Decentralization and Devolution of Forest Management in Asia and the Pacific
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FAO and RECOFTC 2000
Foreword

Governments throughout Asia and the Pacific region are creating exciting and innovative opportunities for achieving sustainable forest management and biodiversity conservation goals by decentralizing authority and responsibility for resource management. The trend to decentralize is driven by a range of factors, including efforts to reduce central bureaucracies and cut budgets, a history of government forest management failures, increased economic liberalization and market orientation, and growing commitment to more equitable forest management.

Throughout the region, innovative legislation and policies are strengthening the hands of local governments and communities in managing forest resources. The various initiatives have led to greater access and control of forest resources by local people. In turn, forest protection and management have often improved and resource pressures been reduced.

While the decentralization trends are very promising, many programs have encountered major challenges, disappointments and setbacks. To explore the issues and challenges facing various decentralization and devolution initiatives, the Philippines Department of Environment and Natural Resources/Forest Management Bureau (DENR/FMB), the FAO Regional Office for Asia and the Pacific (FAO/RAP), and the Regional Community Forestry Training Center (RECOFTC) jointly organized the "International Seminar on Decentralization and Devolution of Forest Management in Asia and the Pacific". This publication is a result of the seminar. The seminar was convened in Davao City, Philippines, from 30 November to 4 December 1998.

The importance of forest management decentralization and devolution issues is underscored by the large number of participants that attended the meeting and the broad support given to the seminar by various international organizations. More than 180 participants from 21 countries participated in the five-day seminar, which included a day of field visits to various sites on the island of Mindanao where many of the experiences from the Philippines in decentralization and devolution can be observed.

The main objectives of the seminar were to:

- Critically review decentralization and devolution experiences in forest management;
- Discuss emerging issues associated with different approaches to adaptive forest management;
- Identify and analyze constraints and opportunities in recent efforts;
- Examine gaps between policy and implementation in the field; and
- Explore how successful pilot efforts can be scaled up to generate wider impact.

One of the main issues that arose from the seminar was the recognition that decentralization and devolution are two very distinct processes. Experiences in the region indicate that decentralization does not automatically result in devolved forest management. Many of the papers in this publication indicate the need for greater understanding of how these policies are actually implemented at the local level and how these policies affect local forest management efforts.

Experience reveals that local government units or local forest bureaucracies are often given responsibility to undertake activities but not the authority or appropriate budget resources to make meaningful decisions. For decentralization policies to have significant impact, those who are delegated responsibility need greater authority and decision-making power to implement programs.
Discussions and presentations at the seminar pointed out that it is not only a lack of human and financial resources at the local level that has led to slower acceptance of decentralized forest management policies, but reluctance within forest and other government bureaucracies to relinquish control.

On the other hand, increasing democratization throughout the region has led to the emergence of numerous alliances among local organizations and networks attempting to create opportunities for more meaningful decision making for local people. There is a need to bridge the gap between governmental reform (decentralization) and the exciting changes taking place at the local level. Only then will decentralization policies have their intended affect of spurring rural development and promoting forest conservation.

We hope this publication will assist those in charge of formulating and carrying out forest management policies to better understand the key issues and challenges that underlie effective implementation of decentralized forest management.

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Acknowledgments

This publication is based upon papers that were presented at the International Seminar on Decentralization and Devolution of Forest Management in Asia and the Pacific. The editors would like to acknowledge Ms. Janice Naewboonnien and Mr. Jeffery Bornemeier who assisted in proofreading many of the papers.

The international seminar was made possible because of the outstanding efforts of many organizations and individuals who worked together in excellent and close partnership. FAO/RAP and RECOFTC are especially grateful to the Department of Environment and Natural Resources/Forest Management Bureau (DENR/FMB) of the Philippines, which was a co-organizer of the seminar and played a key role in making the seminar a success. Particular thanks go to Ms. Mayumi Ma. Quintos, Chief of the Forest Economics Division and her team at FMB who worked countless hours to ensure that all necessary arrangements within the Philippines were made to the complete satisfaction of all participants. Outstanding assistance was also provided by the USAID-funded Natural Resources Management Program (NRMP), and the Development Alternatives, Inc. team that supports NRMP, in organizing the field trips on the island of Mindanao, assisting with local arrangements, providing Secretariat support, and financing the participation of many of the Filipino participants. The organizers would also like to acknowledge the efforts of Mr. Steffan Weidner who worked countless hours to ensure the international seminar was a success.

Core financial support for the seminar was provided by the USDA Forest Service, the United States Agency for International Development (USAID), and the Community Forestry Unit of FAO.

The large number of participants who received financial support to attend the seminar highlighted the great importance that many organizations are giving to decentralization and devolution in forest management. The organizers would like to thank all these organizations for providing the necessary financial support for participants and their follow-up work in preparing papers for this publication. Finally, FAO and RECOFTC thank all the participants who made presentations and actively participated in the seminar, and the authors who prepared papers for this publication.
Decentralization and devolution are dominant themes in contemporary discussions of forest policy and management throughout the world. Many countries have drafted legislation or policies for implementing decentralization and devolution in one way or another. Nevertheless, between the policy, rhetoric and implementation there are obvious gaps, and there is little conceptual clarity about the meaning of decentralization and devolution. The "International Seminar on Decentralization and Devolution of Forest Management in Asia and the Pacific," held in Davao, Philippines, from 30 November to 4 December 1998, explored experiences and issues surrounding the implementation of decentralization and devolution approaches in the region. This introduction reflects on some of the key themes and issues that emerged from the seminar.

Differentiating Decentralization and Devolution

There are diverse definitions of decentralization and devolution, and the two terms are often even treated as equivalent. It is useful, however, to distinguish between them. Decentralization can be defined as the relocation of administrative functions away from a central location, and devolution as the relocation of power away from a central location. In this sense, power can be equated with the capacity or authority to contribute to decision-making. While decentralization and devolution may occur at the same time, it is quite possible to decentralize administrative functions without devolving the power to make meaningful decisions.

In practice, genuine devolution of power over forest resources has occurred only to a limited extent, even where decentralization and devolution are major policy thrusts. Types of both processes can also be differentiated by the direction in which functions or powers are shifted, such as from a central bureaucracy:

- To regional or local offices;
- To local political structures (i.e. local government); or
- To local communities or natural resource users (i.e. groups established by local social processes, not by administrative fiat).

The first type largely represents decentralization only. This introduction focuses mostly on the second and third types, which involve both decentralization and devolution.

Who Sets the Objectives? Devolution of Power over Resources

Within the Asia-Pacific region, the tendency has been to grant local communities the responsibility for protecting forest resources, without granting the rights to use them in a major way. Where local use is permitted, it is usually highly circumscribed and generally limited to minor or non-wood forest products. For example, a tribal community in the Philippines was given the responsibility to protect a watershed, but no rights to use the resources within it. Ancestral domain legislation in the Philippines is intended to recognize traditional connections to resources as a basis for formal tenure, but in this case formal tenure has brought responsibilities without rights (see Datu Ontog Lalong). Another clear example is the case of protected areas in India (see Badola), where people are given the responsibility to protect resources but are not given access to use them.
A related problem is the decentralization of responsibility without devolution of the power to make independent decisions or to take action outside narrow parameters set by forest authorities. Key forest management objectives are usually set by governments, and the decision-making authority of local communities tends to be limited to decisions that meet these objectives.

The pattern of devolving responsibility without power is also evident in the decentralization policies of the Philippines where local government units are the main local implementers. Local government units are given the responsibility to implement programs without the opportunity to define the programs - nor are they allocated adequate resources to meet the new responsibilities.

In real devolution, those to whom responsibilities are devolved should have substantive input in setting the objectives, rather than simply meeting objectives set by others. "Substantive input" does not necessarily mean that all decision making is devolved, but it does imply the genuine possibility of affecting outcomes, and a willingness on the part of those devolving authority to modify their objectives.

This discussion raises some serious questions about devolution. Why, given all the official policies and rhetoric concerned with decentralization and devolution, are governments and forest authorities apparently willing to devolve only responsibility? Are they trying to maintain control over valuable resources while cutting management costs? Or do forest authorities simply not trust communities to make the right decisions? To what extent are forest management objectives negotiable? To what extent should they be negotiable?

**Should Forests be Given over to Communities for Management?**

There is much disagreement as to whether forest resources should be handed over to communities at all. One line of thinking holds that devolution to communities is not only desirable, but necessary; another holds that it is totally undesirable. Between these extremes lie other less absolute viewpoints.

The main argument in favor of devolution is essentially pragmatic: conventional forest management (i.e. through forest departments) has not worked well in much of the region (see Banerjee). Continuing high deforestation rates have been viewed as evidence that the current system is not working. Devolution is expected to offer more effective management. In addition, it is often argued that devolution is desirable on grounds of equity and social justice.

One of the key arguments against devolution is based on the belief embraced by some foresters that communities do not have the ability to manage forests. This concern may be legitimate in particular cases and may indicate a need for some controls (and for capacity building at the community level), but it is not valid as an argument against community control of forests. This viewpoint indicates an obvious lack of trust and confidence in communities.

Another variant is the argument that some communities do not have the will or interest to manage forests. According to this view, commercialization and marketization have transformed the rural economy to such an extent that traditional resource use patterns have been replaced with newer livelihood strategies that include commercial exploitation. Many communities and devolution proponents argue that this change should not stand in the way of further devolution - that there is no reason why communities should not manage forests for commercial purposes. What this means is that many rural people are demanding the same rights and benefits as their urban compatriots (away from livelihoods dependent on forest resources) such as access to markets, choices in managing their natural resources, and education and health services. In
particular the younger generation has largely set out on the path of "modernization", and that might mean that labor-intensive forest management activities are no longer in their interest. In fact, the harboring of high development expectations of many rural people can be a serious threat to sustainable forest management and biodiversity conservation (see Enters and Anderson). Thus, the implication is that forest management policies need to be flexible so they can be adjusted to local realities and the desire to break out of economic exclusion.

The idea that forests cannot be handed over because communities cannot be trusted to manage them properly is, in any case, based on a simplistic understanding of tenure - an assumption that complete control must be vested in either the forest department or communities. Actually, no form of legal tenure anywhere in the world encourages absolute control, so there need not be great concern about a loss of control in handing over forest ownership to communities (see Lindsay). In all societies, non-governmental ownership has always been subject to some regulation. Even in countries where private ownership is most strongly enshrined, such as in the United States or New Zealand (see Clarke), governments still maintain some rights and controls, so people are constrained from certain actions even on their own private land.

Partly underlying the apprehension about relinquishing control of forests seems to be a real concern on the part of some foresters about giving up the valuable understanding, tools and techniques of forestry science. If foresters do not control forests, then what will be their role?

It is feasible that foresters will gain by genuine devolution, because what they will lose is their regulating role, which is often considered a distraction from their focus on forestry science. Devolution can offer an opportunity for rethinking how forestry can support local management.

It is interesting to note that some of the very people associated with Joint Forest Management and similar programs oppose the handing over of forests to local people. This indicates a partial commitment to decentralization in the form of devolution of responsibility and some forms of participation, but an explicit rejection of devolved decision making or power sharing. These views are honestly held and clearly illustrate that the policy dialogue about devolution remains very diffuse. Furthermore, it is apparent that the assumptions of various people advocating devolution are sometimes inconsistent and that many people fail to distinguish devolution from decentralization.

A Typology of Approaches to Decentralization and Devolution

While there is no clear consensus about whether devolution is desirable, it is possible to classify most cases of decentralization and devolution into three basic types of approaches.

In the first type, governments seek public participation in (generally) large-scale programs, with centrally set objectives. This seems to be the pattern in most programs. The Indian model of Joint Forest Management certainly fits this pattern; it involves communities in forestry activities (including protection and planting) on forest department land. While some benefits are provided in return for participation, the objectives are set by the forest department and decisions are made on the basis of these objectives. In other words, communities participate in government programs, they are granted responsibilities and some benefits, but they are given little or no authority. This scenario is essentially decentralization without devolution.

The second type involves the decentralization of forest management roles from central government to local government, but not to local communities. Transfer of responsibility to local government units is a major focus of policy development in the Philippines. Even in this context,
the discrepancy between responsibility and power is an issue. In one example, a provincial governor had to "pull power down" from the central government in order to implement the program. This approach involves decentralization, with a degree of devolution in some instances.

The third approach involves the handing over of a significant amount of control to local communities or individuals. This approach is widely discussed rhetorically, but there are very few working examples. The broadest application appears to be represented by community forestry in Nepal, where community rights to use national forestland can be formally recognized subject to negotiated and approved management agreements. However, even the experiences in Nepal indicate that decentralization and devolution are not always complementary (see Singh and Kafle; Uprety and Shrestha). On one hand, the Forest Act of Nepal devolves forest management responsibilities to forest users groups as independent organizations. On the other hand, the Decentralization Act gives local governmental units control over all natural resources within their administrative area. This has caused confusion and conflict at the local level regarding rights to benefits, access and responsibilities. Local communities are now trying to work out their own strategies to deal with these contradictory policies.

Enabling Meaningful Devolution

Meaningful devolution requires both that local managers (be they local government units or local communities) have the capacity to manage forests and that those with current authority to make management decisions are prepared to transfer that authority. It would be naïve to think that all people with control over resources wield their power only for the common good. No doubt some people wish to retain their power over resources for their own benefit. On the other hand, many (probably most) resource managers are reluctant to devolve authority because they genuinely fear the outcome of uninformed management. A major prerequisite for meaningful decentralization and devolution, therefore, is to build levels of trust in local management.

Trust is a prominent issue. Organizational or social arrangements that increase people's trust in each other are a major form of social capital, which is a resource that enables partnerships to work. It is essential to increase trust between foresters and communities as well as within communities; this will involve building local capacities and providing examples of effective local management to demonstrate improved capacities.

It is also essential that arrangements include safeguards (checks and balances). However, decentralization and devolution approaches should not simply allow forest departments to set and police the rules, and judge community performance. Forest departments must also be answerable to the communities, perhaps through third parties, special tribunals or other mechanisms.

The importance of monitoring the performance of community-level forest managers is often noted. It is important for at least two reasons. First, it provides checks and balances. Second, monitoring can help identify successful community-level managers and contribute, through the provision of good examples, to the building of trust and confidence.

Testing a community's capacity to implement a management plan designed by someone else is not a valid measure of the community's management capacity. In other words, it is difficult to assess community management capacity meaningfully if there is no real community input into decision-making. Monitoring the success of community-based forest management can only be meaningful when there is genuine devolution of authority.
As Banerjee stated during seminar discussion, it is also unfair to apply tougher tests to community-based activities than to conventional forest management. In this context, it is important to remember the high annual deforestation rates that prevail under the current management system.

