CHAPTER 13

DECENTRALIZING NATURAL RESOURCE MANAGEMENT: A RECIPE FOR SUSTAINABILITY AND EQUITY

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Acknowledgments

Summary

The article draws attention to the ways in which different, at times contradictory, policy models and directives, together with political and economic dynamics, shape the mixture of institutional arrangements for NRM as well as their limitations. The article concludes that, if decentralization of NRM is to stand any chance of success, several demands must be made on the process. But these can hardly be realized without well-organized local bodies and civil society, particularly those of politically marginalized categories, while also powerful countervailing forces must be built at the global level to achieve a more enabling environment for effective NRM strategies.

Introduction

In recent years, there has been a considerable restructuring of the institutional arrangements governing natural resource management (NRM). This restructuring has taken place in the context of ongoing efforts at economic reform and decentralization in various countries. Deliberate policy interventions by the state and donor agencies, initiatives by voluntary agencies and local groups, and the impact of market forces on local economic structures have all contributed to this restructuring. Initially, market deregulation and privatization were the guiding principles in these endeavors, while more recently decentralization of governance and local participation have been emphasized. These institutional changes amount to a redefinition of the role of the state and have stimulated further exploration and experimentation regarding a variety of local government and non-state forms of management and co-management. Restructuring efforts of this kind often involve local communities and user groups, joint environmental management schemes, non-governmental organization (NGO)-based initiatives, co-operative bodies and other actors at the micro and meso level. Such altered institutional arrangements have been done, it is often argued, to bring about more sustainable and equitable forms of NRM through the enhancement of local participation.

It remains to be seen, however, whether these institutional changes—particularly decentralization in its various forms—can promote more sustainable NRM practices. In order to achieve this outcome, new practices, among other things, must be capable of transcending past institutional rigidities. They must be capable of containing environmental degradation, promoting sustainable and equitable natural resource use, allowing more effective handling of resource conflicts and facilitating joint environmental resource development, all of which indicate the need to identify and rectify pre-existing problems in the field of policy. At the same time though, there are

potential policy tensions between the equity of access that sustainable NRM practices demand and the process of decentralization that is used to facilitate more sustainable NRM practices. Moreover, many of the arrangements concerned seem to have made an already competitive situation around scarce natural resource utilization all the more complex.

Thus, while appreciating the potentially positive effects of decentralization and participation in opening or enlarging spaces for peoples' movements and other forms of collective action from below, it nonetheless appears appropriate to take a critical look at current modes of thinking and practices regarding decentralization and participation in NRM. Therefore, this article attempts an exploration of the terrain, which will be undertaken based on a non-exhaustive review of recent trends and literature, with a particular interest in the political dimensions of the issues. Specifically, the article seeks to draw attention to the ways in which different, at times even contradictory, policy models and directives, together with political and economic dynamics, shape the mixture of institutional arrangements for NRM as well as their limitations. In pursuing this discussion, we will be particularly interested in problems found with regard to access to and sustainable use and development of resources, the handling of resource conflicts, and the relative empowerment of different user categories.

The next section of the article will review several theoretical and policy debates on the issue of decentralized institutional arrangements for sustainable and equitable environmental resource management. Although our discussion on decentralization and NRM is closely related to participation, we will not specifically address this dimension [see *Leeuwis, 2000; Mayoux, 1995; Nelson and Wright, 1995;* and *Utting, 2001* for the gist of these debates]. Following this, the article will more closely consider some of the issues and arguments that have arisen in connection with decentralizing NRM. This discussion will be informed by recent experiences with decentralized NRM in India and various African countries, which include local government as well as non-state forms, and will be followed by our concluding observations.

Theoretical and policy debates

The changes in institutional arrangements that we are concerned with have given rise to several theoretical and policy debates. Within the realm of theory, Hardin's [*1968*] 'the tragedy of the commons' thesis set in motion, at an early stage, an intense discussion among social scientists on the role of property rights regimes and related institutional arrangements in the management of natural resources. In particular, the merits and demerits of private, state, and community-based resource management systems became a hotly debated issue. Among economists this debate initially focused on the question of whether decentralized collective action could be effective [*White and Runge, 1995: 1683*]. In contrast to this, anthropological perspectives tended to highlight the historically well-adapted, flexible and potentially renewable roles of 'traditional' local communities and institutions in NRM [*Klooster, 2000:2*]. The correlates of the relative success of such resource management systems, in terms of ecological and social sustainability, similarly came under debate [see, for example, *Bromley et al., 1992; McCay and Acheson, 198; Ostrom, 1990; Runge, 1986; Wade, 1988*]. These debates have centered on the conditions that facilitate or hamper the emergence, maintenance, and sustainability of such institutional arrangements [*Klooster, 2000; White and Runge, 1995*].

