will be of interest to scholars of disaster in any discipline and especially to those teaching the growing number of courses on disaster studies.

Nowadays, the innovation in space technologies creates a new trend for the Earth observation and monitoring from space. This book contains high quality and compressive work on both microwave and optical remote sensing applications. This book is divided into five sections: (i) remote sensing for biomass estimation, (ii) remote sensing-based glacier studies, (iii) remote
sensing for coastal and ocean applications, (iv) sewage leaks and environment disasters, and (v) remote sensing image processing. Each chapter offers an opportunity to expand the knowledge about various remote sensing techniques and persuade researchers to deliver new research novelty for environment studies.

Environmental Hazards and Disasters: Contexts, Perspectives and Management focuses on manifested threats to humans and their welfare as a result of natural disasters. The book uses an integrative approach to address socio–cultural, political and physical components of the disaster process. Human and social vulnerability as well as risk to environmental hazards are explored within the comprehensive context of diverse natural hazards and disasters. In addition to scientific explanations of disastrous occurrences, people and governments of hazard–prone countries often have their own interpretations for why natural disasters occur. In such interpretations they often either blame others, in order to conceal their inability to protect themselves, or they blame themselves, attributing the events to either real or imagined misdeeds. The book contains a chapter devoted to the neglected topic of such reactions and explanations. Includes chapters on key topics such as the application of GIS in hazard studies; resiliency; disasters and poverty; climate change and sustainability and development. This book is designed as a primary text for an interdisciplinary course on hazards for upper–level undergraduate and Graduate students. Although not targeted for an introductory hazards course, students in such a course may find it very useful as well. Additionally, emergency managers, planners, and both public and private organizations involved in disaster response, and mitigation could benefit from this book along with hazard researchers. It not only includes traditional and popular hazard topics (e.g., disaster cycles, disaster relief, and risk and
vulnerability), it also includes neglected topics, such as the positive impacts of disasters, disaster myths and different accounts of disasters, and disasters and gender.

This Intergovernmental Panel on Climate Change Special Report (IPCC-SREX) explores the challenge of understanding and managing the risks of climate extremes to advance climate change adaptation. Extreme weather and climate events, interacting with exposed and vulnerable human and natural systems, can lead to disasters. Changes in the frequency and severity of the physical events affect disaster risk, but so do the spatially diverse and temporally dynamic patterns of exposure and vulnerability. Some types of extreme weather and climate events have increased in frequency or magnitude, but populations and assets at risk have also increased, with consequences for disaster risk. Opportunities for managing risks of weather- and climate-related disasters exist or can be developed at any scale, local to international. Prepared following strict IPCC procedures, SREX is an invaluable assessment for anyone interested in climate extremes, environmental disasters and adaptation to climate change, including policymakers, the private sector and academic researchers.

Building upon presentations given during the conference on ‘Disaster Risk Reduction for Natural Hazards: Putting Research into Practice’, held at University College London in November 2009, the articles collected in this book examine how natural hazards research is accessed and used by practitioners and decision-makers, and conversely, how policy and practice inform research. As with the conference, this book successfully brings together views from humanitarian and development agencies, academia, business, government and funding bodies. It is rare to engage such a wide range of sectors in a discussion relating to the issues of disaster risk reduction from a natural hazards perspective, and the book captures this
interaction and the resultant exchange of ideas, thus providing an insight into how stakeholders respectively undertake or engage with natural hazards research. Collectively, the articles highlight the need for greater dialogue, understanding and collaboration between all these sectors if research is to be made relevant and generate significant impact on risk reduction policy and practice. There is an urgent requirement to better understand the respective needs, ways of working, project timescales and funding mechanisms for disaster risk reduction, as well as the challenges posed by institutional and organizational structures and functions. These issues must be overcome to ensure that ultimately, and most significantly, discussions turn into positive practical actions so that research on natural hazards is relevant and applicable. The book represents a step in that journey. This book was published as a special issue of Environmental Hazards.

