odi Overseas Development Institute

INSTITUTIONAL CHANGE WITHIN THE FORESTRY SECTOR:

CENTRALISED DECENTRALISATION

Mary Hobley

ODI Working Papers

INSTITUTIONAL CHANGE
WITHIN THE FORESTRY SECTOR:

CENTRALISED DECENTRALISATION

Mary Hobley

June 1996

Overseas Development Institute
Regent's College
Inner Circle, Regent's Park
London NW1 4NS

Preface

This study is undertaken as part of a three-year Rural Resources and Poverty Research Programme funded by the UK Overseas Development Administration. The programme focuses on the changing role of the state in natural resources management and the provision of supporting services. One hypothesis driving the research is that as the users of natural resources gain more control, so management of those resources and the scope for poverty alleviation improve.

The programme covers a number of subject areas: agricultural services (including research and extension), forestry, water resources and pastoralism. Individual literature reviews were prepared for all areas prior to fieldwork being undertaken. This paper is the product of one such review. Preliminary comparative analysis already conducted has allowed conclusions to be drawn which are relevant to natural resources management in general (see, for example, Natural Resource Perspectives No. 4, June 1995, *Management and Supply in Agriculture and Natural Resources: Is Decentralisation the Answer?*, London: Overseas Development Institute).

The objective of the overall research programme is to derive policy guidelines on:

- how to identify those areas of management and service provision for which the state should retain responsibility

- which other potential providers are best suited to take over responsibilities ceded by governments

- how to manage the process of change

- how the role of the state needs to evolve so that those activities which it does still undertake are performed with the greatest effectiveness, in terms of meeting the needs of the rural poor (while not unduly compromising other valid objectives, such as increasing overall agricultural production or maintaining biodiversity)

This is the third ODI Working Paper which draws on work carried out under the Rural Resources and Poverty Research Programme. The first, Working Paper 80 by Hugh Turral entitled *Devolution of Management in Public Irrigation Systems: Cost Shedding, Empowerment and Performance*, deals with water resources, and the second, Working Paper 81 by Diana Carney entitled *Changing Public and Private Roles in Agricultural Service Provision: A Literature Survey*, looks at the role of the state in the agriculture sector.

Contents

5

Boxes

Summary

In recent years, an important component of most major international funding agencies' support for forestry has been to promote institutional change within forestry bureaucracies in order to encourage them to be more responsive to the needs of local people. This has included decentralisation of some forest management control to the local level through a variety of new institutional arrangements, and also changes in the policy framework as well as the bureaucratic structure.

Underlying the move towards decentralisation of resource control and management is the assumption that it will lead to more efficient, equitable and sustainable use. The debate now centres on what type of institutional arrangement in a given social context is most appropriate. Aspects of these arrangements include property rights structures as well as organisational structures.

Using the idea of an institutional continuum, it is suggested that there is a variety of institutional arrangements that could be selected according to the particular context. This approach requires site specificity and a high degree of social contextual understanding on the part of the implementing or facilitating organisation. To date, such flexible site- and client-responsive processes, although appealing in their recognition of complexity and diversity, have been resisted by government institutions used to the prescriptive model-based approach to development.

This paper considers the following questions surrounding decentralisation within the forestry sector. They will be considered in greater depth through field-based studies in India:

- What are the impacts of decentralisation on the formal and non-formal forestry institutions?

- Under what new institutional arrangements should forests be managed?

- How central is a restructuring of the property rights framework to enable effective decentralisation?

The main tenet of this paper is that recent changes in the forest sector, drawn from evidence primarily from India, indicate that much that has been vaunted as decentralisation has actually increased the power of the state at the village level. Village organisations, established to manage areas of forest jointly, continue to reproduce existing inequalities within local society. The power of the covert

7

institution, where relationships within formal institutions are still conditioned by patronage and rent-seeking behaviour, remains dominant.

1. Introduction

Throughout much of the last 20 years, international attention in forestry has focused on the plight of tropical forests, resource degradation, declining biodiversity and the impact of decreasing forest resources on the global climate. Proportionately less attention has been devoted to local issues of the decreasing access to forest resources and its implications for local people dependent on forests for securing their livelihoods.

In recognition of this, local forestry programmes have sought to improve the well-being of forest-dependent villagers. Since government Forest Departments have jurisdiction over public forest lands, an important component of most major international funding agencies' support has been to promote institutional change within forestry bureaucracies in order to encourage them to be more responsive to the needs of local people. This has included decentralisation of some forest management control to the local level through a variety of new institutional arrangements, and also changes in the policy framework as well as the bureaucratic structure.

At the heart of the efforts for decentralisation within the forest sector lie divergent claims of ownership over forest lands. For the past century, property rights structures have been skewed in favour of the state, at the expense of local people's needs (see Gordon, 1955). Under recent forestry initiatives, new tenurial arrangements have been introduced in many parts of the world. It is not clear, however, that these changes alone have made a substantial difference to villagers' well-being. In some cases, villagers already had *de facto* use rights to forest lands (and formalisation of these rights has led to a diminution in the benefits available). In other cases, the rights were more short-lived than was expected.

In several countries villagers themselves have raised questions about the security of their claims in the face of political instability and shifting government policies at the national level. Although use rights have been important in improving villagers' security of access to land, there continues to be debate about whether they should press for full ownership. Advocates of indigenous people's rights argue that local communities should have their original land claims recognised by the state. Such views underpin Principle 22 of the 1992 Rio Declaration – a Declaration which should guide the approaches of governments to local communities and the management of natural resources. The Principle is reproduced below since it describes the new 'philosophy' and provides the ideological backbone for interventions in the forestry sector.

> Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and

traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development (WCED, 1987).

This paper analyses the impact on the forestry sector of the global imperative to decentralise control, particularly in the light of the Rio Declaration. It also assesses the future for formal forestry institutions and for local organisations charged with the management of part of the forest resource. It draws on a broad body of literature, including the common property literature, to provide a framework for analysis, in the field, of the types of situations in which collective action or other institutional arrangements may operate. In order to provide some empirical grounding to the theoretical framework, India is taken as a case example, since it illustrates many of the major features of the impact of decentralisation on a highly centralised bureaucratic structure. Furthermore, the diversity of social and ecological conditions found in India enhances the lessons to be learned from its experience.

2. Defining the questions

2.1   The decentralisation debate in the forestry sector

Why are we considering the question of decentralisation? Because it is high on the agenda of the global economy as a means of achieving sustainability and efficiency. The new management ethos talks about clients, stakeholders and interest groups. Its vocabulary asks both the private and the public sector to identify their respective client groups and their needs, and to respond with services that will support them. This new managerialism is mirrored by political theory, where decentralisation also demands clear identification of stakeholders, placing control and authority with these groups, and requiring government bureaucracies to restructure to support their clients. The institutional change implied by these approaches is far-reaching.

Decentralisation comprises elements of politics (who benefits?), organisation theory (structural changes) and bureaucratic reorientation (changes in tasks, roles, attitudes and behaviour patterns), and the concept cannot be explained by merely looking at one of these elements on its own. The process will be politically dominated, especially since at the implementation level the interplay of politics and administration requires norms to order relationships within the bureaucracy and among the elected representatives (Sanwal, 1987: 395).

Elements of such changes are still unexplored within the forest sector, although forestry projects charged with facilitating institutional change are now beginning to address these issues. Forest Departments, in common with other government agencies across the world, are facing hard questioning concerning their future role in the sector. In New Zealand, the government took the radical step of privatising the Forestry Commission. In the UK the form of forest sector management is still to be decided, but undoubtedly there will be some change. In the USA, the Gore report (1993) has had equally far-reaching impacts on the domestic forest service and also on the agency charged with overseas development. In India, public sector reform is emerging into the public arena, prompted in part by the actions of the World Bank.

This paper considers the following questions surrounding decentralisation within the forestry sector; they will be considered in greater depth through field-based studies.

• What are the impacts of the process on the formal and non-formal forestry institutions?

- Under what new institutional arrangements should forests be managed?

- How central is a restructuring of the property rights framework to enable effective decentralisation?

2.2 What is an institution?

As this paper indicates, the phrase 'institution' or 'institutional arrangements' encompasses a broad set of meanings. There are two main complementary concepts which underpin this analysis of decentralisation and institutional change. Institutions can be considered to be:

(i)   regulatory arrangements such as customs or sets of rules, values or practices accepted by members of a particular group and which tend to lead to repetition of patterns of behaviour; and

(ii)   organisational arrangements which include ordered groups of people such as a family, farm, private firm, non-profit or governmental agency (Gibbs, 1986, quoted in Fox, 1991: 60; Uphoff, 1986, 1992).

In forestry there are several important levels of interpretation of what constitutes an institution, which will be discussed here in the light of decentralisation policies: namely, property rights institutions; the formal institutions – covert and overt; and the non-formal institutions for resource management (extant or new).

2.3 Decentralisation versus devolution

There are many questions still to be addressed about the effectiveness of decentralisation as a political tool to ensure devolution of power. As Webster (1990: 11) indicates:

> Decentralisation has been seen as a means by which the state can be made more responsive, more adaptable, to regional and local needs than is the case with a concentration of administrative power and responsibility in the central state . . . But decentralisation of government in itself does not necessarily involve a devolution of power. The extension of the state outwards and downwards can equally serve the objective of consolidating the power of a state at the centre as well as that of devolving power away from the central state; it can both extend the state's control over people as well as the people's control over the state and its activities. Decentralisation is a two-edged sword.

The penetration of the state and centralisation of control are discussed in detail later in the paper, with respect to the development of local-level organisations.

