Review: The Atlas of Climate Change: Mapping the World's Greatest Challenge
By Kirstin Dow and Thomas E. Downing

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Dow, Kirstin and Downing, Thomas E. *The Atlas of Climate Change: Mapping the World's Greatest Challenge*. Berkeley, CA: University of California Press, 2006. 112 pp. ISBN: 1-84407-376-9. US$19.95, £12.99, paper.

The Atlas of Climate Change is an amazing effort by Kirstin Dow and Thomas E. Downing. Kirstin Dow is Associate Professor at the University of South Carolina and Senior Research Fellow at the Stockholm Environment Institute. Thomas E. Downing is Director of the Stockholm Environment Institute and Visiting Fellow at Oxford University, contributor to the Intergovernmental Panel on Climate Change (IPCC) and advisor to the UK Climate Impacts Programme. The Atlas reflects major findings of the IPCC's Fourth Assessment Report to support the writers' view that "we know enough to act, and will face ever more serious consequences for delays in doing so" (p. 9).

The atlas provides scientific information related to climate change with the help of beautifully illustrated colorful maps, graphs, tables and photographs. It elaborates the reasons, evidence and consequences of climate change and looks into the measurements taken to reduce greenhouse gas emissions. It covers a wide range of topics including warning signals, future scenarios, vulnerable populations, health impacts, renewable energy and emissions reduction.

It presents evidence and signs of climate change with reference to polar changes, glacial retreat and the weather-related disasters around the world. It analyzes the causes of climate change in a historical perspective and shows how the increasing concentration of greenhouse gases like methane, nitrous oxide and carbon dioxide is the direct consequence of industrialization and growing dependence on motor vehicles. It also attempts to examine the impact of climate change on ecosystem and human life. Food and water scarcities, salt-water intrusion into freshwater supplies, coastal erosion, coastal storms and rising sea levels are some of the various hazards of climatic change. These cause threats to health, economy and cultural assets in the form of heat-waves, droughts and flooding. Coastal communities and regions with high population and intensive economic development are at serious risk.

The issue of climate change must be taken as a serious challenge at all levels. Governments, business and civil organizations can play a major role in formulating and implementing the policies at public level. Efforts should also be made at the personal level to take steps in changing the living style to reduce the greenhouse gases emissions. *The Atlas of Climate Change* evaluates international efforts to reduce greenhouse gas emissions. The UN Framework Convention on Climate Change (UNFCC) stresses stabilizing greenhouse gases emissions at a level that would prevent human induced interference with the climate system, and the Kyoto Protocol sets targets for reduction in emissions. Although over 160 countries have ratified the Protocol, not all of these have met the targets for reduction.

Kirstin Dow and Thomas E. Downing advocate solutions to the issue like trading in carbon credits to share the burden of reducing emissions globally, availability of adequate funding on climate change, involving the local and regional authorities to develop policies, and use of renewable energy sources. They also stress increasing the capacity of nations to cope with climatic hazards such as raising public awareness of climate change and building a healthy infrastructure. In this way, the atlas is unique because it provides not merely the technical data but also interprets it in a broader perspective inviting thoughts and actions.

The atlas is a great resource for climatologists, researchers, postgraduate and undergraduate students to obtain scientific data on climate change. It is also useful for the general public to easily understand the basic issues related to the complicated and technical knowledge of climate change. The authors have also explained the scientific terminology used in the atlas so that a non-specialist reader can understand the atlas with ease.

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