

Democratic decentralization in sub-Saharan Africa: its contribution to forest management, livelihoods, and enfranchisement

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SUMMARY

Efforts to promote popular participation in forest management in Sub-Saharan Africa have faced many obstacles and disappointments. Although promises of improvements in relation to forest management, rural livelihoods and local enfranchisement have been achieved in some cases, accounts of frustration outnumber those of success. Focusing on participation through democratic decentralization (namely the transfer of meaningful discretionary powers to local representative authorities), this paper reviews recent empirical studies on the outcomes of popular participation in forest management. The implementation of decentralization of forest management, and ecological, livelihood and democracy outcomes are examined, and misconceptions in analyses of decentralized forestry are explored. The expected benefits of democratic decentralization within forestry are rarely realized because democratic decentralization is rarely established. In most cases, local authorities do not represent the local population or their space of discretion is so narrow that they have little effect on management. There is little official local management taking place, even under so-called decentralized or participatory management arrangements. If ever significant space for local discretion under democratic authorities is created, researchers will have the opportunity to study whether democratic decentralization can deliver the theoretically promised positive outcomes. Nevertheless, some cases shed light on effects of local decision making. Three general observations are made on effects of decentralization. First, environmental, livelihood and democracy objectives are not always mutually reinforcing, and under some circumstances they may be at odds. Second, environmental effects of improved forest management often result in benefits accruing to distant or higher-scale aggregate populations, while local communities carry the costs. Third, poor peoples' use of natural resources to maintain their livelihoods often

conflicts with profit and revenue interests of local elites, national commercial interests and governments. A negotiated minimum social and environmental standards approach to decentralization of forest management may safeguard essential ecological functions and at the same time protect essential livelihood and economic values of forests at all scales of society. The remainder of decisions, such as how forests are used, by whom and for what, could then be safely placed at the discretion of responsive local representatives.

Keywords: Africa, community-based, decentralized, forest, livelihood, management

INTRODUCTION

Ten to twelve per cent of the world's natural forests are officially managed with some degree of popular participation, which is also the case in at least 21 sub-Saharan African countries promoting some form of popular participation in natural resources management through decentralization or various community-based natural resources management (CBNRM) approaches (Sunderlin *et al.* 2008, World Bank/WWF Alliance 2002). In some of these countries, the changes in rights and powers to manage forests seem to fulfil the conditions that would enable improved forest management (Blomley *et al.* 2008), local enfranchisement (Wily 2001), local authority legitimation (Brockington 2007) and livelihood effects (Lund & Treue 2008). However, a growing literature indicates that, in most cases, popular participation is reflected more in government and donor discourses than in the experience of rural communities (Campbell *et al.* 2001; Ribot 2004; Tacconi *et al.* 2006; Blaikie 2006; Benjamin 2008).

In this article we review forestry decentralization reforms in sub-Saharan Africa with an aim to identify what progress has been made on the ground and what major constraints remain to achieving improvements in forest management and rural livelihoods through processes of devolving rights over forest resources. The first section characterizes current efforts at implementing popular participation through democratic decentralization. Thereafter we review the empirical literature on the outcomes of processes of popular participation in forest

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management. Finally, we explore misconceptions in analyses of decentralized forestry and propose some ways forward.

ESTABLISHING DEMOCRATIC DECENTRALIZATION FOR FORESTRY

Democratic decentralization entails that representative local authorities (individual or collective bodies) are entrusted with significant powers. Such a transfer of powers to local authorities is theorized to improve local decision-making efficiency and equity (Agrawal & Ribot 1999; Smoke 2003). Popular (by which we mean broad based or inclusive of the whole population) participation advocates make similar promises (Chambers 1994). In decentralization theory, efficient and equitable outcomes are expected when powers that are relevant to local people are devolved to representative local bodies (see Agrawal & Ribot 1999). Following Manin *et al.* (1999), an authority is representative when it is responsive to local needs. Representation is democratic when responsiveness is driven by accountability of that authority ‘downwardly’ toward the concerned population. It is benign dictatorship when it is driven by good will. We focus on its democratic form. By relevant powers, we mean powers that are sufficient to enable local bodies to be responsive to local needs and aspirations, and by accountability we mean counter power (for discussion of accountability mechanisms see Ribot 2004; Rihoy & Maguranyanga 2007). Downward accountability refers to situations where local bodies can be held to account by the populace through an ensemble of positive or negative sanctions (Agrawal & Ribot 1999; Ribot 2004; Ribot *et al.* 2008).

