



CHAPTER 3

Collaborative management

The case for collective (and joint) management

Collective management regimes for forest resources can be appropriate when the demand on a resource has become so great that it can no longer tolerate unregulated (open access) use, with the result that property rights in the resource have to be created, but other factors make it impossible or undesirable to allocate the resource to individuals (McKean, 2000). A common property regime can also emerge as a way to secure control over a territory or a resource, to exclude outsiders, or to regulate use by individual members of the community. As pressures on the resource increase over time, collective control may be replaced by private property rights or by government control, or control may collapse and be replaced by open access use.

Choice of management of forests as common property has in the past been strongly affected by arguments that it is inefficient, and unsustainable, compared with private property or State ownership. This argument was dramatically expounded in Garrett Hardin's article entitled "Tragedy of the Commons" (Hardin, 1968), which was interpreted as postulating that overuse among those using a 'commons' was inevitable, because each would seek to extract more than their share of the benefits, knowing that the gain from doing so would more than offset the costs to them of this overuse. Wide acceptance of this thesis contributed to the pursuit of land distribution policies that favour individual private landholdings, and to the justification of State control of forest resources.

In the past two decades, growing evidence has accumulated to show that, while this thesis can, and often does, apply, it should not be held to be of general application. In appropriate situations, users often prove to be able to create and sustain collective arrangements that avoid overuse. A growing body of knowledge gained from research into existing collective management systems, and experience with programmes to support new systems, has resulted in fuller understanding of the attributes of resources and users that appear to be conducive to the formation and functioning of successful self-governing arrangements of this nature (Ostrom, 1999). This information is summarized in Box 8.

Three characteristics of attributes identified in Box 8 are of particular significance to understanding the scope for community forestry as collective management (Ostrom, 1999; Arnold, 1998; Baland and Platteau, 1996; McKean and Ostrom, 1995).

(1) The nature of the resource and its value to the users. There are resources that are more logically managed as a whole rather than as individual plots, as, for instance, (a) where they need to be maintained on a scale large enough to function as a productive ecosystem; (b) where coordination among users may be necessary to deal with multiple uses and externalities; or (c) where group control can be the most efficient way of coping with the costs of

Attributes of common pool resources and of users that are conducive to self-government BOX 8

ATTRIBUTES OF THE RESOURCE

- **FEASIBILITY OF IMPROVEMENT:** The resource is not so deteriorated that it is useless to organize, nor is it so underutilized that there is little advantage involved in organizing it.
- **INDICATORS:** Reliable and valid information about the general condition of the resource is available at reasonable costs.
- **PREDICTABILITY:** The availability of resource units is relatively predictable.
- **SPATIAL EXTENT:** The resource is small enough, given the transportation and communication technology in use, to allow users to develop accurate knowledge of external boundaries and internal micro-environments.

ATTRIBUTES OF THE USERS

- **SALIENCE:** Users are dependent on the resource for a major portion of their livelihood or for other variables that are of importance to them.
- **COMMON UNDERSTANDING:** Users have a shared image of the resource and of how their actions affect each other and the resource.
- **DISCOUNT RATE:** Users discount the likely value of future benefits to be achieved from the resource at a sufficiently low rate (i.e. they expect satisfactory levels of future benefits).
- **DISTRIBUTION OF INTERESTS:** Users with higher economic and political assets are similarly affected by a current pattern of use.
- **TRUST:** Users trust one another to keep promises and relate to one another with reciprocity.
- **AUTONOMY:** Users are able to determine access and harvesting rules that will not be countermanded by external authorities.
- **PRIOR ORGANIZATIONAL EXPERIENCE:** Users have learned at least minimal skills of organization through participation in other local associations or through learning about organizational methods of neighbouring groups.

Source: Ostrom, 1999

monitoring porous boundaries and enforcement within those boundaries (McKean, 2000). Also, there are resources that make an important contribution to the livelihood systems of the users. Collective management has historically been particularly prevalent where forests have provided critically important inputs into agriculture (e.g. providing replenishment of soil nutrients through green mulch or tree fallow), where livestock management depends on access to woodland or forest (as in arid Africa and Asia), or where forests provide important dietary inputs (e.g. in high forest regions without livestock). The quality of the resource, and its capacity to yield returns that are commensurate with the costs incurred in protecting and managing it, are also likely to be important factors.

(2) Collective capability for resource management.

There is the presence of, or ability to create, a local institution able to effectively control and manage the resource on behalf of the community of users. Effectiveness or ineffectiveness in this respect can often be linked to the size of the group and commonality of interests about the resource within it, the powers to define membership and create and implement group management rules vested in the institution, and the availability of functioning conflict management and resolution mechanisms. Much of recent research and experimentation with collective community forestry has focused on trying to clarify the circumstances in which increasingly heterogeneous rural populations might be able to create and operate effective collective management regimes.

(3) A supportive policy and support framework.

There is the willingness and ability of governments to create a policy and legal basis that creates or reinforces the local rights with respect to forest resources, that empowers the local institutions to control and manage the exercising of these rights, and that authorizes the relevant government institutions to effect and support this transfer of responsibilities and rights. Of equal importance is the willingness of the political and administrative machinery of governments to implement such changes in ways that transfer real power to community forestry groups, and not to thwart this by interpreting change in ways that effectively leave control in the hands of forest departments and the local extensions of governing political interests, or of industrial or other external interests.

The wide range of community forestry forms that have emerged in part reflect substantial differences in the importance of the factors outlined above in the various situations. Governments still seeking to extend their political presence across relatively new nations are likely to view transfer of authority over forest areas differently from those seeking to devolve responsibilities away from the centre. Where forest resources are no longer of significant revenue or strategic value to governments, the potential for community forestry that increases the share of benefits from forest resources that accrues locally is likely to be greater than where they are still important centrally. Situations with strong, well-entrenched forest departments present different

potentials, and constraints, from situations where the government presence in forestry is weak.

In practice, collaborative systems range from situations where full control, and even ownership of the forest, is transferred to a local body through a community forestry programme, to situations that do no more than create, or legitimize, limited local rights to particular forest product usages. Most lie somewhere in between; with the State granting additional rights and powers, but often retaining ownership and a share of the resource and benefits, and rights of approval and enforcement of the agreement for such co-management.

The arguments in favour of co-management, or joint management, by governments and resource users have become more prominent as it has become apparent that often user communities and institutions are unable to take on responsibility for control and management unaided, and that the alternatives of continued State control or privatization are also unsatisfactory. The concept of co-management, therefore, promotes the idea of trying to develop equitable partnerships, drawing upon the complementary strengths of forest departments and local users. In principle, the government, rather than withdrawing from forest control and management in favour of local users, would reshape its responsibilities to ensure the largest measure possible of involvement by the latter, and to ensure collaboration rather than conflict between the two (Berkes, 1997; Baland and Platteau, 1996).

Within forestry, co-management has become increasingly prevalent because it appears to offer, among others, the following advantages to the State.

- It enables the government to continue to exercise a regulatory role (this is important where there are significant environmental externalities associated with the use of forests or forest lands).
- In State forests it transfers some of the responsibility for, and cost of, forest protection to local user communities, and also enables the forest department to retain control over components of the resource that are of direct value to the State (e.g. timber and forest land).
- It can facilitate the provision of government support (e.g. investment, technical assistance and strengthening of local institutional capability) to user communities.
- It may enable the forest department to act as an adjudicator in disputes among stakeholders who have conflicting claims on the forest.

The danger is that, in practice, co-management may result in a situation in which government agencies continue to exert too great a measure of control. To be effective as a vehicle for real *community* forestry, it must achieve the right balance between the main parties involved.

Co-management in practice

The four programmes, or groups of programmes, discussed in this section represent relatively long-established and substantial examples of community forestry co-management. They cover a range of different resource, user, institutional and policy combinations. The first two represent government initiatives to increase local involvement in management of State forests. The India programme reflects a situation in which there is a strong, relatively well-resourced forest department, whereas the programmes in West Africa reflect a situation where this is not the case. In the other two examples, changes have been effected that have resulted in a greater level of local empowerment, reflecting a greater measure of local rights prior to the community forestry initiatives. In the case of Mexico, these changes have also enabled local users to become actively involved in industrial forestry.