Despite these different perspectives, there is broad consensus among researchers and policy-makers on the pivotal role of institutional arrangements in shaping peoples' interactions with their natural environments and negotiation processes in NRM. These arrangements determine who has what kind of access to which kind of natural resources and what use they can make of such resources. While institutional choice theorists like Ostrom [*1990, 1992*] are particularly interested in grasping processes of institutional crafting and consolidation, reflexive, explanatory approaches have highlighted serious limitations of many design-oriented perspectives. It has been argued that, by adhering to rational choice-based models, design-oriented approaches negate the complex nature of institutions and run the risk of imposing formal institutional forms on previously existing informal, but often invisible, ones [*Cleaver, 2000; Klooster, 2000; Leach et al., 1997, 1999*]. According to these critics, the inherent tendencies toward functionalism in design-oriented approaches and the view of institutions as simply 'rules-in-use', progressing from weak to robust forms and to steady states given adequate support, are oversimplified, static and evolutionistic.

In these critical perspectives, institutions encompass not only sets of formal and informal rules, regulations, and norms but also social meaning—namely shared values, understandings and perceptions of 'the right way of doing things' [*Cleaver, 2000: 368*]. Thus, institutions are intrinsically permeated and shaped by notions and ideologies of gender, class, and other social divisions in societies. Related 'deeply-sedimented social practices' may also be considered as institutions, or as part of institutions [*Giddens, 1979: 80*]. In much of the literature an even broader concept of institutions, encompassing organizations, is used. However, such a conception must be handled with caution, even though the idea of viewing institutions simply as rules, and thus sharply distinguishing rule from practice, has been dismissed. As noted by Leach et al. [*1999:237*], only some institutions that are of critical importance to resource access and control have organizational forms. Many have 'no single or direct organizational manifestations, including money, markets, marriage, and the law'.

These critical views emphasize the diversity, multiplicity and inter-relatedness of the institutions involved in NRM, among which there are many informal ones, as well as their dynamic and often conflict-ridden nature. Institutions are 'subject to multiple interpretations and frequent redefinition in the course of daily practice' and 'often operate as arenas of negotiation and struggle', as Berry [*1993:4, 20*] states. In other words, they constitute contested terrain in which different interests are played out, subject to the power dynamics of human agency. Institutions thus have to be analyzed not only in relation to material resources but also in relation to culture and to power and authority relations, including gender relations. Due attention should be given to the contested dimensions of institutions, and to their potential for change under the influence of human agency [*Berry, 1993, 1997; Cleaver, 2000; Klooster, 2000; Leach et al., 1997, 1999; Mosse, 1995, 1997*].

Public choice, good governance and populist advocacy at the policy level

The embracing of decentralized and participatory NRM approaches in many countries since the 1980s has entailed extensive discussions and debates concerning the merits of such organizational and institutional interventions. Among policymakers as well as academics there appears to exist a widespread consensus at one level about the desirability of decentralization,

derived from the commonly held idea that devolving powers from the center to lower political and administrative levels may facilitate people's participation in development and resource management. Beyond this, however, the meanings attached to the term 'decentralization', and the views about the extent and forms of participation to be realized, the institutional changes needed regarding the role and structure of the state, and the way in which the restructuring process should be achieved, tend to diverge. Not surprisingly, these differences, and the respective debates about them, reflect the theoretical, ideological and political interests of the advocates concerned [*Carney and Farrington, 1998; Mohan and Stokke, 2000; Webster, 1995*].

The most influential actors in the decentralization arena are, first, neo-liberal public choice advocates, who begin from a market-focused agenda designed to 'roll back the state' and achieve service delivery efficiency through privatization or delegation, with a preference for such delegation being outside the public sector. Within this perspective 'participation' implies market transactions, with 'the people' in the role of consumers and possibly providers. Accordingly, in the field of NRM the idea of contracting out services for local natural resource management to NGOs or developing joint delivery systems in NGO and private sector partnerships is increasingly articulated. For example, since the late 1980s a range of Indian policy documents concerning forest and watershed development have been making recommendations in this vein [*Baumann, 2000:16-17*]. The state is basically seen as a constraint on efficient management. Nevertheless, under 'the enabling state' discourse, neo-liberals have argued more recently that it should provide the kind of administrative and political institutional context necessary to facilitate efficient and effective service delivery [*Mohan and Stokke, 2000:248*].