The distinction between participatory approaches and democratic decentralization is that the latter is specifically about including whole populations in decision making based on representative authority (Wily no date). Democratic decentralization involves the transfer of powers to democratically elected local governments. The community concerned is composed of the citizens, who are usually those who live in the jurisdiction and endowed with certain rights of belonging. Further, decentralization locates powers in permanent local government institutions (we use the term institutions narrowly to refer to organizations in general rather than ‘rules of the game’; as in North 1990). Hence, decentralization can be expected to be more durable than most other interventions and ad hoc arrangements. The World Bank’s community-driven development (CDD), and other participatory or community-based natural resource management (CBNRM), define the community for each intervention, such as the user group, the stakeholders, the people near the forest or the fishers. They also define the mode of representation of each ‘community’ as they go, creating or choosing to work with appointed committees, elected committees, stakeholder fora, participatory processes, ‘customary’ chiefs, project personnel, and so on (Ribot & Mearns 2008). These

temporary means of participation rarely constitute democratic decentralization. Further, many transfers to customary and other private bodies, neither support nor follow the logic of democratic decentralization. We focus on democratic decentralization, which is the institutionalized form of popular participation.

Attempts to establish decentralized forestry are shaped by a multi-layered political economy (Rihoy & Maguranyanga 2007; Wittayapak & Vandergeest 2009; see also K. Eaton, K. Kaiser & P. Smoke, personal communication 2009). They are partly about demand for change from below and largely about the institutional infrastructure to enable those demands to take shape (Rihoy & Maguranyanga 2007). We focus on the institutional infrastructure or state creation of (dis)enabling spaces. In producing these spaces there are constant struggles over what kind of powers should be transferred to which authorities. The outcomes expected from decentralization depend on the resulting distribution of power. The vertical division of power between centre and local shapes the degrees of freedom and accountability of local institutions (Mawhood 1983; Føllesdal 1998; Rocher & Rouillard 1998; Manor 1999). The horizontal distribution of functions and powers among different kinds of local institutions (different in their relations of accountability), such as administrative, representative, customary, private or third sector, also shapes local decisions and outcomes (Ribot *et al.* 2008).

The quality of local and national democracy also shapes democratization in specific sectors, including forestry (Rihoy & Maguranyanga 2007; Wily no date). Wily (no date, p. 18), among others, observed that ‘where devolved governance is poorly developed, empowerment of local forest management in new legislation is demonstrably constrained...’ She argues that decentralized forestry requires establishment of decentralized government institutions. This is not a great surprise. Decentralization in any sector requires that some institutional infrastructure of decentralization is in place. Yet, in practice, most emerging elected local governments across Africa have constitutions that compromise their democratic or decentralized nature. Policy makers and other deciders make elected local leaders upwardly accountable to political parties and create budgets making them accountable to line ministries and legislatures. They have little discretion and can hardly be said to represent their local population. Further, most development agencies and forestry line ministries avoid local democratic governments. Even where there are strong elected local authorities, they choose to work through participatory, stakeholder or CBNRM approaches (as with CDD). Finally, line ministries create and strengthen their local deconcentrated offices. In short, forestry, by and large, avoids democratic local institutions (Ribot & Oyono 2006; Ribot *et al.* 2008).

Local power without representation is not democratic decentralization. Nor is representative local authority without powers. Accordingly, we should not expect improved equity, efficiency or local enfranchisement from these two common

institutional configurations (powerless representatives and powerful autocrats), despite that they are often created in the name of democratic decentralization. Power transfer and institutional choice are equally important. Below, we explore why and how international and national agencies and front-line professionals avoid choosing to empower democratic local institutions.

