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ScienceDirect
Global Environmental Change 17 (2007) 250–259
Global Environmental Change
www.elsevier.com/locate/gloenvcha

Small-scale forest carbon projects: Adapting CDM to low-income communities

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Received 15 February 2005; received in revised form 7 September 2006; accepted 4 October 2006

Abstract

Given the decision to include small-scale sinks projects implemented by low-income communities in the clean development mechanism of the Kyoto Protocol, the paper explores some of the basic governance conditions that such carbon forestry projects will have to meet if they are to be successfully put in practice. To date there are no validated small-scale sinks projects and investors have shown little interest in financing such projects, possibly to due to the risks and uncertainties associated with sinks projects. Some suggest however, that carbon has the potential to become a serious commodity on the world market, thus governance over ownership, rights and responsibilities merit discussion. Drawing on the interdisciplinary development, as well as from the literature on livelihoods and democratic decentralization in forestry, the paper explores how to adapt forest carbon projects to the realities encountered in the local context. It also highlights the importance of capitalizing on synergies with other rural development strategies, ensuring stakeholder participation by working with accountable, representative local organizations, and creating flexible and adaptive project designs.

Keywords: Small-scale CDM; Forest carbon; Low-income communities

1. Introduction

One of the most serious challenges facing countries today is reconciling the needs to reduce poverty and to protect natural resources, while at the same time meeting an increased market demand for forest products (which has risen dramatically in developing countries in the past 30–40 years). These three apparently conflicting needs are precisely those meant to be addressed by small-scale sink projects under the clean development mechanism (CDM) of the Kyoto Protocol—that is, improvement of livelihood conditions in developing countries, through a market mechanism aimed at mitigating climate change through sustainable use of natural resources.[1] In a sense, these projects are a test case for market valorization of environmental services (Skutsch, 2005). They are also manifestations of the way in which environmental management is considered essential to fighting rural poverty. The Kyoto Protocol allows for two ways to reduce greenhouse gas emissions, one is the internal measures taken in developed countries, for example investment in renewable energy or alternatively, implementation of flexible mechanisms: Joint Implementation, Emissions Trading, and the CDM. Most relevant to development, forestry and climate is the CDM (Robledo and Pfund, 2004). Forestry is allowed as a sink measure under the CDM only in the form of afforestation and reforestation (i.e. planting or reforesting trees), emulating community-based forest management projects (Skutsch, 2005).

Over 30 forest sinks projects have been tested under the UNFCCC activities implemented jointly (AIJ) pilot phase of which a number explicitly target small-holders and low-income producers, although it remains unclear if they

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[1]To date no small-scale CDM sinks projects have been validated by the Executive Board of the CDM.

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doi:10.1016/j.gloenvcha.2006.10.001

qualify for CDM credits (FAO, 2002, p. 194). Examples include the Scolel Te Project in Chiapas. These bilateral forestry projects aim to provide dual benefits of global climate protection and local development benefits while reducing transaction costs. While a number of studies have explored lessons from payments for environmental services (PES) and community development schemes (Landell-Mills and Porras, 2002; Rosa et al., 2003; Grieg-Gran et al., 2005; Pagiola et al., 2005; Kosoy et al., 2006) this paper broadly draws lessons from projects established under the climate Convention specifically. Review of the experience so far shows that most of the pilot sink projects have fallen short of their equity and local development objectives (Brown et al., 2004; May et al., 2004; Tschakert, 2004). The weaknesses in every case, like in so many development projects in the last decades, point to a lack of attention to governance[2] aspects as a crucial factor—that is weak rights and lack of government services and weak accountability in environmental management.

Various observers have already noted that economic and technical matters have dominated the discussion on sinks in the CDM, with less attention being paid to issues of equity and sustainable development (Boyd, 2002; Boyd 2003; Brown and Corbera, 2003). Yet, even the most basic understanding of the nature of sinks projects reveals that these issues are of utmost importance, since projects take place in rural areas where the majority of poor people are concentrated, where conflicts over land and resources are not uncommon, and where livelihood conditions are complex, fragile and changing. Throughout the Kyoto Protocol negotiations, many environmental groups resisted the inclusion of sinks in the CDM on the grounds that they would be used by large-scale industries to establish vast mono-species plantations, possibly displacing and further marginalizing local and indigenous populations (World Rainforest Movement, 1999; Sawyer, 1993). Furthermore, reforestation and afforestation projects on productive lands run the risk of activity-shifting leakage (such as displacement of farmers leading to clearing of adjacent lands resulting in more emissions) depending on whether the activities engage or displace landowners (Schwarze et al., 2002; Black-Arbelaz, 2002). This of course would go against any notion of sustainable development and the basic principles of any environmental treaty. The inclusion of small-scale projects in the final decision on land use, land use change and forestry under Article 12 (Decision 19/CP.9) of the Kyoto Protocol is meant to assure that low-income communities also benefit from projects under the CDM, specifically by broadening the scope of beneficiaries and thereby reducing transaction costs (Boyd et al., 2004).

Several studies have pointed to options (such as multi-species community-based reforestation or agroforestry) that are more likely to deliver benefits to those marginal populations, that are true to the goals of the UNFCCC, and that can also be attractive to emerging socially and environmentally responsible markets, given the right design principles (Smith and Scherr, 2003; IUCN, 2002; Bass et al., 2000). Although these types of projects often imply higher transaction costs and a higher risk associated with working with multiple stakeholders, research suggests that transaction costs are minimized by including local beneficiaries in community-based forestry projects where collaboration between local people and NGOs is evident. For example, collaboration and new technology development such as, participatory geographical information systems have helped to enhance participatory monitoring by local inhabitants in forestry management (Skutsch, 2005). This success will also be dependent on including local people in important decision-making. For instance, in determining how to distribute carbon benefits equitably among carbon producers, given that among the poorest people access to resources constitute a critical ingredient of security, and that poor peoples rights and provision of key services depends on locally-driven initiatives, which are often overlooked by outsiders. This has been the case in the implementation of the United Nations (UN) Millennium Development Goals (IIED, 2006). We therefore suggest that by integrating Kyoto Protocol carbon forests with other rural development projects and by working with local, representative community-based organizations, it is possible to make sinks projects work for both people and the climate.

If the carbon market takes off in seriousness then governance issues relating rights and ownership of trees and land are likely to come under discussion (Skutsch, 2005). This is because property rights are assigned to trees and forests, thereby changing ownership rights to resources (Liverman, 2004), stakes are also high, and increases in local inequalities possible (Asquith et al., 2002; Boyd, 2003, Brown and Corbera, 2003). We argue that the features common to many low-income communities such as, their high reliance on natural assets for security to cope with unexpected events, could act as constraints to forest carbon projects. However, we also say that it is not enough to focus on the opportunity costs of engaging in carbon forests, but that it also pays to address access and rights issues from the moment of project conception and design and ensure the participation of local communities as project developers and managers—particularly in the case of small-scale projects. This is so not only because it is within the mandate of the CDM to contribute to sustainable development (which we here take to include improved equity, as per the definition of the World Commission on Environment and Development (1987), but because given the long term nature of sinks, and the complex conditions in most rural areas where low-income communities reside, projects that do not involve the local stakeholders and compromise their access to much needed resources, stand to fail. Experience from existing sinks pilot projects shows that unless these issues are addressed at the

[2]Governance is about the plurality of actors beyond government involved in managing public goods, and refers to legitimacy in decision making in civil society (Kjaer, 2004).