In operational terms, the latter perspective has strengthened the overlap of the public choice agenda with a second stream of thought shaping the ideas and practices of decentralization, namely the 'good governance' agenda. The 'good governance' agenda has clear neo-liberal overtones even as it advocates institutional reforms that should 'bring the state closer to the people' and increase its accountability and transparency [*Baumann, 2000:17*]. This is to be achieved by administrative and political decentralization, in combination with a strengthening of local government capacities and efforts to involve the participation of local communities and other local 'stakeholders' in development and NRM activities.

Both public choice advocates and good governance protagonists start from a top-down institutional restructuring process in which the state itself is expected to play a central role, with NGOs as key allies. However, the possibility of resistance to such restructuring occurring within the state apparatus, as opportunities for clientelism are lost and power and resources are relinquished to local actors in the periphery, tends to be overlooked. Local structural inequalities and related external and internal patronage and power relations also tend to be neglected. This omission is not necessarily due to the technocratic perspectives of neo-liberals and donor bureaucracies, however. It may also result from populist influence over the design of decentralization policies, particularly in the field of NRM.

Populist advocates of decentralized NRM, particularly favoring community-based approaches, tend to turn a blind eye to local social inequalities and related intra- and inter-community resource controversies and struggles. This allows them to uphold a highly romanticized vision of 'traditional communities' as homogeneous and harmonious entities, inherently capable and

inclined to maintain socially and ecologically sustainable NRM systems [*Agrawal and Gibson, 1999; Li, 1996*]. The use of such idealized representations of community in the policy arena can produce 'strategic gains' in 'ongoing processes of negotiation', according to Li [*1996:502, 509*]. But she cautions against the translation of these images at the operational level because of their misleading generalizing and exclusionary tendencies.

Operational debates

At the operational level, the adoption of decentralized and participatory NRM approaches has frequently taken place within the context of particular programs or projects for sustainable development that utilize sectoral approaches [*Leach et al., 1997*]. As a consequence, the different forms of institutional arrangements available in given sectoral contexts such as forestry, watershed management, fisheries, and the like, as well as the appropriateness of each for the management of the various types of local resources concerned, are now frequently debated issues. One branch of this literature focuses on apparently successful NRM undertakings and contemplates the insights they provide [for example, *Bromley et al., 1992; White and Runge, 1995; Veit et al., 1995*]. A more critical discussion questions the appropriateness of presently prevailing decentralized NRM efforts on various grounds, often related to their technocratic, ahistorical, and apolitical features [see, for example, *Mosse, 1997; Steins et al, 2000*]. In particular, the conceptual and operational approaches commonly adopted with respect to 'community', 'participation', and 'jointness' have been recurrently criticized [*Mosse, 1997; Agrawal and Gibson, 1999; Nelson and Wright, 1995; Sundar, 2000; Utting, 2001*]. It has also been advanced that the question of uncertainty that surrounds the socio-political, economic and ecological conditions shaping people's livelihoods and natural resource use should be seriously considered in decentralized NRM efforts [*Mehta et al., 2001*].

A related discussion concerning forms of NRM decentralization has narrowly focused upon the question of the extent to which the state should devolve management authority and property rights to local level communities and groups [*Agrawal and Ribot, 2000; Poffenberger and McGean, 1996*]. The prevalence of the sectoral approach in project operations and in many discussions concerning NRM has narrowed the perspective further. Together, these factors may help explain why many proponents appear to favor the maximum devolution of governance to local level user groups. However, in embracing this position it appears that the limitations and pitfalls of 'going local', as Mohan and Stokke [*2000:254*] call it, have received insufficient attention.

Decentralizing NRM: mixed objectives, mixed results

It will be clear from the above discussion that operational strategies for decentralization and participation tend to be informed by a mix of policy objectives, some of which may be inconsistent or even contradictory. As noted, their sources of inspiration are often markedly heterogeneous. On the one hand, national and international agencies are engaged in the promotion of market liberalization, which is designed to mobilize capital internally and facilitate economic globalization by opening up local economies to international capital. This requires attuning institutional and organizational arrangements. As a result, the promotion of local participation is often focused on providing support to local private enterprise in the commercial

exploitation of natural resources. On the other hand, decentralization strategies are expected to promote local participation in NRM 'from below', with the goal of defending the subsistence and resource interests of poor communities and user groups dependent on a particular natural resource base for their survival. These opposite demands give rise to various political, economic and administrative contradictions in the moves towards decentralization.