Institutional choice and power transfers

The choice of local institutions as partners or recipients of power by governments, large non-governmental organizations (NGOs) or donors, often does not favour democratic decentralization or popular participation (Ribot *et al.* 2008). In Ghana, for example, Wardell & Lund (2006) observed that the national government favoured user groups over elected local governments to govern forest reserves, thereby consolidating traditional non-democratic institutions' authority over forests. In Namibia, the management of land and forests is in the hands of customary chiefs (Watts 2003). In Mozambique, traditional chiefs have recently been recognized as interlocutors for service delivery and, *inter alia*, natural resources management in rural areas (Buur & Kyed 2007).

The choice of powers to transfer prevents the emergence of democratic decentralization. Only in a few cases are significant decision-making powers or revenues devolved to elected local authorities. For example, significant powers over certain categories of forests in Uganda, Senegal, Mali and Tanzania have been transferred to elected local authorities (Oyono 2004; Ribot 2004, 2009; Lund & Treue 2008; Wily no date). Yet, these decentralizations have been attenuated by subsequent, *de facto* and *de jure* limitations on these power transfers (Ribot 2004; Larson & Ribot 2007; Ribot *et al.* 2008). In most cases, where local governments are involved, their main role is reduced to signing off on management plans laid down by forest services and then carrying out prescribed forest management activities in a kind of new era *corvée*.

In Uganda, elected local authorities are given jurisdiction over only a trivial fraction of the forests. Currently, 30% of the country's *c.* 5 million ha of forest is centrally managed as Central Forest Reserves, National Parks or Wildlife Reserves, while a mere 5000 ha of forest is managed by local governments as Local Forest Reserves (Muhereza 2003; Turyahabwe *et al.* 2007). The remaining 70% of forest is found on private and communal land where management is regulated through a licensing system administered by local government (Turyahabwe *et al.* 2007). Furthermore, the process of decentralization in the forestry sector has been rolled back on two occasions since the first reform in 1993 (Bazaara 2003; Banana *et al.* 2007). Many forests previously in the public domain have also been privatized in the name of decentralization (Ribot 1999; F. Muhereza, personal communication 2001).

In Tanzania, huge tracts of previously unreserved forest have been and are being handed over to elected village councils

(Blomley *et al.* 2008). Yet, most village councils are excluded from actually using their forests because the national forest authority requires prohibitively expensive inventories to form the basis for management planning (Mustalahti & Lund 2010).

In Mali, the environmental service refuses to transfer powers to elected local government despite requirements of the new forestry laws (Y. Tamboura, personal communication 2000). Further, many forests previously in the public domain are being privatized in the name of decentralization (Ribot 1999; F. Muhereza, personal communication 2001).

In Senegal, the 1998 Forestry Code gave rural councils powers to decide if and when their forests will be cut and the right to make and execute management plans. Yet, the national forest service has not allowed them to exercise any of the rights they were given in law (Larson & Ribot 2007; Ribot 2009).

The choices by higher-level political and administrative institutions on how decentralized forestry is institutionalized at the local level may reflect a multitude of values and interests (Ribot 2004). Some of these can be found in policy documents and may be concerned with preserving biodiversity and catchments, carbon storage, securing a continued supply of forest products or meeting public revenue targets. Others are left unstated but can be equally important, including gaining strategic advantages in national party politics through patronage, paving the way for rent seeking, or simply convenience or expediency in service delivery and planning of development (Bates 1981; Ribot *et al.* 2008). The choices made by higher-level political and administrative institutions are often influenced by national elites and bilateral and multilateral donors (Ferguson 1996; Ribot *et al.* 2008). Institutional choices, and the motives behind them, shape implementation patterns and the potential for decentralization to result in greater equity and more effective management or service delivery.