A groundbreaking book that crosses cultures and contexts to provide a foundation for critical reflection on the role of occupation in disaster and development. An occupational perspective is illuminated by drawing upon the experiences of survivors, practitioners, personnel from local and international organisations, researchers and academics, with implications for policy, practice and education. Supports the development, use and practice of occupational therapy in disaster preparedness and response contexts presents a rich array of new material and learning which is sought after by occupational therapy and occupational science professions case study experiences covering epidemics, refugee crises, industrial emergencies, conflict, terrorism and natural disasters concludes with a description and analysis of a proposed occupational framework for disaster preparedness and response Contributed by a truly global team of authors from Australia, the US, India, Japan, Sri Lanka, the UK, Hong Kong,
Indonesia... Edited by a team who are widely recognised and experienced in development and disaster contexts
Archaeologists have long encountered evidence of natural disasters through excavation and stratigraphy. In Surviving Sudden Environmental Change, case studies examine how eight different past human communities-ranging from Arctic to equatorial regions, from tropical rainforests to desert interiors, and from deep prehistory to living memory-faced and coped with such dangers. Many disasters originate from a force of nature, such as an earthquake, cyclone, tsunami, volcanic eruption, drought, or flood. But that is only half of the story; decisions of people and their particular cultural lifeways are the rest. Sociocultural factors are essential in understanding risk, impact, resilience, reactions, and recoveries from massive sudden environmental changes. By using deep-time perspectives provided by interdisciplinary approaches, this book provides a rich temporal background to the human experience of environmental hazards and disasters. In addition, each chapter is followed by an abstract summarizing the important implications for today's management practices and providing recommendations for policy makers. Publication supported in part by the National Science Foundation.

The impacts of natural and man-made disasters have increased exponentially over the past few decades. Moreover, with our global interconnectedness and the growing scale of disasters, today's catastrophic disasters can have regional, national, and even global economic consequences. Following in the tradition of the successful first edition, Hazards Analysis: Reducing the Impact of Disasters, Second Edition provides a
structure and process for understanding the nature of natural and human-caused disasters. Stressing the role of hazard risk management for public, private, and nonprofit organizations, the author and expert contributors cover problem solving, risk analysis, and risk communications to ensure readers are in a position to identify key problems associated with hazards and the risks that they present. The book details a systematic process of hazards identification, vulnerability determination, and consequence assessment for the natural, built, and human environment. Using a cross-disciplinary approach, this book effectively demonstrates how to use the results of vulnerability assessment, spatial analysis, and community planning to reduce adverse disaster outcomes and foster social, economic, and environmental sustainability. Throughout, the book stresses that hazards analysis is not an isolated process but one that must engage the local community. Complete with clearly set objectives, key terms, discussion questions, satellite images and maps, and ancillary websites for further study, this authoritative guide covers every element of the hazard analysis process in a step-by-step format. Hazards Analysis presents time-proven strategies for building sustainable communities, identifying and prioritizing risks, and establishing successful disaster prevention and relief strategies prior to a disaster.

The pressure of climate change, environmental degradation, and urbanisation, as well as the widening of socio-economic disparities have rendered the global population increasingly vulnerable to the impact of natural disasters. With a primary focus on
medical and public health humanitarian response to disasters, Public Health Humanitarian Responses to Natural Disasters provides a timely critical analysis of public health responses to natural disasters. Using a number of case studies and examples of innovative disaster response measures developed by international agencies and stakeholders, this book illustrates how theoretical understanding of public health issues can be practically applied in the context of humanitarian relief response. Starting with an introduction to public health principles within the context of medical and public health disaster and humanitarian response, the book goes on to explore key trends, threats and challenges in contemporary disaster medical response. This book provides a comprehensive overview of an emergent discipline and offers a unique multidisciplinary perspective across a range of relevant topics including the concepts of disaster preparedness and resilience, and key challenges in human health needs for the twenty-first century. This book will be of interest to students of public health, disaster and emergency medicine and development studies, as well as to development and medical practitioners working within NGOs, development agencies, health authorities and public administration.

In recent years, several major natural and man-made hazards have challenged scientists, government officials and the public in general: earthquakes, major volcanic and other seismic eruptions in Mount St. Helens, El Chichon, Mexico city, Nevado del Ruiz, Japan, Italy, Greece, Cameroon and many other places on our globe; Tsunami in
the Pacific Ocean and deadly storm surges along the coasts of India, Bangladesh and Japan; Cyclones, floods, thunderstorms, snow storms, tornadoes, drought, desertification and other climatic catastrophes; Amoco-Cadiz oil spill accident (France), Three-Mile Island (U. S. A. ) and Chernobyl (U. S. S. R. ) nuclear accidents, Bhopal chemical accident (India), acid rain (Canada, U. S. A. ) and other technological disasters. Such hazards have snuffed out millions of lives, inflin