**Conclusion**

Examination of the key issues surrounding decentralization and devolution of forest management in the Asia-Pacific region clearly reveals a single important theme: it is not enough simply to diversify the responsibility for implementing centrally defined objectives. Rather, decentralization and devolution policies and implementation must progress to genuinely devolved (usually pluralistic) forms of decision making and objective setting. Otherwise, decentralization and devolution will contribute relatively little to sustainable forest management and human development.
Decentralization and Devolution in Forest Management: 
A Conceptual Overview
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Introduction

The terms decentralization and devolution, along with a number of associated terms (such as participation and power) are now used widely in discussions about forestry policy. The terms are, however, used to describe a wide range of different approaches and processes to forest management and are often wrongly interchanged. The first aim of this paper is to define more clearly what the various terms and concepts mean. The second aim is to look at some ways in which the concepts have been applied in practice and to identify implications from these experiences to guide future attempts to apply decentralization or devolution to forest management practices.

This paper is a critique of much of what has been described as decentralization and devolution in the past, not a critique of the ideas (or ideals) behind decentralization and devolution. It supports the call for devolution made by Dr. Banerjee (see Ajit Banerjee in this volume). The paper is not intended to be a comprehensive analysis of the different decentralization processes occurring throughout the region, but rather an effort to encourage more explicit awareness of what devolution or decentralization mean both theoretically and in practice.

Definitions and Concepts

Four key concepts will be discussed in this section: decentralization, devolution, power and participation.

The terms decentralization and devolution are often used more or less interchangeably, but it is important to differentiate between the two. Decentralization can best be defined as relocating administrative functions away from a central location. This does not necessarily involve changing the locus of decision making, or devolving power. In distinction to this, devolution can be understood as relocating power away from a central focal point.

In this context, power can be defined as the capacity to affect the outcome of decision-making processes. It is important to stress that this implies a genuine role in decision making, not just a token input in the form of “consultation”. These definitions are not precise, but the distinction reflects common usage and, more importantly, it is useful for purposes of analysis.

Another important aspect of both decentralization and devolution is the direction which either one can take. In the forestry context, the terms are used to describe the relocation of administrative functions and/or power from a central location or focal point to:

- regional or local offices of the forest bureaucracy;
- local political structures (such as the sub-district or administrative village level); or
- "natural" users (i.e. groups established by local social processes, not by administrative fiat).

Participation is another term which is used vaguely. Arnstein (1969) developed a typology of ways in which the word is used. These eight levels are progressively ranked in a ladder which
groups various usages into more general categories ranging from "non-participation", "degrees of tokenism" to "degrees of citizen power" (see Figure 1). When we look at many so-called participatory projects it is clear that they fall within the lower levels of the ladder. The organizing principle of this ladder is the degree of power people have over decisions that are made. This notion of participation ranked in terms of degrees of power over decision making is a useful entry point into discussions of what is really devolved and decentralized in forest management.

**Review of "Participation" in Forest Management**

Several conclusions can be drawn from any modestly informed look at what passes as participatory forestry:

- Most local participation in forest management occurs at the lower levels of Arnstein's ladder of citizen participation;
- Examples of serious devolution (expressed as a meaningful role in decision making about forest resources) are rare; and
- Participatory forest management rarely involves access to valuable forest resources.

The last point is made clear by Banerjee (2000) who reviewed the participatory forest management experiences of a number of Asian countries where he had personal experience. He drew the following conclusions:

- In India, Joint Forest Management (JFM) applies only to degraded areas;
- In Nepal, where community forestry is relatively advanced in the hills, the extension of community forestry to the Terai (where there are valuable accessible resources), or to access to any valuable products, is strongly contested by foresters; and
- In Bhutan, community forestry applies mainly to peri-urban degraded areas.

Discussion of people's participation in forest management often revolves around complaints that the "people do not want to participate in forest management". Sometimes the reason for this unwillingness to participate is attributed to a lack of knowledge and skills or a lack of understanding regarding the importance of forests. Sometimes it is seen as being the result of the absence of adequate "participatory methodologies" ("if we just had better tools and techniques, we could get people involved"). It is likely, however, that the more common reason is that people do not "participate" because they see no point in promoting someone else's agenda. We return, thus, to the question of power to influence management decisions.
This failure to devolve power is not just a matter of not devolving power to communities. Many attempts at administrative decentralization and devolution exhibit a common pattern in which the "periphery" is expected to implement objectives set at a central level. Very often there is a discrepancy between the responsibilities people are given and the rights and powers they have (including the power to act on their responsibilities). Devolution of responsibilities is rarely accompanied by devolution of authority. For example, forest staff are often given the responsibility to encourage local people to participate in forest development activities, for which there is a budget, but do not have the authority to make agreements about the use of that budget. Agreements made in good faith by field staff are often reversed by senior officials, with the result that confidence in field staff by local people declines and efforts to increase local support fail.

Misapplying Devolution and Decentralization

In addition to the basic problem of devolving true power responsibility to implement policies, there are three major ways in which decentralization and devolution have been misapplied:

- Responsibility is often devolved without accompanying devolution of authority to make meaningful decisions required for implementation. This occurs when decentralized administrative units are required to implement programs without having the authority to make the local decisions needed to implement the programs (as in the example given above). It also happens when communities are given responsibility to manage forests without the authority to make the day-to-day decisions involved to perform these responsibilities.
- Responsibility (and, sometimes, authority) are devolved to the wrong people. An example of this is where control of a forest is given to a group that does not have locally recognized use rights, or when authority is given to an elite group, disempowering a wider population of users.
- Approaches to devolution and decentralization are frequently based on applying standard organizational models of local organization (usually based on formal administrative structures) that ignore local conditions and (often effective) existing local arrangements and organizations. In other words, application is often sociologically naive.

As an example of the pressures to impose a standardized organizational model, it is useful to look at Indonesia in 1998. In the spirit of *reformasi* associated with the fall of the Suharto Government, there were immense pressures to make major reforms to forest policy, including strong emphasis on recognition of the needs of local people. The Minister of Forestry at the time was a strong supporter of cooperatives and there was an assumption that local participation would flow in the form of standardized cooperative arrangements, despite the risks that cooperative arrangements would probably not be appropriate in all (or even many) situations. To work, cooperatives would need to be appropriate for a variety of situations such as cases where voluntary groups of farmers were involved in timber production or where traditional shifting cultivators were involved in regulating farming on individual plots through existing social arrangements. Cooperatives might work in some cases, but would be problematic in others.

The problem with standardized models is that they often ignore what has been learned about the social basis for effective local action. A brief history of the evolution of community forestry in Nepal illustrates some of the issues associated with applying devolution and decentralization at the community level in forestry. The Nepal study illustrates the misapplications and also shows ways they can be addressed.
The Nepal Experience

Following the nationalization of private forests in 1957 and the collapse of the feudal system in the early 1950s, it became increasingly clear that the government could not manage forests effectively without local people being involved. It was also recognized that rural people had legitimate and urgent needs that could only be met from forests. The first real community forestry policies were initiated in 1978 with the introduction of Panchayat Forest and Panchayat Protected Forest Rules under which specified areas of forest could be handed over to local politico-administrative units called Panchayats for reforestation of degraded forests (Panchayat Forests) or protection in the case of existing forests (Panchayat Protected Forests).

This proto-community forestry was modestly successful in achieving local support, but was limited by the fact that neither category of forest allowed any significant forest use unless there was also an approved forest management plan. These were very rare. Major rethink became evident in a watershed Workshop on Community Forestry Management in 1987 and was officially enshrined in Nepal's Master Plan for the Forestry Sector in 1988. The revised policy encouraged transfer of forests to local communities for active management and use. Emphasis in the field shifted to developing operational management plans with communities as a prerequisite to handing over forests for their use.

But major institutional barriers remained. One of these was the continuing requirement that the Panchayats should be involved, although it had already been established that smaller groups of traditional users, living close to forests and with informal locally recognized access rights, were more appropriate managers. In fact, handing forests over to the Panchayat was often seen by traditional users as giving away their forest to those who had no active interest in their management. The problem was that there was a strong official ideology that the Panchayat system was a unique and indigenous non-party solution to governance in Nepal. This made it impossible to ignore the village Panchayats in community forestry arrangements. There were also some major "institutional incompatibilities" between the forest department and local communities that limited the rate of hand over of forests to communities (Fisher 1990). These incompatibilities included:

- The tendency by the forestry department to assume that there was some sort of institutional vacuum at the local level. It was assumed that there was no useful local knowledge about forest management and subsequently, locally established use-rights and existing local management systems and organizations were ignored. Thus, emphasis was placed on establishing new arrangements that not only ignored existing arrangements, but also were often in direct conflict with them.
- The "committee syndrome", whereby interventions focused on setting up standardized and externally-sponsored organizations in the form of committees. Field staff were required to set up such committees, although they frequently lacked local support and operated in name only. In the meantime, functioning local systems often continued to operate unrecognized.
- The forest department, partly because of the Panchayat ideology, continued to focus on local government, rather than on "natural" user groups.

Research into local forest management systems and lessons from field experience led to an improved understanding of these difficulties, but it was only with the collapse of the Panchayat ideology after the 1990 revolution, that community forestry was able to shift focus from local Panchayat officials towards user groups. Legislation in 1993 further entrenched the user group approach. These changes led to a rapid increase in the number of community forestry
management agreements. By 1998, the government had handed over more than half a million hectares of forest to roughly 5,000 registered user groups.

The community forestry program is very popular with rural people, and demand for development of operational plans and hand over remains high. There are, however, signs that many forest officials would like to limit the program in various ways.

The main point emanating from the experience of Nepal relates to the increased success of participatory forest management which arose from a better understanding of what is involved in successful local collective action. Lessons about the factors that enable people to work together to manage forests were incorporated in policy and implementation. It was only after power was devolved to the actual users that community forestry in Nepal began to take off.

What is Known about the Social Basis for Collective Action?

There is a vast body of literature on the management of forests as common property and a great deal has been learned about the social basis for effective collective action at the local level (see Ostrom 1990; Fisher 1994). Essentially, forest management by local people requires people to agree or consent to some forms of regulated access to, and use of, forest resources. This involves cooperation, negotiation and institution building. So, what is known about the types of conditions necessary for collective action? We know that:

- There must be a high degree of trust among actors, who must be reasonably confident that others will comply with agreements made.
- People are less likely to breach agreements when doing so will interfere with existing social arrangements. In other words, people do not wish to start conflicts with people they live with, they depend on to provide work, and with whom they share family ties. Interdependence (Ostrom 1990) or embedded social relationships (Fisher 1994) encourage adherence to forest management arrangements. For this reason "natural" communities are a better basis for collective action than artificially constructed, or administratively convenient, units.
- Collective management around resource management is more likely when the boundaries of the resource and the boundaries of the social unit managing it coincide (Uphoff 1992). This can be phrased slightly differently: all the people who use a resource and only those people, should be part of the social unit which manages it. Again, managing forests through formal administratively convenient units (such as Panchayats) tends not to work socially, unless they coincide with the actual users of the forest.

All of these points have great importance for how devolution or decentralization is applied at the community level. Where communities are defined in terms of the formal political and administrative structure, there are real risks that responsibility and authority will be applied to a "community" level that is inappropriate in terms of what is known about effective collective action.

The tendency to focus too much on the formal local political structures makes sense to bureaucracies, for several reasons:

- It is easy to identify representatives;
- A clear legal basis exists; and
- It is procedurally simple (which is good for large-scale implementation).
But, there are major disadvantages:

- The formal political system is often adversarial whereas resource management requires consensus, or at least consent;
- The representatives do not represent all interests;
- Because of this, there is likely to be limited adherence to decisions;
- Formal political systems tend not to coincide with "natural" user groups; and
- Collective action is inhibited if relationships are not "embedded".

Conclusions and Implications

What are the implications of these observations for the implementation of devolution and decentralization forest management policies?

The first implication (applicable whether the shifts are to local administrative units, local political structures or to "natural" user groups) is that effective decentralization or devolution requires devolved decision making and the need to support devolved responsibilities with power and authority. The second implication, applicable at the community level, is that the process needs to be informed by an understanding of the social basis of local (collective) action. A third implication (not explicitly discussed in this paper, but arising from the discussion) is that we need to think of ways to combine the concerns of local governments with those of other non-formal groups.

References


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1 These limitations apply even when the formal political system involves representative democracy. In representative democracy, there is often a high level of opposition to majority decisions. Where outcomes cannot be enforced, consensus or consent are necessary.
Four Considerations for Decentralized Forest Management: Subsidiarity, Empowerment, Pluralism and Social Capital

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Introduction

Unfortunately there are many examples of inadequate and unsustainable forest management by central governments and large private interests alike - from both the developed and developing worlds. In developing countries, where governments are often distant from the resource base and have little means, some government forest reserves exist only on paper, having long ago been exploited and converted into other land uses. On the other hand, forest concession management by industry, especially when it tends to follow short-term economic interests, has equally been questioned about its sustainability.

Perhaps because of these failures, decentralization has been viewed as a promising way of achieving more sustainable forest management. Decentralization in general, and its usual accompanying concepts like participation and co-management, holds prospects for increased proximity to clients, local ownership, reduced transaction costs, increased equity, and enhanced sustainability (Van de Sand 1997); and improved management, accountability, agricultural and economic productivity, and cost recovery (Vermillion 1997). Brown (1998), discussing the rationale for community involvement in forest management, mentions proximity, impact, local livelihoods, capacity, equity, cost-effectiveness, adaptation and development philosophy as key elements.

Decentralization as a means to improve forest management and promote sustainability has had a great number of adherents over the past decade or so. To many, it is a less naive form of participation, and is a form of participation that recognizes political and administrative realities, and moves beyond the isolated, small-scale, success of some participatory rural development projects. A number of documents and reports deal with its positive and potential impact. However, a growing number of voices point out that decentralization is not sufficient, or does not and can not work unless some important accompanying measures are in place.

Forestry has not been immune to the "decentralization fever". Decentralization in forestry holds a number of perhaps illusory and unkept promises. However, devolution of forest management responsibilities and authority to local communities, private small holders or other local groups is not a "sustainability panacea", especially when one type of inadequate, monolithic management is replaced by another. Some experience seems to show local communities and groups perform erratically, sporadically and inequitably (see Enters and Anderson in this volume). They need interaction with outside entities for technologies, techniques markets, and other things that might not be available to them. They are also not immune from capture by special interests and manipulation. They may lack interest and skills, they may be unable to manage conflicting interests within the community, and its knowledge and management systems may be stressed by an increasingly globalized, populated and liberalized world. Indeed, it was partly for some of these reasons that many forests were nationalized in the first place. In isolation, local communities may lack sufficient checks and balances to prevent environmental abuse and may not develop the capacities for sustainable forest management. Decentralization does not mean that local communities or groups magically have the capacity for sustainable forest management.
Decentralization, like participation, means many things to many people and has become common in the jargon of donors and governments alike. Clearly a critical approach is needed if decentralization is to live up to its promises and produce meaningful change and better forest management, and not just remain cynically used phrases to camouflage the status quo. A number of critical questions are currently being asked:

- When and where is decentralization justified?
- What should be decentralized and to what extent?
- Do local entities have the capacity to adequately fulfil their "new" roles and responsibilities?
- How can decentralization avoid becoming deconcentration and the status quo in new clothes?
- Does decentralization implicitly imply a broader and more diverse institutional landscape?

