## The carbon offsetting dilemma

I am writing this foreword a few days before the opening of the 21st meeting of the Conference of the Parties (COP-21) to the United Nations Framework Convention on Climate Change (UNFCCC). The world's countries have met annually for more than twenty years and have yet to agree on a binding global treaty to reduce the rising greenhouse gas emissions driving anthropogenic climate change. By the time you read this, however, we will know if this lack of will and long-term vision has been addressed and if a global mitigation goal has been set. More importantly, we will know which types of policies, technologies, and funding mechanisms are likely to be settled on to 'walk the talk'.

The role to be played by (trans) national carbon markets in climate change mitigation, including the well-established European Union Emissions Trading Scheme and others emerging elsewhere, will probably continue to be a cornerstone of international and national climate policies; but how much demand for carbon forestry activities may be generated through these and other emerging markets - or if none will be generated at all - remains unclear. The price of carbon offsets, including those from forestry activities, has plummeted in the last few years due to an over-supplied market and uncertainty about future demand, both from regulated schemes like the Kyoto Protocol's Clean Development Mechanism (CDM) and from voluntary exchange platforms. This falling demand has meant that many of the early projects are struggling to continue, reminding us about the fragility of using offsetting activities as a means to support both forest management and rural development in the land-use sector of the global South.

In the last few years, we have also witnessed the development of the UNFCCC's framework for Reducing Emissions from Deforestation and forest Degradation, and the sustainable management of forests and enhancement of forest carbon stocks (REDD+), which has led to the design and implementation of many regional and local activities that have been mostly funded by multilateral or bilateral "aid". Whether these activities will be able to cover a share of their implementation costs by trading carbon offsets in regulated or voluntary carbon markets is also unknown today, as is the extent to which these costs will be further supported by multilateral and bilateral 'aid', as mobilized, for example, through the UNFCCC's Green Climate Fund.

In this context of uncertainty about the future of carbon markets and carbon forestry in particular, Stephanie Paladino and Shirley J. Fiske's edited volume represents a landmark book that can help us think critically about the present and future of such activities. Its distinguished contributing authors explore the central debates that have emerged around carbon offsetting and forestry activities in the last decade, including:

- i) the role of nature commodification narratives in influencing environmental policy design and project implementation at national and local levels, respectively;
- ii) how 'carbon accounting' may obscure the environmental ineffectiveness of carbon markets and the profits attained by powerful and knowledgeable actors;
- iii) the role of local environmental and social histories, including tenure regimes and political dynamics, in shaping the design and outcomes of carbon offsetting activities;
- iv) the tensions between formal institutions and procedures at the international level, e.g. benefit-sharing frameworks or safeguards, and their actual implementation at national or local levels; and, finally,
- v) the economic, social and environmental impacts –including the distribution of costs and benefits- that result from parachuting new and externally-imposed 'development and conservation' blueprints, such as carbon offsetting, into existing landscapes, territories and communities.

Each of the book's contributions addresses at least one or more of these five issues, and they all delve, directly or indirectly, into one of the central questions of carbon offsetting research: Should climate change mitigation be based on actions that transfer the ultimate responsibility of emission reductions away from the responsible parties, especially if they do so at the risk of further impacting already marginalized or poor communities of the global South?

Before your mind sketches an answer to this question, imagine a forest management project developed for both timber commercialization and carbon trading purposes. Here, villagers with formal rights to the forest feel generally satisfied with the activities and the revenues derived from the project, but say they need more technical and financial support in order for the project to significantly improve their incomes and contribute to livelihoods. Project staff recognize this need, but say that low levels of donor funding constrain their ability to provide a higher level of support. There are also villagers who don't have formal rights to the forest. They have not participated in the design of the project, but some have been able to take on supporting and monitoring roles in the project, and have benefited in that way from a smaller share of timber and carbon revenues than formal rights holders. Project staff argue that benefit-sharing arrangements within the village are an internal matter, and fall to the community to work out. In the project developer's view, that the project causes no evident harm, such as causing increased inequities in access to forest resources, is sufficient to consider the project a success. At the same time, there are national and international social movement organizations advocating that funders should refrain from supporting the project because, on the one hand, its benefits are not equally distributed throughout the community and on the other, carbon revenues do not fully accrue to the villagers but to the developer as well. Yet project development does have costs that must be met.

This example reflects, of course, only one possible reality in the design and implementation of carbon forestry activities, and I have deliberately posed a mixed picture of positive and negative social outcomes to puzzle you. I have also done so to highlight two more central questions that, in my view, also permeate this edited collection, as well as carbon offsetting research to date.

Who is legitimately entitled to say 'yes' or 'no' to carbon offsetting activities? Is it the scholars and activists contributing to this book? The project developers? The forest-related communities and individuals involved? The project funders, managers, social movements, and readers of this book?

Whose values should be brought into the discussions about the desirability and the significance of carbon offsetting in a given context or culture?

Together, the three overarching questions I pose here relate to the three pillars of social justice, i.e. distribution, procedure and fairness, and they should be simultaneously taken into account when analyzing the present and future of carbon markets, and of carbon forestry activities in particular. The contributions to this collection do a brilliant job in this regard, and highlight either directly or indirectly if, how, and why carbon markets have embraced (or not) these three pillars of justice. Overall, they equip us with the necessary information to resolve, at least in our own minds, a plausible and well-informed response to each of the three questions posed above and, particularly, to the editors' neatly sketched ethical dilemma: should we 'trade in trees' to save the planet?

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