Calls for the devolution of power to the local level are pervasive across the international community, and all recognise the central role of local users of resources in management (see recent policy documents – World Bank, 1991, 1994). But how effective has this devolution been? Since much of the experience gained with the implementation of new forms of forestry is relatively recent, it is perhaps too soon to be able to pronounce definitively on their success or otherwise. However, early indications do suggest that rhetoric and reality remain far apart. Major donor organisations and international agreements may all subscribe to the following view of the Rio Conference:

> The pursuit of sustainable development requires a political system that secures effective participation in decision-making . . . This is best secured by decentralizing the management of resources upon which local communities depend, and giving these communities an effective say over the use of these resources. It will also require promoting citizens' initiatives, empowering people's organisations, and strengthening local democracy (WCED cited in Colchester, 1994: 71).

But the achievement of such a goal is still distant. The extent to which such principles can and should direct development policy in the forestry sector is still to be questioned. At the root of this rhetoric, is there a real quest for a new world order where actions are assessed in the light of their impact on individuals, and where governments and their agents are held accountable at the most local level? Some would contend that this should be the underlying thrust of the approach (Ghai, 1994; Colchester, 1994); others see it as a means through which to decrease the costs of government and enhance the participation of the private and other sectors (Rowchowdhury, 1994). Is it a call for a new democratic structure that allows those at the local level control over their destinies? Furthermore, is forestry an appropriate vehicle through which to challenge the existing form of governance?

Moreover, as Webster (1990) indicates, is decentralisation necessarily such a 'good thing'? Do decentralisation and devolution lead to greater equity? Is this an attainable goal? Is the obverse centralisation and inequity?[1] Is the quest, spearheaded by Western-based doctrines, for efficiency, accountability of public

---

[1] 'The predominant [development] approach pursued in developing countries has been characterised by excessive centralization, large-scale investment and modern technology, and has often resulted in sharp inequalities and widespread impoverishment. It has frequently been environmentally destructive and socially disruptive, with unregulated industry and concessions to capitalist interests contributing to both environmental degradation and the dispossession and impoverishment of indigenous people. The alternative approach to development, which is exemplified by the grassroots environmental movements, is characterized by small-scale activities, improved technology, local control of resources, widespread economic and social participation and environmental conservation' (Ghai and Vivian, 1992: 15).

organisations, divestment and privatisation, an appropriate response to the needs of villagers wanting to gain greater control over the use of and access to natural resources? Some influential commentators on the political economy of countries such as India, question the validity of a direct transfer of Western ideology (Ghosh, 1994: 1929). This paper does not attempt to answer these questions but tries to assemble some evidence to indicate the complex nature of the impacts of decentralisation (whether partial or total).

The arguments surrounding the decentralisation debate involve discussion of the appropriate institutional form to manage forest resources. As the following sections indicate, there is no one solution to this question, but rather an array of arrangements according to the particular requirements of the forest users. How far the forest bureaucracy can or will divest itself of some of its authority remains to be seen. However, in an atmosphere of increasing intolerance of bureaucratic ineptitude, there seems little doubt that forest services will lose some of their authority, at least at the margins of their power base on degraded lands.

Just as questions are being asked about the role of the state in the regulation and management of natural resources, so too there are questions being asked about the nature of the local organisations being developed by governments and whose interests they represent (Colchester, 1994; Hirsch, 1993). In Thailand policies that have encouraged the penetration of the state into regions previously managed by indigenous institutions have had questionable benefits for the majority of the local people. These 'participatory institutions', which purportedly give the village a role in making decisions on rural development, are the facilitators of a paralysing bureaucratisation of village procedure which has replaced the older more informal institutions (Hirsch, 1993: 210). Westoby (1987: 306), reflecting on community development practices of the 1960s and '70s expresses the same sentiments:

> Only very much later did it dawn on the development establishment that the very act of establishing new institutions often meant the weakening, even the destruction of existing indigenous institutions which ought to have served as the basis for sane and durable development: the family, the clan, the tribe, the village, sundry mutual aid organisations, peasant associations, rural trade unions, marketing and distribution systems and so on.

It is disingenuous to define development as characterised by these alternatives – decentralisation or centralisation, local versus central government. This characterisation, together with the contention that grassroots environmental movements are necessarily going to lead to more widespread benefits, has to be carefully evaluated.

The call for grassroots development also brings into question the conditions under which it is appropriate. As the vast literature on collective action shows (Wade, 1988; Ostrom, 1990, 1994; Bromley, 1992) there are many conditions under which

collective action has broken down and resources have degraded. The defining features under which such action is appropriate remain elusive in the forest sector, although certain patterns are emerging – most particularly those seen in resource-scarce situations, well illustrated in the Middle Hills of Nepal (see also examples in the African rangelands, Runge, 1986: 631; Shepherd, 1992).

2.4 What is forestry?

Although this may seem a trite question, its answer provides many of the reasons why decentralisation has become such an important and all-pervasive issues in the forestry sector.

Forestry encompasses many objectives: commercial, rural development (poverty alleviation, employment creation, empowerment of marginalised groups – in particular, women), tourism and amenity, and conservation. Conflicts often arise between these objectives and the priorities assigned to each in a given area. Research disciplines for the support of forestry include: economics, microbiology, history, political science increasingly, anthropology, sociology, law, ecology, chemistry (soil science), zoology, botany, among many others. Forestry is a highly centralised profession with a diversity of roles and products, where internal conflicts and contradictions often dominate.

Its practice has required the development of multi-disciplinary skills and their accommodation within a framework that allows them full expression. Forestry, alone among the professional disciplines, derives its power base from ownership of large areas of land. This has left it vulnerable to attack by a number of environmental and human rights groups who contend that this power has been wrongfully wrested from local groups whose livelihoods are deeply associated with the forests.

From the catapulting of forestry on to the international stage, in the early 1980s, to the grassroots questioning of the role of the profession, the response was initially one of defence and more recently of seeking new forms of partnership that will help to deflect some of this criticism. In the global climate of decentralisation and bureaucratic divestment, this has led to the current situation where forestry (so long impervious to the decrees of the outside world) has been forced to respond to these changes and examine its own institutional framework. As indicated above, this framework now contains responsibility for a wide range of often conflicting land management objectives. Structures that were established to fulfil the primary objective of revenue maximisation are now redundant in a world that insists that forest lands be managed for a multiplicity of benefits. The shift from a primary objective of revenue maximisation to multiple objectives ranging from conservation management to the development of local organisations for forest management has had profound consequences across the forestry sector. The debate about

decentralisation is by no means confined to the developing world but is live in every country.[2]

The implementation of the decentralisation process has brought issues of ownership and control to the forefront of the debate. In forestry, the historical development of state control over forest lands has meant that the land base held in trust by the profession for the public good is enormous. The following statistics provide an indication of the extent of forestry estates in Asia. In India, Forest Departments control 22% of the national territory (Agarwal and Narain, 1989); in Indonesia, 74% of the territory is controlled by the Forest Department; and in Thailand, the Royal Forest Department administers some 40% of the nation's land (Colchester, 1994). These amazing figures underline the fundamental challenge posed to the departments by the call for the devolution of some of this control to the millions of people living in these forest areas. The means by which this is being achieved needs considerably more analysis and the form of the linkages between state and people needs to be critically assessed.

2.5   Decentralisation in action

In New Zealand, where possibly one of the most extreme and far-reaching restructurings of the sector has occurred, the forest service was abolished and separate organisational structures were established. This deconstruction of a monolithic organisation in favour of several discretely functioning units has been one mechanism for copying with the conflicts of multiple objective management engendered within one organisation. The conflict is described in the 1987 Report of the Director-General of Forests:

> The major reasons which led to the restructuring of the New Zealand Forest Service were an inability to provide the transparent accountability for the mix of functions performed by the department and perceived conflicts of interest between those functions (cited in Brown and Valentine, 1994: 12)

By identifying and separating out these objectives and setting up distinct organisations each with primary responsibility for a major objective, conflicts become public (i.e. inter-departmental wrangling is more visible than intra-departmental disputes). Demarcation of territorial responsibility, and therefore also accountability, is easier to attribute. Thus the advisory and regulatory functions have become the responsibility of a Ministry of Forestry. Conservation, a subject which has frequently brought forestry professionals into conflict with environmentalists, and is considered by many to be irreconcilable with the practice

---

[2] See a recent edition of *Unasylva* (1994, Vol. 45: 178) devoted to a discussion of the impacts of decentralisation on the forestry sector.

of commercial forestry, has been assigned to a Department of Conservation (primarily responsible for natural forest conservation). And a state-owned Forestry Corporation is responsible for commercial and plantation resource-based activities. In addition, the great power base of a forest service – its land – has also been largely privatised.

The message that emerges strongly from the New Zealand experience is that there is no blue-print for institutional change: the structure of organisations necessary to meet international, national and local imperatives must evolve from the particular national circumstances. The principle of decentralisation, although global, should not lead to a globally uniform response.

3. The institutional continuum

3.1 The property rights continuum

Underlying the move towards decentralisation of resource control and management is the assumption that it will lead to more efficient, equitable and sustainable resource use. The debate now centres on what type of institutional arrangement in a given social context is most appropriate. Aspects of these arrangements include property rights structures as well as organisational structures.

At one end of the property rights debate are those who argue that total privatisation of resources to rational individuals will lead to more efficient and sustainable use (Demsetz, 1967). At the other end of the spectrum the common property literature points to the potential of sustainable group management of forests, where there are adequate individual incentives, secure long-term tenure arrangements (Fortmann and Bruce, 1988) and group-imposed restrictions (Runge, 1986; Ciriacy-Wantrup and Bishop, 1975; Ostrom, 1990, 1994).[3] Ostrom et al. (1988) detail many cases that indicate that there are situations in which co-operation between a group of resource users does lead to careful and sustained management. The work of Netting (1976) in Switzerland and McKean (1986) in Japan provides further evidence to support the effectiveness of collective management under certain conditions.[4]

Others, most famously Hardin (1968), have contested this assertion and argued for highly centralised structures in order to protect the ecological integrity of a resource, and avert a 'tragedy of the commons'. This view coincides with the commonly heard views that the peasants are the destroyers of the environment, whereas the government is the custodian. Joint (participatory) forest management challenges the central tenet of this argument, and posits the view that under certain circumstances local people, together with the state, should become the managers of the forest. Community forestry in Nepal moves a step further and asserts that the

---

[3] There is also a large and expanding empirical literature. The mainly anecdotal evidence underpinning these assertions is now being tested through a large longitudinal research programme coordinated across the world by Elinor Ostrom at the University of Indiana. This programme assesses the impact of ecological, social, economic and institutional changes in the forestry sector. It is expected that it will provide many of the answers to questions currently being posed by donors, academics, and implementing agencies.

