Foreword

The warming of the atmosphere that blankets the earth and makes it habitable is the greatest threat that humanity faces in this century. One happy development is that this statement does not need to be defended at any great length because a consensus on the facts and projections about climate change has been built up over the past three decades. The debate now is increasingly about the actions that need to be taken—by whom and when—both for mitigating the extent of temperature increase and for adapting human societies to the temperature increase that is now unavoidable. This debate has several dimensions.

First, the scientific debate is not entirely over. There is a broad consensus that anthropogenic emissions of greenhouse gases (GHGs) are the principal source of the increases in global temperature that have already been seen and that are projected to take place in the future. However, there are still many uncertainties about some of the parameters used in these projections, the impact of factors like aerosols, the risk of extreme weather events, the variation of impact by region, and the effect of changes in the climate on ecosystems and economic activities. Hence, a continuing process of scientific investigation is necessary.

Second, managing this threat necessarily requires global cooperation because of the planetary nature of the GHG cycles and the worldwide impact of an increase in the average global temperature. A global negotiating process for securing agreement on who does what and when has been underway for about three decades and the outcome remains a work in progress. Climate change has also become a major issue in other global forums, like the G20. Hence, climate diplomacy has become a major feature of international relations. Third, the fulcrum for action is very much at the national level. The commitments that emerge from climate diplomacy, including, for instance, the nationally determined contributions required under the Paris Agreement of 2015, have to be implemented through changes in national laws and policies. This is particularly true for energy policy which is the centrepiece of climate action programmes. Hence, the debate on the required actions has to connect the global to the national level.

Fourth, the reach of national governments in terms of groundlevel action is often limited, and sub-national bodies like provincial governments, municipalities, and local bodies have to be committed to take action. This also has to include non-governmental entities, like corporations, who determine technological choices, products, and processes that will affect climate prospects very directly. Many of these sub-national entities and corporations are developing their own climate action programmes and need to be a part of the policy debate.

Fifth, non-governmental organizations (NGOs) have played a major role in raising awareness and agitating for action at the international level. They have brought to the negotiating table an issue-based commitment, thereby forcing governments to look beyond narrow national interest. This role is particularly important right now when the global agreement does not involve binding commitments but only unilateral national pledges. At the national level, too, these activist NGOs and independent researchers play a crucial role in helping to identify appropriate actions, holding governments accountable, and keeping the long term in focus in development policy debates.

Finally, climate action cannot be separated from other goals of development policy. This is particularly true for adaptation actions directed at coping with temperature changes that are unavoidable, but it also applies to mitigation action. There are often synergies between climate goals and other development goals, like poverty eradication, self-reliance, disaster risk reduction, and so on. Hence, the debate on climate action has to be embedded in the broader debate about development goals and policies.

This book—a collection of separately authored chapters—edited by Navroz K. Dubash, is a very timely contribution to an issue that is central for development policy today. Though many books keep coming out on the issue of climate change, there is no comparable book dealing with the Indian situation. Its five sections cover all the dimensions of the aforementioned debate.

The opening section on science contains up-to-date material, which presents assessments of impact in India that are not widely known. The section on the international dimension includes some fascinating inside accounts of climate negotiations. The section on politics is particularly helpful on the seminal role of NGOs, as is the one on actions on the challenge of finance and technology transfer, which have played so prominent a role in the global negotiations.

The book presents a good case for integrating climate concerns into development policy and vice versa. The final section deals with the changes that are necessary in three areas relevant both for carbon mitigation and for adaptation (energy, urban development, and forests) and three where the challenge is largely that of adaptation (agriculture, water resources, and coastal areas).

This is a book which should be read by everyone whose primary interest as a researcher, policymaker, or enthusiast is in climate policy or in any one of these sectoral areas. It is also a valuable resource for anyone concerned about the long-term well-being of humanity.

I congratulate the editor and the authors for this valuable contribution which will help to ensure a more informed climate debate in India.

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