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BRIEF COMMUNICATION

Towards a more balanced view on the potentials of locally-based monitoring

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Abstract The literature on locally-based monitoring in the context of conservation of ecosystems and natural resources in developing countries displays a great deal of optimism about its prospects as a low-cost approach to gather information about conservation outcomes. Yet, this optimism stands in stark contrast to studies on co-management between States and local communities showing that such processes—in which communities and the State ostensibly work hand in hand on the monitoring and management of natural resources—are fraught with power struggles within communities as well as between communities and the State and that the information produced and communicated is often invoked in such struggles. Information produced and communicated in systems of locally-based monitoring will reflect these struggles in particular if such systems are bound up with processes of co-management or REDD+ in which the information can be perceived by those who monitor to be linked to claims over resource rights and associated benefits. In such situations, trust in locally-based monitoring should be tempered by scepticism and systems of checks and balances.

Keywords Locally-based monitoring · Co-management · REDD · Conservation

Introduction

Locally-based monitoring builds on the nearness and knowledge of the people involved and has been suggested an effective and low-cost alternative to monitoring by external professionals of the condition of ecosystems and conservation areas in developing countries, where resources to monitor and manage such areas are scarce. According to its proponents, the implementation of locally-based monitoring in such contexts may yield co-benefits in the shape of local social development and empowerment, and improved governance of the resources in question (Larrazábal et al. 2012).

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The literature on locally-based monitoring in the context of conservation in developing countries thus displays a great deal of optimism about its prospects (Danielsen et al. 2000, 2005, 2009; Garcia and Lescuyer 2008). The recent focus on the carbon sequestering potential of forests has sparked another surge of interest in the potentials for obtaining accurate and low-cost information from locally-based monitoring (Skutsch et al. 2009). A recent review argues that 'community monitoring is useful and cost-effective for REDD+ carbon monitoring' and that 'communities can assess above ground biomass, monitor social and environmental variables, and store and transmit the data' (Larrazábal et al. 2012). The review concludes by saying that 'In many circumstances community monitoring (CM) has advantages over conventional monitoring: it can provide otherwise-unavailable or irretrievable information, build local capacity and more equitable relations between local people and the authorities, it can be economically more efficient, and it can result in more rapid management interventions.' Another recent review goes further to say that 'Systematically gathered and reported CBM data could form the backbone of a nested REDD+ structure in which the efforts of different levels (local, subnational and national) are integrated into one MRV system. It could even form the basis for a system of benefit sharing, since it would help determine the performance of different communities or land owners at a local level, which could be used as the basis for allocation of rewards or payments' (Pratihast et al. 2013, p. 101).

The optimism displayed in this literature stands in stark contrast to the large body of studies on processes of devolution and/or co-management of natural resources and ecosystems between states and local communities. These have demonstrated that such processes—in which communities and the State ostensibly work hand in hand on the monitoring and management of natural resources—are fraught with power struggles within communities as well as between communities and the State (Agrawal and Gibson 1999; Roe et al. 2009; Ribot et al. 2006). And in relation to how these contestations may affect the information produced and communicated in systems of locally-based monitoring, a growing literature shows that claims over the resources are supported or contested by local communities and State actors by making references to (the lack of) information about the state of the resource (e.g. Nightingale 2005, Mathews 2011). On the basis of this readily available evidence, it appears questionable whether the information produced and communicated in locally-based monitoring systems can generally be taken at face value. This concern is particular acute in the context of REDD+, where such information is loaded with incentives in the shape of REDD+ payments to local forest managers. It thus seems likely that communities can 'assess, store and transmit data'; yet it seems even more likely that the information that is stored and transmitted will be highly affected by the incentives facing the communities.

A few recent studies on locally-based monitoring indicate that the information produced and communicated is indeed affected by the social and political context within which the monitoring system is set. Yasuè et al. (2010), for instance, found that community members perceived a considerable increase in fish stocks inside and catch outside a community managed marine protected area, whereas biological surveys showed a high degree of stochastic variation and only a minor increase in fish abundance. The authors argued that the observed discrepancy could be explained by community members' wishful thinking, desire to please external actors, or confounding with other benefits of the project. From Tanzania, Nielsen and Lund (2012) demonstrate that the production and communication of information under the locally-based monitoring system generally takes place under conditions of on-going struggles over access to benefits from the collaborative forest management processes within which the monitoring system operates. This implies, in these cases, that the

people involved in the monitoring underreported on utilization and disturbance levels to higher level authorities to safeguard their authority over the forests.

The lessons from the literature on community-based management and co-management of natural resources suggest that the optimism displayed in parts of the scientific literature on locally-based monitoring should be tempered. Information produced and communicated under locally-based monitoring systems are bound to be shaped by the particular context within which they are based, i.e. by the incentive structures facing those doing the monitoring and by struggles over resource rights and access to resource values. This is not to say that locally-based monitoring has no value. Quite contrary, there are good reasons to believe that involvement of the people living in and around ecosystems in their monitoring and management can result in efficient and equitable management. This is basically the premise of the idea of participatory and decentralized management approaches. Yet, the power struggles and competing claims over authority in such contexts will invariably involve the information produced and communicated about the ecosystem and its uses. Thus, one should be cautious about the information produced and communicated in systems of locally-based monitoring in particular if they are bound up with processes of locally-based management in which the information can be perceived by those who monitor to be linked to claims over resource rights and associated benefits. In such situations, trust in locally-based monitoring should be tempered by scepticism and systems of checks and balances.

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