[4] Collective management systems in Nepal and India are also well documented (see for example, Arnold and Campbell, 1986; Dani et al., 1987; Hobley, 1990; Gilmour and Fisher, 1991; Sarin, 1993).

state's role is that of regulatory authority only and that total management control should rest with the users of the resource (however, property rights are retained by the state). Under these rulings there is a clear understanding that the state can no longer take sole responsibility for the management of forests, since organisationally it has neither the capacity nor the will to ensure the integrity of the resource into the future.

The usual dichotomy drawn between public and private management can only be considered helpful in the early stages of analysing institutional options for a particular sector. The continuum approach, however, provides the most interesting way forward and perhaps the most pragmatic. Runge's analysis reinforces the observation made that there are no simple property rights scenarios; rather, there is a continuum of options that need to be put in place according to the particular conditions and context of the resource. Thus he (1986: 633) states that:

> rather than invoking the general superiority of one type of property institution, . . . different institutions are responses to differing local environments in which institutional innovation takes place. Such innovations are likely to range along a continuum of property rights, from pure rights of exclusion to pure rights of inclusion, depending on the nature of the resource management problems . . . There are not universal prescriptions for efficient and equitable resource management.

As Ostrom (1994: 7) so cogently argues, the situation is not an either/or one but an 'and' situation where there are many arrangements that can be accommodated ranging from partnerships with government and local people to complete local control. What is perplexing, as well as dangerous, is that scholars are willing to propose the imposition of sweeping institutional changes without a rigorous analysis of how different combinations of institutional arrangements work in practice. Limiting institutional prescriptions to either 'the market' or 'the state' means that the social-scientific 'medicine-cabinet' contains only two nostrums.

This paper looks at the various management systems and their institutional implications both for local organisations and also for government and non-governmental agencies charged with their support. Using this notion of a continuum, a variety of institutional arrangements could be selected according to the particular context. This approach requires site specificity and a high degree of social contextual understanding on the part of the implementing or facilitating organisation. To date, although it appeals to academics in its recognition of complexity and diversity, this process has been resisted by government institutions used to the prescriptive model-based approach to development.

In the case of forests where the land on which they are growing is clearly vested in the government, the association of institutions is clearly defined by this central tenet. In South Asia, therefore, where this situation predominates, the types of decisions to be taken about institutional partnerships revolve around the extent to

which Forest Departments should retain authority over management decisions for an area of forest and over usufructuary rights, but there is little debate as to whether the government should or should not retain control over the land. Indeed, joint forest management is seen by many within Forest Departments as a means to reassert control over forest lands and defend their boundaries.

The question to be addressed is: What are the conditions necessary to trigger local people to implement their own institutional arrangements to change the structure of the situation in which they find themselves? (Ostrom et al., 1988: 117) The answer is complex. One of the key enabling structures is a facilitating policy framework; for example, community forestry in Nepal gained its greatest impetus once the government had passed legislation allowing for guidelines to provide Forest Department staff and users with legitimacy for their actions. Most particularly, this policy affirmed the legitimacy of local people's usufructuary rights. Hence the importance of changing the property rights institutions:

> [These] critically affect incentives for decision-making regarding resource use and hence economic behaviour and performance. By allocating decision-making authority, property rights also determine who are the economic actors in a system and define the distribution of wealth in a society (Libecap, 1989: 6–7).

Under what conditions is privatisation the answer?

A series of calculations need to be made before the decision to privatise can be taken. Much of the literature concerning the medieval open field systems (Dahlman, 1981) demonstrated that privatisation of resources was only possible when the costs of protecting an individual's boundaries did not outweigh the benefits of production. In the case of forests, except for small patches of forest close to villagers' houses, it is virtually impossible to protect the forest against the predations of outsiders. In such circumstances the costs of individual protection would far outweigh any benefits. It therefore makes sense for a group of forest users to come together to manage the resource in common, thus spreading the costs of protection across a larger group of people. Again, the utility of such an approach depends on the size of the benefits obtainable. If the resource is of sufficient extent or value (not necessarily financial), there is sufficient reason for individuals to manage it in common, again with the proviso that there is a security of tenure over the resource that can be upheld both against the power of the state and against locally powerful non-rightholders. Thus common management, with its attendant rules and punishments for infringement, demands a degree of mutual responsibility and does not permit the individual to ignore the effect of his/her actions on others.

In forestry, the task facing forest authorities is to identify the relevant institutional responses to a particular social, ecological and political context. In some situations collective action will be an appropriate response, in others it may not be possible

to evoke a collective response; such situations may require other responses such as small group leaseholds, or perhaps the privatisation of resources. Any change, however, will require the provision of an enabling policy framework, and assured long-term rights of access.

3.2 The formal institutions – the role of government agencies

Timber, logging concessions, government officials, local forest users, democratic institutions, corruption – all these words are linked in different forms of overt and covert relationships. Currently, in many countries of South-East Asia, the nexus between timber, the state, and the timber trade is seriously undermining the development of any form of local democratic institution for the management of forest resources. ('The practice of dealing out logging licences to members of the state legislature to secure their allegiance is so commonplace in Sarawak that it has created a whole class of instant millionaires' (Colchester, 1989).) The conflicts between macro-political policy, donor imperatives, and local needs are becoming increasingly clearly articulated as participatory forest management and decentralisation become common currency. Thus the potential impact of decentralisation on the formal institutions is dramatic. As Forest Departments have been forced, from economic and political expediency, to adjust their structures, certain features of these institutions have become more apparent. The following sections look at some of these features.

The overt institution

Government Forest Departments, as large bureaucracies, have organisational characteristics that both support and run counter to the successful institutionalisation of decentralised forest management. On the one hand, they can provide a long-term base of resources and decision-making capacity accountable to the public interest. On the other hand, experience has shown that programmes administered by bureaucracies tend to become increasingly rigid and top-down, especially as they expand. Decentralisation policies are, however, leading to a slow internal restructuring of formal institutions where lower-level staff are being given increasing responsibilities for substantial elements of management. However, as with local groups, the devolution of power has been only partial within government institutions. Individual innovation is unlikely to be rewarded, where incentive structures are predicated on observing the hierarchical norms of behaviour.

Innovation is a prerequisite for an organisation that is going to be able to respond to a dynamic environment, where the local-state interface has acquired a demanding voice. Innovation requires individuals to take risks, to learn from experience, and to be able to admit failure. The structure of bureaucracies, on the other hand, rewards risk-averse behaviour that conforms to norms accepted within the

institution. This leads to the situation facing most Forest Departments today in which the political and social context increasingly requires a responsive, accountable, innovatory learning organisation, but instead is left with the opposite of all these desired characteristics. How, then, do public institutions move from one end of the cultural spectrum to the other? What are the incentives to support this type of change?

In Asia, government organisations often reflect the patron–client relationships found in society; this further hampers the development of a 'learning' organisation. The new culture of information management, heavily promoted by international organisations, sits unhappily where access to information is privileged and cannot easily be relinquished to lower levels of the hierarchy. As Fox (1991: 61) puts it: 'other problems arise when officials who possess information view it as a scarce resource to be exchanged for scarce commodities or influence of equal or greater value'. Thus, as calls for 'bottom-up planning' grow from lower-level forest officials, senior management responds by increasing the control over information flows. The greater use of centralising technologies such as sophisticated geographical information systems ensures that those who are not computer-literate have even less access to decision-making within the bureaucracy.

The role of the external agency

Rowchowdhury (1994) analyses the impact of external agencies as agents of reform. In this instance the World Bank has been able to use the financial leverage of its large sectoral funding to State forestry in India to enforce structural change in several State Forests Departments. However, is such external pressure necessarily going to lead to the type of substantive change required by the sector? As Madhu Sarin is quoted as saying (Rowchowdhury, 1994: 8):

> Some of the changes suggested by the Bank might seem alright – and even desirous in principle – but the implication of the Bank pushing for these is worrying. The initiative should have come from the government here.

Rationalisation of the administrative structure and functions at each level has been proposed in response to the new forms of forest management. Where responsibility for forest protection and management has been devolved to villagers, the rationale for retaining the positions held by lower-level forest functionaries has been challenged. A simple reduction in field-level staff is not necessarily the most effective way forward, however; rather, this form of devolved forestry requires greater support from field staff and also greater autonomy on their part.

The implications of these recommendations are enormous for the current autonomy of officers within the forest service, and will no doubt be widely resisted. (This has been the experience already in several States of India, where there is growing

resistance to joint forest management now that its implications are more clearly articulated.) Devolved decision-making also requires devolved planning and construction of budgets. It necessitates both internal and external accountability, and brings into question covert systems of patronage that currently may dictate career moves within the service and access to other benefits.

The covert institution

Much development effort is misdirected because of misdiagnosis. For example, many of the efforts directed towards institutional development focus on training and internal management systems. Yet this is likely to be ineffective if rent-seeking drives incentives in detrimental directions. We need to understand and undertake management improvements in the context of changing incentives (Ostrom et al., 1988: 35). Institutional norms and behaviour are governed by a series of rules and regulations that define the boundaries of acceptability. However, when considering different types of institutional arrangements it is necessary to move beyond simple assessment of formally accepted rules to an assessment that takes cognisance of the hidden rules and incentives that actually provide the boundaries for individual behaviour.