FOREST CO-MANAGEMENT IN WEST AFRICA⁴

Historically, much of the forest resource in the region was controlled by traditional authorities, as part of broader systems of control of land and use of land. In most countries, these systems became over-

laid in the colonial and postcolonial periods with varying degrees of State tenure and control over forest and tree resources, and often over tree-bearing land. Particularly in the high forest zone, timber-rich forests have been important sources of government revenue, dedicated to industrial rather than local use.

The move towards more participatory forestry began in the late 1980s, encouraged by donor interests in conservation and more sustainable management of natural resources, and in community management as a means of achieving this. For governments lacking the resources to administer large and remote areas, community forestry had the added attraction that it could shift some of the cost of forest protection and management to communities, and has the potential of reducing destructive actions of rural populations that earlier felt excluded from access to forest benefits. However, the budgetary weaknesses that encourage forest departments to devolve responsibilities for local forest management can mean that they are unable to provide the support services needed to make community forestry effective.

The process varies from country to country, but usually involves contracts with community-level institutions that set out commitments (such as provision of labour for protection and planting) in return for rights and benefits (such as the right to harvest and sell forest produce, and exemptions from fee, royalty and licensing requirements). However, the benefits to participating communities are often limited by

the fact that areas available for community forestry are concentrated in poorer forests, whereas any benefits from richer areas that continue to be reserved for industrial use are confined to transfers of some of the revenue generated from timber sales.

Progress towards arrangements for forest management and control that favour local populations has also been constrained in practice by difficulties in securing effective, representative and equitable control at the local level, and because of problems of multiple users and poorly functioning local institutions. In French-speaking countries, such as Burkina Faso, Guinea, the Niger, Mali and Senegal, the initiatives to decentralize forest management to local groups have been strongly shaped by codes and constitutions that set up levels of national, regional and local government, and by electoral codes and technical codes such as land tenure and forest laws, which between them determine who gets to make which decisions. The way that these intersecting laws are interpreted and operate in practice has often meant that decentralization of forest management has not resulted in the passing on of rights and powers of decision to representative local bodies.

Devolution in these countries has usually involved village chiefs or rural councils. However, chiefs, who are chosen by government-sanctioned processes, are often effectively part of the administrative system. Though rural councils are usually made up of elected representatives, these often tend to be linked to national political parties or in other ways



In West Africa, local forest management usually involves commitments, such as protection and planting, in exchange for rights and benefits, such as the right to harvest and sell forest products.

are not independent of the government administration. The result is that local bodies tend to be responsive to the administration and the State, rather than to their members. In English-speaking countries, such as Ghana, traditional authorities are often stronger, a situation that reflects their role in colonial strategies of 'indirect rule'. However, chiefs are often among the wealthier and more entrepreneurial members of the community, and their interests can be more closely allied to the interests of traders and loggers than to those of their constituency members. Elected local bodies are not likely to be dominated by members linked to national political parties, but they generally cover quite large geographical areas; this makes them less than optimal

⁴ Based on Adams and Hulme, 1999; Brown, 1999; Leach, 1999; and Ribot, 1999.



A forester meeting with a community group in Mali to help them develop a forest management plan.

for handling village forests. In practice, devolution either through leaderships or local government can mean that control and benefits are passed to local élites and outsiders.

The problem of securing effective representation of local interests is compounded by the highly differentiated nature of many rural populations. The development of rural areas in much of West Africa has been heavily dependent on labour provided by groups that migrate from other parts of the region. It is now not uncommon for populations to comprise

several different ethnic and cultural groups, which have markedly different interests with respect to local forest resources and land. Transferring ownership or increased use and control rights to such communities, where there are multiple conflicting interests within the community, will not by itself ensure sustainable or equitable community forestry.

Progress with devolved community forestry has also been shaped by a framework of forest department rules and regulations that limit rights and benefits, and effectively circumscribe the authority and freedom of action of the recipients. In French-speaking countries, policies dating from French colonial times concentrated control in the hands of forest departments and urban traders. Even where subsequent devolution policies have transferred a measure of authority to local bodies, commercial forestry activities are often still subject to forest department approval, supervision and even control. In Mali, for instance, an individual or group wishing to engage in commercial fuelwood harvesting must form an organization recognized by the government and apply to the forest department to develop a forest management plan. This must be approved by the local government, if the forest is within its jurisdiction, but the forest department retains powers of adjudication. In some other countries, the local government does not even have the right of approval or rejection (Ribot, 1999). Forest departments can, therefore, continue to exert strong control, to the extent that it is argued that community forestry can in practice increase rather than diminish forest department control.

Due to these problems in achieving devolution that delivers effective benefits to heterogeneous user populations through existing institutional structures, some countries have focused on granting legal recognition and decision-making authority to smaller, area-based groups, as in the ‘village territories’ approach in some French-speaking countries. This has been a positive departure from the top-down, centralized approaches of the past, but it is not necessarily more effective in communities where there is a diversity of interests among users of local forest resources, and there is no mechanism for resolving conflicts arising from this diversity. Another approach, often project-based, has been to encourage the emergence of smaller, more homogeneous groups to which rights of management and use can be granted. The formation of *groupements forestiers* can give them clearer and stronger rights, but within a framework of tighter forest department regulations. As one observer has noted, this can lead to “real tension over whether the approach represents decentralization or further centralization of control over forests” (Leach, 1999).

In brief, moves to develop forest co-management in the region have been constrained by a number of factors that make it complex to implement without measures to deal with the presence, and differing interests, of multiple stakeholders. This suggests that, to be effective, community forestry may need at least as much support from the government as traditional forestry, though in different forms.

JOINT FOREST MANAGEMENT IN INDIA⁵

The Joint Forest Management (JFM) programme in India provides one of the largest and more fully developed bodies of experience with co-management in community forestry. It has been developed in a category of State forest lands, Protected Forests, in which local rights were recognized, but which historically had been managed by a large and well-resourced forest department, with extensive experience of conventional territorial forestry.

JFM evolved from the Social Forestry programmes discussed in Chapter 1, which attempted to meet rural needs and to prevent overuse of forest resources by encouraging the creation of village and farm tree resources on land outside forests. The shift in focus to co-management in State forests occurred when the 1988 Forest Policy brought about a radical change in the priorities for the forest sector. The Forest Policy subordinated direct economic benefit to environmental stability and provision for subsistence needs, and it stated that forests were not to be commercially exploited for industrial uses. For the first time, environmental stability and provision for the subsistence requirements of local people were given greater prominence than industrial use and generation of government revenue; the policy document included specific reference to providing for the domestic requirements of “tribals and other poor living within and near forest”.

⁵ Based on Khare *et al.*, 2000; Kumar *et al.*, 2000; Sarin, 1998; World Bank, 1998; Saxena, 1997; Hobley, 1996; and Poffenberger and McGean, 1996.

In June 1990, the Government of India followed this up with a circular to state governments recommending the adoption of JFM on areas of state forest land. The principal features of the circular were the following.

- JFM should be an arrangement between the village community, non-governmental organizations (NGOs) and the state forest department, with management plans established and supervised by the forest department, which has the authority to cancel the agreement if it becomes dissatisfied with the way it is being implemented.
- Only people who are organized in village groups specifically for forest protection are to be granted access and benefits (which cannot be granted to individuals); anyone who has an existing claim to forest produce should be given the opportunity to join.
- Beneficiaries should be entitled to usufructuary rights to grass and minor forest products (and potentially to a share of the income from the timber and other products sold by the forest department); grazing or agriculture is prohibited (though grass can be cut for feeding to livestock, and fruit-trees may be planted).
- Only degraded forest areas in Protected Forests are eligible.

By 1997, 17 states had adopted such collaborative programmes involving local communities in the



FAO PHOTO FO-0258/T. Heier

Gathering and selling fuelwood is often an important source of income for the poorest women in areas covered by the JFM programme in India.

management and protection of forest lands in return for rights to use specified forest products. In each, the local vehicle for implementing JFM has been some form of Village Forest Committee (VFC), set up for this purpose.

