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New Paradigm for Saving the World's Forests?

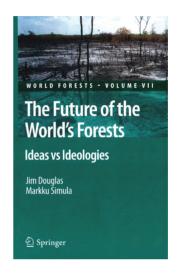
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Book review: Douglas, J. and Simula, M. 2010. The Future of the World's Forests. Ideas vs Ideologies. World Forests, volume 7. Springer. 211p.

Context

Conserving forests, especially tropical forests, and curbing deforestation have been among the most important issues in the global environmental processes and discussions for decades. Despite the international efforts and policy dialogue, the world's forests are disappearing at an alarming rate. According to the United Nations Food and Agriculture Organization annually 13 million hectares of forest are converted to other land uses or lost through natural causes (FAO 2010). Most of the forest loss is taking place in the tropics. The global importance of forest based goods and services has now been widely acknowledged. In addition to timber and woodfuel, forests provide numerous non-wood forest products such as food, fibre, resins, oils, and plant and animal products used for medicinal, cosmetic or cultural purposes, as well as vital ecosystem services. Forests play a crucial role in carbon sequestration and storage, in regulating water flows, air filtration, controlling erosion and in the provision of habitat for 80% of the world's terrestrial biodiversity.

With climate change the role of forests in the global carbon balance has become one of the most important topics in the global environmental policy processes. According to a new report (FAO & ITTO 2011), the world's three rainforest basins (Amazon basin, Congo basin and Southeast Asia)



account for 33% of the world's forests and for an estimated 42% (or 271 Gt) of the carbon stored in the world's forests. Between 2000 and 2010 the net loss of forests in these areas was 5.4 million hectares per year, which resulted in a reduction of the carbon stock by an estimated 1.2 Gt of carbon annually.

The New Book

A great deal of literature has been generated around the issue of deforestation in the tropics, and about the possible solutions for saving the world's remaining tropical forests. Despite of this, the new book titled *The Future of the World's Forests – Ideas vs Ideologies* by Jim Douglas and Markku Simula fills a clear gap in the literature on international forestry development. The book, written by these two eminent foresters, both with more than four decades of experience in international forestry, covers the key trends, policy developments and international initiatives related to forestry and its role in sustainable development in an integrated, comprehensive and forward looking

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manner in a way that has not been done before. It does not try to cover all that has been previously written, but instead focuses on several themes that the authors view as most essential. The book is firmly based on the authors' views and insights about why the international community has not been able to curb deforestation and what are the most important lessons learned and promising developments on which to build new solutions to sustain forests. This personal dimension may in the eyes of some readers diminish the scientific foundations and contribution of this book. On the other hand, it can be seen to add value and can be justified by the main objective of the book, which is to stimulate new thinking within the forest community and to increase effective interaction between the forest community, the general public and forest dependent people.

The authors stress that the future of the forests is defined within the broader context of economic and social change and the way this context is evolving and changing, and emphasise the need to refocus the discussion on forest use, deforestation and forest protection with forest carbon as the main driver of change. They make a convincing and appealing case for elevating the role of tropical forests and markets to the centre stage in meeting the challenge of global sustainability and especially addressing global warming.

The main messages of this book can be summarised as follows: 1) for the sake of the wellbeing of the humankind, the global community cannot afford to let tropical forests disappear, the opportunity costs are simply too high; 2) instead of partial and uncoordinated efforts a major, paradigmatic shift in thinking and reordering of priorities are needed with a much greater focus on developing international markets for ecosystem services especially sequestered carbon; and 3) tropical forests can be sustained only through properly valuing a range of forest products and services and mobilising significant amounts of finance through a market system to protect the forests and allow people to benefit from the continuing delivery of carbon sequestration services.