The lack of compatible objectives, arising from different conceptual and policy approaches to decentralization, may be reflected in inconsistencies in national legislative and policy frameworks. Contrasted and opposed policy goals from different state agencies can conceivably create new or fuel existing resource conflicts and power struggles at various levels. These may occur within the state and local government apparatus, between state agencies and local communities, and within local communities. For example, in Bangladesh the ministry in charge of the development of fisheries resources has been hampered in developing and implementing an ecologically adequate fisheries policy due to the overlapping involvement of competing ministries in the floodplains concerned [*Rashed, 1998*]. The latter's priorities are in commercial or revenue-raising resource management activities rather than resource conservation. This situation has not only led to power struggles among different ministries and departments, but also to local-level resource conflicts between farming and fishing communities, and within fishing communities between fish traders and artisan, or small-scale fishermen [*Rashed, 1998*].

The tendency for different interests to find support in separate branches of the state, such as the conflicting claims of natural resource conservation versus agricultural intensification, has also been reinforced by global institutional factors. Different international donor agencies have often advocated distinct and conflicting strategies for rural and environmental resource management and development [*Lélé, 1991; Utting, 1993: ch. 12*]. The implications of such policy inconsistencies and institutional fragmentation for resource conservation efforts at the local level can be considerable, as will be discussed further below.

The question of conceptual and policy inconsistencies can also be looked at from yet another angle. In constitutional terms, decentralization has often been based on a principle of 'subsidiarity', which involves the premise that higher state bodies should not be doing what lower organs can do better [*Martinussen, 1997: 215*]. In theory this remains a useful point of departure to determine which decision-making powers may best be placed at which level. The test for meaningful decentralization then becomes the extent to which lower organs are in a position to set their own priorities within the parameters established for their jurisdiction. Further preconditions for decentralization to become successful are that the lower-level organs should enjoy legitimate authority and adequate capacity, and have sufficient autonomous financial capability to execute what they have been authorized to do, from taxes and revenues and/or central grants. Nor should such arrangements absolve higher-level bodies from their informational, supervisory, coordinating and possible conflict resolving roles with respect to the execution of decentralized NRM functions, or from ultimate authority over the field of activities concerned.

A number of recent examples, however, indicate that decentralization policies may primarily amount to a selective deconcentration of state functions under the continuing control of the central government. In respect of West Africa, for example, it has been argued that 'the reality of

decentralization so far is that local decision-makers have very little discretion in decision-making, and few skills for effective implementation and monitoring of decisions taken' [*Moore et al., 2000: 1*]. Such policies have often been adopted, it appears, as a way of freeing governments or higher-level organs from financial and administrative responsibility for the activities concerned. Such cost-saving devices have been part of the general drive to push back the role of central government under the aegis of structural adjustment programs. With reference to certain Sahel country governments, for example, Toulmin [*1991: 35*] suggests that

> the only 'responsibilization' that will take place… is likely to concern cases where the state can divest itself from certain costly obligations, for example by transferring responsibility for maintenance of bore-holes to pastoral associations, and by handing over the role of maintaining irrigation schemes to water user groups.

Decentralization, which in this and other instances may be closely linked to privatization, may thus be introduced as a device to generate fiscal savings. In such circumstances the decentralized entities concerned, which may be districts or lower tiers of government, are actively encouraged to find their own resources for the activities they wish to undertake. However, different regions and localities start out with unequal endowments, and are unlikely to find that their respective governments are prepared to come forward with significant re-distributive measures [*De Bruijne, 2001: 24, 29*]. This implies that poor districts and local communities will be less able than better endowed ones to make use of the new 'opportunities'. Moreover, environmental protection and equitable participation in NRM may not rank very high on the list of priorities to which modest resources are allocated. What remains then, at best, is the possibility of a foreign donor being prepared to step in and fund the initiation of environmental projects thought to be of longer-term relevance, even though such an intervention is in principle temporary and will generate the need for sustainable follow-up.

Closely related to the subsidiarity rationale for decentralization is the argument that decentralization can build on the efforts of local groups and communities, engaging local knowledge to resolve local problems. However, within the local context, broader, more comprehensive perspectives on the interlocking problems of a particular natural resource base may not always be articulated. Indeed, different stakeholders may be inclined to act on matters in line with their own specific interests and horizons. In many situations no mechanisms exist to juxtapose these different interests. Where such institutional gaps occur, it is important to try to overcome them, through the creation of channels for informed dialogue among stakeholders. This may raise awareness of the implications of each group's actions on the interests and welfare of others, and of the legitimate claims of other users to access the resource base concerned. Attempts to do this have been advocated, and tentatively pursued, with regard to resource conflicts involving various pastoralist groups and farming communities in the Horn of Africa [*Doornbos, 2001*]. It remains to be seen, however, whether they will be sufficient to meet the demands of equity.