Not surprisingly, in such a large and diverse country, the results of applying the JFM approach have var-

ied considerably. In the original area, in the south-west part of the State of West Bengal, where the underlying approach was first developed in the 1970s, there have been tangible results. This is an area where most of the land was previously a mixed forest dominated by sal (*Shorea robusta*) that had been heavily cut for fuelwood, poles and other products. The process of resource degradation was depleting subsistence and income flows, and was adversely affecting agricultural productivity. Under the JFM programme, villagers would refrain from fuelwood cutting and grazing and take on more responsibility for protecting the forest, in return for a substantially greater share of the proceeds from the restored resource.

Case studies show that, under the programme, fuelwood availability has increased, there has been a significant improvement in the local environment (including reduced erosion and improved water supplies), and there has been a reduction in seasonal out-migration, suggesting that incomes from employment and from sale of non-timber products have increased. Moreover, this appears to have been of greater proportional benefit to many of the poor (Pattnaik and Dutta, 1997).

The approach has been most successful in villages bordering extensive tracts of degraded forest land, where the forest-to-household ratio is relatively high, there are ethnically homogeneous communities possessing local forestry knowledge, and benefits accrue from minor forest products at a relatively early stage.

JFM has also been successful in the mangrove forest areas in the southern part of the state, due to the protection that it offers against flooding and erosion brought about by improved management. Much less progress was made in trying to extend the approach to the northern region of West Bengal. There, the forests are less severely degraded and contain substantial timber components of continuing value to the forest department, but fewer non-timber forest products of interest to villagers who have more attractive non-forest alternatives available to them.

Thus, even within the confines of a single state, it is evident that the potential for collaborative management of this nature varies considerably. As a consequence of such experiences, JFM is now coming to be seen less as a pre-set formula and more as a set of principles and a process, to be modified and adapted to local circumstances. Some states (and some parts of individual state forest departments) have shown considerable flexibility and innovation in interpreting and applying JFM. This is a conclusion that needs to be underscored, because JFM has provided a model for co-management arrangements not only in India, but also in other countries, and particularly in Africa. It is important, therefore, to recognize that such approaches need to be designed to fit the particular characteristics of each situation.

Some of the issues that have arisen are summarized in Box 9. Some relate to difficulties in ensuring sufficient incentives to local participation in JFM. Pursuit of sustainable forest management usually means

Some issues that have arisen during implementation of Joint Forest Management in India

BOX 9

RESOURCE FACTORS

- Restriction of JFM only to degraded forests limits the potential benefits users can obtain, which can reduce their commitment to forest management.
- Pursuit of conservation usually means restricting or prohibiting existing gathering or harvesting activities that are of importance to sections of the poor. Subsequent changes in the composition of protected forests can have a detrimental impact on the poorest and most vulnerable in the community, unless measures are taken to offset the impacts of the changes.
- If protection through JFM is introduced only to individual communities and forest areas, the pressures of overuse are likely to be transferred to other areas.
- A focus on producing plantation products can mean that the benefits local people obtain from forests can shift from products that help meet immediate subsistence needs to commercial products that can be sold, and generate income, in the future. (Creating plantations can also displace present grazing and gathering users.)
- Plantations can create important benefits from employment and wages in their early years, but it can be difficult to provide a continuing flow of benefits in the years between the establishment and harvesting phases (employment as a benefit can also distort

incentives for participation away from forest management, and it risks diverting people from other activities that may provide a more even flow of benefits).

- Management plans developed by forest departments for plantations tend to require forestry skills, reducing the potential for user participation in the planning process.

VILLAGE FOREST COMMITTEES AS THE LOCAL IMPLEMENTING ORGANIZATION

- Some VFCs tend to be dominated by the local élite, and consequently may not adequately represent the interests of some of those most dependent on forest products.
- Where a VFC exists just as a committee of the forest department, without links with the *panchayat*, or without a recognized legal status, it may lack authority in dealing with the intragroup and intergroup conflicts that JFM can generate.
- The need for self-initiated forest protection groups to bring their procedures into line with those of JFM, in order to benefit from the legitimization of their rights to use the forest that this would bring, can lead to a considerable reduction in direct benefits to their members.

- There is no national legislation: the 1988 Forest Policy is a non-statutory and advisory statement issued by the government, and it can be challenged in courts of law. State-level JFM programmes are embodied in administrative notifications, and they do not have the firm legal basis that they would have if they were included in forestry legislation proper.

REVENUE SHARING AND ACCESS TO INCOME

- VFCs in some states get only small shares of the revenue, and forest departments can be slow to transfer these funds to them.
- JFM regulations can mean that some revenue that previously accrued to gatherers now has to be shared with the VFC and the forest department, and product flows previously used to meet subsistence needs may be diverted to sales.
- Regulations encouraging and enabling wide membership in the VFCs can mean that people join just to share in the income accruing to them.
- JFM areas are not exempt from existing regulations that require producers of non-timber forest products to sell to government forest corporations and other authorized organizations.

restricting or prohibiting existing gathering or harvesting activities that are important to some of the poor members of the community, at least temporarily. Though subsequent management of the forests can be structured to favour species and products of local value, the resulting changes in the composition of protected forests are likely to have different impacts on different categories of user. Even in the generally successful experience of southwest West Bengal, fuel-wood headloaders, among the poorest in most communities, did not share in the increase in benefits (Hill and Shields, 1998). Unless measures are taken to offset the negative impacts of the changes it brings about, the introduction of JFM may, therefore, be detrimental to the most vulnerable in the community.

In addition, exclusion of richer and more productive areas of forest limits the potential benefits users can obtain. In some areas, the forest available for JFM has proved to be unable to generate benefits commensurate with the costs local people are being asked to bear. In some JFM programmes, therefore, additional benefits have been introduced. These can take the form of wage employment in forest department activities, provision of services such as improved roads and water supplies, and provision of financial and technical support to self-help groups to enable them to develop non-forestry livelihood enhancement activities. However, questions arise as to how sustainable such measures can be.

Issues also arise over the distribution of costs and benefits among the forest department, the VFC and individual members of the committee. Bringing



FAO PHOTO 1947/6/G. BIZANTI

An important issue facing forest protection committees is how to create effective venues where women users can express their concerns.

production of more valuable products under JFM regulations can mean that some revenue that previously accrued to gatherers now has to be shared between the forest protection committee and the forest department. Some states have acted to reduce this disincentive by substantially increasing the share of the revenue that goes to the village committee.

Other problems relate to the presence of multiple stakeholders with overlapping or conflicting interests. Issues include:

- how to create forest protection committees that are representative of the different categories of

user within a community (often with particular concern about providing an effective venue where women users can express their concerns);

- conflicts that arise with prior users of the forest who have been excluded from membership in the committee;
- how to avoid 'free riders', people who become members of the committee solely to get access to the income and other benefit flows it controls; and
- the nature of the relationship of the VFCs (which are recognized only by the forest department) with other community institutions, particularly the *panchayat* system of local-level political and administrative institutions.

Perhaps the most fundamental issues are those concerning the balance between forest departments and villagers in the functioning of JFM. The state retains legal title to the forest areas allocated to JFM, and specifies which areas may be included. The VFCs are initiated by the forest department, which assigns a forest department staff member to the committee, supervises the application of their operational rules, and can dissolve them at will (without compensation). The JFM arrangement is consequently one that is ultimately controlled by the forest department. There is thus a danger that, in practice, JFM could result in an extension rather than a devolution of forest department control and influence, and could serve to promote a

protection agenda rather than the interests of village members. However, recent studies increasingly show that, at least in the more progressive state programmes, JFM has achieved considerable progress in moving towards forms of implementation that are more responsive to local needs and concerns. In the process, there has often been a marked improvement in the relationships and understanding between foresters and local people (Jeffery *et al.*, 1998).