The authors outline the main issues and the proposal to move quickly towards the carbon focused sustainable forest management paradigm right at the onset of the book, the rest of the book builds up the case for their argument from dif-

ferent angles. Chapter 1 presents the motivation for the book and describes in general terms the nature of the debate related to the natural forests in the developing countries. Chapter 2 focuses in more detail on the fragmented and dysfunctional nature of the dialogue that has centred on the issue of forest sustainability and the reasons why sustainable forest management (SFM) has failed in many parts of the world. In many cases economic and social policies outside the forest sector (e.g. agriculture and energy sectors) influence forests and can undermine the efforts to promote SFM and forest conservation. The second reason relates to the different stakeholders' lack of incentives to pursue SFM. Often forest and environmental agencies, forest owners, private sector operators and local communities are not interested about the broad and long term benefits of sustaining forests or cannot afford it due to lack of alternative livelihood options. The value of forest ecosystem services has not been included in the analyses of the agencies and actors involved in forest decision-making at national and local levels. This is mainly because the opportunities to access financial transfers that would compensate the production of these ecosystem services through sustaining the forests have been very limited.

Chapter 3 describes the current state of the world's forests and the forest loss problem by presenting information on global and regional deforestation trends and their implications on the delivery of forest ecosystem goods and services from carbon sequestration, watershed management and biodiversity maintenance to more traditional forest products.

Chapter 4 looks at the role of international trade in SFM and concludes, not surprisingly, that trade can have both adverse and positive impacts on sustainability. The authors acknowledge the potential forest certification can have in promoting SFM and suggest ways for enhancing the effectiveness of certification especially through reducing unnecessary and confusing competition between different certification schemes. They also highlight the limitations of certification and its ineffectiveness in combating deforestation, as the underlying causes of deforestation are only partly related to international trade. Most of the trade in forest products is within domestic borders and increasingly between other developing coun-

tries or emerging economies such as China and Vietnam, which are driving the demand without really paying attention to sustainability or legality issues. The authors note that forest certification can actually provide perverse incentives and work against sustainable management of forests in developing countries by placing developing countries and most of their operators at a disadvantage. For many developing country producers instituting SFM is simply too costly; this can serve as an excuse to continue exploitative logging and targeting markets that are indifferent to sustainability concerns. Furthermore, even the markets in the developed countries do not really reward certification.

Illegal logging is an important impediment to SFM, especially in developing countries. Several international efforts are currently implemented to prevent illegal timber from entering the United States and European Union markets. The authors conclude that these approaches will have a role in addressing illegality issues but are only a second best instrument in enhancing SFM as they do not address the main direct causes for the failure to institute SFM.

Chapter 5 concentrates on the causes of deforestation, recognising that they relate to complex and overlapping competition for land and resources and emphasising the importance of differentiating between proximate causes and underlying driving forces. Proximate causes, such as infrastructure development and agricultural expansion, have a direct impact on forest area. Underlying driving forces are demographic, economic, technological, cultural, and policy and institutional factors. The authors conclude that in order to develop measures (regulatory and capacity building, and incentives/disincentives) to combat deforestation and forest degradation, we need to better understand the motives and incentives which are driving the behaviour of the different groups whose actions are leading to forest loss.

Chapter 6 presents a historical review of the shifting paradigm of sustainability, and then proceeds to situating forests in the broader economy and discussing the international agreements and efforts related to environmental sustainability and SFM in particular. The failure of the international regime to address forest sustainability in a comprehensive manner can be attributed to national

sovereignty issues and economic interests. It has proven extremely difficult to reconcile the provision of global public goods and private benefits at the international level. The authors further make the point that one of the reasons for the failure to address the forest sustainability issues has been the highly ideological and narrow interpretations of what needs to be done exhibited by many of the international forest constituency groups. The development of the World Bank's 1991 forest policy that resulted, under pressure from the various advocacy groups, in the exclusion of finance to support any forest operations in the tropical natural forests, including SFM, is presented as an example of this.

