



At Risk

Second edition

Natural hazards, people's vulnerability and disasters

Ben Wisner, Piers Blaikie, Terry Cannon, and Ian Davis

At Risk: natural hazards, people's vulnerability and disasters
Second edition
2003

Copyright Wisner, Blaikie, Cannon and Davis

The attached three chapters constitute Part I of the book, and have been made available in the public domain by the authors and Routledge as part of the UNDP follow up to the Hyogo Framework for Action 2005.

Royalties for the print versions of the book are donated to three disaster reduction networks in the South: *La Red* (Latin America), *Duryog Nivaran* (South Asia) and *Peri-Peri* (Southern Africa)

Contents

Foreword

Preface to new edition

Preface to 1994 edition

List of figures and tables

Part I Framework and theory

1 THE CHALLENGE OF DISASTERS AND OUR APPROACH

In at the deep end

Conventional views of disaster

What is vulnerability?

 The basic idea and some variations

 Risk society?

 Deconstruction approaches

 Vulnerability and normal/daily life

Changes since the first edition

The International Decade for Natural Disaster Reduction

Urban growth and the growth of urban concerns

Changes in earth care

The emergence of the 'Precautionary Principle'

Critiques of economic globalisation

Changes in human development and well-being

War and humanitarian relief

Media and policy selectivity

Convergence and critique

Convergence

Critique

Audiences

Scope and plan of the book

Limits and assumptions

Limitations of scale

Technological hazards

TEXT BOX 1.1

Naturalness versus the 'social causation' of disasters

2 THE DISASTER PRESSURE AND RELEASE MODEL

The nature of vulnerability

Two models

Cause and effects in the disaster pressure model

The chain of explanation

Time and the chain of explanation

Limits to our knowledge

Global trends and dynamic pressures

Population change

Urbanisation

War as a dynamic pressure

Global economic pressures

Adverse agrarian trends and livelihood diversification

Natural resource degradation

Global environmental change

Uses of the Pressure and Release model

TEXT BOXES

2.1 Landless squatters in Dhaka

2.2 Karakoram and house collapse

2.3 Problems with disaster statistics

2.4 Age structure and vulnerabilities

3 ACCESS TO RESOURCES AND COPING IN ADVESITY

Access to resources – an introduction

The purpose of the Access Model

Access in more detail

New thinking since 1994

‘Normal life’ – the formal Access model

Households and access in a political economy

Transitions from ‘normal life’ to disaster

Time-space positioning of hazards

Time and disasters

Post-event transition to disaster

Access, transition and safety

Coping and access to safety

Coping defined

Types of coping strategy

Coping and vulnerability analysis

Coping and transition to disaster

The Access Model as a research framework

Part II Vulnerability and hazard types

4 FAMINE AND NATURAL HAZARDS

Introduction

Famines and their causes

Explanations of famine

Neo-Malthusian explanations

Environmental 'supply-side' explanations

Economic theories of famine

Complex emergencies, policy famines and human rights

Causes, pressures, unsafe conditions and famine

Access and famines

Policy

Early Warning Systems

Strengthening livelihood systems

Response to famine from the grass roots

Conclusion

TEXT BOX

4.1 Famine in Malawi 2002

5 BIOLOGICAL HAZARDS

Introduction

Human health, daily life and vulnerability

What are biological hazards?

Limitations to our treatment of biological hazards

Biological links with other hazards

Livelihoods, resources and disasters

The role of access

Vulnerability-creating processes

The micro-environment

Migration and biological hazards

Regional physical environment

Pressures affecting defences against biological hazards

Genetic defences

Environmental and cultural defences

Root causes and pressures

Biological hazards in Africa

Steps toward risk reduction

Policy directions

Precautionary science

TEXT BOXES

5.1 The Irish Potato Famine (1845-48)

5.2 AIDS in Africa

6 FLOODS

Introduction

Flood disasters, challenges and changes in thinking

Floods as known risks

The paradox of flood control

Natural dams

Flash floods and landslides

Disastrous outcomes for vulnerable people

Mortality, morbidity and injury

Livelihood disruption

Floods and vulnerability

Summary: flood prevention and mitigation

Local-level mitigation

Social protection and flood precautions

Flood mitigation and preparedness

TEXT BOXES

6.1 Floods in China 1998

6.2 'Small' floods: a hidden problem

6.3 Bangladesh – reducing vulnerability to floods is not the same as stopping floods

6.4 Flooding and deforestation: the causation controversy

7 COASTAL STORMS

Introduction

The physical hazard

Patterns of vulnerability

Contemporary coastal settlements and the cyclone hazard

Coastal livelihoods

Case studies

Less-densely populated coasts

Rural hinterlands

Densely populated coasts

Islands and small island states

Policy responses

8 EARTHQUAKES AND VOLCANOES

Introduction

Determinants of vulnerability to earthquakes

Access to resources in normal life and transition to disaster

Classic case studies: Guatemala and Mexico

The Guatemala earthquake, 1976

The Mexico City earthquake 1985

Recent case studies

Kobe earthquake 1995

Social vulnerability and high-risk groups

Unsafe dwellings

Economic vulnerability

The failure of disaster preparedness measures

Community resilience

Gujarat earthquake 2001

Social vulnerability – high-risk groups

Unsafe buildings

Economic vulnerability

Community resilience

Volcanoes and related hazards

Nevado del Ruiz eruption, Colombia 1985

Montserrat volcanic eruptions, 1995 – 98

Geography and vulnerability

Social vulnerability and high-risk groups

Unsafe conditions

Economic vulnerability

Failure of protection measures

Livelihoods, warnings, governance and volcanoes

Goma, Congo, eruption of Mount Nyiragongo 2002

Social vulnerability and high-risk groups

Unsafe conditions

Economic vulnerability

Failure of protective measures

Community resilience

Policy response and mitigation

TEXT BOXES

- 8.1 Progression of vulnerability: Kobe earthquake
- 8.2 Progression of vulnerability: Gujarat Earthquake
- 8.3 Chronology of events during the Montserrat eruption
- 8.4 Progression of vulnerability: Montserrat eruptions

Part III Towards a safer environment

9 Towards a safer environment

Towards a safer environment: are statements of intent merely hot air?

From Yokohama to Johannesburg via Geneva

The Yokohama Conference 1994

The IDNDR Programme Forum 1999

The Millennium Declaration 2000

The Johannesburg Summit 2002

Risk Reduction Objectives

First Risk Reduction Objective:

Understand and communicate the nature of hazards and vulnerabilities and capacities

Second Risk Reduction Objective:

Conduct risk assessment by analysing hazards, vulnerabilities and capacities

Third Risk Reduction Objective:

Reduce risks by addressing root causes, dynamic pressures and unsafe conditions

Fourth Risk Reduction Objective:

Build risk reduction into sustainable development

Fifth Risk Reduction Objective:

Reduce risks by improving livelihood opportunities

Sixth Risk Reduction Objective:

Build risk reduction into disaster recovery

Seventh Risk Reduction Objective:

Build a safety culture

TEXT BOXES

- 9.1 Emergency Management Australia: Extract from Study on the assessment of personal and community resilience and vulnerability
- 9.2 Central America: implementing comprehensive recovery?
- 9.3 Flood recovery in Anhui province China, 1993

Bibliography