An important related question concerns the determination of 'stakeholders'. If decision-making on such issues is based on prevailing institutional patterns in respect of property rights or images of identities, most often women will not be defined as stakeholders. The likelihood of such a course of affairs is particularly great if existing networks of local leaders and 'knowledgeable' state and NGO representatives play a key role in the process of establishing contacts and

gathering information, as is frequently the case. Local leadership institutions as well as state and NGO agencies working in the fields of agriculture, forestry, and water resource management are in general 'male spaces' that lack gender sensitivity. In short, 'stakeholder consultations, if not handled properly, may serve the ends of (continued) social exclusion—most especially that of edging women out of the process' [*Pantana et al., n.d: 17*].

The Indian experience: contradictory decentralization dynamics

The Indian experience may be used to further illustrate the extent of unfulfilled expectations regarding decentralization. In India there has been considerable pressure from below, exerted by various people's movements and NGOs, for both the decentralized management of natural resources and increased people's participation in such management [*Dwivedi, 2001; Poffenberger and McGean, 1996; Sinha et al., 1997*]. At the same time, consistent with worldwide trends stimulated by international financial institutions, the central Indian government has, in recent years, initiated decentralization of NRM along sectoral lines by establishing guidelines for devolving decision-making powers and central government funds to lower administrative levels. Decentralization further down to the community level is also being encouraged, facilitating participatory resource management that focuses on local community-based user groups. However, as economic globalization has increasingly demanded the opening up of local economies, local NRM in many parts of the country has become geared towards commercialization without adequate attention to the subsistence needs of the poor, or indeed natural resources protection.

These contradictory decentralization dynamics have been compounded by a complex set of political, economic and administrative problems. First, the central government of India has issued not only specific guidelines for the sectoral decentralization of NRM but also legislation and guidelines that stipulate decentralization of government itself, with the latter, not surprisingly, having implications for NRM. The ways in which these two forms of decentralization should interface in practice has remained an unresolved question, however. This is partly because it has been largely up to the state governments, and in the case of specific natural resources to the line departments within states, to implement the various sets of decentralization guidelines in ways that they see fit. Thus, the forms and political and legal contents of decentralization depend largely on the particular constellations of political forces within the various state polities and administrations. In many states, it appears that politicians, bureaucrats, or members of legislative bodies have thwarted the devolution of adequate resources, powers and authority to elected local government or *panchayati raj* institutions and to user groups. Local politicians and power-holders have in fact often hijacked decentralization of NRM initiatives for electoral and related purposes. Only in five or six states have serious attempts been made to carry through democratic or political as distinct from merely administrative decentralization by devolving powers, and resources to representative bodies that are accountable to local populations [*Manor, n.d.; Webster, 1995*]. When noting this, though, we should also remember that this record still contrasts favorably to that of many other countries.

Aside from intra-state obstacles, constructive implementation of both the *panchayati raj* and sectoral NRM forms of decentralization has been frustrated by political strife between the central and state governments. The principal arena of contention—functions, powers and authority

within the policy field of development planning and implementation—happens to be central for both the *panchayati raj* and sectoral NRM decentralization activities [*Baumann, 1998*]. The multi-layered administrative and political competition and conflicts accompanying decentralization in India are also fueled by the problems surrounding the relationship between the system of *panchayati raj* and newly evolved sectoral NRM institutions at the local level. The same is true for the relationship between different sectoral NRM institutions established within the same geographical area. Concerns noted in this respect include a lack of complementarity in the functioning of the different institutions and a lack of constructive inter-linking between different institutions (Kant and Cooke, 1998). Instead, there is often a tendency to subsume local user groups into local government bodies, which may erode their effectiveness (Poffenberger and Singh, 1996). The reverse may also occur—namely sectoral NRM institutions taking on the functions assigned to *panchayati raj* institutions (Baumann, 1998). Evidently, therefore, where the democratic functioning of local bodies is impaired and internal political deadlocks occur, weaker user groups tend to be disadvantaged in conflicts regarding resource allocation. In such circumstances, decentralization may mean further empowerment of the powerful and the progressive weakening of the poor. At a range of different institutional levels, new NRM policies and arrangements may thus constitute fresh targets for political gain and competition. Such anomalies may occur particularly in the context of transitions towards decentralization, though there is a danger that they may turn into more permanent features.