Complete answers to these questions are beyond the scope of this paper. However, the paper attempts to introduce four considerations - subsidiarity, empowerment, pluralism and social capital - that contribute to a better understanding of the processes involved in the decentralization of forest management, and therefore to more realistic approaches. While many other issues could be discussed, such as participation and accountability, the contention of this paper is that these four considerations are centrally (but perhaps not uniquely) important for understanding and succeeding in decentralized forest management. Despite this importance, they are often overlooked.

This paper builds mainly on the deliberations of two workshops, both held in Rome in December of 1997, the "Technical Consultation on Decentralization" and the "Working Group on Pluralism and Sustainable Forestry and Rural Development". While the paper raises some concerns as to the possible success of some forms of decentralization, the aim is not to doubt the need for decentralization in many cases, but hopefully to make it a more effective process.

Subsidiarity

Subsidiarity is the principle that decisions should be made at the lowest possible level where competencies exist. It aims for the effective implementation of tasks within a given policy and a hierarchical level, which minimizes costs and maximizes social well-being. For forest management, this implies that "concerned local populations should be officially responsible for a part of the cost and benefits of functions essential for the local management of resources". (Babin and Bertrand 1998). In essence subsidiarity is the concept behind decentralization. In many instances in the past, local communities were assumed to not have the capacities to make decisions about local resource management, even when they were required to shoulder some or most of the costs.

Babin and Bertrand (1998) cite two examples of the concrete use of the concept of subsidiarity in forest management. One is the development of "rural wood-energy markets" in Niger. The Government of Niger developed a framework that confers extensive local autonomy to local populations on the basis of a contract negotiated between the state and a local management structure. The process does not impose technical solutions, but promotes the emergence of possible solutions and self-organization. It does not assume that the central level has all the answers, technical or otherwise, but assumes that solutions will emerge as challenges are encountered. In their words "the state plans and manages forest resources at the national and regional levels and leaves local management to the local population". Some results of this process include 150,000 ha of forest under management, appropriate quotas and harvesting
techniques, high tax collection rates, increased incomes for local populations, and increased levels of social investments.

In Madagascar, contracts (secure local management contracts) and environmental mediators are being used to help promote more sustainable forest management. The government passed a law in October 1996 (Law 96-025) on the local management of renewable resources - mainly through a process of contracting management to local communities. The Government of Madagascar, CIRAD (Centre de Co-operation Internationale en Recherche Agronomique pour le Development) and their partners in GELOSE (local and secure management of natural resources) are applying the principle of subsidiarity to forest management. This includes a process of mediation in the negotiation of contracts and activities that allocate responsibility and authority for management to the local level.

Subsidiarity can be a useful tool to judge decentralization efforts and choose among options. It requires not only a careful and realistic analysis of local capacities, but also a comparison of capacities and devolution of responsibility and authority to the most appropriate entity. Strangely, this is often absent from much discourse on decentralization. Subsidiarity can help against the tendency to apply potentially universal solutions, like decentralization, without local adaptation. Subsidiarity is also helpful in pointing out the element of time (i.e., that levels of competency change over time). So should decentralization.

While subsidiarity helps to assess the different, but complementary roles of the state and local actors and the necessity for roles for both, it also points towards the type of role the state might play. According to Kaimowitz et al. (1998) local governments and actors

"...also need an overall policy context favorable to local initiatives and clear mechanisms for exercising their legal rights and carrying out their responsibilities. Unfortunately, so far, national and departmental government agencies have done little in this regard, and in some instances have indirectly undermined local government activities. Externally funded projects and NGOs have provided municipal governments with some technical assistance, training, and funds, with largely positive effects, but this has been insufficient to consolidate their natural resource management activities."

Other roles for the state mentioned by Babin and Bertrand (1998) include "referee, economic decider, supervisor of actions and their effects, planner of actions in the framework of land-use ... providing structural instruments for orientation and development". It is also necessary for the state to look after "public goods" that may be undervalued by the private sector or at the local level.

Empowerment

There is a saying that "power is never given, it is always taken - it has always been thus and it will always be thus" (possibly attributable to W.E.B. Dubois). Thus the notion of 'empowerment' is immediately problematic. How can one party empower another? Does not the less powerful party have to take power? Dependence on power sharing and the good will and altruism of the powerful (either in government or in the private sector) is a highly risky and unpredictable affair for the less powerful. In most instances, local communities and user groups will have to be organized (to demand power) before power is shared. They have to be organized to take it - otherwise they are condemned to wait for a few altruistic people to come along. To paraphrase Bratton (in Robinson 1996) once the question was "how can development and government agencies reach the poor majority?" - the participation question. Now it is more likely to be "how
can the poor majority be enabled to influence meaningfully public policies and choose those who will implement them?" - the empowerment question.

Ribot's (1998) work on forest management in the Sahel describes the decentralization process, which indeed benefits local people, but perhaps not as much as it should.

"The language of decentralization and participation is often of local control, autonomy and benefits yet the new structures being introduced in their name afford little. Local populations are still relegated to a carefully circumscribed set of roles and relations with forests, little autonomy is created and few new benefits are devolved."

In some cases, the costs of decentralization are disproportional to the benefits. This has been the case in Mali and in some forms of Joint Forest Management (JFM) in India when the requirements and part of the costs of developing a "local" forest management plan are such that in reality decisions and authority remain with the centralized forest service. Contracts for forest use can have the same problem. Some contracts between local users groups and the forest development authority for classified reserves near Bamako, Mali were looked upon very favorably by local groups. However, it became clear that the forest service was not only the sole judge of what amounted to good forestry practices with respect of management plans, but also the arbitrator in case of disputes. Local groups accepted the arrangements because they got slightly more benefits and security than they would have otherwise. But as Ribot (1998) points out, this was perhaps more in the way of charity than of empowerment. These actions improve life slightly for rural populations and thus are welcomed, but they do little to change the fundamental relations and bestow secure rights. There is a growing literature that critiques much of the participatory approach on these or similar grounds (see for example Brown 1994). In many cases it appears that local communities through decentralization become little more than proxies for the central technical units.

In some cases, it appears that decentralization is solely motivated by financial considerations. For example, forest service personnel working for a project responsible for the management of peri-urban forest reserves near Bamako, Mali explained to villagers that the decentralization of forest management and the sharing of rights and responsibilities with user groups was implemented due to financial constraints at the center. The implication was that if funds became available again then the participatory approach would be discontinued.

Ribot (1998) implies that decentralization without empowerment is in reality another form of centralization. Attempts to decentralize are often made without proper analysis of either the situation or the process of decentralization itself. It has rarely gone beyond the terms of projects and marginal small-scale exceptions. Ribot (1998) also states that the concern for decentralization is not new - he enumerates four waves of interest in decentralization in West Africa since 1900 - and thus is not always successful or extensive.

There are numerous ways of empowerment. The obvious legal and political ones may in fact be the most difficult if not necessarily the most important. Ribot (1998) cites several processes or preconditions that contribute to local empowerment and accountability that do not necessarily rely on legal and political systems or reforms. These include:

"embeddedness of authorities in the local community; belief systems that orient authorities toward service and dedication; reputations that local authorities seek to maintain; journalists, NGOs, community organizations or individuals lobbying or acting as watchdogs; social resistance or threats of resistance; ... central state oversight oriented toward downward
accountability (in place of the current form of central tutelle); reporting requirements concerning local government meetings and public service; information dissemination about the obligations and powers that local governments have to local populations;... open fora for public discussion;... education and literacy campaigns."

Decentralization and empowerment should also include the various services working at the local level. If these services, such as extension, are not empowered (i.e. field agents do not have certain rights, authorities and responsibilities), they will be unable to respond adequately to the demands placed on them.

Aspects of empowerment should be built into decentralization and devolution efforts and these efforts should be critically assessed for their degree of empowerment of local entities.

**Pluralism**

Successful decentralization often implies new and more open and equitable relationships between a range of groups and organizations - community, government, private sector, NGO, etc. - at the local level. As Fiszbein (1997) states, "After all decentralization means that certain functions previously performed by national bureaucracies will be performed by a given combination of public and private agents at the local level". This combination means that multiple and, at times, conflicting interests are in play. Decentralization implies an emerging pluralistic situation.

Pluralism can be applied to many domains (see Box 1). As a system applied to politics - to the way society is to be conducted and guided - pluralism is grounded in the need to ensure that several decision-making powers should find expressions thus creating a series of checks and balances between groups. As applied to the analysis of society, it asserts that experiences differ as well as opinions, behavior and reactions. It usually refers to the existence of a number of social groups who coalesce around certain apparently common traits or experiences. As a philosophical doctrine, it affirms that beings are many, are individualistic, and do not depend on an absolute reality (Clement 1997). In epistemology, it implies that there are no universal truths (at least for non-trivial questions of substance) and that separate knowledge systems exist which cannot be absolutely proved or disproved (Rescher 1993).

In forestry, there are growing numbers of groups who are independent and do not share the same forest management objectives. Disagreements on objectives are often interpreted by the parties as lack of capacity (Fiszbein 1997). For example, forest services sometimes assume that because local groups do not agree with central expert authorities on how forests should be managed, that they must lack capacities or knowledge, and therefore are not capable of managing these resources. In fact this often has to do with having different sets of objectives and frankly disagreeing on approaches. Disagreement does not always signal lack of capacity.

One of the major reasons mentioned in opposition to decentralization is the lack of capacity of the decentralized entities. In addition to the argument that "lack of capacity" is often in reality a disagreement on objectives, it can also be argued that this is a hypothetical statement or self-fulfilling prophecy. Local entities can never prove their abilities unless they have some authority. Fiszbein (1997) observes that in Colombia the proponents of decentralization did not argue that local entities already had the capacity to manage. They argued that only through decentralization would these capacities be developed. He also observes that what is often perceived as lack of capacity is in reality conflicting objectives. Studies in Mali (Sow and Anderson 1996) and Sudan (Sulieman 1997) for example demonstrate that local people have very different perceptions and
perspectives on the forest resources and their management. This does not mean, of course, that local people lack capacity. This strongly reflects the pluralistic situation.

<table>
<thead>
<tr>
<th>Box 1: Some key elements of pluralism in sustainable forestry and rural development</th>
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<tbody>
<tr>
<td>• Different groups have and always will have different positions, opinions and objectives on sustainable forest management and rural development</td>
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<tr>
<td>• Groups are autonomous and independent</td>
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<tr>
<td>• There is no single, absolute, universal and permanent solution to any substantive natural resource management problem - for any given land unit there are numerous &quot;sustainable scenarios&quot;</td>
</tr>
<tr>
<td>• No group/organization can claim a superior or absolute scenario; sustainable forestry and rural development decision-making is no longer the sole mandate of expert authorities</td>
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<tr>
<td>• A system of organizational checks and balances is central for avoiding errors of a narrow single entity management system - this is the positive aspect of 'bounded conflict'</td>
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<tr>
<td>• Conflicts are inevitable and can not be resolved but managed</td>
</tr>
<tr>
<td>• Equity in decision-making is a distant but worthy ideal</td>
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<tr>
<td>• Platforms, mediators and facilitators are often needed to provide the conditions for negotiation and cooperation</td>
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<tr>
<td>• Communication is essential and helps participants understand their differences</td>
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<tr>
<td>• Consensus is unlikely but progress can be achieved without it</td>
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<tr>
<td>• Approaches to sustainable forest management that aim at consensus are often misguided and unsustainable</td>
</tr>
<tr>
<td>• Proactive approaches and new processes of sustainable forest management decision-making in pluralistic environments are emerging - more experience is needed</td>
</tr>
</tbody>
</table>

*Anderson et al. (1998)*

Presently, pluralism's most common use in development jargon seems to be to describe a multitude and diversity of actual or potential "delivery mechanisms". Traditional public sector service delivery has been heavily criticized for such weaknesses as inadequate coverage, ineffectiveness, inefficiency and audience bias. Observers have seen a greater role for other partners (such as the private commercial sector, NGOs, and farmers or forest owners' associations) to overcome constraints in public delivery. Much of this discussion assumes that there remains unity of objective and purpose, a single knowledge system and a right answer to be extended. It assumes that somehow all these different organizations fit together to serve the same objective and to deliver similar scientific content. In many cases, different non-government partners are simply seen as "sub-contractors" or acknowledged to be better at meeting the needs of certain audiences, but with the same body of knowledge. Sometimes it appears that other partners are integrated as long as they recognize a sole source for technical content and thus become mere proxies for the centralized authority (*Anderson et al. 1998*).

The situation may be more complex. Pluralism does reflect a differing set of views, and on complex issues (like ecosystem management within a dynamic social system) these views are resistant to scientific reductionism.

"... pluralism will not only be accorded recognition, but it will be used and made an integral part of government policy. Among the institutional consequences of pluralism obtaining recognition
in various countries, decentralization is frequently listed, i.e. pluralism as handing over the governance of a component part of the territory to some elected local authority (and not to appointed agents of the central government). Two factors enter into play, however, and relativize this link between recognizing pluralism and decentralization. One is bound up with the imperfect nature of decentralization, which is often de facto the fruit of a subtle compromise between deconcentration and decentralization. Accordingly, decentralization does nothing to simplify problems attendant upon pluralism; there will always be groups and individuals with differing opinions and objectives, and the resolution of local problems does not always facilitate the solution of problems at the national level. Quite the contrary". (Clément 1997)

Decentralization inevitably unmask conflicts, genuine disagreement and lack of consensus at different levels. However this is critical to the development of capacities. Partnerships and political competition at the local level and the greater involvement of non-state actors are a strong motivator of capacity building (Fiszbein 1997).

There are fears and some real risks that some types of competition between multiple interests at the local level can lead to degradation. This is even sometimes the justification for the imposition of central control. On the other hand, the presence of multiple interests can lead to a system of checks and balances and mutual monitoring by autonomous groups where the chances for sustainability are improved over single interest management. Crucial to new relationships and the success of decentralization is the recognition that this implies pluralism and the creation of coordination mechanisms (forums where multiple groups and interests get together and negotiate) and participatory methods that respect the plurality of participation. There is no single mechanism and approach that fits all situations.

**Social Capital and Capacity Building**

Many forestry and environmental problems and activities require some type of collective action, usually on common pool resources, but also on public and private lands. Most forms of JFM in India and community forestry in Nepal, for example, are based on types of collective local action. Decentralizing management to local groups poses the question of capacity at the local level. Collective action can be very difficult where levels of social capital are low and capacity is weak or lacking.