HILL COMMUNITY FORESTRY IN NEPAL⁶

In the Middle Hills of Nepal an unusually strong system of co-management of community forests has evolved, well backed by legislation, in an area where there remain high levels of dependence on forest products and well-entrenched traditions of self-sufficiency. Historically, hill forests were controlled under various forms of tenure, some feudal, some in the name of the State, and some communal. As a result of the overthrow of the feudal system in the 1950s, the forests of feudal owners were brought under the control of the State, under the Private Forests Nationalization Act of 1957. Where local leadership was strong, more local groups appear to have taken steps to bring the forest areas that they used under their own *de facto* communal control during that period, in order to secure their continued access to them.

⁶ Based on Shepherd and Gill, 1999; Shrestha and Britt, 1997; Malla, 1997; Gilmour, 1997; Hobley, 1996; Shrestha, 1996; and Gilmour and Fisher, 1991.

In 1978, the government passed legislation enabling substantial amounts of public forest land in the Middle Hills to be handed over to local communities to manage, in recognition of the practical difficulties of managing the country's dispersed forest resources through the forest department. Local management was to be achieved through the *panchayats*, the lowest level of political and administrative organization, which would enter into agreements with the government to manage local areas under agreed forest management plans.

Initially, progress was slow. Villagers were suspicious that it was just another way of abrogating their customary rights. Procedures were cumbersome, and *panchayats* usually proved to be unsuitable bodies for undertaking local forest management, as the areas they administered seldom coincided with user group boundaries. Though forest management committees were formed, they seldom functioned as representative discussion and decision-making bodies.

Following passage of the Decentralization Act in 1982, responsibility for management began to be transferred to forest user groups, incorporating features of the indigenous control and management systems that many communities in the Middle Hill areas were already practising. With the abolition of the *panchayat* system in 1990, more authority and responsibility were progressively devolved to these groups. These new institutional formats were formalized in the 1989 Master Plan for the Forestry Sector, and the user group approach was given legal authority in the 1993 Forest Act. Ownership of the

land remains with the State, but trees legally belong to forest user groups, though the State reserves the right to take back possession of the community forest if the terms and conditions of handover are not met. Management control rests solely with the users of the resource, who now develop their own operational plans (which have to be approved by the forest department), set the prices at which the produce is sold, and determine how surplus income is spent.

By January 2000, there were 8 900 registered forest user groups (FUGs), managing 652 000 ha of forest, and many more were waiting to be registered. User groups are now coming together and forming larger



Villagers in Nepal meeting to decide what kinds of trees to plant.

network organizations. The largest network, the Federation of Community Forestry Users in Nepal (FECOFUN), with more than 1 000 user group members, is taking on a negotiating and mediating role, and is providing members with some services previously provided by the forest department.

Issues still arise, both within user groups and among them, and with the forest department. Concerns have been expressed about several issues: possible domination of user groups by local élites; the question of whether women are properly and effectively represented within groups; potential conflicts over responsibilities between FUGs and the evolving system of local government bodies with overlapping mandates; and recent moves by the forest department to increase the level of control its staff can exercise over management decisions in user group forests. Nevertheless, the Nepal experience has been encouraging; advancing democratic management of forests by local users is to be found in most situations, giving it a strong institutional basis and bringing about an attitudinal shift within the forest department towards facilitating local efforts.

Moreover, where user group management is active, illegal logging, overgrazing and forest fires have usually declined, and the condition of the managed forests has often improved. This has generally been achieved by user groups that adopt conservative, protective management practices. Concerns have arisen that the resulting reduction in harvests by comparison with earlier practices could mean that pressures are being diverted to areas of forest outside commu-

nity forests, and could be disadvantaging some of those users who drew most heavily upon the community forests. A challenge to the system at present, therefore, is to encourage more productive community forest management.

The considerable measure of success of community forestry in hill areas of Nepal evidently reflects both well-focused and well-delivered government interventions, and also the fact that the hill areas of the country demonstrate many of the resource and user attributes favourable to this form of governance. Forests are very important to the functioning of hill systems; they provide fodder and bedding for the livestock that are critical to hill agriculture, fuel and construction materials, and sources of income. Both richer and poorer among users have historically had a shared interest in these outputs from the forest and, as a consequence of their isolation, many hill communities have a long history of managing their local resources.

However, the hills are being exposed to changes in these attributes. People are migrating to take advantage of employment opportunities elsewhere; the hill areas are gaining access to markets and supplies of purchased goods; and children are spending more time in school. These are some of the changes that are altering the conditions that have favoured collective management of local forests. With less labour available on farm, more marginal agricultural areas are being withdrawn and are often recolonized by, or planted to, trees, thus creating sources of tree products nearer to the home. Expanding market

opportunities and alternative livelihood opportunities for some can increase internal differentiation within FUGs, leading to conflicts over objectives to be pursued in managing their forests (e.g. disagreements over whether income from community forests should be distributed to members or spent on community welfare). It is too early to say how these developments will evolve. However, the fact that user group forestry is by now well established, and is growing so vigorously, encourages the idea that it will be able to adapt to such changes.

COMMUNITY MANAGEMENT OF FORESTS IN MEXICO⁷

The recent experience of Mexico in developing stronger and more effectively participatory community forestry institutions and practices has been among the most advanced and important, involving resources that often have the potential to generate substantial economic benefits locally. Much of the country's forest resources (up to 90 percent in some states) is on community land, and 17 million of the country's poorest live in these forested areas (Wentzel, 1999). Rights to these lands were granted to communities (*ejidos*) after the 1910 revolution. Arable land was typically assigned to individuals, but forest and pasture land was held in common. *Ejidos* owned the forests, but were not permitted to sell or transfer the land.

⁷ Based on Taylor and Zabin, 2000; Chapela, 1999; Wentzel, 1999; Landell-Mills et al., 1999; Richards et al., 1995; and Richards, 1992.

However, in practice, these community forest resources were controlled by the government, which granted logging concessions to private sector and parastatal forest industry companies. The members (*ejidatarios*) of the *ejidos* benefited very little, as regards both income and employment. A nominal stumpage fee was paid into a community development fund administered by the Ministry of Agrarian Reform, but little was transferred to the *ejidos*. Because it generated so little benefit for them, the concession system in effect pushed *ejidatarios* towards conversion of forest land to agriculture and animal husbandry. This form of management was thus encouraging deforestation rather than conservation.

Control over natural resources became a component of peasant unrest (Castanos, 1994). In the mid-1970s, peasant organizations, supported by policy reformers within government, campaigned to change the system so they could participate more directly in control and exploitation of their forests, and benefit more substantially and sustainably from the proceeds. In the mid-1980s, new legislation, culminating in the 1986 Forestry Law, transferred decision-making power over forest harvesting to the *ejidos*, on condition that they meet sustainable forest management requirements (such as a management plan drawn up by a forester), to be monitored by government Units of Conservation and Forestry Development (UCODEFOs). Stumpage fees, set by the market, were to accrue directly to the *ejidos*.

The technical assistance functions previously assumed by the government were decentralized, and the role of the State was reduced essentially to one of supervision and support. *Ejido* organizations that took on management and operational roles were encouraged to participate in cooperative federations set up to provide technical and organizational support, particularly technical assistance, marketing and liaison with government. Initially, government provided considerable subsidized support to these 'forestry civil societies', as part of its broader efforts to actively encourage and help *ejidos* to assume responsibility for production. By the early 1990s, 40 percent of forests with commercial value had management plans for extraction; of these, 40 percent sold timber standing, another 20 percent extracted and sold timber themselves, and another 20 percent had sawmills.

By the early 1990s, demands for market liberalization had become another powerful force for change in the country and in the forest sector. Following modification of Constitutional Article 27 in 1991, the 1992 Agrarian Law allowed *ejidos* to divide communal land that could be purchased and sold, and permitted groups of *ejidatarios* to use their share of the communal resource to engage in commercial activities, and also to enter into joint ventures. Concerns have been raised that this could undermine community-level forestry, encouraging *ejidos* to convert forest land to other uses, but actual change of this kind has been limited. However, it has encouraged more *ejido* involvement in logging and processing, and in investment in plantation establishment.