In its attempts to create a more market-friendly economic framework, the Indian government has also been encouraging a greater role for the private sector, thus allowing resource management regimes in various areas to become oriented towards, if not governed by, specific user categories of particular environmental resources. For example, in several parts of India poor owners of small ruminants, as well as other resource users, have been losing their customary access to village commons as these areas have been given to commercial dairy farming cooperatives for pasture cultivation [*Doornbos and Gertsch, 1994*]. Similar selective group privatization tendencies have been noted in favor of other commercial farming activities and of commercial woodland exploitation [*Agarwal, 1992; Blair, 1996*]. Resource use clashes not only pertain to land-based resources but have also increasingly occurred with regard to maritime resources, over which artisan fishermen have been competing with the mechanized fishing sector for their livelihood [*Meynen, 1989*]. As in the case of forests, this process has resulted in the formation of various social and political movements for the protection of the rights of the artisanal sector and the conservation of the resource base.

Clearly, potentially conflicting pressures arise from the opening up of local markets in response to globalization and liberalization on the one hand, and the demand to ensure equitable access to environmental resources to the weaker sections of local populations on the other. First, market forces may influence incentives for collective action positively as well as negatively. Hobley and Shah [*1996: 5*], for example, note the potentially positive role of market incentives in inducing local group-based NRM efforts. They also warn, however, that 'markets are difficult to predict and products that have a high value today may equally have a low value tomorrow, possibly endangering the viability of resource management organizations'. Moreover, differences in market access among users of a particular resource are a crucial source of conflicting demands, which may also constrain or jeopardize cooperation in NRM [*Kurian, 2001; Meynen, 1989*]. The more heterogeneous the resource use interests and household endowments of a community, the

more susceptible they may be to such conflicting pressures. Out of fear of the squabbles that might ensue, some Indian *panchayats* even appeared to be reluctant to engage in community-based forest management endeavors [*Blair, 1996: 489*]. The influence of heterogeneity on the scope for community-based or collective NRM is not always negative, however. According to Hobley and Shah [*1996*], this will largely depend on the representativeness and effectiveness of management and decision-making structures.

Technocratic paradigms and boundary setting

Several authors stress that technocratic paradigms in and of themselves may leave a strong imprint on the currently prevailing approaches towards decentralized and participatory NRM [*Cleaver, 2000; Gauld, 2000; Gronow, 1995; Utting, 2000*]. One of its implications is a selective targeting and mode of implementation of environmental and sustainable development concerns. This can have far-reaching consequences, including the adoption of a divisible and fragmented perspective on 'nature'. Decentralized interventions in NRM tend to focus on specific natural resources, like forests, wildlife, or water. Which resource is targeted is strongly influenced by environmental and economic fads and fashions. Such a perspective treats specific natural resources as isolated systems. It negates the 'nested' and interdependent nature of ecosystems, and thus the need for an integrated and holistic approach to ecosystem regeneration [*Agarwal and Narain, 2000; Uphoff, 1998*].

Bureaucratic reification also occurs by placing communities and user groups, conceptualized as spatially and socially bounded entities, center stage in conservation and resource management, to the neglect of broader identities and wider relationships and their fluid and ambiguous institutional boundaries. This tendency prevents adequate recognition of how newly established or re-constituted and formalized institutional spaces are being used politically for the sake of reshaping social, economic and political relationships between genders, ethnic groups and the like in the interest of dominant parties [*Mosse, 1997; Rashed, 1998*]. It also negates the possibility that decentralizing resource management and use rights to relatively small, spatially bounded, permanent units may be counter-effective in terms of sustainability if considered from a wider perspective [*Agrawal and Gibson, 1999; Uphoff, 1998*].

Various case studies of newly established community forest- and watershed management systems in India demonstrate the ways in which the aforementioned problems are a real threat to both ecological and social sustainability. They reveal inter-village as well as intra-village conflicts over boundaries, the barring of access to enclosed commons, and the overriding of the rights of weaker communities or subgroups, like tribals, landless, herdsmen, women, and migrants, by more powerful ones [*Ahluwalia, 1997; Poffenberger, 1996; Sarin, 1996*]. For example, a forest regeneration program studied by Shah and Shah [*1995*] resulted in fierce confrontations between the different villages involved. This was because its de-centralized village-based approach to NRM led the most forest-dependent members of such villages to raid the forest areas of adjoining villages in order to allow for the regeneration of their own forest. The extent to which this situation threatened to disrupt the widespread network of social relationships on which the sustainability of the village communities depended is very well portrayed by the following lament by one of the village leaders:

