

# An issue of equity



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The world's most vulnerable must be prioritized in adapting to climate change.

## FAIRNESS IN ADAPTATION TO CLIMATE CHANGE

Edited by W. Neil Adger, Jouni Paavola, Saleemul Huq and M. J. Mace

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It is well recognized that vulnerability to the impacts of climate change is unequal: the planet's poorest face the widest assortment of climate-related stresses and have the fewest tools to cope with them. In Asia, for example, 2.5 billion people live in rural areas on incomes of less than one dollar per day. They typically do not have access to sanitation, are vulnerable to disease and, coupled with illiteracy, poverty undermines their ability to pursue sustainable practices. The disaster-prone and ecologically fragile nature of their environment makes it unproductive, further increasing their exposure to climate risks. Similar demographics across Africa result in extreme exposure to the various manifestations of climate change that intensifies the pain of a vicious cycle of land degradation, polluted river catchments, desertification and diminished ecosystem services.

In an effort to explore what we know about the plight of the world's most vulnerable, *Fairness in Adaptation to Climate Change* brings together an extraordinary collection of scholarly essays that focus on the role of equity and fairness in supporting the capacity of human systems to adapt to climate change. It is a succinct presentation of the obvious — that access to resources is an essential prerequisite for adapting to any external stress — but it is also a careful discussion of the more subtle — that the capacity to adapt and equity are related through intricate webs of social, cultural, political and economic connections. These are prerequisites for effective adaptation that the world's poor are, for all intents and purposes, currently denied.

Because context can vary significantly from place to place, society to society and time to time, however, it is extremely difficult to tell an inclusive story about how equity and fairness should enter development plans and, perhaps more importantly, negotiations under the United Nations Framework Convention on Climate Change (UNFCCC). Equity issues are not foreign to the UNFCCC. We live in a

world where the richest developed countries like the United States and the fast-growing emerging economies like China and India emit the largest proportion of greenhouse gases and developing nations suffer the largest proportion of negative impacts. The Convention asserts that this is, quite simply, not fair, and so countries that have signed the Convention have committed themselves to remedying the situation.

Several fundamental themes run through the entire collection, which is essentially a rigorous scholarly assessment of the role of equity in understanding adaptation. The first relates vulnerability to the social and environmental processes that limit the ability of systems to cope with climate-related stresses. Vulnerability is thereby appropriately and integrally related to the wider political economy within which it is located. The second theme argues that uncertainty (born of either imprecise understanding of climate change and socio-political-economic systems or conflicting norms of justice) is never a reason not to act. Some participants in the climate policy debate have used uncertainty to do just that; but this book provides more evidence that they are, quite simply, wrong in doing so.

A third holds that vulnerability must be measured using multiple "numeraires" or metrics. Here the essays are on the frontier of the academic discourse on impacts. Although many impacts can be expressed purely in economic terms, in other cases, different yardsticks must be recognized. For example, the Fourth Assessment Report of the Intergovernmental Panel on Climate Change makes no attempt to convert some of its major conclusions into economic measures. An additional 1 °C of warming would increase the number of people facing water scarcity by up to 1.2 billion additional people in Asia and 250 million in Africa and would cause as much as a 5% decline in wheat and maize productivity in India. Another degree of warming would cause China to experience a 12% decline in rice

productivity, and water scarcity would affect an additional 1.6 billion people in Asia and Africa. These are risks that defy meaningful economic quantification, and they fall in places where most of the world's poor reside.

Two bookend chapters were crafted by the editors to tie these themes together with more than the usual signpost descriptions of who said what. The intervening chapters ask "So what?", and the somewhat academic discourse of the early chapters is brought to life in case studies from Bangladesh, Tanzania, Botswana, Namibia, Hungary and Vari.

The editors themselves then bravely tackle the more difficult question of "What do we do about it?". They argue that avoiding dangerous climate change is the minimum moral responsibility of the planet's most privileged decision-makers, but they also highlight that this is not simply a developed-developing country problem. Some of the world's most vulnerable people live in places like Darfur, but others are citizens of the wealthiest societies the planet has ever seen, in places like New Orleans. They argue correctly that allowing dangerous impacts would exacerbate inequity and other social problems everywhere, but they conclude optimistically that making progress towards reducing inequity across the globe and within individual communities could be good "climate policy".

To support their optimism, they offer a productive approach to adaptation, arguing persuasively for making the most vulnerable (wherever they live) the top priority in designing adaptation programs. All themes identified in the book can be found in the UNFCCC. All that remains is to weave them into meaningful implementation — the incredibly difficult task of asking the Parties of the UNFCCC to keep to their word.

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