A new Forestry Law in 1992 greatly reduced government involvement in forestry, not only removing unwieldy bureaucratic regulations but also eliminating subsidies and technical assistance to community enterprises. Provision of technical services to communal landowners was privatized, and *ejidos* had to contract such services from private contractors or their forestry associations. Forest management requirements were to be enforced through harvesting permits, subject to the approved management plans, and a network of forestry associations (UNO-FOC) to promote sustainable forest management.

Market liberalization also exposed community enterprises to global competitive forces. Competition with low-cost imported timber as a result of the North American Free Trade Agreement (NAFTA) has made it difficult for many of them to operate profitably. Lack of business and marketing skills within *ejido* forest enterprises, and lack of adequate capitalization at the *ejido* enterprise level, are other problems they confront. In recognition of the difficulties *ejidos* face as a result of the shift from rural development to market liberalization policies, a government financial incentive plan (PRODEFOR) was introduced in 1997 to facilitate measures such as making management plans, and providing access to information and training.

The impact of this succession of changes on one of the most highly developed groups of *ejido* forest management enterprises, in the tropical State of Quintana Roo, is summarized in Box 10. This, and

other comparable experiences elsewhere in the country, indicate that the earlier radical expansion of peasant participation in forest management and control often resulted in incomes being raised, and forest loss being slowed down. However, the subsequent changes in favour of market liberalization have opened the way for new types of economic organization within *ejidos*, and transfer of technical functions to the private sector, which tend to weaken forestry civil societies' ability to perform delivery, advocacy and regulatory roles. In many situations, there is a shift away from community control towards private interests and market-based initiatives. There are concerns that this is a process from which only some *ejido* members are likely to benefit, and that could disadvantage the poor.

Conditions that favour collective and joint management

Though devolution to collective management at the local level has attracted much attention over the past 15 years or so, relatively few studies have focused on understanding the conditions in which it may actually be accomplished successfully (Agrawal and Ostrom, 1999). Similarly, little scholarly work addresses the issue of when co-management is feasible (Berkes, 1997). Therefore, there are few clear explanations

Plan Piloto Forestal, Quintana Roo, Mexico BOX 10

In the forest areas of the tropical State of Quintana Roo, there has been a long history of exploitation for chicle and mahogany, and other timber and non-timber forest products. An earlier pattern, in which small logging contractors worked with local communities (*ejidos*), was replaced in the 1950s by a 30-year concession to work 550 000 ha of these forests; the concession was awarded to a large parastatal company, Maderas Industriales de Quintana Roo (MIQRO). In the early 1980s, as this concession was approaching its end, a state government supportive of rural development cancelled it and turned over responsibility for management of the forests to local *ejidos*.

In 1982, a Plan Piloto Forestal (PPF) project was set up, initially to support ten *ejidos* that had progressively taken over responsibility for management and exploitation of their forest resources. Subsequently, the coverage of the plan was expanded, and by 1995 about 50 *ejidos* covering 500 000 ha were involved. Each *ejido* created its own operational cooperative. In organizing and running their operations, many *ejidos* have been able to draw on a long experience with chicle cooperatives. The general assembly of the *ejido* allocates jobs and decides on disposition of revenue. This can give rise to conflicts between business imperatives and the socio-political context of the *ejido*; there can be pressures to distribute profits to members, or to meet non-forestry needs of the community, rather than to reinvest in the forestry enterprise. As a result, the latter have often been undercapitalized. Rotation of jobs, in accordance with traditional practices, encourages social cohesion but can weaken business efficiency.

Four cooperative forestry civil society associations were set up, covering different areas. The first covers an area with relatively rich mahogany forests that have provided

substantial benefit flows to member *ejidos*. This is a large group, and some of the larger member *ejidos* have been able to invest in processing. The second association is in an area with a less mahogany-rich resource, and with fewer members, and it has had to focus production and marketing on railway sleepers, a less remunerative product. The last two associations have fewer *ejido* members and even fewer timber resources, and they have had to focus on developing other forest-based activities, such as agroforestry and non-timber forest products. Because their leaderships are elected, the associations have internal credibility and can help resolve internal social and political issues, and they can push through unpopular measures such as reduction in allowable cut. Therefore, they play a very important role.

In its early years, the PPF generated rapid increases in local benefits. Active marketing increased prices and expanded the range of species sold, ensuring larger income flows. In addition, deforestation slowed down sharply. More recently, there has been a decline in the quantity and quality of the resource available, which has

resulted in lower returns from forestry and has reduced the incentive to *ejidos* to pursue sustainable forest management. Those associations and *ejidos* with a poor forest resource base have often found it difficult to maintain their members' interest in forest management, which consequently has declined in favour of agriculture.

Market-oriented pressures to convert *ejido* enterprises into modern business enterprises have put a premium on efficiency, and this can conflict with the welfare function of *ejido* institutions. Some *ejido* forestry enterprise organizations have taken advantage of the opportunities provided by the 1992 Agrarian Reform for new forms of organizing forestry activities, and have reorganized as self-contained semi-autonomous work groups, each of which is allocated a proportion of the forest resource, in order to address these efficiency problems. Concerns have arisen that this could lead to division of the forest land, and that, together with the exclusion of non-group members from forest benefits, it could undermine the unity of the *ejido*.

Smaller associations, with lower-value resources against which to charge costs, are also finding it difficult to fund technical assistance, now that the earlier government subsidies have been withdrawn. In addition, some richer *ejidos* are leaving their association, and are contracting technical assistance and marketing services from private-sector organizations in order to avoid subsidizing poorer *ejido* members of the association. The associations are consequently becoming weaker and less effective, as the broader development focus shifts towards approaches that are more driven by market forces.

Sources: Taylor and Zabin, 2000; Wentzel, 1998; Richards et al., 1995; and Richards, 1992

as to why, in practice, devolution does not necessarily ensure more equitable access to forest benefits, or lead to sustainable forest development, or result in satisfactorily functioning institutional arrangements.

In assessing what lessons might be learned from experiences such as those outlined in the previous section, the following discussion is organized around three issues that often appear to be central to the success, or lack of success, of co-management of forest resources in practice.

- (1) Incentives for rural populations to conserve and manage their local forest resources are often weak, or are offset by substantial disincentives.
- (2) Governments often fail to provide the local organizations to which they devolve responsibility with sufficient real authority and support to enable them to exercise their rights and manage their forests effectively.
- (3) User populations can face constraints and problems that make it difficult for them to organize and function satisfactorily as collective managers of local forest resources.

INCENTIVES AND DISINCENTIVES

The issue of incentives and disincentives for user groups to engage in collective management of local forests revolves around the questions of whether sustainable forest management will produce

sufficient benefits for the participants to make this worth while and, if so, whether management is best achieved through collective arrangements. In this section, three aspects of this issue are examined. The first is the potential of the resource to produce forest product flows, and the question of whether these compare favourably with alternative uses of the land. The second is the impact of regulatory constraints, in particular those associated with conservation of the resource, on the cost-benefit balance. The third is the impact of growing exposure to market forces, in particular the impact on the choice between collective and private forms of management.

Adequacy of benefit flows from a forest resource

Communities are likely to be prepared to bring a local forest resource under management for forest products only if this appears to offer greater benefit to them than other uses of the land on which the forests are located. Where rural development has been based on the expansion of the area under agriculture, it is more likely that forests will be cleared rather than conserved and managed.

Areas that have resources of sufficient size and quality to provide benefit flows commensurate with the costs of management, areas that are not so heavily degraded or reduced in size as to require a sizeable investment of time and effort in order to become productive, and areas that local users know how to manage, are evidently more likely to form the basis for successful collective forest management

than areas that do not have these attributes. The strength of community forestry in mahogany-rich areas in Quintana Roo, and in sal-rich areas of West Bengal, relative to neighbouring areas that are less well endowed with resources, emphasizes the importance of resource quality and abundance in encouraging users to commit themselves to local management.