Disaster management is a vibrant and growing field, driven by government spending in the wake of terrorist attacks and environmental debacles, as well as private-sector hiring of risk managers and emergency planners. An ever-increasing number of practicing professionals needs a reference that can provide a solid foundation in ALL major phases of supervision – mitigation, preparedness, response, communications, and recovery. As climate change leads to further costly catastrophes and as countries around the world continue to struggle with terrorism, the demand for solutions will only grow. This revised edition of Coppola’s revered resource meets said demand head-on with more focused, current, thoughtfully analyzed, and effective approaches to disaster relief. Expanded coverage of global approaches to disaster management with enhanced data and research on disasters around the world, including Cyclone Nargis, the H1N1 pandemic, and the tsunami in American Samoa More material on risk management, mitigation, myths that affect behavior during crises, and post-disaster evaluation of the response Up-to-date information on the role of aid organizations and
international financial institutions like the World Bank in disaster response, as well as commentary on the latest research in disaster management and policy studies. Assessment of Vulnerability to Natural Hazards covers the vulnerability of human and environmental systems to climate change and eight natural hazards: earthquakes, floods, landslides, avalanches, forest fires, drought, coastal erosion, and heat waves. This book is an important contribution to the field, clarifying terms and investigating the nature of vulnerability to hazards in general and in various specific European contexts. In addition, this book helps improve understanding of vulnerability and gives thorough methodologies for investigating situations in which people and their environments are vulnerable to hazards. With case studies taken from across Europe, the underlying theoretical frame is transferrable to other geographical contexts, making the content relevant worldwide. Provides a framework of theory and methodology designed to help researchers and practitioners understand the phenomenon of vulnerability to natural hazards and disasters and to climate change. Contains case studies that illustrate how to apply the methodology in different ways to diverse hazards in varied settings (rural, urban, coastal, mountain, and more) Describes how to validate the results of methodology application in different situations and how to respond to the needs of diverse groups of stakeholders represented by the public and private sectors, civil society, researchers, and academics. Hazards, Risks, and Disasters in Society provides analyses of environmentally related
catastrophes within society in historical, political and economic contexts. Personal and corporate culture mediates how people may become more vulnerable or resilient to hazard exposure. Societies that strengthen themselves, or are strengthened, mitigate decline and resultant further exposure to what are largely human induced risks of environmental, social and economic degradation. This book outlines why it is important to explore in more depth the relationships between environmental hazards, risk and disasters in society. It presents challenges presented by mainstream and non-mainstream approaches to the human side of disaster studies. By hazard categories this book includes critical processes and outcomes that significantly disrupt human wellbeing over brief or long time-frames. Whilst hazards, risks and disasters impact society, individuals, groups, institutions and organisations offset the effects by becoming strong, healthy, resilient, caring and creative. Innovations can arise from social organisation in times of crisis. This volume includes much of use to practitioners and policy makers needing to address both prevention and response activities. Notably, as people better engage prevalent hazards and risks they exercise a process that has become known as disaster risk reduction (DRR). In a context of climatic risks this is also indicative of climate change adaptation (CCA). Ultimately it represents the quest for development of sustainable environmental and societal futures. Throughout the book cases studies are derived from the world of hazards risks and disasters in society. Includes sections on prevention of and response to hazards, risks and disasters
Provides case studies of prominent societal challenges of hazards, risks and disasters Innovative approaches to dealing with disaster drawing from multiple disciplines and sectors

Between 2010 and 2015 the world experienced 530 disaster events that affected 140 million people, killed 78,000 people and caused US$151bn in damages, figures that are testament to the significant and increasingly negative impact that disasters have globally. Disaster Risk Reduction for the Built Environment provides a multi-faceted introduction to how a wide range of risk reduction options can be mainstreamed into formal and informal construction decision making processes, so that Disaster Risk Reduction (DRR) can become part of the 'developmental DNA'. The contents highlight the positive roles that practitioners such as civil and structural engineers, urban planners and designers, and architects can undertake to ensure that disaster risk is addressed when (re)developing the built environment. The book does not set out prescriptive or context blind solutions to complex problems because such solutions can invariably generate new problems. Instead it raises awareness, and in doing so, inspires a broad range of people to consider DRR in their work or everyday practices. This highly-illustrated text book provides a broad range of examples, case studies and thinking points that help the reader to consider how DRR approaches might be adapted for differing contexts.