Social capital is often seen in vague and ambiguous terms. It remains a secondary consideration for many involved in decentralized forest management. An example, from Hobbes, perhaps best shows what it is and how important it can be. To paraphrase: One neighbor's rice is ready for harvest today and another's will be ready tomorrow. The second neighbor does not help the first because she is not sure that the other will help her the next day. Both neighbors lose in real economic terms because of the lack of "norms, trust, and reciprocity networks that facilitate mutually beneficial cooperation in a community" (Harriss and de Renzon 1997). A study of social capital in Tanzania (Narayan and Pritchett 1997) revealed that higher village social capital is associated with higher levels of individuals' incomes even after controlling for household education, physical assets and village characteristics.

Harriss and de Renzon (1997) distinguish an array of different types of social capital including family and kinship connections, wider social networks or associational life, cross sectorial linkages, political capital, institutional and policy frameworks and social norms and values.

The concept of social capital may be of particular relevance to the decentralization debate. In an important study, Putman (1993) shows how the differences in existing social capital (meaning
norms of reciprocity, networks, and trust) impact and condition the success of decentralization efforts in Italy. In 1970, Italy embarked on an ambitious program of regionalization and decentralization of governance. The central question of the study was “what are the conditions for creating strong, responsive, effective representative institutions”? The success of decentralization in the North of Italy can be traced back to higher levels of civic engagement or social capital. Putman (1993) even traces differences in social capital back one thousand years. His analysis stresses that the success of decentralization depends on the levels of social capital that already exist within the local area, which is path-dependent or historical in nature. His work is interesting because it lays the groundwork for predicting the success of decentralization. Once the key factors are known it might be possible to design decentralization strategies that take them into consideration. However, his outlook is ultimately somewhat pessimistic - the techniques to build social capital and the length of time involved are daunting.

Bebbington and Kopp (1998) provide examples in forestry where social capital was built (in a dialogue between the local and central levels) and these networks and norms of trust served to promote sustainable forest management. In one case, these processes were mainly from the bottom up, as the decentralization of forest management was initiated originally by rural people's organizations (RPOs) wanting to take more control over their indigenous lands in Bolivia. In another case, from Colombia, the process was more top-down with central government level actors taking a lead role in decentralization. He also emphasizes the important role of social capital in making the use of other forms of capital more efficient and effective, and the key role of government officials.

On the other hand, the effects of the lack of social capital in forest management can be quite dramatic. Conroy et al. (1998) give a striking example from Orissa, India. Here four villages took collective action to protect a degraded patch of a reserved forest. They started in 1975 and by 1984 the vegetation had increased in density and height. However that same year, several of the villages had a series of conflicts about the siting of a road, the sharing of benefits from a jointly managed pond and local elections. The villagers no longer had the levels of social capital (including trust) needed for collective action. Within the space of several days the protected patch was cut down by the villagers (and also by some unconstrained outsiders). By 1986, the patch was worse than it had been in 1975 with roots even having been dug up. It should be noted that while the conflicts had a dramatic effect on the collective action needed for forest management and protection they originally had no link to forestry.

The relationships between local institutions and central governments are complex and effective decentralization may well mean that the latter takes on a stronger role in some areas. "Local governments clearly require external assistance both to bolster their support for sustainable resource management and to strengthen their capacity to promote such management" (Kaimowitz et al. 1998). Those policy arguments which pose civil society or the local community against the state, or which rest on the view that a "robust civil society" is necessarily a precondition for "good government" are almost certainly misconceived (Harriss and de Renzon 1997). Governments can help build social capital and capacity. What appears to be needed is new forums for the various actors to come together and methods of participation that are indeed empowering and take into consideration dissonance and dissonance.

Conclusion

Decentralization and devolution hold promise for improving forest management and moving towards sustainability. Many local communities and groups are uniquely placed to contribute to these goals, for a number of reasons. They often have important endowments of social capital
making collective action possible, although this is not always the case. Less well recognized, they are often pluralistic in nature and contain traditional systems of administrative and political checks and balances and accountability (Thomson 1994). As such, they are more pluralistic than government departments and private sector concerns, and are therefore perhaps slightly more likely to manage their forest resources sustainably.

Decentralization should result in more effective and productive interplay between organizations involved in forest management - from community-based organizations through private companies to state agencies. Sustainable forest management requires constant learning and adjustment. The presence of a multiple actor system promotes needed mutual learning and innovation in addition to checks and balances. Multiple interests, instead of being a threat to sustainability, may in some ways be essential. To the extent that decentralization promotes this, and not single entity management, it will contribute to sustainable forest management.

Much decentralization is top-down - implemented as programs with too much time spent discussing levels and representation. It is an artificial non-organic approach to something that should remain, if one is honest, unpredictable. "Each municipality has a quite distinct dynamic that can lead to widely diverging social and ecological outcomes" (Kaimowitz et al. 1998). Hence sometimes decentralization helps achieve sustainable forest management and sometimes it hinders the achievement of this goal.

Decentralization cannot guarantee that communities will reap more benefits and be more interested in sustainable forest management. However, it does seem to increase the chances that this will happen - especially when combined with other enabling actions and incentives. As Kaimowitz et al. (1998) state: "There are clearly instances where decentralization has or will allow these groups to participate more in local government, have greater access to forest resources, restrict encroachment by large timber companies and ranchers, and influence policies affecting forests". While containing promising elements, this does not guarantee sustainable forest management per se. Experience shows that decentralization and devolution are complex processes and in themselves not sufficient to guarantee sustainable resource management.

Decentralization is an approach that embodies many elements - some of these elements may even be more critical than decentralization itself. In fact it may not be a universal "good" thing - some things should not be decentralized and a strong center may be needed to assure the success of decentralization. Decentralization may be needed to meet the goals of local capacity building, pluralism and subsidiarity.

Decentralization can be both an end and a means, it can pose almost as many problems as it solves. It is also not a panacea and should not be taken, for example, as a substitute for democratic representation. It seems to work best in situations where a number of criteria are already in place and is not a substitute for those conditions. Since decentralization does not seem in itself to be the answer to sustainable forest management and its outcomes are somewhat unpredictable, it may be useful to give more attention to subsidiarity, empowerment, pluralism and social capital.
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Creating Legal Space for Community-based Management: Principles and Dilemmas

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Prologue: Law and the Fumba Mangroves

For centuries, communities on the Fumba peninsula of Zanzibar have depended on mangroves. Mangrove poles have provided a critical supply of building material for homes and boats. The rich mangrove ecosystems have supported an abundant supply of fish and other marine resources.

Today, as elsewhere in the world, the mangroves of Fumba are disappearing at a tremendous rate. Alarmed by this state of affairs, in the early 1990s the residents of Kisakasaka village, in collaboration with Zanzibar's small Subcommission for Forestry, took some modest steps to address this problem at the community level.

Villagers and foresters agreed that the crux of the problem was the wanton fashion in which the mangroves were being exploited. People from other parts of Zanzibar and mainland Tanzania were coming to the area and destroying large areas of the mangrove forest. The villagers conceded that their own use of the mangroves was increasingly out of control and showed little respect for past local management practices. No one, in short, was taking responsibility for the management of Kisakasaka's mangroves.

With the encouragement of government foresters, the villagers of Kisakasaka responded to this situation by designing a new approach to local mangrove management. They formed a conservation committee, and they worked out a set of rules or by-laws which they felt would help stabilize the situation, and allow the mangroves a chance to regenerate. Cutting periods were established, closed areas were identified, and harvesting limits were set. The by-laws created a simple system of penalties for violations, and a rotation system of monitoring by committee members. Finally, access to the area by outsiders was to be limited, allowed only under certain conditions and subject to an entrance fee and permit.

Zanzibar's beleaguered Subcommission for Forestry, understaffed and underfunded, has increasingly come to recognize the essential role of communities in forest management. Similar experiments are springing up elsewhere on the islands, and a newly adopted National Forest Policy proclaims the need for more (Silima et al. 1994). There are, of course, great uncertainties. Immense economic and demographic pressures are bearing down on the new arrangement in Kisakasaka, and it remains to be seen if these can be resisted. No one knows for sure if the incentives for participation will be sufficient to overcome the costs of organization and forbearance. It is too early to tell if the adopted rules are environmentally sound, but in view of the alternatives, these seemed like risks worth taking, to villagers and foresters alike.

There is, however, another important issue, one that has hovered in the background throughout the short history of the Kisakasaka effort: are such initiatives legally sustainable? Will the experiment work under Zanzibar law? Questions like these arose from time to time during the

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2 An earlier version of this paper was presented at the International Workshop on Community-Based Natural Resource Management, held 10-14 May 1998 at The World Bank, Washington, DC.
process of mapping out the Kisakasaka plan, but in the end this aspect received little systematic attention.

The failure to examine legal implications is not surprising. It is human nature to wish away legal complications when things seem to be going well. But had careful attention been paid to these matters, a number of soft-spots in the legal foundations of the experiment might have become apparent. Consider the following:

- All mangroves, including those in Kisakasaka, were "forest reserves" under Zanzibar's forest law. In reserves, all decisions regarding management were to be made by the government, and all forest resources belonged to the government. While the Subcommission for Forestry agreed to village use of the mangroves in accordance with an approved plan, nothing in the law or in the Subcommission's informal agreement with the community could prevent it from unilaterally changing its mind. Result: the rights of the community to manage the mangroves and to benefit from its management could be easily terminated, and were therefore legally insecure.

- Zanzibar's forest law had been written in an era when the main objective was to keep people out of the forests, not to involve them in management. Under a loose reading of the law, the government might be able to delegate substantial powers and responsibilities to communities in forest reserves. Many officials, however, did not read the law in this spirit, and instead pointed out that there was nothing in the law that gave them the explicit right to grant such powers to communities. Result: the legal authority of the Subcommission for Forestry to allow community initiatives in mangroves was perceived as uncertain.

- The group of villagers involved in the program was largely self-selected and informally constituted. Its relationship to existing local government institutions was highly uncertain. It was also uncertain how the group's by-laws related to the power of townships to issue their own by-laws in relation to resource management. Result: the legal status of the management group and its authority to make and enforce rules was unclear.

When the villagers and foresters were working out a plan for Kisakasaka, concerns like these, if acknowledged at all, must have seemed abstract and obscure. The community and the government were, after all, working together for once toward a common goal, in a climate of mutual trust.

However, It is not hard to imagine ways in which these infirmities could come to have real-life consequences. What if other Zanzibaris, jealous of Kisakasaka's regenerating mangroves, began to argue that the villagers had no right to lay claim to a part of Zanzibar's "national" forests? What if some Kisakasaka residents themselves began to violate the by-laws, arguing that those by-laws had no legal status? What if personnel changes within the forestry sector brought in decision makers unsympathetic to community management - could they stop the Kisakasaka experiment with a stroke of the pen?

Experiments like Kisakasaka, in short, have emerged in a legal environment that at best was poorly suited to their objectives, and at worst could jeopardize their success.

There are prospects that the legal environment may be changing for the better. Zanzibar has recently adopted a new Forest Resources Conservation and Management Act, a law that may, if fully implemented, address many of the above concerns. The new act provides a mechanism for drafting "community forestry management agreements" that can be utilized for forest reserves as well as other areas suitable for community management. Procedures for the delineation of
community forest areas are spelled out, as are the basic rights and responsibilities for both parties to any agreement. Community groups are empowered to draft enforceable by-laws (subject to Forest Department approval) and can be recognized as legal entities. Nevertheless, the law draws back from setting forth too many details, opting instead for a flexible approach that would allow agreements to be tailored to reflect local conditions and community aspirations.

**State Law and Community Management**

The example of Kisakasaka is far from unique. It represents a modest example of a growing emphasis worldwide on the management of forests and other natural resources by local communities, groups, families and individuals.

But Kisakasaka is representative in another way as well - in the weaknesses of its legal underpinnings (though as noted above, recent legal reforms may improve the situation). This is a characteristic it shares with many, if not most, community-based management efforts around the world. For the most part, legal regimes do not provide a way for local people to establish enforceable legal rights to the resources on which they depend, or to play a meaningful part in planning and managing those resources. Many national laws continue to reflect a state-centric approach to resource management and a restricted philosophy of property rights that has tended to undermine existing community-based systems. This has seriously constrained local people and progressive government officials in the search for new community-based solutions.

As in any area of human endeavor, community management can take place in blissful ignorance of its legal environment, provided that (by design or indifference) the policy, social and economic conditions are favorable. Some community management systems have existed for centuries, and may continue to operate with no legal underpinning as far as state law is concerned, and perhaps even in direct contradiction to what is written on the law books or administered in the courts. There are of course many political, social, economic and ecological variables that play a part in the success or failure of any given effort, many of which state laws and legal institutions may affect only marginally.

Yet community-based management systems almost never exist in a state of pristine isolation. Natural resources are the focus of increasing conflicts around the world. Where community-based management efforts are subject to growing threats from outside or within, and to the tugs and pulls of national and international economies, the formal legal environment, for better or worse, becomes increasingly relevant. Consequently, it appears inevitable that the presence of state law (or in many cases, the problems caused by its absence) will loom ever larger as community-based efforts receive more attention - both supportive and damaging - from outside.

Looked at from a different angle, local management initiatives need state law, sometimes more than their advocates like to recognize, though usually less than governments are willing to admit. They need state law because, however robust local management systems may be, there are things that local institutions or community-based rules often cannot accomplish alone. This includes:

- **Community-based institutions, acting alone, cannot define the rules by which they interact with outsiders.** Of course, interaction with outsiders is invariably shaped by community-based rules, and frequently governed by long-standing norms and understandings between local groups and outsiders that stand outside of state law. Highly localized management systems (for example, those that operate at the level of a particular village or user group), are often nested within a wider community governed by elaborated "customary" or non-state legal regimes that provide rules for how the smaller groupings within the larger community interact as well as mechanisms for resolving conflicts. Thus,
"outsider" may be defined differently depending on which concentric, or sometimes overlapping concept of community, one is alluding to. The point remains, however, that because local groups and community-based systems are also nested within a state legal regime, local groups often need a legal status that outsiders can recognize and interact with. They need legal protection from trespass and the criminal behavior of outsiders. They need state law to provide legal recognition to community-based rules and to tell outsiders that they have to abide by those rules.

- Local rules also cannot define the limits of state power, that is the extent to which the state will respect local autonomy, and where, and under what conditions it will retain the power to intervene. In the best scenario, community groups, other components of civil society, and government will work together to define these limits. Nevertheless, unless these limits are spelled out in state law, or somehow recognized by the state legal system, there is little that community-based rules alone can do to enforce them.