This suggests that the widespread practice of restricting community forestry to degraded or poorer areas of forest has often weakened its attractiveness to local users. Though programmes such as JFM in India can often improve the quality of the resource through enrichment planting on the degraded areas that are available, and provide wage employment in so doing, issues arise as to whether this can provide a sufficiently valuable resource to sustain local interest. Queries have also been raised as to whether those who are most affected by the change share proportionately in the benefits (Hill and Shields, 1998). Another concern is whether wage income from forest department work really creates a local sense of involvement and commitment to sustainable forest management, or whether it is merely “paying communities to protect forest resources” (Kumar *et al.*, 2000).

Another issue, given the relatively long-term nature of much forest management, is whether changes in the demand for forest products, and in the competitiveness of forest product activities relative to other sources of income, of the kind reviewed in Chapter 2, are likely to increase or diminish local interest in the

forest resource in the future (Byron and Arnold, 1999). In a recent study in an area in western Malaysia, for instance, it was found that the number of forest species used or sold as food, medicines, etc., had declined during living memory from 279 to 71 (Lim Hin Fui and Jamaluddin Ismail, 1994). Incentives to engage in collective control and management of a local common pool forest resource are evidently likely to become weaker as the role of its products in local livelihood systems declines in this way.

Benefit flows to local people can also be reduced by government regulations and practices that reserve significant shares of the benefit flows to the State. This can take the form of revenue-sharing arrangements, or imposing stumpage charges or other forms of taxation, or requiring local producers to sell their produce through government marketing bodies, as has been the practice in parts of India. Or, as has often happened, forest departments may retain control over the timber or other important commercial product components of forests allocated for joint management. In contrast, an important feature of the recent advance of community forestry in Latin America has been the inclusion of timber in the resource available to communities for exploitation (Wentzel, 1999).

Disincentives created by conservation restrictions

Restrictions placed on forest use in order to protect forests brought into community forestry schemes and put under sustainable forest management can



An important advance in community forestry in Latin America has been the inclusion of timber in resources available to communities for exploitation.

impose costs on local people that reduce their incentive to become involved. Allowable harvests may be reduced and the structure of benefits may be changed, as the composition of the forest changes under management. In fact, it is difficult to find programmes that have not had at least a transitional adverse impact on those who have had to cut back or give up earlier gathering or grazing activities. This has sometimes occurred in unexpected ways. Recent research in Nepal, for instance, showed that the structuring of community forests to yield products such as fodder, mulch and fuel, which appeared to be most used locally, could in practice favour the landed and those with livestock, rather than the landless, who need saleable products from the forest (Richards *et al.*, 1999).

Restrictions placed on forest use in pursuit of conservation objectives can also significantly reduce the potential to generate satisfactory returns to local users. A recent study of experience with initiatives to encourage conservation-compatible types of forest production in Latin America concluded that these provide only limited scope for enhancement of the incomes of those engaged in them, and so can have the effect of discouraging sustainable forest management. Thus, with the exception of some situations that are well endowed with commercially exploitable products and well placed with respect to access to markets, confining local commercial use to harvesting and sale of non-timber forest products was found not to be financially rewarding. Similarly, the additional costs of logging practices designed to reduce damage to the remaining forest were found to make timber production uncompetitive (Southgate, 1998).

The difficulties encountered by communities in Mexico in continuing to manage *ejido* forests sustainably in an increasingly competitive environment raise a general issue in this respect: namely, that sustainable forest management, as it is usually defined, reflects global rather than local conservation values. Therefore, there is a need to consider what forms of external support local user groups need in order to be able to accommodate such broader values. This issue, and the related argument that community forestry interventions should give greater weight to conserving the attributes of forest resources that local people value and seek to conserve, is discussed further in Part 3.

Market-related disincentives to manage collectively

In principle, by giving added value to forest products, market opportunities should increase the incentive to control the use and management of forest resources. In practice, market forces can also result in intensive pressures on collective management systems. Thus, the Mexico experience shows that opportunities to use the resource for commercial ends are likely to introduce potential conflicts between the pursuit of profitability and the welfare objectives of collective control of forests. In the process, market forces are likely to increase the transaction costs associated with maintaining a collective management system.

Where market opportunities lead to greater pressures on the resource from users both inside and outside the user group, increased conflicts of interest are likely to arise, as has been seen frequently in the case studies in West Africa, making the process of control more difficult. This can cause breakdown of the mechanisms for exclusion and control, leading to overharvesting and degradation of the resource. More complex controls and institutional measures are then likely to be needed, if collective control arrangements are to be able to cope with the increased pressures (Thomson, 1992).

It has been argued that, given these features, collective management is best suited to meeting subsistence demand, rather than production for the market (Baland and Platteau, 1996). Nevertheless, there are

many functioning commercial activities based on collectively managed forest resources. A study of factors explaining the ability or the failure to adapt collective management systems to deal with producing for the market, as well as for subsistence needs, concluded that: "Communities who seem best able to adapt to commercialization are those with flexibility in determining whether to participate, which allows control over the degree of change, or those in which change has been less rapid" (McElwee, 1994). The greater resilience of the longer-established chicle cooperatives in Quintana Roo, by comparison with the newer *ejido* timber enterprises, when confronted with recent market liberalization policies, appears consistent with this finding.

In some situations, more complex mechanisms that can cope with additional dimensions have been successfully developed. In some, these involve setting up separate arrangements for the subsistence and commercial activities based on a collectively controlled resource. In the Sukhomajri project in the Shivalik Hills in northern India, for instance, fodder grass for local self-use is protected collectively and distributed to all member households, while the rights to commercially valuable bhabbar grass are auctioned to private contractors (Saxena, 1997). In the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) programme in Zimbabwe, communities have formed joint ventures with the private sector to get access to the specialized safari and hunting skills and experience needed to generate commercial revenues from the wildlife resources that they manage (Murphree, 1996). In



Some communities have formed joint ventures with the private sector in order to generate commercial revenues from wildlife resources.

others, marketing (and sometimes production) has been handled by cooperatives of one kind or another. Nevertheless, the recent developments in community timber production in Mexico show how the need to compete with modern-sector producers can accelerate a transformation from collective to private control.

TRANSFERRING EFFECTIVE POWER

One of the most frequently expressed concerns about initiatives to devolve authority to manage forest resources to local bodies is that, in practice, many of them fail to transfer real, or sufficient,

power and authority to those expected to take on the responsibility for forest management. Policies and programmes that actually empower local people to make decisions and set objectives, or at least to have a genuine role in decision-making, are rare. As a result, collective or joint management does not achieve a real transfer of power, which effectively remains centralized (Fisher, 1999).

This can come about for various reasons, but the most common is inability, or unwillingness, on the part of governments to let go. This may be because insufficient attention has been paid to the conditions under which devolution of authority can be accomplished successfully. Devolution involves the willingness of central authorities to give up power to those at the local level, a course of action that often clearly presents difficult choices. In the forest sector, as has been pointed out in commentary on the process in Nepal, “a major problem is that the organization which has been given the responsibility for devolving control of forests to local communities also represents the interests of those who have most to gain by maintaining control of the forests themselves. The Forest Department is being asked to use its authority to give away its authority!” (Gilmour and Fisher, 1991).

Devolution is more likely actually to take place when it provides a strategy whereby central government can pursue its goals more effectively than at present (Agrawal and Ostrom, 1999). As was mentioned in Chapter 1, it is noteworthy that the coun-

tries where collective forestry is most developed (and is strongest) such as India, Nepal and Mexico, tend to have been those that recognized that their existing forestry strategies and practices were failing to conserve essential functions associated with forests, and to contribute to key national objectives, such as rural development, and those where governments had determined to rectify the situation.

Similarly, devolution has been pursued where it has been seen as a less costly strategy for maintaining sustainable forest management at a time when central budgets are shrinking. More proactively, it can be pursued as a means of increasing the influence of the central State at the local level by inserting its presence into the mechanisms of local governance. Devolution is also likely to be favoured where local interests and the interests of the devolving authority are compatible.