Disaster Risk Reduction for the Built Environment provides a multi-facetted introduction
to how a wide range of risk reduction options can be mainstreamed into formal and informal construction decision making processes, so that Disaster Risk Reduction (DRR) can become part of the ‘developmental DNA’. The contents highlight the positive roles that practitioners such as civil and structural engineers, urban planners and designers, and architects (to name just a few) can undertake to ensure that disaster risk is addressed when (re)developing the built environment. The book does not set out prescriptive (‘context blind’) solutions to complex problems because such solutions can invariably generate new problems. Instead it raises awareness, and in doing so, inspires a broad range of people to consider DRR in their work or everyday practices. This highly-illustrated text book provides a broad range of examples, case studies and thinking points that can help the reader to consider how DRR approaches might be adapted for differing contexts.

This book focuses on the challenges of living with climate disasters, in addition to the existing gender inequalities that prevail and define social, economic and political conditions. Social inequalities have consequences for the everyday lives of women and girls where power relations, institutional and socio-cultural practices make them disadvantaged in terms of disaster preparedness and experience. Chapters in this book unravel how gender and masculinity intersect with age, ethnicity, sexuality and class in specific contexts around the globe. It
looks at the various kinds of difficulties for particular groups before, during and after disastrous events such as typhoons, flooding, landslides and earthquakes. It explores how issues of gender hierarchies, patriarchal structures and masculinity are closely related to gender segregation, institutional codes of behaviour and to a denial of environmental crisis. This book stresses the need for a gender-responsive framework that can provide a more holistic understanding of disasters and climate change. A critical feminist perspective uncovers the gendered politics of disaster and climate change. This book will be useful for practitioners and researchers working within the areas of Climate Change response, Gender Studies, Disaster Studies and International Relations.

Emerging Voices in Natural Hazards Research provides a synthesis of the most pressing issues in natural hazards research. The book begins with an overview of emerging research on natural hazards, such as hurricanes, earthquakes, floods, wildfires, sea-level rise, global warming, climate change and tornadoes, among other topics. Remaining sections cover socially vulnerable populations and the cycles of emergency management. This book will serve as a consolidated resource for academics, students and researchers who are eager to learn about the most pressing issues in today's natural hazard research. Provides a platform for readers to keep up-to-date with the interdisciplinary research that new
professionals are producing Covers the multidisciplinary perspectives of the hazards and disasters field. Includes international perspectives from new professionals around the world, including developing countries. Environments around the globe are undergoing human-induced change. Human population growth, rapid urbanization, expanding global economy, and the diffusion of western consumer lifestyles are placing increasing pressure on natural and social systems. Global institutions, nation-states, and local communities are seeking to identify and employ sustainable solutions to these environmental and socio-economic challenges. Sustainability has emerged as a policy discourse that seeks to balance the desire and need for economic growth with the protection of the environment, and the promotion of social and environmental justice. This book contributes to the study and search for sustainable responses to global environmental change. The authors of this volume explore environmental change in different places around the world and the diverse responses to such changes. The chapters demonstrate the need for place-specific sustainable development; the authors suggest the need to see sustainable responses to environmental change as a negotiated outcome between various social actors living and working in diverse spatial, environmental and socio-economic contexts. Environmental Change and Sustainability is a
timely international examination of the relationship between environmental change and sustainability. As an InTech open source volume, current and cutting edge research methodologies and research results are quickly published for the academic policy-making communities. Dimensions of environmental change and sustainability explored in this volume include: Natural science approaches to study of environmental change Importance of perception in human understanding of environmental change Role of external events and institutions in shaping sustainable responses to environmental change Importance of bottom-up sustainable development as key to reducing environmental risk and community vulnerability The need for place-based sustainable development that combines local conditions with global processes Creation of a sustainable development model that synthesizes local, traditional knowledge of the environment and environmental management with the techniques and understandings generated by modern environmental science

