

Chapter 10 broadens the agricultural policy discussion beyond the commodity programs to consider U.S. farmland policy. Lawrence Libby discusses how farmland policy has evolved from “the scarcity argument” (p. 185) based on a concern for the future food supply to a recognition of the ecological and amenity services that farmland provides. He summarizes current federal and state policies and also looks at two trends in the future of farmland policy. One involves creating markets for farmland services so that consumers can express a willingness to pay; the other promotes the responsibilities associated with land ownership that will require mandatory action by landowners. In Chapter 14, “The Changing Economics of Agriculture and the Environment,” David Ervin and Frank Casey summarize the current public agro-environmental programs run by USDA, but their main focus is on how to encourage cost-effective private voluntary environmental initiatives. They list six specific motivations for “corporate environmental management” (CEM) along with a discussion of the CEM literature. They develop a stylized farmer environmental management decision model to expand the CEM approach to agriculture and conclude with eight topic areas needing attention by agricultural and resource economists.

Going beyond U.S. agricultural policy, Daniel Sumner, in Chapter 12, examines the food security justification for agricultural commodity policies and argues that liberalization of agricultural trade policy can improve national food security more than investments in technological innovation. In Chapter 13, Tim Josling embraces Tweeten’s idea of a “new economic paradigm” (p. 247) for agriculture and considers its effect on policy reform. He summarizes agricultural policy changes in the OECD countries and presents four competing agricultural paradigms behind these changes that are affecting international trade negotiations. The different policy objectives of these four paradigms explain much of the disagreement surrounding WTO agricultural negotiations.

Alan Randall brings the book to a fitting conclusion in Chapter 15 by reminding economists that their attempts “to impose simplicity on a complex world” (p. 286) are viewed quite differently by those with an alternative outlook. He presents the case of an isolation paradox, which exists when individual action fails but coordinated action would make all parties better off, and examines some of the

policy and process characteristics that could help break this paradox. The author discusses economists’ justifications for the systematic use of BCA for policy decision making, along with its moral underpinnings, but argues that in a world of moral pluralism policy makers must find heuristics that everyone can agree upon. He then presents ways in which BCA can be used “to inform decisions rather than to decide issues” (p. 298). Randall contends that economists’ usual recommendations of let the market handle it, create a new market, or use a benefit–cost test are not the only possibilities. Thus this concluding chapter, perhaps, “challenges some of Luther’s cherished assumptions,” (p. 300) and challenges all economists to broaden their approach to policy analysis and solutions.

This book obviously covers a wide range of agricultural policy issues that will have to be addressed in the twenty-first century and so provides a useful compendium of agricultural policy analyses. However, concerns that the budget surplus which existed in 2000 would be used to create market-distorting agricultural policies are no longer relevant and point out how quickly policy discussions can become dated. Much of the analysis in this book is still relevant today, and could inform a similar undertaking that examines issues related to the 2002 farm bill. One minor criticism is the order of the essays; I have presented my review in the order that I preferred. In addition, Chapter 11, “Kuznets Curves for Environmental Degradation and Resource Depletion,” is an interesting econometric analysis, but, although the authors (Aref Hervani and Tweeten) mention a connection between food security and greenhouse gas emissions and natural resource-depletion, this chapter seems misplaced in a book on agricultural policy.

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Toman, Michael A., Ujjayant Chakravorty, and Shreekant Gupta, eds. *India and Global Climate Change: Perspectives on Economics and Policy from a Developing Country*. Washington DC: RFF Press, 2003, 366 pp., \$60.

The heat is on, or so it appears. Although country-specific, the book makes an important contribution to the literature on global climate

change, keeping this issue on the front-burner. Climatological “techies” especially will warm quickly to this book for the rich details it offers on hydrocarbons, emissions, and the possible repercussions. The intended audience is “. . . Indian and international audiences, both professional and student” (p. xiii). This may be casting the net too wide given the varying technical complexity of individual chapters, some of which require a background in advanced calculus and matrix algebra. Notwithstanding the few technical portions of selected chapters, the descriptive approach employed by most authors to convey otherwise complicated material makes much of the book accessible to the intended audience. The focus on developing countries is a novel feature.

There are 17 chapters, organized, seemingly logically, into four sections: causes, mitigation, international climate policy, and conclusions. All but one of the authors appear to have backgrounds in economics and/or policy analysis. Although they obviously possess expertise in climate issues, the book is true to its title in that the perspective is mainly economics- and policy-oriented. Thus, readers expecting a truly interdisciplinary treatment are likely to be disappointed. However, to their credit, many authors use a systems context to address the multi-criteria nature of the underlying issues, and explore climate change within a larger framework of sustainable development. The book is rather lengthy, and readers might occasionally find themselves bogged down in minutiae. Chapters can be skipped without loss of continuity. Some chapters could have been consolidated. For example, both Chapters 12 and 13 examine the same issue, the implications of possible Kyoto Protocol implementation on developing countries, using the same approach, game theory. In addition, it would have been desirable to summarize the book’s conclusions into one chapter; as it stands, there are two chapters included in the section titled “Conclusions,” which, while informative in their own right, do not seem to emanate directly from the material in the preceding chapters.