Higher-level institutions have consistently shaped the scope of local institutions, attenuating decentralization, through the maintenance of central control of ostensibly decentralized authorities. They exercise control through conditions attached to transferred funds, staff and administrative controls, forms of oversight or *tutelle*, imposition of specious expert advice, discourses of lack of local capacity and transfers of burdens while central authorities continue to control benefits (Nemarundwe 2004; Ribot 2004; Ribot & Oyono 2005; Wardell & Lund 2006). In Ghana, Wardell & Lund (2006, p. 1899–1900) showed how, 'contemporary decentralization is accompanied by increasing central government and line ministerial control, hollowing out local people's participation and control'. The strengthening of central government and line ministries '...has provided the [Ghanaian] Forest Department with the means of off-setting local people's ability to enjoy the rights with which they have been enfranchised,' and government practice was that, 'access should not be prevented, but kept illegal in order for various rents to be extracted' (Wardell & Lund 2006, p. 1900). In short, imposed

outside priorities (legal and illegal) enclose local discretionary spaces, attenuating democratic decentralization.

Forestry reforms rarely establish the basic institutional arrangements of democratic decentralization; they are not usually implemented, or are attenuated in implementation. Nevertheless, while establishing democratic decentralization is difficult, some substantively democratic forms of decentralization are being practised and studied.

DOES DECENTRALIZATION IMPROVE FOREST MANAGEMENT?

Empirical research on the effect of decentralized forestry on management and condition in Africa is scarce. In their review of CBNRM in Africa, Roe *et al.* (2009) found a number of studies documenting positive effects of these approaches to wildlife populations, whereas there is a striking absence of similar well-documented studies on forest impacts. Most studies on forestry report perceived changes in forest condition only, with limited hard data. Most evidence on impacts of decentralization and other participatory processes of forest management in Africa comes from Tanzania (Roe *et al.* 2009), the bulk reporting that decentralized forest management conserves forest resources. The results from Tanzania's joint forest management processes are, however, ambiguous. In these co-management processes (a form of collaboration between state and communities distinguished from decentralization since powers are not formally transferred to local authorities), communities are managing under restrictive regulations set by the Forest Division that generally allow some extraction of deadwood and low value non-timber forest products but rarely allow harvest of timber or non-timber forest products for commercial purposes. Where Kajembe *et al.* (2006) and Persha and Blomley (2009) found that communities managing jointly with the state did no better than the state on its own, Meschak *et al.* (2006) and Blomley *et al.* (2008) found conversely that community involvement improved state management. The results from the last two studies, however, stemmed from studies of old project sites, implying that project-based high-intensity implementation may underlie the observed effects.

In relation to community-based forest management in Tanzania, where communities receive wide ranging powers over forests, the results are altogether positive (Sauer & Abdallah 2007; Lund & Treue 2008; Persha & Blomley 2009; Vyamana 2009). These results do, however, stem from special circumstances. While Persha & Blomley (2009) report from a relatively small forest area given to a cooperative of former workers on a private estate in 1982, the three other studies report on villages that have received major attention from donors, policy makers and researchers in the late 1990s and early 2000s. Notwithstanding, however, the results indicate that the Tanzanian process, in the cases where the state has surrendered powers to the villages, has created an environment that is conducive to community engagement

and conservation. One of the elements that stand out in the Tanzanian context is that forest management committees are vested in the democratically elected village government system.

Outside Tanzania, there are few studies. One study from Malawi found deteriorating forests under community management and attributed this to competition between the community forest committees and customary authorities as well as a lack of accountability of all leaders at the community level (Zulu 2008). A recent study from Mali showed how differences in local government support of community management initiatives were directly translated into differences in management performance and the resulting biophysical changes in locally managed forests (Benjamin 2008). Like Wardell & Lund (2006), this study highlighted the importance of relationships between local government and community-level institutions, and how legal pluralism creates a sphere where rights are continuously transformed through negotiation. In the Mali case, the communities that managed to negotiate good terms with local government were successful in managing their forest according to their purposes.

In Senegal, Wurster (2010) found that forests exploited for charcoal managed under two decentralized forest management projects (World Bank and USAID) were ecologically no different (in natural regeneration or species changes) than charcoal production areas with no management at all. While the projects claimed to be decentralized, the forest service was still making almost all decisions (codifying them in management plans). Hence, results cannot be attributed to decentralization. Nevertheless, the case indicates that management planning, whether or not decided on by local populations, does not necessarily improve forest quality. The existence of management plans cannot be taken as an indicator of improved use.