I am wondering what we [Pingot people] are gaining from protecting our forests so religiously? … If it continues like this, every village around Pingot will be our enemy. Then their relatives in other villages will become our enemies as well. At this rate our daughters in Pingot will never be able to get married. Who will want to marry an enemy's daughter? [*Shah and Shah, 1995: 81*]

It is not only with regard to community groups that sensitivity to the possible negative consequences of place-based boundary setting for sustainable and equitable natural resource use and development has been frequently lacking. The same is true for districts and local government units. As Veit [*1996:1*] notes with respect to the African context, 'too often, local administrative boundaries are not conducive to or supportive of local-level socio-economic development or environmental management'. Instead, he recommends boundary setting, or 'redistricting' as he calls it, 'more sensitive to ecosystems and natural resource endowments' [*Veit, 1996: 2*]. This discrepancy between the boundaries of specific ecosystems and those of respective local government units that should manage them has also been observed elsewhere. In India, boundary questions are complicated by the failure to reconcile the roles of different institutions with formal or customary mandates to manage natural resources in a certain region. In some areas, then, competition and conflicts arising from the overlap of roles and/or jurisdictions exist between *panchayats* and newly established watershed committees, and between the latter committees and the new forest protection committees. Competition and conflicts are also evident between these formal institutions and informal institutions operative in the same area [*Baumann, 1998; Kant and Cooke, 1998*]. Decentralized sectoral approaches to 'nature' and to 'people' thus present a danger of producing fragmented and disjointed approaches to resource policy and governance. It is possible to end up with situations in which no institution has sufficient authority and scope to coordinate and accommodate the diversity of resource interests and/or the aggregate of formal and informal institutions with a resource management role.

Institutionalized exclusion

Cumulatively, the above factors tend to accentuate rather than diminish resource conflicts, the unsustainable use of certain natural resources, and social inequality. This danger is aggravated by the exclusion of insufficiently represented or indeed non-represented interests from access to NRM endeavors, and by their likely reaction. These interests would include female community members, mobile and/or transitory user groups, non-residential stakeholders, or villages located elsewhere within the geographical spread of the resource concerned. Women in particular are frequently excluded through representative systems of community institutions and organizations. Such institutions tend to accept only one member per household—usually the formal head, the formal titleholder, or the 'owner' of certain resources such as land, trees or forest resources, positions largely occupied by men. Moreover, even without formal exclusion, women are often unable or unwilling to participate in formal mixed gender meetings, or, even if they do participate, they may be unable or unwilling to voice their views and concerns. This can be due to numerous factors, such as restrictions on women's mobility, skills, time, access and control of resources, and authority and constraints in the discursive interactions between men and women [*Mayoux, 1995: 246-7; Zwarteveen 2001: 3-5; Jackson, 1997*].

With such problems in mind, Meinzen-Dick and Zwarteveen [*1997:4*], writing on south Asia but with wider relevance, conclude that attempts at improvement 'cannot be left to local

communities' but will need 'external pressure, guidance and intervention'. But it is not only local communities that need this kind of external pressure and support to improve gender equity. The same is true for local governments, and for many state agencies and NGOs engaged in NRM in agriculture, forestry, and water resources. Preferably local women's movements and organizations with sufficient gender expertise in the areas concerned should take the lead in this, as they already do in various instances.

Another related and frequently reported source of exclusion, with harmful implications extending beyond gender relations, are systems of representation in NRM that rely on constructs of property or usufruct that neglect the multidimensional nature of overlapping and nested rights to and uses of natural resources [*Rocheleau and Edmunds, 1997*]. As may be easily recognized, this is a longstanding problem. For example, Sundar [*2000:253*] observes that in northern India in the early and mid-nineteenth century, village commons were established by enclosures that annihilated existing communal relationships between highland and lowland cultivators. The same practice occurred during the Peruvian agrarian reform of the 1970s, when collectives were created in valleys of the Sierra with boundaries that negated the user rights of and exchange relationships with agro-pastoralists of the Altiplano. Again, recent 'community' based NRM approaches exhibit similar tendencies of exclusion, especially impinging on mobile and non-residential user-groups like pastoralists, shifting cultivators, seasonal gatherers and migrants. An important reason for this is, as suggested earlier, that the enclosure of commons is frequently linked conceptually to a notion of 'local community', conceived in terms of 'permanent, year-round residency' [*McLain and Jones, 1998:1*]. This community is thought to have a clear-cut, 'identifiable relationship to an identifiable resource', to use the words of Sundar [*2000:254*]. Other characteristics commonly attributed to 'the community' are, that it 'consists of stable married households' and 'privileges the male links of property as against the multiple other links that individual households share with their affines' [*Sundar, 2000*]. It will be clear from the above discussion that these assumptions tend to particularly harm the resource use interests of women.