Why is India attracting attention when it accounts for only 2–4% of world CO₂ emissions? The most compelling reasons stated are the profound implications of marked climate change for a country rapidly expanding beyond a billion people. Thus, it is clear that India has a large stake in the evolution and effectiveness of global-warming mitigation strategies. In addition to the more obvious justifications,

India’s energy mix has shifted from biomass to coal, resulting in higher emission intensities. Furthermore, although per capita CO₂ emissions are low (below a quarter of the world average), the national growth rate exceeds the global rate, inevitably leading to an increasing global share.

Industry and transportation account for the largest share of India’s energy use (48% and 24%, respectively). The main sources of greenhouse gas (GHG) emissions mirror those that top the list in developed countries—coal-based electricity generation and vehicular emissions, particularly in large cities. Electricity is the fastest growing energy sector, with demand projected to grow approximately fivefold by 2035. On the bright side, agricultural sector electricity consumption is expected to decline rapidly over the next few decades (from 30% of total consumption in 1995 to 1% in 2035) due to more efficient agricultural production practices and better national accounting of transmission losses (currently attributed solely to agriculture). However, gains here may be diminished by the presence in India—and other developing countries—of a large “informal sector” (i.e., the “black market”), which is simultaneously energy intensive and energy inefficient. An entire chapter (Chapter 5) is devoted to the role of the informal sector in GHG emissions, an inclusion that is commendable and imperative given this sector’s prevalence in the developing world.

Many chapters provide a historical context that readers unfamiliar with India will find especially useful. For example, in Chapter 4 it is pointed out that GHG emissions reduction did not factor into the policy reform process initiated during the early 1990s. These reforms included industrial deregulation and lower trade barriers that contributed to India’s accelerated economic growth. Without quantifying the impacts, another author presents a useful conceptual supply–demand framework (Table 4-2) to help explain the links between policy reforms and GHS emissions. The role of alternative, cleaner, energy sources (e.g., natural gas, nuclear, and hydropower) is also explored.

Chapter 3 posits that India’s large stock of coal reserves (much of which is low quality due to its high ash content), but limited natural gas and oil reserves, complicates mitigation. In light of this, another chapter (Chapter 2) notes that natural gas importation is possible—and desirable—in certain regions of the country (such as coastal locations), a substitution that is facilitated in the short-run by competitive

prices relative to coal. Policy goals have been articulated that will aid in the task of reducing CO₂ emissions, including increasing the share of rail transportation compared to road transportation. In addition, renewable energy sources continue to be explored in an effort to diversify and expand India's current energy production capabilities. Wind and small hydropower have shown the greatest potential for GHG mitigation in the short run, biomass in the medium term, and solar in the long run. Nuclear power accounts for a small fraction of power generation and, like other cleaner and renewable energy sources, its growth is shown to be constrained by sociopolitical factors.

The role of energy conservation as part of the solution continues to be stressed, and appropriately so. The book indicates that in India, as with most of the developing world, increased efficiencies are often possible in electricity transmission and distribution (for instance by reducing/eliminating pilferage and nonmetering; improving appliance standards and labeling; and promoting consumer awareness). In addition, the book advocates enhancing carbon sequestration through afforestation, reforestation, and regeneration, important since the forest sector is currently considered to be a net emitter of CO₂ due in large part to rural household reliance on wood for fuel.

The book reveals that the policy tools for environmental protection in India are based on standards and regulation. Economists generally advocate incentive-based policies such as taxes or tradable permits; however, it is emphasized in the book that the literature is less clear about the effectiveness of these policy tools in the presence of large pricing distortions in the energy sectors of most developing countries. Chapter 7 concludes that, one way or another, there appears to be a role for regulatory and institutional reforms to achieve cost-effective reductions in CO₂ emissions even when these reforms are not motivated by a desire to reduce such emissions.

The link to international climate policy is important and a commendable feature. Some of the approaches advocated (such as an international emissions trading system with variations for developed and developing countries to allow for greater equity, Chapter 14) are fairly novel. Implications abound for developed countries, too, in the latter part of the book which deals with emissions trading and similar market-based abatement instruments.

One gets the impression that the demand side offers a relatively sizable potential for GHG mitigation in the short run, while the supply side appears to have more potential in the long run. Demand side interventions include increased efficiency of existing technologies, increased consumer awareness, and fuel source switching. Not surprisingly, major impediments to reform processes that lead to energy efficiency appear to be institutional rigidities coupled with a lack of political will to effect reforms. Perhaps greater reliance on participatory approaches and stakeholder involvement (the model used with much success in water quality management in the United States, for example) can overcome such impediments; however, there is limited discussion of this issue.

In conclusion, this is a must-read for those interested in learning more about a burning issue that has consequences for several generations. The book leaves little doubt that the planet needs to go on a low-carb(on) diet. The issues addressed in this insightful book are serious ones and necessarily ensure that this discussion is not likely to cool down any time soon. If we don't pay heed, we may have to take the heat!

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Obstfeld, Maurice and Alan Taylor, eds.
Global Capital Markets: Integration, Crisis, and Growth. Cambridge, UK: Cambridge University Press, 2004, 354 pp., \$60.45.

As the twenty-first century dawns, there is almost universal agreement that global financial integration will play an important part in shaping the development trajectory of countries. Global financial integration, however, is a process. This makes it a useful concept for a historical study on the evolution of capital markets. Knowing what variables predict capital flows and their composition, where capital flows and why, and how the benefits from greater capital market integration are distributed provides policy setters with a better understanding of the constraints that global capital markets place on their policy choice calculus.

In this book, two renowned scholars tackle some of these questions by presenting a new economic history of international capital

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