Although management plans may not always improve outcomes, whether communities will conserve forests or not depends at least partly on rules. Autonomy guarantees little. So-called sustainable management is usually posed as a prerequisite on behalf of the state for establishing or supporting local peoples' rights to forests. In standard practice, decentralized forest resources can be recentralized if certain environmental criteria are not fulfilled (Hobley 1996; Ribot 2004). While potentially protecting forests, such prerequisites are often used as a backdoor through which state agencies recentralize control of forests under a veil of concern for the resource status (Oyono & Ribot 2005). Central forestry departments have wide discretion to retain or recapture forest management on grounds of concern for ecological (not social) sustainability. This discretion is often used, with little justification, to override decisions devolved to local authorities under decentralization (Lund *et al.* 2007). There is plenty of room for abuse because (1) local managers' access to information and decision-making fora is generally limited, and (2) the criteria for judging when recentralization is ecologically necessary, to

meet higher-scale societal objectives, are often vague and ambiguous.

WHEN DOES DECENTRALIZATION IMPROVE LOCAL LIVELIHOODS?

Few studies have examined whether sustaining forests is good for local livelihoods. In general, profits from alternative land uses, such as agricultural, captured by the immediate land users, are higher than the returns obtained from forests. Whereas agriculture usually provides products that benefit the landowner or tenant only, forests provide multiple products and services that benefit a variety of actors from the local to the international level. If rural people are denied access to the most-lucrative aspects of forestry (timber and wildlife), it is unlikely that they will perceive forest as the more lucrative land use. If national governments benefit more from agriculture, horticulture or timber plantations, they are also unlikely to maintain natural forests. Thus, rules regulating who has access to benefits from different land uses underlie land-use decisions.

Decentralized forests are often sources of public revenue for local governments or user groups. Increasing revenues at community level is one of the most prominent outcomes of decentralized forest management in Africa. Although local government remains sidelined as a manager of forests in Uganda, they have become empowered through their legal entitlement to 40% of the revenues from the management of National Forest Reserves (Muhereza 2006; Turyahabwe *et al.* 2007). In Cameroon and Tanzania, revenues have also increased for rural communities in community forestry areas (Oyono & Efoa 2006; Oyono & Nzuzi 2006; Lund 2007). Such revenues are generally used to cover the direct costs of forest management and for public infrastructure or services, like roads, bridges, gutters, schools, health and clinics, which indirectly contribute to improved local livelihoods. Still little is known about how the benefits of improved public infrastructure are distributed among social strata in rural communities.

Empirical research suggests that whereas the wealthy in rural communities have a higher absolute forest income, the poor are more dependent upon forest income (relative to total income) (Cavendish 2000; Campbell *et al.* 2002). In addition, forest resources have an important function in providing safety nets for poor rural households in times of hardship (Pattanayak & Sills 2001). So, forest returns to certain, often poorer, segments of communities, in the form of income and, in particular, livelihood security functions may be higher than their expected alternative income, should forest land be converted to other uses.

Conversely, however, it is often the poor and marginalized forest-dependent people who are hit hardest when centralized forest management is decentralized, and restrictions on forest use as a result become more effective (Saito-Jensen & Jensen 2010). People living on the forest border are more prone to crop damage and loss of livestock owing to forest wildlife,

and can experience constraints in expanding their farmland if the forest border is suddenly fixed (Schreckenberg & Luttrell 2009). Further, it has been observed in both Kenya and Tanzania, that forest decentralization results in a net transfer of forest revenues from the poorest households to communities' common funds (which are not necessarily spent on pro-poor activities) and to more well off households. This happens through locally devised taxation and licensing systems for extraction of commercial products like timber and charcoal (Lund & Treue 2008; Schreckenberg & Luttrell 2009; Vyamana 2009).