Just as it is naive to assume that people's organisations are necessarily a more equitable and desirable means through which to manage forests, so government institutions should not be seen as homogeneous in their distribution of benefits and access to power. Each institution, whether formal or non-formal, is composed of individuals whose behaviour is governed by interactions that are both covert and overt. It is the covert interactions, those that are the most difficult for an outsider to comprehend and to incorporate within a programme of institutional change, that will mainly determine outcomes. Rhetoric and planning can only address those overt structures that are amenable to discussion, for example policy and legislative frameworks, human resource development, and remuneration. Patronage systems and rent-seeking behaviour, both within the service and with outsiders, are the real determinants of institutional performance, condition all interactions and are the most difficult to tackle.

Where power and status within a forestry department are equated with control over a large area of forest territory, the 'soft' intangible control provided through participatory forest management is of little attraction to most professional foresters. Coupled with the rent-seeking nature of many individuals within the organisation, this leads to a complex environment in which incentives provided through the overt formal structure are generally insufficient and unattractive. As participatory forest management increases the accountability and transparency of transactions, formerly hidden relationships are revealed often to the cost of the individuals involved.

The problem has been heightened by the move away from resource-creation

projects (plantations) to institutional reform programmes. This change in project practice and funding has fundamental implications for project partners where highly centralised institutions are being asked to divest authority and control both to lower levels within the institution and to other organisations. Incentives (generally financial) provided through plantation programmes are no longer in place, and the demand for greater internal and external accountability is also putting pressure on individuals to change from covert to overt relationships.

At the same time, it is necessary to understand the incentives for individual membership of a particular institution, if there is to be an effective change in the operation of that institution. For instance, there are many examples of the patronage of local forestry officials being sought and paid for by villagers in order to gain access to forest products (Nadkarni et al., 1989; Pathak, 1994). Joint forest management may remove this source of patronage, and turn the otherwise covert relationship between certain villagers and the Forest Department into an overt relationship between a different group of villagers and Forest Department staff. As accountability and transparency within the village increase, the pressure to dismantle covert relationships will also increase. This imperative for change will not necessarily coincide with the economic interests of the most politically powerful groups or indeed Forest Department staff who may have spent large amounts of money to secure a particularly lucrative position (see also Wade, 1988).

However, these changes may also be offset by the increased penetration of the state into the village through social forestry and now joint forest management programmes. Ironically, although decentralisation may have brought a greater transparency in certain relationships, it may also have led to increased linkage between the individual forest user and the state, and thus greater opportunities for the development of covert relationships. This change could be construed as increased centralisation of control, and not decentralisation.

3.3 The non-formal institutions

What is a village? The role of the individual in collective action

As discussed above, the new philosophy talks about devolution of power and control to 'local people'. However, it rarely disaggregates this term to its constituent parts. Who are the 'local people', what is a 'village', and who are the 'users'? Without a correct identification and clear understanding of the client group, it is unlikely that local forest management organisations will be sustained over the long term.

Aid projects are at the interface between Western development ideology – with its insistence on the empowerment of the individual – and other ideologies that may insist on the subjugation of the individual. For example, as Wade (1988: 5)

describes from his research in South India

> [t]erritorially-defined groups like villages are not a focus for [Indian villagers']
> identity and needs. Indeed, the strength of attachment to non-territorial groups like
> the sub-caste is said to obstruct emotional attachment to the village.

This important insight should be tested against the rhetoric that asserts that local forest management should be organised at the 'village' level. It then becomes a question of whether the village is an appropriate institution through which to implement such programmes, and one with which villagers themselves identify, or whether there is some other grouping that better represents the ways in which local people view the forest resource and its management. This question is explored when we consider who are the users of the resource, and who should benefit from local forest management.

In the Indian context, the village is better seen as a group of individuals linked in a series of horizontal and vertical patron–client relationships that extend up into the state hierarchy (Wade, 1988: 5; Pathak, 1994). Any intervention in these relationships should therefore be viewed in this context. Are we, then, presuming too much when we assert that these village organisations should be representative of all groups? Perhaps this is to deny the cultural restrictions that regulate village interaction with the outside world through the mediation of a few members of certain caste and gender groups. Such questions need to be explored through further research that analyses the composition of forest management groups and the decision-making systems (overt and covert) in operation.

Who has user rights?

Returning to the plea, articulated by donors and international activists alike, to give users rights over forest resources through new property rights institutions, the next question to be addressed is: who are the users? In order to address the issues of institutional sustainability and the impact of decentralisation, it is essential to understand who exactly are the users of these resources, and what the implications of changing forest management structures are for those who are excluded from access to the forests.

Proximity to the forest and regularity of use may, in many situations, determine who is the user. For example, in Nepal and India primary users are described as those who live close to an area of forest and use it on a daily basis (and by implication have traditional rights to this use). Secondary users may be identified as those who use the forest on a regular basis, but not daily, usually as the major source of products to sustain their livelihoods, for example fuelwood sellers. Tertiary users may be identified as seasonal users, such as graziers or collectors of medicinal herbs. Consideration is being given to ways in which the access rights

of this latter group may be protected and negotiated in conjunction with the primary and secondary users, to ensure that alienation of rights does not occur (currently their rights are usually extinguished under joint forest management arrangements).

This question of who is a user, is extremely complex. In a sense, if the question is approached from a livelihood perspective (instead of from the 'recognition of traditional rights perspective'), the answer is quite different. In this instance, an individual whose sole source of livelihood is derived from forest products would be identified as a primary user. Priority would be placed on groups such as headloaders (whose only source of household income is obtained from the sale of firewood) over other village groups who may partially secure their household needs from the forest but may also obtain some tree products from private land. In general, their livelihoods are only partially derived from the forest.

Throw into this complex equation the rights of indigenous communities who have been displaced from forest areas by incomers, and the whole situation becomes one of multi-tiered negotiation, both spatially and temporally. The initial problem is then to identify who has a legitimate claim to the benefit of the resource, and indeed who determines what is or is not legitimate. As the example presented in Box 1 indicates, legal right alone should not determine who has managerial control; customary rights in this case have been practised for generations and should not be ignored because they are not legally recognised. In this example, the traditional rightholders have been disenfranchised through the process of community forestry in Nepal.

Box 1   **Who are the users?**

Prior to the mass settlement of large areas of the Terai, it was primarily inhabited by the Tharu people and other related forest-dwelling groups, including Majhis, Rajbansis, Satars and Darais (Bista, 1987: 128). The Satars are a landless semi-nomadic group who were dependent on the forest for their livelihood, both as a source of food through hunting and gathering, and as a source of shelter. With the rapid disappearance of the forests in these districts, these small groups have come under intense pressure and have become increasingly marginalised and exploited by incoming hill groups.

According to community forestry policy in Nepal, forests should be handed over to those who have traditional rights to use them. In this case, the traditional users were too far away to benefit from the policy, and indeed lost the right to collect products when adjacent forest communities took over protection of the forests and banned other users' access.

Source: Hobley (1992)

Just as in Nepal, so in India where some users have become disenfranchised. The proponents of joint forest management often appear to be blind to the social, ecological and political diversity of the nation, and apply the model irrespective of the location (although the consequences of the application are highly diverse). This tends towards the current situation where local organisations are being established in a fashion that takes little cognisance of local imperatives, and will not lead, either in the short or long term, to sustainably managed forests.

Women as users

At the heart of decentralisation policies in the forestry sector lies the endeavour to provide formalised property rights to those groups who may previously have had only informal or customary access to the forests, practised at the whim of forestry officials. In addition, many development projects adopting these new forms of forestry aim to bring marginalised groups into the development process. Accordingly, they emphasise the involvement of women in decision-making about resource allocation and assert that it is those whose livelihoods depend on the use of forest resources who should make the authority over management decisions.

Property rights are, however, highly gender-specific and should be considered in several dimensions including control and use (Joekes et al., 1994: 139). Thus, institutions may be established which allow local people to manage resources, but the key target groups may still remain partially excluded from the process. This is particularly the case for many women; their use rights may be secured through this process, but they still have no control over the management of their rights. Control remains vested in the male members of the group. The question of how women are incorporated into the development process through forestry programmes is still incompletely addressed. Webster's (1990) study of general participation in panchayat organisations[5] reveals a similar series of fundamental problems encountered whilst trying to promote women's participation:

> [Women] are rarely present at the public meetings . . . The idea of participation by
> women in any kind of meeting is rarely considered by men and laughed at by women
> . . . Attendance at a meeting would also imply that women had a role in decision-
> making which most men consider not to be the case . . . The women from the more
> affluent households never attend these meetings, this is both a gender and caste
> phenomenon. [I]t is not merely a question of being elected but of being able to assert
> a presence within the meetings as well. Caste, gender and the prevailing norms of
> social behaviour with respect to elders and the educated remain as obstacles here
> (Webster, 1990: 115).

---

[5] The lowest unit of local government, usually incorporating a number of villages with elected representation from each village or ward.

This was also the situation found by the author in Nepal, where research carried out into the participation of women in the community forestry decision-making process indicated that projects aiming to increase women's involvement often actually increase social tensions between men and women, and may lead to a reduced role for women:

> The foreigners told the villagers that because women are the forest users they must also be members of the forest committee. According to the foreigners it should be compulsory for women to attend the meetings. The men agreed to this and women were allowed to become committee members. However, women were informed of a meeting only when a male committee member chanced to meet them. Even if women attend meetings they cannot voice their opinions: they cannot speak against the opinions of their seniors. When the men have finished speaking that is the end of the meeting . . . Men do not tell women that they cannot speak at the meetings, but the men do not want to be opposed by women.

Also, women are reluctant to speak out because they are afraid of making mistakes; they think that people will laugh at them . . . The important thing is that men should realise the importance of women's views regarding forest management. The problem cannot be solved by outsiders imposing such ideas on men. If the men wish to dominate women then that is what will happen (Sama Chetri quoted in Hobley, 1991: 148).

How fit are local organisations to govern?

In the light of existing experience, this question still remains to be tested. If institutional change is predicated on the development of effective local organisations, what will ensure that these organisations continue to function into the future? At the heart of this question lie incentives that will encourage structural as well as behavioural change. What incentives are there for individuals to act collectively for the common, and not individual, interest.?