- State law may play an important role in providing basic protection for individuals against the abuse of local power. The extent to which state law should intervene on behalf of locally oppressed people, or can be effective in doing so, is of course problematic. Nevertheless, especially in constitutional settings, where the state has pledged to uphold some basic human rights, it is hard to see how state law can escape this responsibility. In many parts of the world, people oppressed by their own communities turn for support (though sometimes more symbolic than instrumental support) to concepts of equity or social justice that are articulated in state law.

- Finally, state law is needed to provide basic guidelines for protection of important wider societal interests, such as environmental protection. Here, again, the problem is one of balance. The call for vesting stronger and more secure property rights in local communities is sometimes portrayed as dangerous because government will lose its power to protect wider interests. Yet such an argument is clearly spurious. No private property right is absolute, and government always retains a regulatory function by which it can act to protect legitimate interests of outsiders, including future generations (Lynch 1998). The problem lies in trying to define those interests. Government frequently has an excessively expansive and detailed vision of the "national interest", with the result that local autonomy and decision making can be drastically undermined. National interest has often been defined as if the needs and aspirations of local people were not part of the equation, and that national interest can only effectively be defended by the state defining all rules of resource access and use.

To point out in a generic way why state law has an important role to play in effective community-based management is not to say that it actually plays this role in all or even most cases. Law, in fact, does many of these things quite miserably, or not at all. Despite the rapid proliferation of rhetoric in support of community management and participatory processes, many if not most community-management efforts continue to exist in a state of legal uncertainty and insecurity (Bruce 1999).

There have always been exceptions to the above generalization. And perhaps more importantly, some encouraging legal developments are beginning to take place in many countries, where laws are being designed that are more supportive or at least less hostile to community initiatives. Though it is difficult to summarize the wide-range of approaches that are emerging, it is possible to identify several different approaches:

- Laws that recognize local ownership (or other substantial property rights) over land and/or natural resources based on historical claims. These would include laws that provide for the recognition of long-standing land claims of indigenous communities as in
ancestral domains legislation in the Philippines, native title laws in Australia, and indigenous land rights laws in a number of Latin American countries.

- Laws that provide mechanisms for a site-specific delegation to local people of some measure of management responsibility over state land and/or resources, either on an indefinite basis or for a particular term. Such delegation is usually spelled out in some sort of plan or agreement. Under this category would fall most joint management or co-management arrangements, such as Joint Forest Management (JFM) in India and similar programs in a growing number of other countries.

- Laws that promote decentralization (decentralization being used here in the sense of delegation or devolution of authority to local government units). Depending on the nature of the decentralization program in a particular country, it may result in a greater involvement of local community-based institutions in resource management. This is less likely to be the case, however, where decentralization is in essence simply a delegation of authority to local units of central governments, or where local government institutions are more accountable to higher levels of government than to the local population (Ribot 1997).

These are not hard and fast categories. Indeed, the first two broad approaches might be said to represent a spectrum, consisting of a variety of situations characterized by more or fewer "sticks" in the bundle of rights held by community-based managers. In between these two ends of the spectrum we find many types of intermediate approaches, such as laws that allow for village titles over common property resources in Tanzania (Wily 1997).

**Designing Enabling Laws: Principles and Dilemmas**

The emergence of new legal techniques in a number of countries should not obscure the fact that there are many other countries where little progress has been made. Where progress has been made, often it has been ambivalent and not supported by enough political and social will to make it a reality. There remains, in the words of Lynch (1998), an urgent need to design legal frameworks that "allow local community-based institutions to define, preside over and redefine the rules of resource use".

The purpose of the remainder of this paper is to suggest some basic principles that might guide the design of an improved legal framework for community-based management, and to identify some of the central difficulties and remaining issues that confront this task.

The search for broadly applicable principles may seem like a risky undertaking in view of the diversity of approaches falling within the scope of community-based natural resource management, a diversity that is reflected and reinforced by the wide variety of legal arrangements (existing or proposed) that might apply. The promotion of community management may in some cases involve the recognition or revival of pre-existing management systems or existing community-based tenure regimes; in other cases, it may involve the creation of new systems and new rights. There is a sliding scale in terms of the level of government involvement or oversight. In some situations, community ownership or control of an area may be acknowledged, with government only playing the role of regulator. In other situations, government may assert and retain ultimate ownership and control of the resource, but allow some degree of community management subject to site-specific agreements. All of this takes place against the backdrop of extremely diverse legal traditions and doctrines, and in the context of legal systems of vastly different capacities and origins.
This variety warns us against searching for legal models that are easily transferable from one country to another. This is a dangerous pursuit in any field of law (Lindsay et al. 1998). The danger is greatest in a subject matter such as community-based management, which is inherently characterized by local variation. Workable laws that effectively support community-based management will vary widely depending on the peculiarities of existing legal and institutional arrangements, and the nature and extent of community management models and objectives in particular settings. For example, community participation in the management of a protected area may involve rights that are significantly restricted compared to community management of a village forest maintained largely for local uses. Working out fair and sustainable leasing arrangements for *bhabbar* grasses in India may seem to have little in common with the effort to define ancestral land rights in the Philippines.

Nevertheless, there are certain key substantive principles that are central to the task of improving the legal environment, however varied the situation, and however significant or restricted the rights that have been devolved or recognized.

Laws designed to promote community-based management can usefully be evaluated by reference to criteria that fall into two broad categories - **security** and **flexibility**. Community-based managers, whatever the setting, need secure and certain rights. At the same time, they also need the flexibility and the power (the *legal space*) to exercise choice in a way that reflects their unique needs, conditions and aspirations. For both security and flexibility, laws in most countries of the world leave much to be desired.

### Security

As already stressed, community-based management can take many forms, and the nature of the rights local people have with respect to the resource can vary considerably from model to model. Nevertheless, one principle should apply in any context. For any individual community effort to be successful, it must not only provide a realistic hope of significant benefits, but also must instill confidence that the rights to those benefits are secure and will not be taken away arbitrarily. This principle applies however limited or extensive the rights granted under a particular program may be.

Security is, of course, in part a state of mind. Where relations have traditionally been good between community and the government, local people might feel secure enough to undertake management simply on the basis of a promise from local officials. Sometimes a sense of security is derived from the fact that a particular management arrangement is part of a donor-funded project, thus unlikely to be derailed as long as the flow of funds is assured - a type of security that may prove illusory in the long run. In other situations, communities may not feel secure no matter how carefully and strongly their rights are set forth in legal documents.

Nevertheless, while perceptions of what constitutes security may vary, some key attributes can be identified that provide guidance to the designers of substantive legal provisions. It should be noted that this list is not exhaustive; at the same time, not all of the listed criteria may be relevant to any given situation. They are offered here simply as an indicative sample of the types of considerations that should be taken into account when attempting to design secure legal rights.

1. **Security requires that there be clarity as to what the rights are:** Confusion as to one's rights can significantly undermine the effectiveness and enthusiasm with which those rights are exercised. There are many examples in laws from around the world of rights so vaguely described as to be virtually meaningless. Striking examples include laws that
state that "customary rights of forest-dwellers will be respected as much as possible" or "customary law shall be respected unless the national interest requires otherwise". Perhaps more significant is the uncertainty that pervades many co-management arrangements, where rights and responsibilities have supposedly been negotiated and tailored to local conditions. Part of this is a failure of communication and understanding, part of it is a matter of politics - it may suit some people in power for rights to be vaguely defined, and finally part of it is a matter of drafting, both in legislation and regulations and in local level agreements that govern specific community-based initiatives. Examples from India and elsewhere testify to frequent confusion about the way in which benefits are to be shared, leading to false expectations and possible disillusionment.

2. Security requires certainty that rights cannot be taken away or changed unilaterally and unfairly: In almost any situation there are circumstances where rights can be taken away or diminished, but conditions and procedures for doing so need to be clearly spelled out, fair and transparent, and the issue of compensation needs to be addressed. In the case of a co-management arrangement, it is important that the threshold be high, that termination by government not be an option unless there have been serious and persistent violations, and a failure to remedy those violations after notice. However, many legal provisions governing co-management fail to meet this standard, apparently giving the power to government to decide that a co-management agreement can be terminated for any reason, or for difficult to define reasons such as the notion that the agreement is no longer "viable." This type of insecurity may be exacerbated by the type of legal instrument that enables the establishment of co-management arrangements to begin with. In the case of India, despite several attempts to amend the Forest Act of 1927 to provide a firm legal basis for JFM, the program continues to be a creation of state government notifications and administrative orders. While this does provide an opportunity for flexibility in responding to experiences and problems encountered in implementation, it also fosters a sense among some government officials that the rights of participants are malleable, temporary and can be changed unilaterally by government if it decides that conditions warrant (Kant and Cooke 1998).

3. Security is enhanced if the duration of rights is either in perpetuity or for a period that is clearly spelled out and is long enough for the benefits of participation to be fully realized: If rights are to be in force only for a particular period of time - as in some co-management arrangements or community forestry leases - care should be taken to ensure that agreements are at least as long as is realistically required to reap the benefits of participation. Some of India's JFM notifications, for example, prescribe terms that range between five and ten years, or are tied to a growing cycle. Such provisions (which are not untypical of co-management in other countries as well) could create the impression of a "one-shot" approach that could undermine the community sense of ownership of the resource in question and weaken its long-term attitude towards management (Lindsay 1994).

4. Security means that rights need to be enforceable against the state (including local government institutions): The legal system has to recognize an obligation on the part of the state to respect these rights. It is uncertain in many contexts - and, largely untested - whether co-management agreements are in fact viewed under law as containing enforceable contractual obligations on the part of the state (Eggertz 1996).

5. Security requires that the rights be exclusive: The holders of rights need to be able to exclude or control the access of outsiders to the resource over which they have rights.
Use of the word "outsider" is potentially problematic. Exclusivity does not mean that there are no people outside the principal group responsible for management that might have certain rights that need to be respected. Distant or sporadic users of a resource may have legitimate historical claims that need to be accommodated. To the extent those rights are respected by the rules that are adopted, it would be wrong to refer to those users as outsiders in the sense that word is used here. What exclusivity does mean is that once the holders of rights have been defined, other users cannot be imposed on the group against its will. This means that government, for example, cannot assign rights to others over the same resource (such as assigning mining concessions in a community forest). It also means that government needs to recognize the power of the community group to apply its rules to outsiders, and where necessary, to assist in the enforcement and protection of the group's rights from outside interference.

6. Exclusivity also means that **there must be certainty both about the boundaries of the resources to which the rights apply and about who is entitled to claim membership in the group.** The issues of delineating the resource and identifying the holders of the rights are discussed below.

7. Exclusivity also means that **the government entity entering into the agreement must have clear authority to do so:** An agreement should only reflect promises on the part of government that the responsible authority is empowered to fulfill. For example, a contract between a government agency and a community-based management group concerning government land cannot create a right to exclude if the agency did not have the power to delegate that right in the first place. Other sectors of government may have powers over the same land and be in a position to take action that would be contrary to the principle of exclusivity if they were not included in the agreement themselves. This problem may seem a bit remote, but there are not infrequent instances of co-management agreements foundering on the shoals of inter-agency jealousies or turf battles, and a lack of clarity as to which government agency has control over which piece of land.

8. **Security requires that the law recognizes the holder of the rights:** The law should provide a way for the holder of the rights to acquire a legal personality, with the capacity to take a wide range of steps, such as applying for credits, subsidies, entering into contracts with outsiders, collecting fees, and enforcing rules.

9. Finally, and perhaps most dauntingly, **security requires accessible, affordable and fair avenues for seeking protection of the rights, for solving disputes and for appealing decisions of government officials.**

There is nothing surprising about the items on this list, and nothing about them is unique to the community-based management context. Some or all of these are attributes of security that any person or group having important private rights is likely to want and need. At the same time, we cannot ask too much of law. Law cannot ensure security in inherently insecure environments. For example, where people have a fundamental distrust of state law and legal institutions, reforming laws may have only a marginal effect at first in improving the sense of security. We need to keep in mind that fixing law may be a necessary condition in the long term, but not a sufficient one. What is striking for our purposes is how poorly most state legal regimes are in providing the basic elements of security to community-based management initiatives. In too many cases, government seems to be given very broad discretion to change its mind. So long as government signals to community managers that it does not take their rights seriously, it is likely that community managers will not either.
**Flexibility and Meaningful Choice**

Community-based natural resource management is about local choices and local adaptation. These qualities are put at risk if an excessively rigid, uniform approach, dictated by outsiders is applied. In this area of lawmaking, it is particularly important to think of law as an enabling tool, not as an elaborate set of rules that prescribe or dictate solutions to local problems. Yet it is remarkable how often this principle is ignored.

It must also be acknowledged that protecting flexibility in law is not an easy task, and some very serious dilemmas need to be faced. Even if it is both just and efficacious for state law to "pull back", and allow community-based rules (including in some cases deeply entrenched and long-standing systems of "customary" law) to flourish according to their own dynamics, flexibility can never be unlimited. Both wider society outside local groups, as well as individuals inside the group, have interests that need to be taken into account. Protecting these interests, while still leaving the necessary space for real local decision making and choice, requires very delicate balancing.

While the need for flexibility (for providing legal space for meaningful choice) is a principle that should guide all aspects of the design or support, it is examined here with respect to three areas: planning and management; the structure of local groups; and the identification of group membership and jurisdiction. All of these are closely interrelated, especially the last two.

**Flexibility in planning and management**

Legal regimes should allow flexibility in deciding what the objectives of management should be and the rules that will be used to achieve those objectives. Successful natural resource management obviously needs to be sensitive to local ecological, social and economic variations. Participants in management must also perceive that the benefits of participation outweigh the costs. These axioms are likely to be violated where outsiders presume to know what local people want, need or deserve. And yet in practice, this frequently happens. We hear tales from many places about management decisions made within "participatory" management contexts that do not reflect basic realities about what local people want or need.

What is striking when one looks at even some of the most progressive new laws supporting community-based management is how jealously government holds on to the decision-making function. This expresses itself in a number of ways. Often the legal requirements for drafting a management plan are quite complex, and likely to be alien to what communities are used to and perhaps what the situation requires. Frequently, regulations regarding co-management continue to vest almost all management decisions in government. There may be requirements for consultation with villagers, but at the end of the day, the decision rests with forestry officers, and they are ultimately responsible for producing the plan. This kind of close control may be necessary in some delicate environmental situations, but in many instances it is driven more by a long-standing belief that "government experts know better". Law alone cannot eliminate the tendency of officials to impose planning and management decisions, but the way that laws are drafted can help tip the balance away from perfunctory consultation to greater local ownership of the planning process.

