Change), has been a senior advisor and manager at the World Bank, has advised the U.S. and Sri Lankan governments, and has issued hundreds of publications and earned extensive credentials and awards.

This book is challenging to those who lack a background in economics and who are not prepared for sudden and frequent immersion in complexity and mathematics. Many sections are literature reviews that will be of most value to those who have read or will go on to read the referred works. Some of the book clearly calls for active participation. For example, the section entitled "Applying the Sustainomics Framework to Climate Change" provides an overview of relevant principles for policy formation. We learn that we should be mindful of such concepts as social equity (including the intergenerational kind), the problem of externalities, the ethics of making the polluter pay, safe limits, carrying capacity, and irreversibility. This vital list of considerations that should be fully respected by our leaders is followed by a real-world example: a case study of greenhouse gas mitigation prospects in Sri Lanka. It demonstrates how various energy development pathways may be compared in terms of the cost of avoided carbon. It does not spell out how all the important considerations previously noted can be applied. A solar homes program is found to have the highest cost for avoided carbon. We are told that "this result is a good example of the hazards of conducting the analysis in terms of changes in system costs rather than changes in net benefits". In a much later section we learn that Sri Lankan consumers have a high willingness to pay for solar homes and there are available subsidies to overcome the up-front financing obstacles, so this reader wondered if this meant that solar homes were a good investment after all. But in yet another discussion of the economic, social and environmental aspects of various energy options we find the conclusion that the solar option should have a low priority for Sri Lanka. The book is not for the reader who wants everything sorted out — it is not a primer. But it is a real account of actual examples, and thus invaluable for anyone who wants to understand how development planning really works and can protect environmental, economic and social values.

Reading this book is good training for a very large task. Although Munasinghe provides wonderfully clear explanations and enlightening examples of actual development planning analyses, readers will work hard, leaping with him from concept to application. Munasinghe's grasp is extraordinary, and this book seems to contain much of the knowledge needed for saving the world. Sustainomics is a gift, and we should do our best to try to use it well.

> Rick Reibstein Environmental Law and Policy,

Center for Energy & Environmental Studies/Department of Geography, Boston University, 675 Commonwealth Avenue, Boston, MA, 02215, USA Tel.: +1 617 358 3366. E-mail addresses: rreibste@bu.edu, rickreibstein@rcn.com.

1 June 2008

doi:10.1016/j.ecolecon.2008.06.018

Global environmental negotiations and US interests, Deborah Saunders Davenport, Palgrave Macmillan, 2006, ISBN-13: 978-1-4039-70-21-3, 275 pages

This book sets out to analyze why there are effective global regimes addressing some environmental issue areas, while other issues are covered by weak regimes or no formalized regulatory regimes at all. To this end, the book empirically examines and analytically compares three major environmental issue areas: ozone depletion, climate change and deforestation. Davenport characterizes the ozone case as a relative success while she describes the other two cases as much less successful (if not outright failures). Her analytical approach to studying issues of state interests and behavior and determinants of collective outcomes is rooted in rational choice and game theory.

Davenport describes how many studies use the "tragedy of the commons" analogy to investigate issues of free-riding and policy failure in cases of (international) environmental politics. This approach assumes that it is the openness of a common area that makes it hard to manage. Yet, Davenport convincingly shows that the ozone case and the climate change case share many of the same commons characteristics, but the two regimes differ in effectiveness. Furthermore, the logic of the tragedy of the commons suggests that resources that are under exclusive jurisdiction will be better managed. This, however, is contradicted by the forest case: deforestation is continuing in many parts of the world as countries have failed to agree on a forest treaty.

Instead, Davenport argues that "the only framework that can accommodate both the difficulty in obtaining cooperation on a global commons problem, such as climate change, and the difficulty in achieving protection of resources under sovereign jurisdiction, such as forests, is one based on an analysis of relative perceived costs and benefits of an effective solution" (p. 6). Within this cost/benefit framework, she stresses two important aspects for successful negotiation and effective regime formation. First, there is a need for state leadership based on a combination of capacity and will. Second, the willingness of a state to lead depends on its expected costs and benefits from a particular agreement (including the costs of manipulating the preferences of other states).

Discussing approaches to measuring effectiveness, Davenport proposes that an ideal effective negotiated outcome must be legally binding. This, however, may not be entirely borne out by empirical evidence from the soft law literature. For example, a voluntary mechanism operated relatively successfully regulating the international trade in hazardous chemicals between 1989 and 2006, and it is not a given that the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade that superseded it will be more effective. In addition, Davenport's definition automatically classifies one of her three empirical cases — forests — as weak simply because the issue area lacks a treaty.

Davenport rightfully acknowledges that not all environmental treaties result in a physical improvements, and identifies four sets of effectiveness criteria for judging a treaty: the inclusion of concrete and precise commitments and timetables for their achievement; the design of a compliance mechanism that includes monitoring, implementation review, enforcement procedures, a dispute settlement body, and sanctions for non-compliance; universal participation including all producers of harm as well as potential providers of financial and technological resources to assist implementation; and explicit language detailing relationships to other treaties as well as a specified body and procedures for resolving conflicts with other treaties.

The environmental politics literature on effectiveness supports many of Davenport's claims about the importance of these four criteria for enhancing collective implementation and problem solving. Yet, it should be noted that few (if any) environmental treaties contain strong versions of all these components. In fact, for many international environmental issue areas, serious and persistent political conflicts are occurring among key participants over the inclusion of several of these measures. Davenport's analytical framework, however, does little to shed light on why leading countries hold such diverging opinions regarding the design and application of specific measures across regimes.

Applying a unitary actor and cost/benefit perspective to the well-written case studies of ozone depletion, climate change and deforestation, Davenport argues that "the key difference between them is who stood to benefit and who stood to lose from an effective agreement, and how these interests mattered for the outcome of global environmental negotiations" (p. 11). Furthermore, her interest in leadership leads her to focus on the role of the United States in shaping policy outcomes. One of her main conclusions is: "It is an American perception of costs and benefits that determines the interests of the United States, and that, so far, determines the effectiveness of international environmental cooperation" (p. 210). The book limits itself by arguing that the United States is the only actor able to exercise necessary leadership. Certainly, the United States is influential, but for example international management of hazardous wastes and chemicals is improving, although the United States has not ratified several central treaties. There also have been some positive developments under the Kyoto Protocol, which was rejected by the United States. This is in large parts due to growing leadership by the European Union and/or coalitions of industrialized and developing countries working with non-governmental and inter-governmental organizations. That is, critical leadership comes in many material and non-material forms and is exercised by a host of actors.

Overall, this book is recommended for those who want to read more rational choice inspired analysis of international environmental politics.

> Henrik Selin Department of International Relations, Boston University, Boston, USA Corresponding author. Tel.: +1 617 358 2590. E-mail address: selin@bu.edu.

> > 18 June 2008

doi:10.1016/j.ecolecon.2008.06.019