Where *de facto* use of forest resources has enabled local people to retain 100% of forest products, the joint forest management sharing arrangements are perceived to be unattractive. This is particularly apparent in areas of relatively high forest cover. In the best JFM situation villagers are allowed to retain 50% of the proceeds and in the worst scenario only 25%. Even factoring in additional payments that must be made between villagers and functionaries, villagers probably had greater real access to forests and their products prior to the introduction of JFM. Such a supposition does, however, need substantiation through further research.

In situations where *de jure* use rights allow villagers good legal access to forest products, JFM has even less to offer. In these cases, villagers are being asked to exercise their rights with responsibility, and in some circumstances to curtail their use. This exercise entails attendance at meetings, donating household labour for protection functions and in some cases allowing non-rightholders access to the

resource. For those who may currently be disallowed access to forests, JFM may provide an opportunity to gain use rights. However, in the main JFM is used by those who already retain social control within a group in order to increase their power further.

In addition to the incentives provided or withdrawn through the formalisation of access rights, there are other issues concerning costs and benefits that need to be addressed (drawn from Uphoff, 1992: 10):

* Time – do benefits/costs accrue rapidly? If not, what is their impact?

* Space – benefits/costs accrue locally rather than remotely. What are the implications of this for those who do not share in these benefits (particularly those traditional users who are excluded by geographical distance)?

* Tangibility – benefits/costs are evident and are not hard to identify.

* Distribution – benefits accrue to the same people who bear the costs of management rather than to different people. This is an important issue with regard to women's participation and control over use rights.

* Those who were benefiting before more formal systems were put in place should not be disenfranchised. This relates to marginalised groups within the village, and those who are distant from the forest.

Given the theory, what of the reality in the forestry sector? Since much of the theory is derived from empirical experience, it does have a high degree of rigour when tested under real conditions. Recent experience, in both India and Nepal, with the development of participatory forest management through local organisations points both to the potentiality of these organisations and also to their frailty. This frailty can be induced by either endogenous or exogenous factors. In particular, organisations break down because of the non-inclusion of traditional users of a resource. This is less of an issue where there are pre-existing resource management organisations, but this may then lead to the question of how equitable these organisations are. This is of importance to donors in the forestry sector who may place a high premium on the participation of marginalised groups in forest management organisations. This issue needs to be further analysed when assessing the sustainability of indigenously derived institutions as compared with those that are exogenously facilitated.

As has already been discussed, recent decentralisation activities within the forestry sector have led to greater penetration of the state into the village. As the state continues to reassert ownership over forest land through village forest management organisations, the presence of forest officials in these organisations is seen as an essential controlling feature. In many situations, village forest committees

established under joint forest management have become an arm of the Forest Department, rather than being developed as independent organisations that could challenge the authority of the Department. One particular case cited in North Bengal indicates the degree of control retained by the Forest Department over the membership of local organisations:

> According to the [government] resolution, the concerned Divisional Forest Officer, in consultation with the 'Bon-O-Bhumi Sanskar Sthayee Samiti' of the concerned Panchayat Samiti, shall select the beneficiaries who will constitute the FPC(s) [Forest Protection Committee(s)] . . . Each FPC shall have an Executive Committee, comprising the Sabhapati or any member of the 'Bon-O-Bhumi Sanskar Sthayee Samiti' of the Local Panchayat nominated by him, the Gram Pradhan or any member of the local Gram Panchayat(s) as nominated by him, and elected representatives of the beneficiaries (not more than 6) as members and the concerned Beat Officer as Member-Secretary. The constitution of the FPC including the executive committee must be approved by the Divisional Forest Officer concerned, on the recommendation of the 'Bon-O-Bhumi Sanskar Sthayee Samiti' of the concerned Panchayat Samiti' (Roy et al., n.d.: 2).

As can be seen from this quotation, the Forest Department and formal administrative structures retain a large degree of control over the decision-making process. Under such conditions, it is difficult to envisage forest users having a genuine role within such an organisation. In many cases, the composition of the village forest committees is merely a formalisation of pre-existing relations between certain sections of village society and Forest Department officials. Thus the choice of villagers with whom to interact when establishing a JFM group will often bear no relation to the criteria the aid agency may consider appropriate, but will be highly dependent on the types of relationship already in existence. Hence, the objectives of empowerment, women's participation, equity, may become extremely difficult to achieve in the face of pre-existing structures of exchange and transaction that are often inimical to the objectives of the agencies.

Such local organisations may, however, retain a large degree of stability since they do not challenge the *status quo*. In terms of sustainability they may survive into the future, even though they do not necessarily satisfy the requirements of forest development policy.

3.4 The role of non-governmental organisations

If the demand for services driven by local organisations cannot be sustained by the government sector, can the non-governmental sector step into its place? This question has taken centre stage in the agriculture sector, where there have been many examples of successful partnerships between non-governmental organisations

and local people.[6]

Similarly in forestry, there are several successful examples of collaborative partnerships between government, non-government and local organisations. For the last two decades NGOs in India have provided the voice of dissent and environmental conscience, placing the environment high on government agendas. The Chipko movement and the influential eco-feminist work of Vandana Shiva, in conjunction with the work of the Centre for Science and Environment and many others, have together brought about an enormous change in government rhetoric and latterly in policy (for example, the successful opposition to the Narmada Dam, and the impact of the Chipko movement on logging in the Himalayas).

There is another distinct group of NGOs that have had an even more significant developmental impact mainly at the local level, namely the implementational NGOs. In the main, they have had a highly sectoral and location-specific focus, with a relatively restricted spread effect. Some have replaced the activities of the state; others have worked in association with state agencies; others have taken up an independent and critical function, working in both advocacy and implementational modes where they have attempted to use their experience to influence policy.

Just as there can be no universal model for a successful local organisation, it is also hard to reproduce the success of one NGO in another environment with different actors. The role of key individuals, in positions of influence spanning the government and non-government sectors, cannot be underestimated; a strategy based on such people has been used successfully by several aid agencies (see section 5 and the discussion of the Ford Foundation's experience). However, dependence on a particular 'stellar configuration' may also cause programmes to collapse when the individuals involved depart, lose favour or clash with incomers.

As notions of decentralisation gain impetus and the role of the state comes under closer scrutiny, so also do the role of NGOs and their relationship to the state. In forestry, because of the vesting of land ownership in the state, this relationship has particular significance with an added dimension and tension. Unlike in agriculture, where in general NGOs can play a direct role with independent producers who own their land and therefore have some degree of management control, in forestry the users of forests have at best only usufructuary rights, and management control is held by Forest Departments. Therefore, if NGOs wish to work with forest users on state forest land, they have to assume an intermediary role between the user and the state. Intermediary organisations have an early and difficult catalytic role in

---

[6] This paper does not attempt to review the major works analysing the role of NGOs, in particular the important series of books by Farrington et al. (1993), Carroll (1992).

facilitating linkages between local people and the state; several organisations in India, such as Vikram Sarabhai Centre for Science and Technology (VIKSAT), Aga Khan Rural Support Programme (AKRSP) and MYRADA, have, however, been relatively successful in this role.

4. Decentralisation, the Panchayati Raj and implications for the forestry sector

The development of linkages between sectoral and political decentralisation is also an important part of ensuring sustained institutional change from bottom to top. In essence, such linkages will help to provide a democratic forum in which the power of the line agencies may be challenged. As discussed in section 3, the Forest Departments retain a large amount of control over Village Forest Committees, indicating that the decentralisation process is only partially implemented. Currently, VFCs have no other institutional structure through which to question the actions of the Forest Department, or other line agencies.

In India, a process of explicit political decentralisation is enshrined in the Panchayati Raj system.[7] However, several commentators have noted that, although the rhetoric points to lower-level decision-making, in actual fact 'with Panchayati Raj, the *power* of decision-taking remains concentrated and centralised in the political and administrative hierarchies, though in form it seems dispersed through the various organs of local self-government' (ISVIP, 1971: 183 quoted in Wade, 1988: 31). Although this comment was made some 25 years ago, it is still considered to be the case in most States that the panchayat system has not decentralised control. Control is still mainly vested in the line agencies, and it is the relationships between the agents of the state and local people that determine where power is maintained:

> Officials are seen and see themselves as dispensers of favours. It is widely assumed that if an official wishes to do something for you he can, and the problem is how to make him want to. If you fail, it is because you do not have enough influence or have not paid enough money (Wade, 1988: 31).

Sanwal (1987: 384) reinforces the point made by bureaucrats about the impact of the changes in power relations implied by the decentralisation process:

> in intent decentralisation concerns relations between the government and the masses, but in its implementation decentralisation involves relations within the national government. The centre will need to give up some of its power and there will have to be a powerful political incentive for this. In developing countries an interdependence of politics and administration with mutually respected jurisdictions, is part of the organisation structure.

---

[7] An enactment by the Government of India to reconstitute and empower the panchayat system of local government.

This pragmatic view is supported by Pal (1994) who, commenting on recent Panchayati Raj legislation in Haryana, sees a centralisation of control rather than decentralisation to these newly structured units of local government. The fate of the panchayat institutions is likely to play a crucial role in the future devolution of responsibility for forest management, where the credibility of village-level forestry organisations will hinge on whether they are fully integrated into the political decision-making system. To date, there has been a large communication gap between the panchayat institutions and other village groups, with a lack of accountability and transparency about the allocation of panchayat funds to village development activities (Shankar, 1994: 1847). The panchayats have failed to represent the interests of the broad array of village groups, but equally the panchayats themselves have not been empowered. Control over decision-making has remained with the line agencies and politicians (Pal, 1994: 1843). Paraphrasing Sanwal (1987), 'he who holds the budget holds the power'. Although budgetary control does not explain all the facets of the ownership of power, it is considered to be of great importance within bureaucracies, where individuals are described as powerful because of their control over budget lines.