It is also noteworthy how much the range of choice in community-based natural resource management is influenced by the preoccupations of different sectors, within government and international organizations. In any given location, we might find any number of overlapping participatory strategies, prescribed by different sectoral policies and legislation different sectoral
policies and legislation governing water, forestry, fisheries, livestock, etc. which can lead to the creation in some places of separate and competing local institutions. As one Swazi farmer explained to me this creates a sort of "exhaustion with participation". There is a tendency for outsiders to look at resources in a compartmentalized way, which does not match up well with the way local people themselves see their resources. What more and more research is bringing out is that there are often many possible environmental futures for any given area of land and water, and it is not always obvious that one should be preferred over another. Why grow timber and not fruit trees? Why not more grass or food crops? Why not some sort of unique mixture of uses? These are all fair questions, but the categories and labels used in law can sometimes fix that choice. Sometimes the simple accident that land falls under the purview of one government agency and not another means that its destiny is fixed, and there is little room for real choice by local people. As one study of co-management of government forestland in southern Africa showed, most of the decisions about what future was appropriate had already been made, leaving very little on the table for negotiation (Matose 1997).

**Flexibility in recognizing and forming community-based organizations**

Flexibility is required in regard to how state law handles the recognition of local groups. It has already been mentioned that community managers need some sort of legal "personality" that is recognized by state law. The difficulty is how to spell this out in law. There has been a tendency for outside law to prescribe in too much detail the structure of local organizations and the rules by which they operate. This is perverse, since one of the assumptions of community-based natural resource management is that it is best to build upon local institutions that have roots in local values and practices. If law tries to squeeze these institutions into forms that are too complex and alien to the local situation, and then tries to standardize that form across many different social settings, the result could be to create institutions that have little legitimacy among their members.

It is instructive to look at this issue in the context of native land rights in Australia. Australian law is interesting because it illustrates two quite different approaches to the problem of group recognition. One approach is epitomized by the Aboriginal Councils and Associations Act. The law, which was drafted to provide for the establishment of legal forms for indigenous groups to hold native titles, was intended to allow indigenous groups "to develop legally recognizable bodies which reflect [Aboriginal people's] own culture and do not require them to subjugate this culture to overriding Western European legal concepts". As one study has shown, however, this goal fell down in the hands of lawyers and officials who were unable to break free from the concepts, processes and general approach with which they felt comfortable. The result was a law that gave almost no room for local cultural variation in corporate structures and decision-making processes, and in fact caused groups to lose control over their affairs. By contrast, some state laws adopted in the 1990s, including the Native Land Titles Act are much more geared to the recognition of existing institutional forms, providing very basic requirements and guidelines, but leaving the details of internal group functioning up to the group itself. These latter laws are notable for their recognition that state law should not try to codify the community-based laws of indigenous groups, recognizing that to do so would threaten their inherent adaptability and the inevitable processes of change over time (Fingleton 1998).

It must be conceded that this is a very difficult area and that legal recognition of community-based institutions can have unexpected consequences. Even if done carefully, recognition almost always changes the entity that has been recognized in some way. Moreover, legal recognition of local leadership arrangements can be a device by which elites in a community further enhance their own power, at the expense of weaker sections. There is also a tendency on the part of some
advocates of community autonomy to become so fixated on keeping state law out of the internal workings of a group that they cannot hear when people themselves are asking for intervention.

This issue emerged at recent series of consultations in Swaziland, a country in which the power of traditional leadership is still very strong, but where the system is under increasing pressure from both within and outside local communities. Speaker after speaker proclaimed that, while they did not want to abandon their tradition they were no longer sure that they knew what chiefs could and could not do, and fearful that customary controls on chiefly discretion were falling by the wayside. They said, in essence, "We don't want government law to tell us what to do; but we would like some basic guidelines, some help in holding our leaders accountable". One thing that was particularly striking about these comments was that many of the speakers were chiefs themselves.

**Flexibility in defining jurisdiction and boundaries**

Flexibility is needed in the definitions of management groups and areas of jurisdiction. The need for certainty with respect to these issues has already been mentioned. The question is how should state law address the issue of what group has authority over what resources and in what area? These are extremely difficult issues. There are a number of tendencies we can identify in laws around the world. One approach is for law to designate on a uniform basis a local body or authority that would have control over a pre-defined area, say a district or village council. Another approach is to provide for the recognition of different groups formed around different functions and objectives. The Nepal Forest Law, for example, refers to user groups who will have forestland turned over to them. These are essentially self-defining groups, and neither the membership of the group nor the demarcation of the area they manage have anything to do with local government boundaries. In fact, the Nepal legislation specifically states that a community forest area can overlap the boundaries between adjoining Panchayats (administrative units).

There are advantages and disadvantages to both approaches. The case of devolving authority to local government units is easier to define in legislation because there are uniform local structures in place. However, vesting power in a local government body is no guarantee that local people will have more of a say in local resource management, unless those bodies are designed to be democratic, representative and accountable (Ribot 1997). Moreover, natural resources and the way that people use them often have little respect for administrative boundaries (Emsail 1997). A fluid method of defining the responsible group creates a possibility of finding those institutions or people who, according to their own perceptions and needs, should have management responsibility and control over local resources. These are often based on long-standing traditional relationships. So the emphasis here is on self-definition. Still, the law may be legitimately concerned about whether some person or group is being unfairly denied an opportunity to participate.

It should also be noted that the empowering of local groups of users without efforts to coordinate with local units of government can in some cases result in the emergence of debilitating institutional conflict. Indeed, there is often a poor articulation between the seemingly complementary agendas of decentralization and community-based management (often driven by sectoral line ministries) that will need more careful attention as both agendas gain momentum.

A growing body of literature draws our attention to the immense conceptual and practical difficulties of "locating the community" in the formulation of legal regimes devolving powers and responsibilities to local communities (Kloeck-Jenson 1998; Leach *et al.* 1997; Enters and Anderson both in this volume). It is essential to examine critically the various shorthand terms
used when discussing community-based natural resource management, and in designing legal strategies that support it. These can often obscure a messy reality and can have the effect of making decisions for people that they do not want to make. This paper, for example, may well be accused of focusing on a supposed tripartite relationship between state, communities and resources. Obviously, the positing of such a relationship, while perhaps useful as an organizational device, ludicrously oversimplifies reality. What communities are we talking about? In almost every situation, even within single villages, there are overlapping and often conflicting ideas of community, often bearing little resemblance to what outsiders see or want to see. Different groups or individuals within a community may have very different relationships with local resources, and very different visions of what the ideal future for their area should be. Even state law is not a homogenous thing, but a composite of many different, often competing elements. And left out of this tripartite scheme are numerous additional relationships with other people and institutions at local, national and international levels, who all may have legitimate claims to be stakeholders for the resource in question. In view of these complexities, we should think of the potential of law reform not as a search for a correct answer, but as a search for processes by which multiple and varied stakeholders can fairly and transparently negotiate and renegotiate with one another.

Making Law Reform Meaningful

Most of these remarks have focused on the substance - the principles and conceptual framework - of law. It is also useful to look briefly at the process of reforming and implementing laws, and examine several broad principles that could help guide the effort to make law a meaningful presence rather than a well-intentioned but ultimately empty gesture.

First, it is important to ensure that the design of law (from national legislation down to local level agreements) is governed by the needs, aspirations, insights and capacities of the intended users of the law, that it is not driven by the preconceptions of lawyers, donors and other outsiders, however well intentioned. This means opening up the process of lawmaking much wider and much earlier than is the case in most countries. For example, it is not sufficient simply to hold a few workshops at the end of the drafting process. It would be incongruous indeed for a process designed to elicit participation to be imposed from above without participation in its design. Yet, this requires emphasis because - even in many democratic societies - the concept of really engaging affected people in the lawmaking process from the beginning is either ignored or viewed with alarm. It means that lawyers need to learn to work to demystify law, to make its concepts and language accessible. It means that local managers and their allies, on the other hand, need to train themselves better in the language and processes of law, not all of which, incidentally are bad and twisted creations of devious legal minds. This is not a recommendation that flows only from a belief that people should have the right to be involved; it is a pragmatic recognition that without involvement, there is simply no realistic hope of passing laws that reflect reality and are capable of being used. A corollary of this is that law reform in support of community-based management should not be seen as a one-shot affair. It is an ongoing process that needs constantly to respond and adjust to feedback from the field.

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3 The environmental entitlements literature, epitomized by the works of Mearns, Leach and others has done much to broaden our thinking in this regard. See for example, Leach et al. 1997.
Second, the capacity of people to understand and use the law needs to be enhanced. Obviously this applies to educating local managers. But it applies as well to government bureaucracies, police forces and judges. Of course, at the end of the day, it is not going to be laws that persuade government officials to give real space to local initiatives - it is going to depend on changes in attitudes and professional styles. Law can influence these changes, but it cannot force them to happen.

Third, there is an obvious need to find ways of improving the machinery of law. A relatively independent judiciary is critical, but if community managers had to depend on most court systems to be the defenders of their rights, they would be in trouble. These remarks have been painfully silent about the need to design new ways of dealing with disputes and conflicts, but clearly this will be a vital part of making changes in the substantive content of rights a reality.

Fourth, we need to be realistic in our expectations. Law is often an inefficient and unpredictable way to accomplish change. Any attempt through law to make massive changes from what is on the ground will simply be ignored. Laws should not be enacted that rely upon resources that government does not have or that require a massive redesign of institutions that is simply unlikely to take place. It is counterproductive to legislate away all the messy and unpalatable aspects of life - this has never worked and never will. Passing laws that don't have some realistic chance of being implemented and of meeting at least some of their main objectives is a sure way to undermine further any residual faith in the rule of law.

Finally, a closing question about priorities. It may be asked whether the emphasis on the substantive detail of law is justified. Community managers and their allies must make strategic choices about priorities. They must consider in any given context whether for the time being it is better to work with imperfect legal instruments and concentrate on persuasion and building alliances rather than pushing immediately for legal changes that may, in some circumstance, upset delicate coalitions. Nevertheless, the search for legal regimes that provide meaningful, secure and flexible rights to community-based management is not a second-generation task. It is fundamental if community-based management is to become a sustainable and widespread strategy, rather than the ad hoc approach it has been in many countries so far.

References


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4 The empowering potential of law and policy should not be viewed solely from the perspective of community-based groups, but from the perspective of progressive government officials as well. Indeed, the impetus for law reform has in some contexts come from government officials themselves, because of the constraints that law puts on their capacity to respond to and support community initiative (Shah 1998).


Introduction

Decentralization has often been confounded with the concept of geographical division. Most people mistakenly consider division of a state into provinces and provinces into districts as decentralization because the area under each of the lower levels is less than that of the next higher. This is one of the reasons why a number of words have been coined to distinguish between different facets of decentralization. These include deconcentration, delegation, devolution and privatization (Hye 1985; Banerjee and Lutz 1996). Basically, deconcentration and devolution can cover the whole spectrum of decentralization types. Deconcentration can be defined to include all cases where larger units have been subdivided into small units without transferring any special authority. Devolution on the other hand refers to deconcentration where some form of authority has been passed from the center to the lower units in the hierarchy.

In this paper, policies of decentralization in forest management are first described, then the impact of the policies are discussed, and finally, some changes in the forest management paradigm are proposed. Prospects for change, methods of implementation and related problems are also examined.

History of Forest Control and Forest Policies

In forest management, the history of deconcentration parallels the deconcentration of the general administration although with some significant differences. For example, in India, around 1927, forest management, for long a central matter, became a provincial responsibility under the revenue department. Soon after, the forest section became independent of the revenue department. The forest organization since then consists of a Chief of Forests located at the provincial headquarters, and his regional deputies called Conservators of Forests. Divisional Forest Officers are usually located at the district headquarters and Forest Rangers and Beat Officers at the block or sub-block levels. This organizational structure is very similar to the general administration. The most striking difference is that deconcentration in forestry never went down to the village level or legislative wings. Another important variation is that the forest department opposed private or communal forest ownership in contrast to agriculture, for example. Thus, in spite of some deconcentration, forest management in India continues to be centralized, which is mainly a result of state coercion.

Pre-colonial times

Until the 16th century, the forestland in the Asia-Pacific region was mostly used by local communities for hunting and gathering, and distinct forms of shifting cultivation (Banerjee 1995a). In addition, forests were felled for sedentary agriculture and home gardens were introduced. Forest areas were usually controlled by a single or group of households, except in the case of hunting and gathering activities where control rested with the community. Land ownership was communal or land belonged in some vague terms to the sovereign. Land and forest management, however, rested with households. The forest administration was deconcentrated to the household, a group of households or the community level but the ownership lay with the community. This devolved form of forest management was neither an introduced nor imposed process, but rather a natural development of society.
Colonial times

With few exceptions, the relationship between households and the community, and natural resources, changed dramatically with the arrival of the colonial powers and consolidation of their foothold in the colonies. Forests came under the sovereignty of the state, which meant a move towards centralization, although the de facto situation was frequently different. Where forest products had a high commercial value and could be easily exploited (e.g., teak in India, Burma or Thailand, or sal and pine in Garhwal Himalayas), the arm of the administration reached the forests quickly. Remote forests and malaria infested areas (e.g., Nepal Terai) as well as products for which there was no market continued to be used by local people. In such cases, the de facto and de jure situations differed, which created tension between the people and the sovereign at a later stage in history. As the countryside opened up, the demand for all types of timber increased in the local and international markets. As the state realized the potential monetary and other values of the forest, stricter rules were enforced to bring all forests under its control.

Post-colonial time

With independence, the noose of state control on forestland was further tightened and traditional users were further excluded. In India, in 1953, the government gained control over the forests that belonged earlier to the zaminders (landlords). Even as late as 1980, the Conservation Act stipulated that central permission was required to change the legal status of any forest, which is a concurrent subject. But overall deforestation rates continued to increase.

Based on the provisions of the Indonesian Constitution (Basic Forestry Law enacted in 1967) the central government is empowered to control all relations between the people, the private sector and forests. Article 5 of this law stipulates that, "All forests within the territory of Indonesia, including the natural resources contained therein, are controlled by the state". Large areas were declared as parks and nature reserves or permanent protection forest (World Bank 1993) in order to exclude people from forests.

In Thailand, the Land Code of 1954 has the most important bearing on the question of land ownership, and by implication, on the process of centralization. Public forestland (Pah san-guan) historically had many users or "squatters". The government promulgated that anyone occupying any forestland as of 30 November 1954 was eligible to receive a land-use certificate provided proof of occupancy could be produced within 180 days. Only a few farmers in the provinces were aware of this stipulation. Most failed to take advantage of the opportunity to gain land rights. Thus, the new law turned them automatically into 'encroachers' of their own land. In 1985, the National Forest Policy set the "unattainable" 40 percent target for forestlands. In fact, the Royal Forest Department undertook a tree-planting program in degraded forests, which resulted in even more evictions and subsequently a political crisis (Lynch and Talbott 1995). The result of these developments is that today the debate on the decentralization process for forest management continues in Thailand with only few positive changes on the ground.