There are also several factors that cause devolution not to work satisfactorily in practice. One is that other interests may prove to be stronger than those favouring transfer of control of forest management to local user institutions. In Thailand, for instance, although a logging ban had reduced the commercial and revenue arguments in favour of central control of upland forests, the growing strength of environmental interests, concerned about water supplies for Bangkok, resulted in stricter protective regimes that have hampered rather than strengthened moves towards empowering communal management in these forest areas (Vandergeest, 1996; Wittayapak, 1996).

For there to be actual devolution of authority requires the transfer of significant property rights, though not necessarily rights of ownership, as has sometimes been argued (Agrawal and Ostrom, 1999; Baland and Platteau, 1996). Even where this has been specified in devolution policies, it has often failed to materialize in practice. For instance, policy provisions have not been followed through with the necessary changes in legislation and institutional structures. Though some progress has often occurred without such changes (Fox, 1996), without legislation that provides authority to government agencies and communities to generate and implement the necessary rules, regulations and operational measures, local forest management can be challenged in courts of law, and local groups can encounter difficulties in asserting their rights. Such problems are often aggravated because the legal base is weak and confused. In most countries, Western tenure and more recent systems designed to transfer control over land from local to the new political élites, coexist with community systems, undermining the latter but seldom providing a satisfactory alternative because they are not enforced. This causes confusion, because the legal status of land and forest resources becomes unclear, and this can mean that people can be faced with different fora for settling a dispute under different legal systems (Bruce, 1999).

There have often also been shortcomings in the processes undertaken in order to enable local people to participate in decision-making. The concept of participation, in the sense of ‘having a share or taking part’, has been central to the main thrust of

community forestry. It embodies the underlying aim of ensuring that those who are ‘dependent’ on the forest or its products have a commensurate say in decisions about how it should be used, and an equitable share in its benefits. But participation has been primarily a donor objective, not always shared by governments of *rentier* States without much incentive to stimulate the rural sector. Nor has its pursuit always reflected the realities of the conditions of profound political imbalance within which it is intended that such participation by the weaker segments of society take place (Brown, 1999).

The result has frequently been ‘participation’ that is more apparent than real. ‘Participatory’ mechanisms emerge that enable forest departments to create local partners that become their proxies, rather than representatives of local users able to challenge their actions when necessary (Hobley, 1996). People may acquiesce in such changes, because they have no choice to do otherwise, but they are not empowered by them (Ribot, 1999).

As has been seen in most of the case studies reviewed above, forest departments all too often remain as active (and frequently dominant) partners in local forest management, acting as stakeholders with material interests in the resource as well as government regulators. This frequently results in their prescribing rules and regulations that limit the rights and benefits of user communities and that effectively circumscribe the authority and freedom of the recipients to act (Ribot, 1999; Brown, 1999; Hobley, 1996).

This is likely to undermine the very process of empowering a local institution to deal with its particular situation. Pre-set formulaic rules are unlikely to match the needs of many of the groups to whom they are applied. Rules that cannot be altered by a group can freeze a continuously evolving relationship between people and the resource they draw upon at a particular point in time, preventing its adaptation to further change (Hirsch, 1997). Even in Nepal, considerable disagreement and friction still exist between user groups and the forest department over the rules laid down and monitored by the latter (Shrestha, 1996).

Nor is it just the continuing involvement of the forest department that can affect the extent to which real power over use of forest resources accrues to local users. Others wishing to have a say may include other branches of central government, local government, forest industries and commercial companies, NGOs and other forms of civil society with interests in particular environmental or developmental aspects of the ways the forests are managed and used, donors and international biodiversity interests.

THE SOCIAL AND INSTITUTIONAL FRAMEWORK FOR LOCAL COLLECTIVE MANAGEMENT

Implicit in much of the pursuit of participatory community forestry has been the assumption that the conditions of homogeneous communities that in the past often favoured collective management still

exist, or can be recreated (Campbell, 1990). As has become evident in all the cases reviewed, and from much other experience, this assumption needs to be critically reassessed.

In many situations, migration, market integration, changing attitudes, and differences in asset endowments and access to opportunities, have resulted in communities whose component parts have varying interests in the forest resources in their locality. In reality, communities are often internally differentiated by wealth, power, class, gender and ethnic identity, and are unlikely to share a consensus about how the forest should be managed and used. There can be conflicting interests among the poor between pastoral and settled users, between landed and landless, and because of gender. The need of the poor for continued access to a common pool biomass resource to help sustain predominantly subsistence-based coping strategies can increasingly conflict with the interests of those who are better off and who wish to privatize forest output flows in order to benefit from the opportunities that increasing commercialization of forest products presents, or of those who seek to privatize the land and put it to non-forest uses. All too often, control over access to the forest resource is captured, or usurped, by an emergent élite within the broader community.

Securing the rights of access of the poor to forest product resources in such fractured and often conflict-ridden communities has proved problematic. Exercises in participatory appraisal, relying on methods such as Participatory Rural Appraisal (PRA), which



The particular needs and constraints that women face with respect to access to forest products and control over tree resources are all too often neglected.

are likely to reflect disproportionately the views of the vocal and the powerful, run the risk of failing to represent equitably the interests of those who do not have an effective voice (Brown, 1999). Moreover, participatory models based on assumptions of social and cultural homogeneity can be at variance with the reality, for example, of the scope for women's participation. Equally, attempts to recreate, or build upon, collective systems with their origins in the past run the risk of perpetuating relationships that are not consistent with contemporary values with respect to gender or class (Hobley, 1996).

Almost everywhere, the interests of women are inadequately heard or acted upon. Prevailing cultural attitudes and forms of local governance generally mean that decisions are made by men and therefore

frequently reflect the views and interests of only the male members of households. Even where community forestry programmes require that women be represented in local user group institutions, this does not necessarily result in their being able to effectively voice their concerns where custom and practice militate against women engaging in the work of such communal institutions. As a result, the particular needs and constraints that women face with respect to access to forest products and control over tree resources are all too often neglected.⁸

Another issue that emerges strongly from much of the experience that has been documented is that of

⁸ For community forestry publications on gender issues, see Wilde and Vainio-Mattila, 1995; Rojas, 1994; Rojas, 1989; and Clarke, 1987.

the difficulty of creating, or maintaining, in heterogeneous populations, a local institution capable of taking responsibility for the management of the resource. Earlier systems of control and management at the community level have often become eroded or broken down by the pressures brought about by change, or represent only some of the stakeholders with claims on the resource. The high transaction costs associated with organizing in order to take on such responsibilities anew within fragmented communities can mean that people are reluctant to do so, often preferring to leave it to forest departments to manage the forest, or to allow the forest to become an unregulated open access resource (Shepherd, 1992).

Equally widespread is the problem of local institutions that, in practice, prove not to represent the interests of their constituents. As was noted in the section on West Africa, traditional leaderships can pursue agendas that focus on their own rather than the community's interests. Even in the programme of ancestral domain certification in the Philippines, which was designed specifically to restore local rights and authority to indigenous peoples, one of the main constraints to progress has proved to be community groups' lack of trust in their leaders (Hilario and Sabban, 1997). Devolving control or decision-making powers to bodies that do not have accountable leaders is likely to give power over the resource to particular individuals or groups of individuals within the community, effectively privatizing use rights in their favour. It thus risks defeating the social objectives of community forestry.

As was seen in much of the case-study material, local government institutions have often also proved to be unsatisfactory as a basis for local forest management because of their predominantly political and bureaucratic agendas. This can make them more responsive to the concerns of the administration than to the needs and wishes of their constituents. Local government bodies also generally cover much larger areas and populations than a forest user group, and may lack the technical knowledge or the resources to control forestry activities. This proved to be the case, for instance, when the central government in Bolivia devolved responsibility for forestry to municipal governments (Kaimowitz *et al.*, 1998/1999).