Thus, the analytical, empirical and policy prioritization of 'going local' through decentralization and participation may fail to place the institutional issues concerned within a wider complex of interactions, making it difficult to capture the combined effects of various kinds of institutional interventions. Questions about the interrelations, interactions and possible contradictions between different institutional arrangements for resource management certainly appear to have received less attention than they deserve. The same is true with respect to the question as to whether or not there are sufficiently meaningful mechanisms in place for overall resource use coordination, including the handling of changing resource claims, resource conflicts and instances of unwarranted exclusion.

Concluding remarks

One of the basic problems encountered in NRM decentralization efforts concerns the contradictory dynamics arising from the policy inconsistencies discussed in this article. The pressures exerted by global economic forces and processes and the policy prescriptions of international financial agencies often do not leave states much choice except to adopt liberalization, privatization and market deregulation. The weaker the resource base of national

economies and the more they suffer from debt burdens and political instability, the less maneuvering room they will have vis-à-vis these international pressures and demands. Moreover, sometimes the same international agencies that prescribe economic policies favoring opportunities for private capital to lay claims on and exploit valuable natural resources also advocate local government- and/or community-based NRM approaches presumed to strengthen the resource base and livelihood options of poor people. Thus, policy inconsistencies at national levels and the kind of economic reforms and institutional restructuring processes they have given rise to reflect and are strongly conditioned by interactions with international actors and factors. Only strong states, that is to say ones that over time have managed to maintain a 'relative autonomy' and capacity to govern, are able to maneuver in international and national arenas in ways that would allow national policy reforms to be consistent with the requirements of democratic decentralization. This, of course, also assumes that they have the political will and determination to do so.

An equally fundamental problem hindering democratic NRM decentralization concerns structural inequalities that prevent politically and economically marginalized classes and groups from effectively voicing and defending their resource interests and claims vis-à-vis powerful competitors and in broader decision-making processes. In many countries redressing such inequalities would require interventions in production and property systems in ways that run counter to the dominant forces and processes at work. With respect to presently favored property systems it should be noted, for example, that even those rural people who are involved in NRM activities under community-based or co-management programs often do not have secure long-term property or usufruct rights to the natural resources they are expected to manage.

If the gains from decentralized decision-making and community participation are to materialize, a further requirement is that decentralizing state organs should not be allowed to abandon their ultimate responsibility for natural resource policy. Instead, they should ensure that the decentralized organs command sufficient powers, including financial and judicial powers, to be able to adequately execute their responsibilities. Moreover, given the many different institutional initiatives for resource management at the local or micro levels, adequate mechanisms at a common or central level are needed that can handle potentially conflicting or even exclusionary NRM initiatives. For such mechanisms to be meaningful, however, the kinds of interests that tend to dominate policy processes must be taken into account. Interest in the promotion of grassroots participation in NRM should not be allowed to degenerate into a smokescreen for powerful local interests to capture and exploit particular resources.

Adding to the complexity, it is important to anticipate that, beyond broad structural similarities, different situations may present different kinds of contradictions. Rather than allowing for the application of uniform NRM models, there is a need for solutions sensitive to the situation. For example, in some resource conflict situations state agencies representing a particular interest may themselves figure as one of the key parties in conflict over access to environmental resources. Thus, forest departments have been known to try to prevent forest dwellers from encroaching upon the forest so that they can harvest its products [*Pathak, 1994; Matose, 1997*]. In other situations the state may find itself called upon to protect the interests of weaker resource-dependent communities vis-à-vis more powerful private agents. While the shaping or reshaping of political arenas, through decentralization or otherwise, will give rise to changing opportunity

structures, the precise alignment of 'weak' and 'strong' may vary from case to case, calling for differentiated responses.

In short, if decentralization of NRM is to stand any chance of success, a variety of demands must be made on the process. But these can hardly be realized without well-organized local bodies and civil society groups capable of articulating and effectively pursuing the diversity of local interests, particularly those of politically marginalized categories. This alone is difficult enough, yet the other condition for meaningful decentralization is even more problematic: powerful countervailing forces must be built at the global level in order to achieve a more enabling global environment that can sustain if not promote effective NRM strategies at different levels. The latter would require a fundamental reversal of the way policy priorities are presently established—a process that will take time and perseverance. In the interim, the most one may expect is no more than piecemeal gains within a framework of continuing contradictions and contestations between and among global, local and intermediate interests.

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