At the State level, there has been great antipathy to the notions underpinning the Panchayati Raj system. 'At this level, politicians had little desire to create institutions that could provide alternative bases of political power to compete with or undermine their own' (Webster, 1990: 27). Those States that did implement a programme of Panchayati Raj in the late 1960s (such as Gujarat and Maharashtra) soon terminated it as 'new centres of power and authority emerged' to challenge the state authority (ibid.). The generally held view that the panchayat institutions merely reproduce and reinforce the existing power structures is contested, however, by some commentators who argue that these institutions do provide an alternative structure through which local groups can assert their democratic rights (Shiviah and Srivastava, 1991).

In general, experience across India with the institution of the Panchayati Raj has demonstrated an important point: that the power of the centre is mediated through the States, and where the States have no will to implement central policy, the centre has little or no power to enforce its rule. Forestry, however, provides an interesting complement to this. Since the 1970s forestry has no longer been a State subject, but one that is controlled by the centre. Together with the fact that the bureaucracy that controls the forest lands is an all-India service, this leads to the current situation where in many States the Forest Departments are in a uniquely powerful position and are able to flout the will of the State government by referring decisions back to the centre. Many decisions about forest land and its allocation have thus become the subject of conflict between the centre and the States, and a reflection of the power politics between the two.

Some of the problems experienced with the introduction of the panchayat system and the reasons given for its failure (Box 2) apply equally well to the problems

**Box 2   Comparison of the failures of the gram panchayat system
and of JFM organisations**

1. The ordinary villagers fail to distinguish between the gram sabha (village assembly) and the panchayat (lowest level of administration) and are unaware of their rights and responsibilities as gram sabha members.

1* Forest users are often unaware of the rights and responsibilities conferred on them as part of the joint forest planning and management system. They do not consider they are able to challenge the decisions taken by the elected members of the forest protection committees. The general assembly of forest users does not have real decision-making power.

2. The nature of village politics is such that once a village leader is elected the villagers think that they have nothing to do thereafter and the leader will do everything. On the other hand, once an opposition leader is defeated, both he and his followers will cease to take any interest in the gram sabha meetings.

2* Forest users often state that they have elected a chairman and committee to take the decisions for them, although this contradicts the feelings expressed under point 1*. However, this is not unexpected, since the decision-making structures within a village are highly structured and exclusive. It is not to be expected that the implementation of JFM will demolish these structures in a short time and construct new broad-based and open decision-making structures in their place.

3. When the gram sabha comprises a number of villages, there is generally no common venue which is easily accessible to the people of all the constituent villages.

3* This problem is found where the forest protection committee draws its membership from a number of villages. Problems of representation are greatly magnified, and for women, in particular, it becomes very difficult for them to travel to meeting locations remote from their household environment.

4. The timing of gram sabha meetings has much to do with popular participation.

4* Often meetings to discuss forest issues are held at times when the majority of forest users are busy with tasks elsewhere, thus reducing the opportunity to participate for an important section of the user group.

5. Very few people are informed about the forthcoming gram sabha meetings. The usual method of communication is by the beating of drums by the village chowkidars, which is seldom done properly.

continued

Box 2 *continued*

5* In the case of meetings called at the instigation of the Forest Department, usually a select few are notified (committee members). The meeting is often held at the convenience of FD staff, and in many instances meetings are cancelled without prior notice. This leads to frustration and irritation at the waste of time. Information and decisions from these meetings are rarely relayed to the rest of the forest user group.

Source: *Diwaker Committee Report on Gram Sabhas* (1963) cited in Webster (1990: 30).

* Author's additions, drawn from field experience in India.

---

encountered with the newly formed forest protection committees.

Should this remarkable parallel in experience, over a gap of some 30 years, lead to disillusionment and dismissal of the possibility of creating more democratic institutions? The answer is probably no, although this more positive view should be tempered with a realistic assessment of the amount of time necessary to bring about change in local organisational structures that requires the replacement of top-down planning processes through a hierarchical administration by processes in which bottom-up planning integrates with local government structures and line agency delivery of services and support. Such a change also requires a fundamental challenge to socio-political structures at all levels.

5. Institutional experimentation: experience from donors

The experience of donor organisations is useful in helping to identify potentially successful institutional arrangements. A recent review of the Ford Foundation community forestry programme highlights a series of mechanisms that have been successful in changing the working practices of government Forest Departments in South and South-East Asia. The past decade of Foundation-supported activities is marked by the development of new institutional partnerships. The activities of forest bureaucracies have become more collaborative through the development of stronger working relationships with other sectors of society, especially non-governmental organisations and universities.

In these new relationships, each sector has drawn upon the diverse talents and experiences of the others to enhance its own work. For example, NGOs have been supported in their work of organising communities, supplying technical assistance to villagers, advocating policy change on behalf of forest villagers and providing legal and/or marketing services to villagers. Universities and research institutions have been supported in their conduct of training courses, developing new action research methodologies, analysing projects and providing documentation from project processes. Direct support to government has been essential in order to create a sense of ownership and learning, and to enable agencies to develop new programmes and policies. Working together, often on the same projects at the same sites, has facilitated co-ordination and helped the representatives of these different sectors to develop mutual respect and understanding.

The 'three-legged stool'

Development of these multi-institutional linkages has been likened to constructing a 'three-legged stool'. All three legs – representation at the community level, policy formulation, and research/training – are needed to achieve meaningful social change, as well as the 'seat' or means of balancing and linking the legs. The collaborative relationships among the Forestry Department, other government agencies, NGOs, and universities or research institutions have made this integration possible. It should be noted that any one agency or organisation may assume multiple roles in contributing to the three lines of action. For example, both Forestry Departments and NGOs have played essential roles in organising communities and conducting research, and universities have assisted in implementing programmes on the ground and contributing to policy recommendations. Their effectiveness in performing these multiple roles has been enhanced as they collaborate with a broader array of institutions.

5.1   Institutional support groups

Since the early 1980s, the Ford Foundation has provided funds to form and maintain institutional support groups (usually called working groups) for community forestry, institutional mechanisms that embody the principles of the 'three-legged stool'. The nature of these groups has varied, depending on whether they were formed to assist government agencies, NGOs, or research organisations. They may perform a number of functions, including acting as a co-ordinating body, providing training or workshop opportunities, drafting policy, helping with problem definition and exercising leverage on donors.

Because of the focus on forest agencies, working groups that assist the government have been the most prominent and common institutional support groups funded. They appear to be effective in addressing problems that require:

* policy reform where action is needed on a large scale
* a learning process approach
* contributions from different disciplines or organisational perspectives
* momentum to overcome institutional resistance

The groups guide government policy by providing access to a variety of perspectives and serving as a catalyst for change.

Networks

As a precursor to more formal institutional arrangements, networks can be used as a means of facilitating exchange of experience, and to begin to develop informal relationships among individuals and institutions working in a common area. This is particularly the case where NGOs are either weak or have limited credibility with the target institution. Networks also provide a forum for communication among clients who may be physically isolated or, because of the cross-disciplinary nature of the work, may not previously have been aware of the work of other institutions operating in disciplines ostensibly outside their frame of reference (see Box 3).

There are no universal solutions to the complex environment encountered at the local level, and as such there is no one ideal institutional form. The principle behind the working group, of drawing together different organisations with varying perspectives and skills bases, is a useful one and forms the basis for the development of different types of collaborative relationships. Whether the institutions are drawn together through a working group structure, or less formally and directly through networks, should depend on the particular context and analysis of the types of linkages necessary to help facilitate the development of local to national linkages.

Box 3   **China's Forestry and Society Network**

As the social forestry programmes in Yunnan and Sichuan Provinces begin to take shape, it has become clear that many experiments are under way throughout the country to find new models of village-level forest management. In some cases, international aid agencies have worked deliberately with Chinese partners to include participatory forest management as one component of integrated rural development programmes. In other cases, communities and local forestry authorities have recognised that management by administrative order often backed by coercion has not worked, and that it is more effective to forge partnerships which will work in the interests of both the farmers and the forestry authorities. In all cases, exciting work has been going on with new forms of contractual arrangements, community shareholding systems, and the introduction of a wide range of technical innovations. In a country as vast as China, however, it is not surprising to find little communication between projects, and little exchange of information about successes and failures.

The Chinese Academy of Forest Sciences is the country's leading centre for research and dissemination of information on forestry. The Academy's information centre heard of the Ford Foundation's interest in supporting work on social and community forestry in China and offered to act as a centre for documentation on the subject. This offer evolved into a more ambitious proposal to establish a national network and newsletter to be called the 'Forestry and Society Network', and following government approval, the network was established in early 1993. It publishes a quarterly newsletter in Chinese, with two newsletters a year in English since the organisers were of the strong opinion that there is little recognition outside the country that innovation and experimentation are not only possible but are encouraged in China.

After only a year of activity, the network is attracting considerable interest both at the level of government policy-makers in the relevant ministries, and among those concerned at the local level with the management of forest resources. The newsletter is proving to be a lively forum in which a Chinese approach to participatory forest management is being formulated. The network itself is an active association which has already held one regional meeting in the southern city of Suzhou to exchange experiences and ideas, with several more such regional meetings planned for 1994. The Forestry and Society Network is already playing an important role as a forum for re-examining how forest management can improve the livelihoods of rural people, as well as providing a rare channel of communication between different regions and agencies grappling in different ways with similar problems.

Source: Nick Menzies, Program Officer, Ford Foundation, Beijing.

Box 4   Haryana's experience in Joint Forest Management:
some lessons

Experience gained in Haryana, West Bengal, and Gujarat indicates that outside resource teams can offer valuable assistance to the Forest Department (FD) and communities as facilitators in training, processing documentation, ecological research, and communication flows – all of which are designed to capture field learning and rapidly inform program management. Assisting senior FD officers in conducting periodic working group meetings to review program progress and make strategic policy decisions based on diagnostic studies and field feedback has been a major contribution of these resource teams. In the final analysis, it is the commitment of dynamic and dedicated individuals inside FD institutions which is the valuable contribution to program innovation. After identifying a small core group of leaders, an advisory committee could be established to plan strategies, secure time commitments and define responsibilities for program development.

