

■ outlook: book review

## The role of forests in climate policies

Climate change and forests: emerging policy and market opportunities

Charlotte Streck, Robert O'Sullivan, Toby Janson-Smith, Richard Tarasofsky (Eds.);  
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Forests store most of the world's terrestrial carbon and play an important role in regulating its climate. While having the potential to absorb global carbon emissions, the removal of forests is also the greatest source of greenhouse gas emissions in many developing countries, particularly Brazil and Indonesia (Dutschke, 2007). While the potential implications of forest management for the global greenhouse gas budget has been recognized since the late 1970s, international negotiations surrounding the role that forests can play in both mitigation and adaptation to climate change remain contentious (Dutschke, 2007; Freer-Smith et al., 2007; Jung et al., 2007). As the countries of the world look towards 2012 and the post-Kyoto process, this book provides the reader with a timely addition to the discussion of current climate policies involving forests. Furthermore, it provides valuable insights from practical experience to offer a way forward in emerging climate policy frameworks of the future.

The editors state that in order to have an effective post-Kyoto agreement, it must include a comprehensive system that allows for the accounting of land-use-related emissions and removals, with established incentives to reduce emissions from deforestation. With a view to the future debate, their aim was to 'compile existing knowledge, expertise, and experience and make it available in one volume' (p. 4). By bringing together contributions from a remarkable variety of sources – government, international organizations, academia, civil society and the private sector – they have accomplished this task admirably. *Climate Change and Forests* provides a helpful overview of the history of the agriculture, forestry and other land-use sector in international negotiations, a description and analysis of current policy

frameworks, and lessons that can be learned from them for the future. In many instances, these are coupled with case studies of existing forest projects, primarily from South America, that provide concrete examples of challenges that are inherent to these carbon market schemes.

As background, in the first chapter of the book the editors review the history and limitations of the Kyoto Protocol regarding forestry and land-use-related emissions and give the reader some insight into the complex world of international negotiations. Under the Kyoto Protocol there are incentives to restore and protect forest systems in industrialized countries but no incentives to reduce emissions from deforestation in developing countries. As negotiations proceed towards a post-Kyoto agreement, a number of ideas and policy approaches are being discussed that would create incentives for forest conservation. In Chapter 2, Portela et al. give a brief discussion of past incentives for forest conservation, but primarily discuss the possibilities and limitations of a market-based approach. A helpful summary of the different types of market mechanisms for both the regulated and voluntary markets is found in Table 2-1. In spite of the limited effects that current forest markets have on both forest conservation and greenhouse gas emissions, the authors feel that future market-based approaches will operate efficiently once some general conditions are established, including institutional and regulatory frameworks such as property rights, legal, regulatory, monitoring and enforcement frameworks.

After the first two introductory chapters, the remaining four parts of the book focus on the same themes, while developing them in more detail. These chapters are divided

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somewhat arbitrarily under the headings of 'the international arena', 'practical experiences', 'avoided deforestation and the post-Kyoto agenda', and 'national systems and voluntary carbon offsets'. While the subject matter can be broadly grouped in this way, there is overlap between the parts with, for example, practical experiences being found in each of the sections. Introductory sections for each chapter are somewhat redundant, as each simply reiterates the important services provided by forests and their role in international accords to address climate change. This redundancy, however, is difficult to avoid in an edited book with 'stand alone' chapters.

One of the key themes and strengths of this book is how it summarizes, for climate scholars and non-scholars alike, the complex world and terminology of the international negotiations on climate change. For example, the details given of the history and context of land use, land-use change and forestry (LULUCF) by Trines in Chapter 3 help the reader to understand why government and non-governmental organizations were on both sides of the issue of using LULUCF activities to mitigate climate change. O'Sullivan, in Chapter 13, links history and current policy discussions to address reducing emissions from deforestation in developing countries. This chapter summarizes the difficult issues of monitoring and accounting, carbon markets and market flooding and permanence. While all 21 chapters are well written, the book as a whole would have been strengthened by the addition of a glossary for the reader to use as a reference in interpreting the language of the UNFCCC and its sometimes incomprehensible acronyms.

The second theme and strength of the book is the explanation of various incentive mechanisms, such as the Clean Development Mechanism (CDM), Reducing Emissions from Deforestation and Degradation (REDD), and the voluntary carbon market. While each chapter focuses on a different aspect, they discuss the various risks and criticisms of forest-based climate change mitigation through carbon trading. These chapters are often paired with case studies which elucidate the challenges of their implementation and concurrent environmental and social concerns. For example, a case study in Locatelli et al.'s chapter on design issues in CDM forestry projects describes the San Nicolás project in Columbia, which was designed to address the question of how CDM projects could improve the living conditions of the rural poor. The presented results highlight the reality that a high level of outside input for community capacity-building and empowerment is needed in CDM projects, in order to achieve success in poverty reduction and sustainable development for the rural poor. Case studies of national systems and the voluntary carbon market from Australia, New Zealand and the USA give insights gained from outside of the developing world into the possibilities and challenges of these projects.

Given the title and subject matter of the book, it is not surprising that all the contributors remain optimistic about the

potential of market-based mechanisms in forest conservation and mitigation and adaptation to climate change. However, the book would have been strengthened by including at least one chapter that presented a dissenting view and provided an overall discussion as to whether a carbon market is really the best and only strategy. While limitations in implementation of carbon projects are acknowledged, such as poor governance structures in developing countries or issues of forest tenure, these seem to be brushed aside with an overwhelming optimism that such projects would be able to overcome all the obstacles and have unanimously successful outcomes. While it has been acknowledged that such schemes could assist with other important initiatives such as poverty reduction and forest conservation, there is very limited discussion of the complexity of working the details out on the ground. The authors also do not address issues of governance at the community level that could affect the poverty reduction aspects of the carbon payments. Given that poverty and forests overlap in the developing world (Sunderlin et al., 2005), a more comprehensive discussion of the actual poverty reduction potential of such schemes would have been useful.

Nevertheless, in *Climate Change and Forests*, the authors have accomplished their stated goal of bringing together the current state of knowledge on forests and climate change. The book provides a helpful reference for climate scholars and interested observers of the international process of negotiation. It also reminds readers that 'If international policy ... is not developed in a way that effectively stimulates action, a second market failure in the forest sector can be expected, and the dual opportunity to save the remaining forests and reduce global emissions in the most cost-effective manner will be lost' (p. 188). This book is a helpful contribution to the critical and challenging negotiations ahead.

## References

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