Impact of Forest Policies, Rules and Regulations

Forest policies towards centralization in the countries of the Asia-Pacific region had a number of impacts on their forests. Negative impacts include deforestation, forest degradation and loss of biodiversity. Other impacts such as the rise of environmental and green lobbies and local revolts have forced some governments to initiate first steps towards the devolution in forest management in an attempt to reduce the destruction of their forest resources.
**Forestland alienation**

Historically, local people used extensive areas of forests for long-fallow shifting cultivation. As more and more land was usurped by central governments, less remained for the people and their agricultural practices. Consequently fallow periods had to be gradually reduced with negative impacts for forest regeneration and agricultural production.

**Commercial forest exploitation**

Sustainability concerns in forest management were quickly pushed aside when countries reacted to favorable prices and the rapidly growing market demand for their timber. Some governments leased extensive areas of forests to concessionaires for timber harvesting. For example, by 1991 the number of concessionaires in Indonesia reached 580 covering 60 million ha or about 31 percent of the country's land area. In the Philippines, it was 4.67 million ha in 1989 (Gasgonia 1993).

**Dependence of the government on technocracy and policing**

In response to accelerating forest conversion and the poor control of forest resources, many governments initiated a number of programs and projects in forest management. One thrust was development of forest plantations. The Food and Agriculture Organization of the United Nations (FAO) estimates the annual gross planted area to be in the order of 2.1 million ha in Asia-Pacific region (FAO 1993b).

A second response was increasing forest protection efforts, although this measure was quickly assessed to be ineffective, as supervision was time consuming and led to the neglect of management duties by forestry officers (Subhabrata 1996). Corruption also increased tremendously, which did not help to further the cause of forest protection.

**Behavior of forest-dependent people**

In spite of the fact that many governments today control most forest areas, millions of rural and urban people depend, at least partially, on some forest resources. Most forest dwellers are extremely poor and in many ways economically disadvantaged. Due to prevailing laws, their forest use is illegal. In some areas, use is allowed as a favor by the government, although it can be withdrawn any time and without prior notice. Forest users are conscious of their vulnerable situation, and the possibility of being hauled up any time by the guardians of law. They therefore use the forest as a transient resource to be turned into cash whenever possible. This behavior fosters rapid forest deterioration.

**Rise of environmentalists and social activists**

Another development is the emergence of a strong environmental lobby - supported by international NGOs and the donor community - in most countries of the Asia-Pacific region. Environmentalists and social activists are concerned about the loss of habitat, wildlife, and biodiversity. Their major argument is that the losses are so rapid that total disappearance is not far off unless it is pre-empted by segregating sufficient areas of forests as protected areas. Some countries in the Asia-Pacific region have very impressive achievements in this regard. About 14 percent of the total land area has been demarcated as protected areas of various kinds for forest and wildlife conservation purposes (FAO 1993b).
Local protests for forest use rights and annihilation of forests

Subterfuge, resistance or - at times violent - protests by local people who have lost their rights to forests were organized in many countries in an attempt to force governments to yield ground. Examples are the Chipko ("hugging of trees") movement of India and the resistance of logging by the Penan people in Borneo. On the other hand, 'subterfuge' can also be used to annihilate forests by slow attrition.

In 1970, when a major flood devastated many areas in the mountains of Uttar Pradesh of India, the local villagers of Chamoli blamed the destruction on forest cutting by contractors. Through the Chipko movement they prevented the contractors from further logging. The hugging movement then spread slowly to other villages (Ramchandra 1993). Chipko and other such environmental movements have influenced the government to formulate a logging ban on green (live) trees in the hills and to make appropriate changes in forest policy.

The Penans of Sarawak (East Malaysia), a small remnant of hunter-gatherers, objected to timber harvesting in 'their' forests. As the government did not respond to vocal protests, they blocked logging roads to prevent the movement of trucks. In 1989, 71 Penan people were arrested for their activities. While no relief is in sight, the Penans have continued to fight their cause (Millier and Tanglely 1991).

In most developing countries of the Asia-Pacific region, local people have responded to land-use pressures by occupying forests. They either completely take over a forested area or chip away - sometimes hardly noticeable - the forest step by step. This form of unplanned forest conversion is very destructive.

New Initiatives - Successes and Failures

The adverse impacts of central forest management are deforestation and its environmental and social consequences. Between 1981 and 1990, the annual deforestation rate was estimated to be about of 3.9 million ha (FAO 1993b). While the damage to the forest is real, deforestation has also stimulated a debate on the effectiveness of centrally managed forest regimes, and triggered initiatives congenial to decentralization and local forest conservation. The initiatives differ among countries, but all are directed towards devolving forest management to local people.

India

The National Forest Policy of 1988 introduced certain changes oriented towards local and indigenous (tribal) people. Providing fuelwood, fodder, non-wood forest products and construction timber to local people has been recognized as a very crucial function of forests. In June 1990, the Government of India proposed the rehabilitation of degraded forests by local people in association with the forest department in and around the forests (referred to as Joint Forest Management or JFM). Under JFM agreements, forest protection becomes the responsibility of local people. Forest ownership is not affected by JFM, and remains with the government. Local people, through a village committee, are entitled to a number of forest products. By 1992, 17 Indian states had initiated JFM and about 2 million ha of forests were managed by 20,000 protection committees.

The environmental effects of JFM are positive. In most locations where JFM is in place, the forests have recovered dramatically. For example, in Hunsur, a village in the Western Ghats, people had managed a forest where the number of trees larger than 10 cm in diameter at breast
height increased from zero in an unprotected plot to 1,477 in protected plots after 14 years of protection (Rabindranath et al. 1996). In Hoshangabad district of Madhya Pradesh, the production of fuelwood increased fourfold (SPWD 1998). However, although JFM offers great potentials, currently its impact is still minor. In 1998, only 2 percent of the forests of India were covered by JFM agreements and only degraded forests were offered to local communities.

**The Philippines**

In Southeast Asia, the Philippines has the best record of policy changes in favor of the people, in particular upland dwellers. Since 1989, a government order has supported upland dwellers in acquiring legal rights to forest products within the areas of their traditional domain (Viyouth 1993). In addition, the Philippine government has funded several community forestry programs, including the Integrated Social Forestry Program (ISFP) (World Bank 1989), the National Forestry Program (NFP), its subsequent Forest Lease Management Program (FLMP), and the Ancestral Land Delineation Task Force (TF-AD). With some variations, these programs provide incentives to local people living on public forestlands, and in the uplands to sustainably manage local forest resources. However, extensive areas are excluded from the programs. In addition, some programs only cover denuded areas with less than 10 percent tree cover. Besides these two problems, bureaucratic procedures are also very cumbersome for claiming rights to forests and their products.

**Thailand**

In 1975, the Thai Cabinet granted amnesty to the residents of public forests so that they in turn could improve the degraded forests. The villagers were also provided with forest village development (FVP) funds. A similar program called Sit Thi Thamkin (Right to Harvest: STK) was introduced in 1979, although in this case no funds for village development was made available (Viyouth 1993). As of 1990, under FVP, 119 villages covering 55,344 ha have been involved. The STK program of 1979 has benefited 709,395 families on 1.15 million ha of land (Attanotho 1993). Under the Thai constitution local governments at the sub-district level, Tambon Councils and Tambon Administrative Organizations (TAO), have an important role in natural resource administration within their jurisdiction. The Royal Forest Department has recently prepared for the implementation of devolution of forest management (see also Komon Pragtong in this volume).

**Lessons Learned**

There is no doubt that the traditional central forest management systems are partially to blame for the high deforestation rates of the past. The various new initiatives have also not been very successful in reversing past trends. However, it is now being gradually realized that wherever management has been at least partially decentralized to resource users, forests have shown definite signs of improvement. Yet, the process of decentralization is very slow and implemented reluctantly. Also, success is not universal. The reasons for the differences in performance and impacts can be grouped in two categories, i.e. macro- and micro-level issues.

**Macro-level issues**

**Lack of political will**

The forest policy of the Government of India has been to increase forest cover to a minimum of 33 percent of the total land area. Yet, in the name of development, about 4 million ha of forests
have been converted for infrastructure purposes such as dams, roads, townships, and refugee rehabilitation between 1956 and 1980. The government of the Philippines has made tiers and tiers of decentralized units, but no financial resources have been devolved. Most funds have to come from the central government, which means that the deconcentrated units are totally dependent on the center's largess. Although it is well known that the concessionaire system of timber harvesting is not conducive to good forest management, it continues uninterrupted in Indonesia.

**Lack of clear policies and legislation concerning devolution in forestry**

With the exception of Nepal and the Philippines, no other country in the Asia-Pacific region has clearly enunciated a national policy or legislation directed at decentralizing forest management to the local level. While JFM has made significant progress in a number of Indian states, current arrangements are based on an administrative order that may be easily contested in the court. The most important requirement, i.e. an enabling enactment, has not been passed yet.

**Lack of clear tenure**

With the exception of the Pacific Island States where communal ownership of forests is common, there is a lot of confusion on the issue of tenure and customary rights of local people. For example, in Indonesia, the Basic Agrarian Law of 1960 recognizes customary law as the basis of national land law. The Basic Forestry Law of 1967, on the other hand, has been invoked to disenfranchise local people of their rights in favor of commercial timber operations or conservation (Lynch and Talbott 1995). In India, the customary rights concerning various forest products are revoked as and when any national park, sanctuary, biosphere reserve or national heritage parks are established. Even in Papua New Guinea, the recent law dictates that forest owners can dispose of their products only through parastatal organizations.

**Lack of technology**

The technologies adopted in the decentralization initiatives follow the pattern suitable for timber management. No matter what the needs of the people are, the forest management of decentralized units is aimed at producing timber and poles to satisfy urban and industrial demands. There is a severe lack of research on or the promotion of management methods to accelerate the regeneration of shrubs and bushes that are most used by the people as fuel (Banerjee 1989).

**Lack of institutional restructuring**

"Forest Departments" still stand for forest policing. Where the decentralization and devolution processes are implemented, the forest department structures frequently remain unaltered. It is mistakenly assumed that staff training without any change of the main structural edifice of the department is sufficient to deal with decentralized and participatory forest activities.

**Bureaucratic apathy**

Policies supporting the devolution of authority to the forest users in Nepal are very clear. However, forests are transferred to the users only very slowly. Similarly, in Thailand, only 119 villages have benefited from the forest village program. The reasons for this lack of zeal are not difficult to detect. First, foresters are very apprehensive and fearful of losing their power. Secondly, only few foresters have faith in the capacities of people to manage forests sustainably.
After all, the myth that the poor local people are responsible for deforestation has been indoctrinated into their minds for decades.

**Micro-level issues**  
*Usurpation by local elites and power brokers*

In places where decentralization and devolution policies have been drafted and passed, local elites and power brokers have frequently formed management committees and usurped the powers and benefits that should have been equitably distributed. Unless supported by outsiders and a sound system for ensuring equity is established, the poor and uneducated people often fall victim to the more prosperous, educated and vocal section within a village. The nature of forming management committees therefore has to be modified.

**Failure of weaning the people from forest dependency**

An alternative paradigm is being introduced for conservation of forests termed "eco-development" (see also Badola in this volume). It aims at reducing or eliminating the forest dependency of people living inside or on the periphery of conservation forests by promoting economic development of their village. The assumption is that when these people have an alternative source of income, they will not use the forests. The number of forest-dependent people is enormous. An estimate of people dependent directly on forests is about 420 million in India, Indonesia, Nepal, the Philippines, Sri Lanka and Thailand alone (Lynch and Talbot 1995). Economic development for so many people is beyond the scope of forestry projects. The amount being invested per village is paltry and can just touch the fringe of poverty. At best, most villagers view this development as an additional, but not alternative, income and the effects of the level on forest dependency are very limited. Eco-development cannot be a substitute for transferring rights to forests.

**Lack of local participation**

The sustainability of decentralization and devolution in forest management depends on the participation of the forest users in planning, execution, supervision and monitoring. In spite of the rhetoric, the fact is that participation is dismal. Except for the participation of the people in forest protection under JFM, there is hardly any input in planning (micro-planning), execution and supervision. The forestry officials generally are reluctant to accept the advice of others, especially of uneducated local people, on forestry management and related problems.

**Proposal for Change - Prospects and Potentials**

In the context of the discussion above, it is obvious that no half-baked or incremental measures can eliminate the problems that the past mistakes created. The fact is that all forests have to be returned to the people who should be given the authority to manage their resources. This complete and radical devolution has to be to the people who are the users, who reside in or near the forests, and who have the biggest stake in its survival for their own survival. This drastic change can be referred to as `Forest Reform'.
**Proposals**

**Development of political will**

The first and most important change required to bring about reforms in forestry is to develop the appropriate political will of the government. This cannot happen overnight and seldom happens on its own without some external inputs.

Fortunately, the political environment with respect to forest conservation has improved in recent years for a number of reasons. These include the dissemination of periodic data on deforestation rates (FAO 1993a; 1993b), and a surge in activities of international organizations in response to deforestation (Kenton and Tanglely 1991) such as the Man and Biosphere Program of 1972, the World Heritage Convention of 1972, the Tropical Forest Action Plan of 1985, establishment of International Tropical Timber Organization in 1983, Biodiversity Conservation Strategy Programme since 1989, the Biodiversity Convention of 1992, and the UN Conference on Environment and Development (UNCED), popularly known as the Rio Earth Summit, of 1992 and its subsequent support activities. The media has helped in publicizing the problem of increasing tropical deforestation. International and local green NGOs and social activists have mushroomed, and local forest users demand a fair share in natural resource management. However, what needs to be done in concrete terms is frequently not spelled out. People's participation and devolution of authority are always mentioned in the recommendations but drown in the multitude of similar suggestions and proposals for action.

More pressure than what is exerted at present is required to build in the above processes to influence concerned governments to bring about reforms in forestry. Global conventions have to first place the subject of Forest Reform at the top of the agenda and then try to ensure its implementation by the signature countries of any convention.

**Change in policy and legislation**

A change in political will should be accompanied with appropriate forest policies and legislation (see also Lindsay in this volume). Amongst others, new regulations need to cover the deadline for completing the transfer of tenure to the people. In addition, the rules should envisage the preparation of plans for sustainable forest management. The rules should clearly define the benefits, rights and responsibilities of the managing group, which should be incorporated in the management plan. The villagers' managing group has to be small in size, not more than about fifty households, in order to ensure equity, as large groups do not function for the common good (Olson 1971).

Special attention should be paid to the needs of the underprivileged - poor households, the landless, marginal farmers, indigenous people and women - to ensure their participation. Officials should be excluded from management groups, although they may fullfil a useful advisory and monitoring role in the early stages of the Forest Reform.

**Structural change of the forest departments**

Under the Forest Reform, the functions of forest departments have to change substantially. One challenge that governments face is the inherent difficulty in restructuring government departments. The main new functions of the restructured departments would comprise:

- technical extension;
- training of the forest management groups in management skills;
- assistance in preparing forest management plans and research;
• advice on investments in agroforestry and farm forestry;
• dissemination of market information; and
• monitoring of contractual agreements between the government and local people.

