The Regional Impacts of Climate Change

An Assessment of Vulnerability

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The degree to which human conditions and the natural environment are vulnerable to the potential effects of climate change is a key concern for governments and the environmental science community worldwide. To provide the best available base of scientific information for policymakers and public use, governments requested that the Intergovernmental Panel on Climate Change (IPCC) prepare this assessment of the vulnerability of different regions of the world. *The Regional Impacts of Climate Change: An Assessment of Vulnerability* reviews state-of-the-art information on potential impacts of climate change for ecological systems, water supply, food production, coastal infrastructure, human health, and other resources for ten global regions:

- Africa
- Australasia
- Latin America
- North America
- Temperate Asia
- The Arctic and the Antarctic
- Europe
- Middle East and Arid Asia
- Small Island States
- Tropical Asia

This assessment reveals that human health, ecological systems, and socioeconomic sectors are vulnerable to changes in climate, including the magnitude and rate of climate change, as well as to changes in climate variability. It also illustrates that the increasing costs of climate and climate variability, in terms of loss of human life and capital due to floods, storms, and droughts, are a result of the lack of adjustment and response in society’s policies and use of resources. This book points to management options that would make many sectors more resilient to current variability in climate and thus help these sectors adapt to future changes in climate.

The assessment of each region’s vulnerability to climate change shares a common structure to facilitate comparison of information. The focus is on sensitivity, adaptation options, critical zones, and especially vulnerable regions/countries or sectors/resources. The regional assessments have been prepared by leading researchers. The report is based on information contained in the IPCC Second Assessment Report and integrates the most recent research on the topics affecting these regions.

This book will become the primary source of information on regional aspects of climate change for policymakers, the scientific community, and students.

The Intergovernmental Panel on Climate Change (IPCC) was set up jointly by the World Meteorological Organization and the United Nations Environment Programme to provide an authoritative international statement of scientific opinion on climate change. *Regional Impacts of Climate Change* is the first of four Special Reports to be prepared by the IPCC at the request of the United Nations Framework Convention on Climate Change.