Financing the change towards sustainable forest management and reduced loss of important forest values in developing countries is the main topic of Chapter 7. The authors argue convincingly that a very significant increase in financing is needed to drive this change. Until today, the development assistance finance has not been adequate due to its limited scale and scattered nature, and it is unrealistic to expect that major changes in the aid sector would occur in the future. The authors also show that it has proven extremely difficult to use broad economic reforms for revaluation of tropical forests. Furthermore, the development of markets for forest ecosystem services has been slow and restricted to a handful of locations. The authors suggest that the role of forests in carbon sequestration and storage can be the game-changer in the search for ways to finance sustainable forestry.

The authors have set the level of ambition high, which also raises the expectations of the readers. The first and final (Chapter 8) chapters in a way "promise" a new paradigm that will help saving the tropical rainforests and ensuring that they can continue playing their role to the global environmental sustainability. Douglas and Simula favour a macro level market solution to SFM based on rewarding those countries/producers who conserve and manage their natural forests sustainably to deliver carbon sequestration services to the global community. Through proper valuation of the forest resources and creating markets to enable transactions of these services, in theory externalities can be internalised and a supporting framework for SFM created. Even if this could be achievable at a macro level, one of the main chalSilva Fennica 45(4), 2011 book review

lenges will be linking the macro level solutions such as Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) to the micro level and realities on the ground where various actors undertake – often very rationally – unsustainable action. How to really change the incentive frameworks faced by these actors on a scale that matters and at an acceptable cost still remains to be answered.

Conclusions

The authors argue that inadequate finance is one of the main reasons for the failure to halt deforestation and logically propose that the scale of financial flows to promote SFM in the tropics should be dramatically increased and that this could be done through taking advantage of the market opportunities the forest carbon sequestration and storage services provide. This is fully consistent with the Stern Report (2006) conclusions that the opportunity cost of not taking action to mitigate climate change now is much higher than investing in REDD in developing countries today; the benefits of strong, early action considerably outweigh the costs.

It can well be that REDD provides an effective and low-cost climate change mitigation option. However, there is also evidence that REDD credits may in the end not be as cost-effective as believed. Simple opportunity costs analysis may underestimate the real costs of REDD including transaction costs. Without major investments and policy changes at national levels in improving regulatory frameworks and institutions, property rights, and forest management and conservation capacity at all levels it will be difficult to implement REDD.

The authors state that the international private sector is expected to provide a significant part of the needed additional finance through the avenue provided by the forest carbon market, including REDD. There is no question that new incentive systems must be created and national, regional and global markets for forest products, and increasingly, for ecosystem services, and carbon in particular, must play a key role in financing SFM. However, the authors do not specify what actually needs to be done in practical terms at different levels – international, national and local

- to mobilise responsible private sector finance on the scale envisaged by the authors. With the difficulties in the forestry Clean Development Mechanism (CDM) projects under the Kyoto Protocol and the difficulties and slow progress in the current global climate negotiations, one needs to ask how realistic it is to put so much hope on the private sector alone. One can also argue that the national incentive frameworks in tropical countries actually favour unsustainable behaviour of the private sector – be they small or big companies or encroaching farmers. Further, it can be that the REDD carbon market values in relation to (opportunity) costs may be too low to provide adequate incentives to all stakeholders and attract major flows of private capital with high return expectations.

Jim Douglas and Markku Simula put not all but most eggs in the same (carbon) basket while realistically stating that executing the forest carbon based paradigm to sustain forests will be a major challenge. Although it may not take a long time for this new sustainable forestry paradigm to become more widely accepted and start guiding action and investments globally, it would take years to find out if this really was the solution. What we do know now however is that past, often disjointed, scattered and inconsistent global efforts driven by the public sector aid – despite all the good intentions – have not worked, maybe this approach with the forest carbon at the core will work.

This book is very valuable in terms of substance and ideas and would have deserved more careful editing. The text contains too many mistakes and can sometimes be difficult reading because of continuous referencing back and forth, which disrupts the flow of the text and leads to unnecessary repetition.

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