Local forest committees could modify management rules to favour the poor, but the poor are often already marginalized groups with interests in forests that run counter to those of the majority and community leaders (Lund & Treue 2008). In many cases, the livelihood improvement potential of decentralized forest management is severely restricted by the type of forests over which powers are devolved or the restricted nature of powers devolved. In Tanzania, joint forest management signifies a form of decentralized forest management where democratically elected village councils and the Forest Division cooperate to manage forest reserves. In the majority of cases, however, the powers devolved to the village councils are confined to (unfunded) management responsibilities and rights to low value non-timber forest products mainly for subsistence uses. This means that there is virtually no livelihood improvement opportunities as the costs associated with management outweigh the benefits (Topp-Jørgensen *et al.* 2005; Meshack *et al.* 2006). This is because the majority of joint forest management agreements are in montane rainforests, which host national and international biodiversity values that prohibit use, whereas joint management of production forest reserves has not yet been implemented. Likewise, the majority of functional community-based forest management regimes in Tanzania (where village councils have almost total autonomy) are situated in low-value and degraded forest areas, which implies that the immediate livelihood improvement potential is limited (Lund 2007; Mustalahti & Lund 2010).

A plethora of rules and regulations formulated at more-central administrative levels tend to affect the distributional outcomes of decentralized forest management. Larson and Ribot (2007) described how policies originally designed to favour foreign (colonial) and local elites remain biased and create double standards on a playing field already slanted towards the rich, powerful and well-connected. A common example of such policies are licensing and taxation systems that effectively exclude people without access to financial capital and good relations to the administrative system from capturing more than a diminutive share of commercial forest profits (Ribot 1998; Lund & Treue 2008).

Existing social stratifications underlie many adverse effects observed in decentralized forest management processes. In Zimbabwe, Nemarundwe (2004) described how stratification influences who participates in committees and how some local people are able to bring their problems to authorities

who will be more favourable (what von Benda Beckmann 1981 called ‘forum shopping’). Bandiaky (2007) showed how decentralized forestry follows the contours of existing gender inequalities of local social hierarchies, transforming the intended equity outcomes into reinforced inequalities. Other studies came to similar conclusions concerning the reproduction of inequality in Zimbabwe, Uganda and Ethiopia (Bazaara 2006; Feyissa 2006; Mandondo & Kozanayi 2006). Assembe Mvondo (2006) also noted that decentralization to multi-ethnic villages resulted in reinforcement of existing hierarchies, whereas access to benefits was observed to be more equitable in communities composed largely of a single ethnic group.

In general, pre-existing social relations influence who can maintain access through manipulation of the authorities around them and negotiate continued access either through reciprocal relations or payments (Nemarundwe 2004; Blaikie 2006). Such negotiated access is ‘... influenced by factors such as descent, social stratification, character of person involved, and longevity of residence in the area’ (Nemarundwe 2004, p. 289), among others (Ribot & Peluso 2003). The implication is that the structures and processes of decentralized forest management must ensure that the poorest and most vulnerable groups are identified and that rules are constructed that specifically favour these groups.

ANALYTICAL MISCONCEPTIONS

In current forestry discourses almost everything is called decentralization. Without careful reading, it is difficult to distinguish participatory approaches (any consultation, mobilization or involvement of local people) from co-management (a more contractualized form of ‘participation’) or democratic decentralization (involving power transfers to representative authorities). The confusion adds to an institutional amalgam an analytic nightmare in which no policy or project labelled decentralized can be taken at face value. Each intervention must be analysed according to its substantive elements, which include the degree of transfer of discretionary powers to local actors who are downwardly accountable to the population. The extent to which decentralization is being established and what the resulting outcomes are should, at a minimum, be analysed at the national, intermediary and local level to provide an overview of and linkages between (1) the political and legislative framework, (2) the official implementing agencies and (3) the environmental and economic (including distributive) outcomes at local level.

Misconceptions in analyses are multiple. Tacconi *et al.* (2006) argued that studies fail to question the core assumptions of decentralization, which advocate that (1) democratic decentralization is an institutionalized and scaled up form of CBNRM, (2) people will engage in conservation due to the benefits that will follow (also see Hailey 1938) and (3) benefit-driven conservation will lead to less deforestation. The first item, however, is definitional, not an assumption and no

amount of research will resolve it. Rather it is an ‘if-then’ statement: if there is institutionalized representation in the form of democratic decentralization and the representative authorities hold management responsibilities over natural resources, then it is an institutionalized form of CBNRM. As for the last two statements, Tacconi *et al.* (2006) showed that these assumptions hold only under certain circumstances owing to the presence of multiple intervening variables, as reflected throughout this review. After their analysis of 95 cases in India, Agrawal and Chhatre (2006, p. 164) added, ‘variations in how the same factors operate and should be operationalized in different micro-contexts should make us pessimistic about the possibility of a universal theory of the commons.’ Indeed, there may be no generalizable theory of the commons. There may, however, be a generalizable theory of decentralization (a small subset of what happens in and around commons), or even a theory that allows that when the basic conditions of democratic decentralization of forests are established, the outcomes are far from certain.