The expanded fifth edition of Environmental Hazards provides a balanced overview of all the major rapid-onset events that threaten people and what they value in the twenty-first century. It integrates cutting-edge material from the physical and social sciences to demonstrate how natural and human systems interact to place communities of all sizes, and at all stages of economic
development, at risk. It also shows how the existing losses to life and property can be reduced. Part I of this established textbook defines basic concepts of hazard, risk, vulnerability and disaster. Critical attention is given to the evolution of theory, to the scale of disaster impact and to the various strategies that have been developed to minimise the impact of damaging events. Part II employs a consistent chapter structure to explain how individual hazards, such as earthquakes, severe storms, floods and droughts, plus biophysical and technological processes, create distinctive patterns of loss throughout the world. The ways in which different societies make a positive response to these threats are placed in the context of ongoing global change. In this extensively revised edition: An entirely new and innovative chapter explains how modern-day complexity contributes to the generation of hazard and risk Additional material supplies fresh perspectives on landslides, biophysical hazards and the increasingly important role of global-scale processes The increased use of boxed sections allows a greater focus on significant generic issues and offers more opportunity to examine a carefully selected range of up-to-date case studies Each chapter now concludes with an annotated list of key resources, including further reading and relevant websites. Environmental Hazards is a well-written and generously illustrated introduction to all the natural, social and technological
events that combine to cause death and destruction across the globe. It draws on the latest research findings to guide the student from common problems, theories and policies to explore practical, real-world situations. This authoritative, yet accessible, book captures both the complexity and dynamism of environmental hazards and has become essential reading for students of every kind seeking to understand the nature and consequences of a most important contemporary issue.

This volume deals with important social-science issues of law and legal control pertaining to disasters and hazards in a variety of contexts. The orientation of this volume is driven by relevant recent occurrences, such as hurricanes Katrina and Irene in the United States; the 2010 BP oil spill, and the 2011 Japanese earthquake and tsunami. Thematically diverse within the province of the social and behavioral sciences related to law and law-related problems, the chapters in this volume are not restricted in terms of theoretical approach and methodological orientation. Topics addressed include: legal controls pertaining to disaster prevention, response, and mitigation; regulations and policies concerning hazardous conditions; and crime and the control thereof in post-disaster situations.

The Handbook provides a comprehensive statement and reference point for...
hazard and disaster research, policy making, and practice in an international and multi-disciplinary context. It offers critical reviews and appraisals of current state of the art and future development of conceptual, theoretical and practical approaches as well as empirical knowledge and available tools. Organized into five inter-related sections, this Handbook contains sixty-five contributions from leading scholars. Section one situates hazards and disasters in their broad political, cultural, economic, and environmental context. Section two contains treatments of potentially damaging natural events/phenomena organized by major earth system. Section three critically reviews progress in responding to disasters including warning, relief and recovery. Section four addresses mitigation of potential loss and prevention of disasters under two sub-headings: governance, advocacy and self-help, and communication and participation. Section five ends with a concluding chapter by the editors. The engaging international contributions reflect upon the politics and policy of how we think about and practice applied hazard research and disaster risk reduction. This Handbook provides a wealth of interdisciplinary information and will appeal to students and practitioners interested in Geography, Environment Studies and Development Studies.

The term 'natural disaster' is often used to refer to natural events such as
earthquakes, hurricanes or floods. However, the phrase 'natural disaster' suggests an uncritical acceptance of a deeply engrained ideological and cultural myth. At Risk questions this myth and argues that extreme natural events are not disasters until a vulnerable group of people is exposed. The updated new edition confronts a further ten years of ever more expensive and deadly disasters and discusses disaster not as an aberration, but as a signal failure of mainstream 'development'. Two analytical models are provided as tools for understanding vulnerability. One links remote and distant 'root causes' to 'unsafe conditions' in a 'progression of vulnerability'. The other uses the concepts of 'access' and 'livelihood' to understand why some households are more vulnerable than others. Examining key natural events and incorporating strategies to create a safer world, this revised edition is an important resource for those involved in the fields of environment and development studies.