Another important issue involves the facilitative role of support institutions, such as NGOs, university researchers, outside specialists and other government agencies, in strengthening both FD and community capacity to implement JFM. Through diagnostic research, experienced NGOs and other researchers can assist the FD and communities in generating the knowledge to understand the ecological, institutional and economic parameters that need consideration in the design of sustainable forest management systems.

Source: Joint Forest Management: Concept and Opportunities, Proceedings of the National Workshop at Surajkund, August 1992. New Delhi: Society for Promotion of Wastelands Development.

As experience in India has shown (see Box 4) there are a variety of relationships and roles which can be played by institutions and individuals in the development of these new approaches to forestry. It is the careful meshing together of appropriate actors and information which provides an environment that permits change. Above all, it is essential that an enabling policy environment is created which allows the full development of incentives to encourage institutional change and collaboration. The role of the donor project as a facilitating agent to help develop appropriate links between policy and practice is essential. Some aspects of this relationship will be investigated during the field research, the framework for which is discussed in section 6.

6. Research framework: criteria to be tested

In this search for the 'meaning of life' (or at least the meaning of institutional life) we are being drawn into debates that require generic lessons to be drawn from the diversity of experience: there is the need to generalise from idiosyncrasies, and to provide principles upon which future action can be predicated. In order to address these issues, an actor-oriented perspective is adopted, in which the role of the individual and relationships between individuals and between individuals and the state become paramount. Hence, the understanding of systems is rooted in the reality of individual relationships (Hobley, 1990; Long and Long, 1992). These relationships will be studied in the process of looking at different institutional arrangements for the management of forests in South Asia.

Robert Wade's influential book assessing the criteria under which collective action in the irrigation sector in South India operates provides some guidance for understanding actions in other common-pool resource (CPR) areas such as the forestry sector. In particular, there is his insistence on the importance of ecological criteria providing some of the impetus and rationale for collective action 'I argue that the ecological factors – particularly scarcity and risk – are very important' (Wade, 1988: 1). In the forestry sector, as in irrigation, collective action appears most likely to occur in situations of resource scarcity. (The enormous empirical literature documenting local forest resource management in Nepal invariably describes actions in resource-poor areas.) Similar responses have not been recorded in resource-rich areas, although this does not necessarily mean that they do not exist; it may be a reflection of the fact that they are more difficult to recognise because they are often spatially and temporally dispersed.

There are, however, few general aspects with regard to local institutions: an assessment of forestry user groups indicates a great degree of variability in rules, use rights, etc. But as Ostrom argues, it is this very variability that provides some pointers to institutional sustainability. One would question the appropriateness of institutions that all had the same use rules irrespective of ecological or social variation.

> By differing, the rules take into account specific attributes of the physical systems, cultural views of the world, and the economic and political relationships that exist in the setting (Ostrom, 1994: 4).

Ostrom outlines seven design principles that characterise most of the robust common-pool resource institutions. These are amalgamated here with a list produced by Wade (1988: 216) and are used as the base from which to assess particular known examples of collective action in the field-based research.

6.1 Criteria for assessment

1. Clearly defined boundaries
Individuals or households with rights to withdraw resource units from the common pool of resources and the boundaries of the common pool itself should be clearly defined and agreed. The smaller the area of the resource to be managed, the greater the chances of success.

2. The technology
The higher the costs of exclusion technology (such as fencing), the better the chances of success, i.e. investment in the resource leads to a greater incentive to protect.

3. Congruence between appropriation (use) and provision rules and local conditions
Appropriation rules restricting time, place, technology, or quantity of resource units should be related to local conditions and to provision rules requiring labour, materials, and/or finance.

4. Relationship between resources and user group
(i)   Location: the greater the overlap between the location of the common-pool resources and the residence of the users, the greater the chances of success.
(ii) Users' demands: the greater the demands (up to a limit) and the more crucial the resource for survival, the greater the chances of success.
(iii) Users' knowledge: the better their knowledge of sustainable yields, the greater the chances of success.

5. User group
(i)   Size: the smaller the number of users, the better the chances of success, down to a minimum below which the tasks able to be performed by such a small group cease to be meaningful. Swallow and Bromley (1994) suggest, from their research, that group agreement is more likely to collapse where there are more than 30–40 members.
(ii) Boundaries: the more clearly defined the boundaries of the group, the better the chances of success.
(iii) Relative power of sub-groups: the more powerful those who benefit from retaining the commons are, and the weaker those who favour sub-group enclosure or private property, the better the chances of success.
(iv) Existing arrangements for discussion of common problems: the better developed such arrangements are among the users, the greater the chances of success.
(v)   Extent to which users are bound by mutual obligations: the more concerned people are about their social reputation, the better the chances of success (Runge, 1986: 631).
(vi) Punishments for rule-breaking: the more joint rules the users already have for

purposes other than CPR use, and the more bite these rules have, the better the chances of success.

(vii) Consensus about who are the users: recognition of customary user rights as well as legal user rights is important. This must be negotiated at the outset of the formation of a collective action group.

6. Collective-choice arrangements
Individuals affected by operational rules should be able to participate in modifying them.

7. Monitoring
Monitors, who actively audit CPR conditions and user behaviour, should be accountable to the users and may be the users themselves.

8. Detection and graduated sanctions
Users who violate operational rules should suffer graduated sanctions (depending on the seriousness and context of the offence) from other users, from officials accountable to these users, or from both. Ease of detection of rule-breaking free riders: the more noticeable is cheating on agreements, the better the chances of success. Detection is a function partly of 1, 3 and 4(i).

9. Relationship between users and the state
Ability of the state to penetrate to rural localities, and state tolerance of locally based authorities: the less the state can, or wishes to, undermine locally based authorities, and the less it can enforce private property rights effectively, the better the chances of success.

10. Conflict-resolution mechanisms
Users and their officials should have rapid access to low-cost local arenas in order to resolve conflict among users or between users and officials.

11. Minimal recognition of rights to organise
The rights of users to devise their own institutions should not be challenged by external governmental authorities.

12. Nested enterprises
Appropriation, provision, monitoring, enforcement, conflict-resolution, and governance activities should be organised in multiple layers of nested enterprises (possibly linked with other democratically based political institutions).

One of the most difficult challenges facing any donor organisation is how to address and change the culture of a bureaucracy that currently acts in a way that is inimical to the achievement of the objectives of the development project. In conjunction with the analysis of local organisations, the role of the external catalyst is also examined in order to draw lessons from experience.

Experience to date in the forestry sector provides some guidance:

- Ownership of the project process (ideas, implementation patterns, etc.) must be developed by the implementing organisation.

- It is insufficient simply to develop consensus about the purpose of the project; more specifically real understanding is demonstrated only when the project partners are able to plan and implement activities that will contribute to the achievement of the purpose. (Experience has shown that what was considered to be mutual understanding rapidly deteriorates into mutual incomprehension when it becomes clear to the implementing agency what types of activities the donor considers essential for the successful implementation of the project.) There cannot be too much joint planning, i.e. the implications of the 'vision' for institutional change need to be jointly articulated.

- The project 'vision' must be owned by all levels of the implementing agency (i.e. the situation must be avoided where only senior management know where the project may be going to, and where junior staff are merely responding to orders).

- A clear understanding of the covert institution must be developed by the donor organisation, since denial of its existence has had serious negative consequences for project success.

- Clear identification of client groups and methods for their inclusion in the project process must be developed. Just as the project 'vision' should be owned by the implementing agency, it should also be owned by local people.

- Decentralisation without devolution of control will not work.

- Transparency and accountability at all levels (within the village and within the bureaucracy) are essential.

- Institutional arrangements should respond to local conditions.

- Policy frameworks must be enabling and not prescriptive, i.e. permissive of idiosyncrasies.

- Property rights, in many situations, need to be clearly articulated and strengthened at the local level.

- There is a need for donor reorientation to ensure that flexibility and responsiveness are inbuilt into their bureaucratic structures.

- Development of a strong constituency for the project is essential. If there is no

demand from local people for participatory forestry projects, there can be little point in continuing. Lack of demand probably indicates that the project has been poorly developed without ensuring that the above steps have been followed.

6.2 Policy and implementational implications

Ostrom (1994: 1) argues that 'any single, comprehensive set of formal laws intended to govern a large expanse of territory and diverse ecological niches is bound to fail in many of the habitats where it is supposed to be applied'. This statement leads us to a fashioning of policies which provide a general framework allowing for local flexibility to be accommodated. It demands organisations in which individuals have the freedom to respond to need and to identify resources to support a particular approach. It also implies a highly risky environment where the safety of 'norms' is abandoned for the uncertainty of 'anything goes', but within tightly monitorable frameworks. It calls for a world bounded by strict rules of accountability and transparency at every level.

Recent experience has shown that expansion of participatory forestry brings its own challenges. Forest Departments eager to expand programmes are learning that there is not always the time or the capability to train staff adequately. Also, where funds need to be rapidly disbursed to a large of number of sites, there is often a tendency for decision-making to become more centralised, which lessens the capacity to respond to heterogeneous conditions. In addition, experience has shown that the time and effort required to organise and sustain activities in a single village has often been extremely demanding on the time and resources of the implementing agency, although some of these costs can be considered one-off expenses associated with establishing the programme. How, then, can participatory forest management programmes expand without sacrificing their essential character, namely, the capacity to respond to diverse social and ecological conditions and to devote adequate attention to implementation?