Decentralization of forest management and use is not expected to produce positive outcomes in a vacuum. It occurs within a set of management and use rules and is shaped by the values attributed to the concerned forest. In the event that there are rules to protect forest values, under what conditions will decentralizing both responsibility for and benefits from working within these rules result in better management/enforcement? Are positive ecological and social outcomes likely when the costs are greater than the benefits of local forest governance? Probably not. Can market-based mechanisms, which constantly shift the costs and benefits, really ensure conservation over the long run? If the growth rate of a forest provides lower financial returns than elsewhere, why not cut it down now and invest the profit in a fund that has a greater return? The market or use value of forests cannot save forests from destruction, and the fickle nature of markets may mean that today forests are safe but tomorrow prices rise and cutting begins. There is no inherent reason to believe that local (or any other) people will not sell or convert forests if those are the most-lucrative options. There are only reasons to believe that collective local decisions may differ from individual local decisions or outsider decisions (since collectives internalize a broader range of values in decisions). Standards and rules set at a higher level are needed (see Ribot 2004). These rules can (and should) be used to create spaces of local discretion, but rarely are.

Differences between those wishing for conservation and those bearing the costs reshape motives for implementation. While higher-level institutions promote decentralization in search of forest conservation for values at higher levels of social aggregation, such as carbon storage or watershed regulation, the opportunity and direct costs of ensuring all of these values are largely born at the local level. Devolving responsibility for values that do not accrue to local people who bear the cost of conservation measures is not likely to lead to success unless complemented by funds so that local people have incentives to provide these services (Tacconi *et al.* 2006). Conservation is often viewed as something that local people will do for the

returns they will gain (Wily no date). But those returns are public while people's unpaid labour is private. There is no more reason to believe that a village should pay or labour for a bridge so a national highway can cross a river near them, than to believe they should pay for forest management to ensure national or global benefits of conservation.

Analysts (Agrawal & Ribot 1999; Kulipossa 2004; Wily no date) posit that democratic decentralization can work for specified objectives (for example conservation or livelihoods enhancement) only if (1) the appropriate powers for the context are transferred to locally accountable authorities and (2) appropriate rules establish incentives for the specified objectives to be achieved (Larson 2003). Fines for cutting too many or protected trees are among such rule-based incentives. Of course, any rights of this nature also require some mechanisms by which elected local councils can defend, negotiate and even expand their rights as national or regional or even global decisions bear down on and restrain their domain of discretion.

In short, the analytic questions are (1) Does democratic decentralization exist? Why or why not? (2) How does democratic decentralization interact with the incentives on the ground (the rules of engagement and shifting market values) concerning particular objectives? And (3) What is the relation between decentralization, the incentive structure and observed outcomes within specific levels of political-administrative or social organization?

CONCLUSIONS

It is possible to make a few general statements about democracy, livelihoods and ecological outcomes of decentralized forestry in sub-Saharan Africa. First, ecological, livelihood and democracy objectives are not always mutually reinforcing. Under some circumstances they may be at odds. Second, ecological improvements for local people (linked to local livelihoods or profit) are often completely different from ecological improvements for a more-distant or higher-scale aggregate of populations (linked to watershed, biodiversity or global change or to economic growth).

The use of the landscape for livelihoods by the poor may be at odds with both ecological objectives and the profit and revenue interests of local elites, national commercial interests and national governments. Each set of objectives must be taken separately and the relation among them be negotiated in a specific context. There are several questions that need to be asked if competing and converging objectives are to be balanced in a way that supports sustainability, rural livelihoods and democratization. The minimum requirements for guaranteeing ecological wellbeing, local livelihoods and local democracy need to be established for each locality.