This book explores the common language of politics, ecology and risk, and crosses their conceptual divides. It seeks to shed light on the underlying structural factors, processes, players and interactions in the risk scenario, all of which influence decision-making that both increases and reduces disaster risk. The first section explores risk governance under conditions of increasing complexity, diversity and change. The discussion includes chapters on The
problem of governance in the risk society; Making sense of decentralization; Understanding and conceptualizing risk in large-scale social-ecological systems; The disaster epidemic and Structure, process, and agency in the evaluation of risk governance. Part II, focused on governance in regions and domains of risk, includes nine chapters with discussion of Climate governance and climate change and society; Climate change and the politics of uncertainty; Risk complexity and governance in mountain environments; On the edge: Coastal governance and risk and Governance of megacity disaster risks, among other important topics. Part III discusses directions for further advancement in risk governance, with ten chapters on such topics as the transition From risk society to security society; Governing risk tolerability; Risk and adaptive planning for coastal cities; Profiling risk governance in natural hazards contexts; Confronting the risk of large disasters in nature and Transitions into and out of a crisis mode of socio-ecological systems. The book presents a comprehensive examination of the complexity of both risk and environmental policy-making and of their multiple—and not always visible—interactions in the context of social–ecological systems. Just as important, it also addresses unseen and neglected complementarities between regulatory policy-making and ordinary individual decision-making through the actions of nongovernmental actors. A range of
distinguished scholars from a diverse set of disciplines have contributed to the book with their expertise in many areas, including disaster studies, emergency planning and management, ecology, sustainability, environmental planning and management, climate change, geography, spatial planning, development studies, economy, political sciences, public administration, communication, as well as physics and geology. Growing concerns about climate change and the increasing occurrence of ever more devastating natural disasters in some parts of the world and their consequences for human life, not only in the immediately affected regions, but for all of us, have increased our desire to learn more about disaster experiences in the past. How did disaster experiences impact on the development of modern sciences in the early modern era? Why did religion continue to play such an important role in the encounter with disasters, despite the strong trend towards secularization in the modern world? What was the political role of disasters? Historical Disasters in Context illustrates how past societies coped with a threatening environment, how societies changed in response to disaster experiences, and how disaster experiences were processed and communicated, both locally and globally. Particular emphasis is put on the realms of science, religion, and politics. International case studies demonstrate that while there are huge differences across cultures in the way people and societies responded to disasters, there are also many commonalities and interactions between different cultures that have the potential to alter the ways people prepare for and react to disasters in future. To explain these relationships and highlight their significance is the purpose of this volume.
Environmental risks are a multi- and interdisciplinary topic with a great interest in current society. This book examines the issues of natural hazards (e.g., typhoons, landslides, wildfires), anthropogenic activities (construction of artificial dams, the operation of nuclear power plants), and their potential risks to the environment and/or quality of life at various scales, from local to regional and even at a global level. The book intends to discuss concepts, methods, and techniques to address environmental risks and vulnerabilities, revealing the complex interactions between nature and human communities and activities. Policies and practices for disaster risk management should be based on the best state-of-the-art methods and techniques, integration between natural and/or social approaches, interdisciplinary research, and multilevel cooperation.

Offers the first comprehensive overview of research into hazards and disasters from a historical perspective. This title is also available as Open Access on Cambridge Core. The book provides insights into community narratives concerning life in the face of creeping calamities through a case study from the Colombian Andes. It sets out to make sense of the lived experience of disasters that are slowly unfolding as well disasters that have not yet occurred. This book explores what it means to live in anticipation of disaster and in anticipation of an uprooting of community, sense of self, and sense of belonging. It questions whether community resilience is a useful concept in the context of slow-onset geological hazards for which few viable solutions are available. The book forces us to think about how resettlement and displacement functions in the context of slow calamities, which presents distinct challenges, mainly related to lower political saliency than what is usually the case in emergencies. The book thus also has implications for how we think about the adverse impacts
of climate change. By raising new questions on the nature of disasters and calamities and how we experience them, the book explores the challenges and tensions surrounding governance and governmentality. The inter-disciplinary blend of practice-oriented and conceptual reflections will appeal to academics in postgraduate and postdoctoral research in social sciences, specifically, disaster research, geography, and research fields centred on natural hazards and disasters.

The fourth edition of Environmental Hazards continues to blend physical and social sciences to provide a thoroughly balanced, contemporary introduction to hazards analysis and mitigation strategies. It covers all the major rapid-onset events, whether natural, human or technological in origin which directly threaten humans and what they value. Environmental Hazards provides a lucid comprehensive introduction to both the theory and practice of hazards and their mitigation, drawing on interdisciplinary insights. It is essential reading for students of geography, environmental science, earth science and geology.