Diversity is both a challenge and an opportunity. However, in the view of bureaucracies used to the implementation of large-scale models, diversity is a problem whose solution is often beyond the competence of highly structured organisations. New institutional arrangements and partnerships have, to a certain degree, begun to accommodate local diversity. Thus, in several countries in Asia, positive relationships have been constructed between locally based NGOs and government departments. The NGOs have provided the flexibility and responsiveness required to accommodate social diversity, and the government staff have been able to work alongside their NGO partners to supply the technical response to ecological diversity. Although NGOs have provided additional extension outreach in many countries, experience has shown that it is not sufficient or indeed adequate to rely on NGOs alone to provide the interface between local people and government departments. In India, for example, the emphasis on the

development of joint partnerships between local people and Forest Departments has been of central importance. This ensures that Forest Department staff also learn how to become more responsive to local needs.

Above all, what has become apparent from this review of literature and experience is that there is no one solution, but rather a continuum of institutional arrangements and levels of abstraction at which they operate. The fieldwork will attempt to test some of the criteria listed against empirical experience, in order to refine this framework and provide guidance on the conditions under which different forms of institutional arrangements are most likely to operate successfully. As Ostrom (1994) states:

> It is the *match* of institutions to the physical, biological, and cultural environments
> in which they are located that will enable institutions (and the resources to which
> they relate) to survive into the twenty-first century.

Bibliography

Agarwal, A. and Narain, S. (1989) *Towards Green Villages*. Delhi: Centre for Science and Environment.

Arnold, J.E.M. and Campbell, J.G. (1986) 'Collective Management of Hill Forests in Nepal: the Community Forestry Development Project', in *Proceedings of the Conference on Common Property Resource Management*, 21–26 April. Washington, DC: National Academy Press.

Bista, D.B. (1987) *People of Nepal*. Kathmandu: Ratna Pustak Bhandar.

Bromley, D. (ed.) (1992) *Making the Commons Work: Theory, Practice and Policy*. San Francisco, CA: ICS Press.

Brown, C.L. and Valentine, J. (1994) 'The Process and Implications of Privatisation for Forestry Institutions: Focus on New Zealand', *Unasylva* 45(178): 11–19.

Carroll, T. (1992) *Intermediary NGOs: The Supporting Link in Grassroots Development*. West Hartford, CT: Kumarian Press.

Ciriacy-Wantrup, S.V. and Bishop, R.C. (1975) 'Common Property as a Concept in Natural Resources Policy', *Natural Resources Journal* 15: 713–27.

Colchester, M. (1989) *Pirates, Squatters and Poachers: The Political Economy of Dispossession of the Native Peoples of Sarawak*. Kuala Lumpur: Survival International and INSAN.

Colchester, M. (1994) 'Sustaining the Forests: the Community-based Approach in South and South-East Asia', *Development and Change* 25(1): 69–100.

Dahlman, C.J. (1980) *The Open Field System and Beyond*. Cambridge: Cambridge University Press.

Dani, A., Gibbs, C. and Bromley, D. (1987) 'Institutional Development for Local Management of Rural Resources', *East–West Environment and Policy Institute Workshop Report* No. 2. Hawaii: East–West Center.

Demsetz, H. (1967) 'Toward a Theory of Property Rights', *American Economics Review* 62(2): 347–59.

Farrington, J. and Bebbington, A., with Wellard, K., and Lewis, D.J. (1993) *Reluctant Partners: Non-Governmental Organisations, The State and Sustainable Agricultural Development*, 4 vols. London and New York: Routledge.

Feeny, D., Berkes, F., McKay, B. and Acheson, J.M. (1990) 'The Tragedy of the Commons: Twenty-two Years Later', *Human Ecology* 18(1): 1–19.

Fortmann, L., and Bruce, D. (1988) *Whose Trees? Proprietary Dimensions of Forestry*. Boulder, CO: Westview Press.

Fox, J.M. (1991) 'Spatial Information for Resource Management in Asia: A Review of Institutional Issues', *International Journal of Geographical Information Systems* 5(1): 59–72.

Fox, J.M. (1992) *The Problem of Scale in Community Resource Management*, East–West Center Reprints, Environment Series No. 5. Hawaii: East–West Center.

Ghai, D. and Vivian, J. (eds) (1992) *Grassroots Environmental Action: People's Participation in Sustainable Development*. London and New York: Routledge.

Ghai, D. (1994) 'Environment, Livelihood and Empowerment', *Development and*

Change 25(1): 1–11.

Ghosh, Arun (1994) 'Ideologues and Ideology: Privatisation of Public Enterprises', *Economic and Political Weekly* XXIX(30): 1929–31.

Gilmour, D.A. and Fisher, R.J. (1991) *Villagers, Forests and Foresters*. Kathmandu: Sahayogi Press.

Gordon, W.A. (1955) *The Law of Forestry*. London: HMSO.

Gore, Al (1993) *'From Red Tape to Results: Creating a Government that Works Better and Costs Less*. New York: Times Books.

Hardin, G. (1968) 'The Tragedy in the Commons', *Science* 162: 1243–8.

Hirsch, P. (1993) 'The State in the Village: The case of Ban Mai', *The Ecologist* 23(6): 205–11.

Hobley, M. (1990) 'Social Reality, Social Forestry: The Case of Two Nepalese Panchayats', PhD thesis, Australian National University, Canberra.

Hobley, M. (1991) 'Gender, Class and the Use of Forest Resources: Nepal', in A. Rodda (ed.) *Women and the Environment*. London: Zed Press.

Hobley, M. (1992) 'The Terai Community Forestry Project', Working Paper prepared for the World Bank project preparation mission. Kathmandu: World Bank.

Joekes, S., Heyzer, N., Oniang'o, R. and Salles, V. (1994) 'Gender, environment and population', *Development and Change* 25(1): 137–65.

Libecap, G.D. (1989) 'Distributional issues in contracting for property rights', *Journal of Institutional and Theoretical Economics* 145: 6–24.

Long, N. and Long, A. (eds) (1992) *Battlefields of Knowledge: the interlocking of theory and practice in social research and development*. Routledge: London and New York.

McKean, M. (1986) 'Management of Traditional Common Lands in Japan', in National Research Council, *Proceedings of the Conference on Common Property Resource Management*, pp 533–89. Washington, DC: National Academy Press.

Nadkarni, M.V. with Pasha, S.A. and Prabhakar, L.S. (1989) *The Political Economy of Forest Use and Management*. New Delhi: Sage Publications.

Netting, R. McC. (1976) 'What Alpine Peasants have in Common: Observations on Communal Tenure in a Swiss Village', *Human Ecology* 4: 135–46.

Ostrom, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.

Ostrom, E. (1994) 'Neither market nor state: governance of common-pool resources in the twenty-first century', IFPRI lecture. Washington, DC: IFPRI.

Ostrom, V., Feeny, D. and Picht, H. (eds) (1988) *Rethinking Institutional Analysis and Development: Issues, Alternatives and Choices*. San Francisco, CA: International Center for Economic Growth.

Pal, Mahi (1994) 'Centralised Decentralisation: Haryana Panchayati Raj Act, 1994', *Economic and Political Weekly* XXIX(29): 1842–4.

Pathak, Akhileshwar (1994) *Contested Domains: The state, peasants and forests in contemporary India*. New Delhi: Sage Publications.

Rowchowdhury, A. (1994) 'Serving Notice on Indian Forests', *Down to Earth*, 31 August, pp 5–8.

Roy, S.B., Mukherkee, Raktima, Roy, Dibyendu Shekhar, Bhattacharya, Prodyut and Bhadra, R.K. (no date) *Profile of Forest Protection Committees at Sarugarh Range,*

North Bengal, IBRAD Working Paper No. 16. Calcutta: Institute for Bio-Social Research and Development.

Runge, C.F. (1986) 'Common property and collective action in economic development', *World Development* 14(5): 623–35.

Sanwal, Mukul (1987) 'The Implementation of Decentralisation: a Case Study of District Planning in Agra District, Uttar Pradesh, India', *Public Administration and Development* 7(4): 383–97.

Sarin, Madhu (1993) 'From conflict to collaboration: local institutions in joint forest management', *Joint Forest Management Working Paper* No. 14. New Delhi: SPWD.

Shankar, Kripa (1994) 'Jawahar Rozgar Yojana: An Assessment in UP', *Economic and Political Weekly* XXIX(29): 1845–8.

Shepherd, G. (1992) *Local Forest Management in Africa*, ODI Occasional Paper. London: Overseas Development Institute.

Swallow, B.M. and Bromley, D.B. (1994) 'Institutions, Governance and Incentives in Common Property Regimes for African Rangelands', *Environmental and Resource Economics* (forthcoming).

Shiviah, M. and Shrivastava, K.B. (1990) *Factors Affecting Development of the Panchayati Raj System*. Hyderabad: National Institute of Rural Development.

Uphoff, N. (1986) *Local Institutional Development: An Analytical Sourcebook with Cases*. West Hartford, CT: Kumarian Press.

Uphoff, N. (1992) *Local Institutions and Participation for Sustainable Development*, Gatekeeper Series No. 31. London: IIED.

Utting, P. (1994) 'Social and political dimensions of environmental protection in Central America', *Development and Change* 25(1): 231–59.

Wade, R. (1988) *Village Republics: Economic Conditions for Collective Action in South India*, Cambridge South Asian Studies No. 40. Cambridge: Cambridge University Press.

WCED (1987) *Our Common Future*, report of the World Commission on Environment and Development. London: Zed Books.

Webster, Neil (1990) 'Panchayati Raj and the Decentralisation of Development Planning in West Bengal: A Case Study', CDR Project Paper 90.7. Copenhagen: Centre for Development Research.

Westoby, J. (1987) *The Purpose of Forests*. Oxford: Basil Blackwell.

Wollenberg, E. and Hobley, M. (1994) *Experiences and Advances in the Development of Community Forestry Programming. A Review of the Ford Foundation Supported Community Forestry Programs in Asia*. New York: Ford Foundation.

World Bank (1994) *Participation Sourcebook: Technical Paper, Forestry*. Washington, DC: World Bank.

World Bank (1991) *Forest Policy*. Washington, DC: World Bank.

World Bank (no date) *A Strategy for Asian Forestry Development*. Washington, DC: World Bank, Land Resources Unit, Asia Technical Department.