Ecology

Studies must identify what should be conserved or transformed to optimize the ecology for local and higher-scale

values, respectively. To produce different values from a landscape, rules and their enforcement are essential. When local people agree to the rules, enforcement is easier. When local people are involved with enforcement they are more likely to engage in the project behind the rules (Agrawal 2005). But, any rules or measures must recognize that most burdens of conservation are born at the local level, while benefits materialize at multiple scales. Further, credible monitoring and enforcement of higher-level environmental and social values may be costly. In a global review, Lund *et al.* (2009) showed that few studies provide a convincing analysis of the conservation impact of popular participation in forest management. They attributed this to, among other things, the high costs of data gathering and argued that simple, robust and inexpensive methods to measure indicators of conservation must be developed.

Livelihoods

Like ecology, minimum standards for what are perceived to be necessary aspects of production and reproduction of individuals, households, communities and nations must be assessed. What is more important, income from the timber trade or subsistence values of local people? When should forest use for poor people be supported, and when should alternative income activities be sought? These questions are not easy to answer. Most national governments value timber more than subsistence values and elite wealth over enriching rural communities who are currently politically, economically and socially marginal (Hansen *et al.* 2009).

Local democracy

The conditions necessary to promote democratization in and for the local arena must be properly established. Local leaders in democracy are responsive to local needs and downwardly accountable (Manin *et al.* 1999). To be responsive they must have discretionary powers that are relevant and significant to the problems faced by the people they ostensibly represent. Local leaders must have effective means to represent their people's interests within higher levels of social organization (Lindsay 1998). To be accountable there must be multiple mechanisms of accountability, namely means of positively and negatively sanctioning leaders (see Ribot 2004). Elections (with open candidature and universal suffrage) are one important and necessary accountability mechanism, but they are grossly inadequate on their own.

There are many known ecological and livelihood decisions in forestry that can be devolved to local authorities without negative ecological or livelihood consequences. Hence, there is plenty of room in forestry to support local democracy (Ribot 2004). For example, once production and protection forests have been identified nationally to serve higher-level objectives such as biodiversity conservation, watershed protection or carbon storage, and the necessary technical rules for production forest harvest established in accordance

with sound silvicultural knowledge (which tree species, how, at which minimum size and in what maximum annual quantities) have been specified, then the decision as to whether, how much, when, by whom and according to which profit sharing arrangements resource extraction should take place, can all be made at the local level. These last allocation decisions cannot be said to threaten the ecology any more than allowing outsiders to extract the same amount of resources deemed exploitable by national-level forest authorities. In other words, we know that forestry can support local democracy without negative tradeoffs on the ecological front.

Forestry can shape local democracy

Transfer of forest management to democratic local government is being promoted in policy and law in a large number of sub-Saharan African countries on the grounds that democratic decentralization will lead to improved forest management and rural livelihoods. A growing number of voices, however, are claiming that the anticipated benefits of increased popular participation are reflected more in government and donor discourses than experience of rural communities. Further, there is little agreement among scholars about when and under what conditions the theoretical promises of decentralized forest management will materialize. But, it is certain that without democratic decentralization (a condition commonly found in ostensibly decentralized forestry) it is impossible to see or measure outcomes of democratic decentralization. The first step in testing the relations between democratic decentralization and outcomes of any kind will be to work toward establishing democratic decentralization.

Protecting ecological and livelihood values must also be considered in the light of protecting other values, such as democracy and human rights (Petrasek *et al.* 2002; Kulipossa 2004). Commercial interests, NGOs, governments, local elites or local majorities cannot be automatically expected to protect the environment or wellbeing of all local groups. Protecting the environment and local livelihoods is a difficult constrained optimization that cannot easily be designed and implemented by central actors who have few incentives to devolve powers and benefits to local authorities. Democratic decentralization of forestry is, nevertheless, a promising measure that may help level the playing field on which ecological, environmental, political, social and economic interests of all levels of society can negotiate the rules of forest management and use. It is yet to be seen whether a space of significant discretion under local democratic authorities will be created and then whether it will deliver on its promises.

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