Biological and Environmental Hazards, Risks, and Disasters provides an integrated look at major impacts to the Earth’s biosphere. Many of these are caused by diseases, algal blooms, insects, animals, species extinction, deforestation, land degradation, and comet and asteroid strikes that have important implications for humans. This volume, from Elsevier’s Hazards and Disasters Series, provides an in-depth view of threats, ranging from microscopic organisms to celestial objects. Perspectives from both natural and social sciences provide an in-depth understanding of potential impacts. Contributions from expert ecologists, environmental, biological, and agricultural scientists, and public health specialists selected by a world-renowned editorial board Presents the latest research on damages, causality, economic
impacts, fatality rates, and preparedness and mitigation. Contains tables, maps, diagrams, illustrations, and photographs of hazardous processes.

Practitioners in natural hazards reduction and policy makers in climatic change and natural hazards management.

Growing debates around governance are taking place among academic, policy-making, and practice-based communities. In light of the increasing focus on governance, this book presents and discusses governance as a framework that is able to both conceptualize and contextualize risks and disasters as currently experienced and managed into social systems. Contributions offer a variety of perspectives, experiences and socio-cultural contexts which have identified the challenges, opportunities and critiques of promoting governance. Part I explores approaches, models, and keywords as applied to risk and disaster governance theory. Part II investigates practices of risk governance and associated issues by focusing on disaster risk reduction policy and practice. Finally, Part III explores practices of disaster governance and associated issues, by focusing on disaster recovery experiences.

This book highlights cutting-edge recent theoretical and empirical trends and is a valuable resource for students, academics, practitioners and policy-makers interested in risk and disaster governance.

In the examination of gender as a driving force in disasters, too little attention has been paid to how women’s or men’s disaster experiences relate to the wider context of gender inequality, or how gender-just practice can help prevent disasters or address climate change at a structural level. With a foreword from Kenneth Hewitt, an afterword from Raewyn Connell and contributions from renowned international experts, this book...
helps address the gap. It explores disasters in diverse environmental, hazard, political and cultural contexts through original research and theoretical reflection, building on the under-utilized orientation of critical men’s studies. This body of thought, not previously applied in disaster contexts, explores how men gain, maintain and use power to assert control over women. Contributing authors examine the gender terrain of disasters 'through men's eyes,' considering how diverse forms of masculinities shape men’s efforts to respond to and recover from disasters and other climate challenges. The book highlights both the high costs paid by many men in disasters and the consequences of dominant masculinity practices for women and marginalized men. It concludes by examining how disaster risk can be reduced through men's diverse efforts to challenge hierarchies around gender, sexuality, disability, age and culture.

This book addresses the long-overdue imbalance in disaster management: an over-emphasis on post-disaster assistance and a lack of attention to vulnerability reduction. It answers the fundamental question in this debate: how can we mould pre-disaster development initiatives to become the most appropriate means for vulnerability reduction? The book reasserts and reapplies some of the basic concepts and issues which emerged in the 1960s and 1970s, with the message that development is a prime medium both of vulnerability and its reduction. The author examines requirements for long-term change so that conditions which have become the context for catastrophe can be modified. By focusing on longer-term policies and activities now, emergency
relief efforts have a positive context within which to contribute to development and the likelihood of recurrence will be reduced. The book contains case-studies from Sri Lanka, the Caribbean and the South Pacific and focuses on hazards of all kinds, setting out to redress the balance between large-scale disasters of global significance and small-scale disasters that are a matter of everyday existence. Social science research conducted since the late 1970s has contributed greatly to society’s ability to mitigate and adapt to natural, technological, and willful disasters. However, as evidenced by Hurricane Katrina, the Indian Ocean tsunami, the September 11, 2001 terrorist attacks on the United States, and other recent events, hazards and disaster research and its application could be improved greatly. In particular, more studies should be pursued that compare how the characteristics of different types of events-including predictability, forewarning, magnitude, and duration of impact-affect societal vulnerability and response. This book includes more than thirty recommendations for the hazards and disaster community. This book explores an interdisciplinary field at the intersection of gender and development studies, disaster and land tenure policy. It is well known that women generally have weaker claims to land. But how does that translate to increased
vulnerability during disaster? Using case studies from Asia, this book argues that land tenure is a key factor in mitigating the impact of disasters on women. The scale and frequency of disasters have been increasing in recent decades due to human impact on the landscape and climate. Unsustainable farming and land management systems have increased environmental risks and social vulnerabilities. However, around the world the costs of disasters are disproportionately borne by women, due largely to their reduced mobility and lack of control over assets. In post-disaster settings, women’s vulnerabilities increase due to gendered rescue and rehabilitation practices. As such, a gendered approach to land rights is critical to disaster preparedness and recovery.

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