Thus increasingly it has become recognized that community-wide institutions, favoured in so many early community forestry programmes, may not be the bodies best suited to manage directly situations characterized by several different groups of users with conflicting claims on local forest resources. One response has been the move to smaller, more homogeneous groups that are better able to secure consensus, such as the FUGs in Nepal and the cooperative *groupements* in some West African countries. However, smaller groups are likely to have fewer resources and less leverage in accessing the support available from the State. If divorced from the formal institutional infrastructure, they may also risk being seen to lack legitimacy. One solution can be to 'nest' local user group organizations within a hierarchy of organizations that between them can provide these facilities and

services (Ostrom, 1999). In some JFM programmes in India the VFCs have this kind of linkage to the *panchayats* within which they are located. Forming associations of user group organizations, such as FECOFUN in Nepal and the 'forestry civil society' associations in Mexico, can be another way to give small groups greater strength and access to support and external partners.

Another approach focuses on ways of creating better systems of negotiation and mutually acceptable collaborative use among different stakeholders within larger, more heterogeneous user communities. Not all forms of difference among users are inimical to effective joint use (Ostrom, 1999; Baland and Platteau, 1996). Thus, successful FUGs in hill areas of Nepal have been found to be able to craft innovative institutional arrangements that enable those with different interests to participate in different ways (Varughese, 2000).

The increasingly fractured social context within which community forestry functions has led to a situation in which increased attention is being paid to mechanisms for conflict management. Competition for forest resources within and among communities has always generated conflict, spawning mechanisms such as local tenure systems and dispute resolution fora to address such matters. Increasingly, conflicts have also arisen between communities and government agencies, businesses, conservation organizations, development agencies and other entities over access to, and use of, forest resources. Recent policy trends, such as decentral-

ization and economic restructuring, have brought forth new conflicts, as communities and their members pursue new opportunities. Early interest in addressing conflict issues focused on negotiation and mediation as useful tools, as these were seen to be especially compatible with community forestry because of its concern with participatory processes, equity issues and strengthening of local capacity. However, experience has underscored the role of other approaches, including coalition building and litigation, in dealing with conflicts (Buckles, 1999).⁹

In recognition of the growing complexities involved, it has also been suggested that relationships among the different parties with an interest in a forest be based not on new community-wide bodies, but on existing local 'social capital'. This term has come to be used to describe the networks, norms and trust built up within a society that facilitate cooperation for mutual benefit (Putnam, 1993). The concept has attracted strong interest in recent years because of the contribution that such social capital can apparently make both to effective government and to economic development (Harriss and de Renzio, 1997). Most rural communities function through a range of overlapping local institutional forms, such as tenurial niches that provide rights of access to the resource, kin-based claims on labour to work the resource, and trading networks for marketing. It has been argued that it can be more logical and effective

⁹ For applications to community forestry, see Bruce, 1999; and Pendzich *et al.*, 1994.

to negotiate and monitor forest management and use through such existing arrangements than to try to create new, single community-wide institutions (Leach *et al.*, 1997).

However, such social capital is less likely to exist in the recently settled communities often found in, or adjacent to, forest areas (Hirsch, 1997). Attempts to create social capital in such situations can encounter the same difficulties as those that arise in creating VFCs; it can undermine or subvert existing vested interests and consequently may not be effective as a mechanism through which all parties are prepared to work.

Underlying such moves to refine approaches to local collective management and control has been growing recognition of the need to rethink the rationale behind the current focus on 'community' as a vehicle for development and change. Agrawal (1999) has pointed out that, as recently as the 1950s and 1960s, when the pathways to social change and modernization appeared to be more clear cut, communities were seen as "repositories of tradition and an obstacle to 'progress'". The subsequent shift away from this perception of community accompanied growing recognition that the earlier development theories with which it was associated were proving to be flawed. Therefore, we need to be sensitive to the danger that the current perception of community as possessing many attributes favourable to development may also prove to be in need of revision (Agrawal, 1999).

It is also important to recognize the extent to which a community is as much a product of external influences as it is of common internal interests. The communities that collective forest management programmes are constructed around can easily be shaped as much by the procedures of the programme as by the attributes of the people and their location. As a programme takes root, and people develop interests in what it can deliver, the definition of 'community' that it introduces can take on a life of its own, influencing future developments (Sundar and Jeffery, 1999).

Such discussion about the community context of community forestry has made it increasingly evident that it can be counterproductive to consider community management as necessarily an either/or alternative to private and State management options. Given the reality of multiple stakeholders with an interest in forests, it is often more likely that appropriate solutions could incorporate components of more than one form of tenure and management.

As it has become increasingly clear that community forestry can encompass a complex of different interests both within the local user community and among multiple stakeholders with some claim on the resource, so attention has shifted towards more pluralistic approaches and mechanisms that are designed for conditions in which two or more groups, principles, sources of authority, etc., coexist. Key elements of pluralism in the context of

sustainable forest management are summarized in Box 11.¹⁰ In essence, the new focus is pursuing three areas of improvement: a more acceptable balance between forest departments and other stakeholders; frameworks for negotiation, planning and management that provide equal participation by all; and methods of management, conflict resolution and monitoring that can accommodate different objectives and measures of performance and adapt to them (Anderson *et al.*, 1998).

A number of techniques are evolving to address the analytical and operational challenges that accommodating multiple interests raise in forestry (Vira *et al.*, 1998). These include: 'stakeholder analysis', which identifies the key stakeholders in the system and the nature of their respective interests (Grimble and Chan, 1995); the '4Rs' approach, which defines stakeholder roles in terms of their respective rights, responsibilities, revenues/returns from the resource and relationships (Dubois, 1999); the 'environmental entitlements' approach, which tracks people's access to, use of and transformation of environmental goods and services (Leach *et al.*, 1997); and 'adaptive management', which accepts site-specific differences and the need for continuous testing, feedback, appraisal and revision (Lee, 1999). Though such innovative approaches offer promise, not enough experience in applying them

¹⁰ The subject is extensively reviewed in *Unasylva*, 49(194). A more complete set of papers on the subject, from a 1997 International Workshop on Pluralism and Sustainable Forestry and Rural Development, is in FAO, 1999.



Different groups have, and always will have, different positions, opinions and objectives on sustainable forest management and rural development.

has accumulated yet to allow conclusions to be drawn as to what will succeed. Consequently, at present, the more innovative and forward-looking collaborative programmes contain a substantial element of experimentation, as is further discussed in Chapter 4.

To recapitulate, progress with collective management and co-management of forests has often been substantial. However, it is sometimes constrained by insufficient information about the conditions

Some key elements of pluralism in sustainable forestry and rural development

BOX 11

- Different groups have, and always will have, different positions, opinions and objectives on sustainable forest management and rural development.
- Groups are autonomous and independent.
- There is no single, absolute, universal and permanent solution to any substantive natural resource management problem; for any given land unit there is no single, absolute, sustainable management land use scenario (there are numerous 'sustainable scenarios').
- No group/organization can claim a superior or absolute scenario; sustainable forestry and rural development decision-making is no longer the sole mandate of expert authorities.
- A system of organizational checks and balances is central for avoiding errors of a narrow, single-entity management system; this is the positive aspect of 'bounded conflict'.
- Conflicts are inevitable and cannot be resolved, but they can be managed.
- Equity in decision-making is a distant, but worthy, ideal.
- Platforms, mediators and facilitators are often needed to provide the conditions for negotiation and cooperation needed for sustainable forest management.
- Communication is essential and helps participants to better understand their differences.
- Consensus is unlikely, but progress can be achieved without it.
- Approaches to sustainable forest management that aim at consensus are often misguided and unsustainable.
- Proactive approaches and new processes of sustainable forest management decision-making in pluralistic environments are emerging; more experience is needed.

Source: Anderson *et al.*, 1998

under which it could be appropriate, or about how to implement it in the often complex conditions of multiple stakeholders. In this connection, it is important to recognize that there can be limits to collective action. Not all situations where there is the need to strengthen the position of local users of common pool forest resources are amenable to improvement in this manner. Where this is not an

appropriate way of strengthening the position of local users, alternative approaches, such as targeting weaker interest groups, may be more effective and appropriate (Leach *et al.*, 1997). It may also be, as pressures on collective systems mount, that more users will need to shift towards community forestry forms involving individual control and private rights, which are discussed in Chapter 4.