Departments would be divested totally of protection and revenue-gathering functions with few exceptions such as the management of legally defined protection forests.

The new structure would be two tiered; the upper tier consisting of specialists and the lower tier of small units, each responsible to a number of village management groups. The link between the two tiers would be non-hierarchical, with the upper tier responsible for extension, training and advisory services. The smaller units would be more or less independent and responsible for all other functions of the department.

Problems of the proposed paradigm

The paradigm suggested above faces some genuine problems. One problem often cited by the protagonists arises from a misunderstanding. Management of the commons has been described as tragic (Hardin 1968), and there are examples all over Europe and Asia supporting this theory. There is a common apprehension that devolution of forest management will lead to a second "Tragedy of the Commons". However, the present proposal is exactly opposite to what is described as common property in the literature as it limits the forest area for a small number of families for its management. This is synonymous with "communalization", a form of privatization where the property is owned by a group of people instead of an individual or the firm.

The second problem surrounds the issue of population growth, which is a reality in many Asian countries. It is assumed that forests allocated to one particular village will eventually be too small to satisfy subsistence needs. This may be the case in some countries that have already lost much of their forests, such as Sri Lanka and Pakistan, or in cases of uneven distribution of forest resources such as in Indonesia and Indo-Gangetic alluvial plains of India. The only answer to this problem is that governments and the people have to resort to alternative sources of energy and economic dependence. For example, in Nepal, in some parts of the border regions with India, the forests have receded miles away from the villages. The villagers are relying more on agricultural residues and farm trees for fuel.

Another tremendous problem is the possibility of migration as soon as forests are allocated to particular village households. There will be claims and counter-claims to property, some from indigenous people as part of their ancient domains (e.g., Thailand and the Philippines), and others from the old and recent migrants. One basic problem of the recent devolution initiatives is the emphasis on investigating the rights of the local and indigenous people to forests. This approach, which appears to right a wrong, has resulted in bureaucratic tangles and reduced the pace of transfers to a trickle. This distracts from making the important decision on which forest areas should be linked with which community as well as on the roles of the local inhabitants and the government. Disputes are unavoidable, but can be resolved between the claimants with governments as a mediator. Such conflicts have arisen between the Amerindians, the rubber tappers and other forest dwellers in Brazil. They have now formed a coalition of 'peoples of the forest' to fight for a common cause (Miller and Tangley 1991). Similar solutions are possible in the Asia-Pacific region.

Considerable conflicts between concessionaires and the new forest managers can be anticipated. In such cases, the government has to support the people based on its decision to devolve
authorities. That means that in countries like Indonesia, Malaysia and Papua New Guinea, the concession system needs to be dismantled just as has happened in Thailand and the Philippines.

Revenue from the forest is the second largest source of earnings for the government of Indonesia. It is equally important in many other countries of the Asia-Pacific region. In Indonesia, total output from the forest sector is around US$ 8 million (1998), which amounts to 7 percent of gross domestic product. A termination of all concession agreements would obviously result in a serious monetary loss. But in the long run, the country would not only recoup short-term losses but also enhance its income from the forests. The forest managing communities would be required to pay taxes on the income derived from their forests.

Another problem is that many forest managing groups are small and do not have the funds to invest in new technologies required for silvicultural and harvesting operations. As a result, at least in the early years of devolution, a sharp drop in production with the reintroduction of labor intensive technologies can be expected. Over time, productivity will increase as groups gain experience and have appropriate technologies at hand.

Last but not least, are social problems that will emerge when valuable resources are transferred to local communities that are far more heterogeneous than described in the general literature. The potential for abuse of power by local elites, increase in inequity and impoverishment of underprivileged village strata have been discussed above (see also Enters and Anderson in this volume).

Implementation of the proposals

The implementation of the 'Forest Reform' is complex and cannot be handled by forest departments for a number of reasons. The departments are engaged in multifarious activities and cannot provide the financial and human resources required. Further, the forest department staff, as discussed earlier, is probably reluctant to accelerate the process, and lacks the expertise that the 'Forest Reform' requires. A separate agency, such as the Forest Reform Department, has to be established temporarily for the transitional period. This agency should be staffed with people experienced in surveying and mapping, land reforms and social issues and be made up of representatives of government departments and civil society. Its mandate would be to oversee the transfer of forest resources as provided by law within the specified period. The target date will naturally vary from country to country depending on the present state of decentralization. The major tasks of the agency would be to:

- publicize nationally, regionally and locally, the implications of the 'Forest Reform';
- explain the new system and the caveats in village meetings; and
- divide the forests into community forests - production and conservation - and protection forests.

An important task of the agency would be to link communities with their production community forest blocks. The demarcation between forest blocks would follow geographical features and agreed upon boundaries would be included in approximate sketch maps. This process is not without difficulties but with the help of the agency's social activists, conflicts would be resolved to the satisfaction of all people involved. In the case of conservation community forests, protected areas (e.g., a biosphere reserve or a wildlife sanctuary) have to be linked with all the villages that are contiguous to it and which have a stake in the area. That means that such areas will be linked to a group of villages rather than one village as in the case of production community forests, which necessitates the development of collaborative arrangements.
Once the above tasks have been completed and forest management committees formed in the villages, the agency can be disbanded and foresters can directly provide support services to the committees and oversee the demarcation of the various forest types on the ground.

Conclusions

The only option to conserve and sustain all categories of forests of the Asia-Pacific region is to devolve management responsibility and authority to the village and forest user levels through the 'Forest Reform'. Its objective is the establishment of a new paradigm based on the premise that the forest benefits should rightfully go to the people who live in the forest or on its margins, irregardless of when they moved to where they live today. To successfully implement the reform requires policy changes, innovative legislation and a sincere political will. Working together with international organizations and local activists, governments can bring about the reform.

Devolution has to be implemented by linking villages to specific forest blocks that the villagers depend on economically. Thus, the present day large forest blocks need to be divided into smaller units with each being managed by a village committee. The reform process needs to be actively supported by a temporary agency composed of representatives of civil society and government departments. The role of the forest department in the future will be to support the preparation of management plans, to demarcate the forest of different village units and to provide technical assistance and advice on other matters.

Once the devolution process is completed, people will properly supervise and manage the forests of the Asia-Pacific region, corruption by outsiders will be resisted, more local employment will be generated and equity will prevail among the villagers. The government will also gain by imposing taxes on those villages managing their forests for economic gains.

To kick-start the devolution process requires a "Forest Reform Convention" sponsored by FAO and donor agencies and involving all the countries in the Asia-Pacific region. To support the convention theme it is imperative that FAO, UNDP and other organizations disseminate authentic (and not anecdotal) data about the superiority of people's management over the so-called scientific forest management and clarify the positive role that devolution can play in conserving our global forest resource.

References


Introduction

1987 to 1996 marked a decade of change for New Zealand's plantation forestry sector. The first visible change occurred when the government's forestry operations, run by the New Zealand Forest Service, were corporatized in 1987. However, the seeds of change were sown long before this. Indeed, the changes that took place could be regarded as a natural and logical evolution of forest management in New Zealand: as the industry grew from an "infant" in need of nurturing to a mature and competitive force, the need for state involvement diminished. Between 1990 and 1992 the government sold to the private sector over 350,000 ha of planted forests. The most recent chapter occurred only two years ago, in 1996, when the government sold its shares in the Forestry Corporation of New Zealand.

The main purposes of this paper are to trace the process of devolution, which in New Zealand's case is synonymous with privatization, discuss the policy intentions and results, and examine the issues and outcomes of devolution.

Devolution

From government agency to corporate giant

From 1919 to 1987, the government's forestry operations were run by a single agency the New Zealand Forest Service. The department's governing legislation of 1949 established that its primary objective was to produce and market forest products profitably. This was amended in 1976 to enable a "balanced approach" whereby, other factors were taken into consideration, including policies and directives to undertake afforestation in regions requiring economic development, employment provision, utilization of low productivity lands, meeting of planting targets, and environmental objectives.

During this period the government, through its direct and indirect involvement, laid the foundations of New Zealand forestry. By the mid-1980s a number of driving forces converged suggesting that it was time for the government to rethink how it managed its forest assets. Some of these forces included:

- The wood supply from the forests was forecast to surge during the 1990s, and a more commercial operating environment was necessary to maximize returns. This required downstream investments to advance this end.
- The environmental movement was concerned that the government ensured more environmentally friendly practices.
- Government policy of the day was to clarify organizational objectives and, thereby enable transparency and accountability.

The decision to corporatize the commercial functions of the New Zealand Forest Service was made in September 1985. Procedural options were debated and in November of the same year the government determined that the New Zealand Forestry Corporation be formed and empowered to operate as a commercial enterprise.
It was further decided that the non-commercial functions of the New Zealand Forest Service be transferred to two new government departments (Figure 1), the Department of Conservation (which manages the state's natural forest estate) and the Ministry of Forestry (which had policy, forest health and protection, and forestry research functions). The roles of the Ministry of Forestry were transferred to the new Ministry of Agriculture and Forestry in 1997.

In April 1987, the New Zealand Forestry Corporation was formally established, together with eight other state-owned enterprises, as a limited liability company under the Companies Act. A clear commercial focus was regarded as a prerequisite for the New Zealand Forestry Corporation to compete effectively with the private sector. The principle objective of all state-owned enterprises was to operate as a successful business. Indeed, the New Zealand Forestry Corporation proved very successful in turning a loss-making government agency into a highly profitable corporate agency (see Figure 1).

Figure 1: Restructuring the government’s forestry functions in 1985

A corporation in transition

Commercial success, however, was not sufficient to embed the new institutional approach to managing the government's commercial interests in forestry. A number of considerations meant that change was just on the horizon, including:

- The government and the New Zealand Forestry Corporation could not agree on the value of the forest assets;
- A growing appreciation among government and industry was that in order to derive maximum value from the forecast growth in wood supply, the wood processing industry needed greater security of supply; and
- The policy of the day was for the government to sell its businesses, unless there were good economic or social reasons to retain ownership.

The value of the State's forest assets

When the government's commercial forestry operations were corporatized the intention was to transfer the forest assets from the government's books to that of the new state-owned enterprise. However, the values of the forests assets estimated by government officials and by the New Zealand Forestry Corporation respectively were widely divergent. And differences persisted. Officials ultimately suggested that a pragmatic way of resolving the dispute was to sell the assets.
Facilitating value-added processing

Greater value-added processing was impeded by:
- the New Zealand Forestry Corporation's limited ability to raise capital and the requirement that any investment intention first receives the approval of shareholding ministers; and
- private sector processors' reliance on contractual wood supply arrangements.

The sale of the government's planted forests was to overcome both impediments. It provided processors the opportunity to vertically integrate their activities backwards into wood production and, thereby, guaranteed their future raw material supply.

Halfway house

Despite its commercial success, many regarded the New Zealand Forestry Corporation as a hybrid between a government department and a full commercial entity. Caught between two worlds some believed that its structure would only convey the worst of both. Indeed, there were provisions in the State-Owned Enterprises Act that allowed for political interference: it granted shareholding ministers powers of intervention and access to all the information relating to the affairs of the corporation. While Ministers deliberately restrained from interfering on the political level, this did little to sway the perceptions that, because the New Zealand Forestry Corporation was state-owned, the government could intervene in the name of other than commercial objectives.

Government's privatization policy

In its December 1987 Economic Statement, the government announced a fiscal strategy aimed at substantially reducing the level of public debt. In the same year approximately one fifth of government expenditure was needed to meet the annual servicing charge for official debts. The announced privatization was to use the sales' proceeds to repay overseas debts and, thereby reduce interest payments and future budget deficits. In the 1989 fiscal year emphasis was switched to the repayment of both domestic and overseas debt.

The 1988 budget established criteria for determining which government businesses would be sold:
- The government must receive more for the sale of the business than it expects to receive if it retains ownership; and
- The sale of any particular business must contribute to, and not impede, the social and economic objectives of government.

The 1990/1991 sales

The government's 1988 budget also announced that the commercial forest assets (550,000 ha of planted forests) were to be included among government businesses to be sold. The sale's objective was revenue maximization. A Forestry Working Group, comprising government officials and private sector consultants, was appointed shortly afterwards, and "...charged with making firm recommendations on... the optimal process to be used by the Crown in quitting its forestry assets". In its October 1988 report the Forestry Working Group advised that only the forests should be sold - and not the land on which they stood. It recommended that the forest be sold as transferable cutting and management rights and that the forest estate be split up into a
number of sale parcels. The New Zealand Forestry Corporation was appointed the government's sales agent in November 1988.

The government's right to sell its forest assets was enabled by the passing of the Crown Forest Assets Act 1989. The government's forest estate was divided into 90 units ranging in size from 51 ha to 132,121 ha. The 1989 Act, amongst other aspects, established for each unit tradable property rights called Crown Forestry Licenses. The licenses contained individual terms and conditions of sale.

The government intended that sealed bids be accepted for individual units, or groups of units, with the combination of bids giving the best return deciding the forests allocation. The sales process was designed to allow bidders the flexibility to tailor their own packages, to attract a large number of bidders and, thereby, facilitate a competitive bidding process.

Tenders were called for in April 1990, but only for 66 of the 90 units originally meant for tender. Forests in the Bay of Plenty and Canterbury were removed from the public tendering process because of uncertainties involving contractual supplies to New Zealand's two major forestry companies, Tasman Pulp and Paper and Carter Holt Harvey respectively.

Bids closed on 4 July 1990. Eighty-two parties had registered, and about half of these were foreign based. However, of the 82, only two bids met the mark:

- 47,030 ha of forest were sold to New Zealand's Tasman Forestry Limited; and
- 24,000 ha and the Conical Hill Sawmill were sold to Singaporean-Malaysian interest Ernslaw One Limited, for the combined sum of NZ$ 364 million (NZ$ 1.92 = USD).

A substantial round of bids and negotiations followed. The New Zealand Forestry Corporation, the Treasury, and outside experts were involved in negotiations with potential buyers. As a result a further 175,676 ha of state forests were sold including the Hawkes Bay and Canterbury forests which were sold to Carter Holt Harvey, ending the legal disputes. The 1990 sales process grossed over one billion New Zealand dollars.

**The government's residual role**

Bids received for many of the government's forest assets were not satisfactory. Fifty-five percent of the forest assets originally intended for sale remained unsold at the conclusion of the 1990/91 round of sales. Three new state-owned enterprises were established to take control of the unsold forest assets. These commenced operations on 1 December 1990. The New Zealand Forestry Corporation ceased to exist in its original form on 30 November 1990, but remained as a shell company to receive dividends from the new state-owned enterprises. Timberlands Bay of Plenty (later renamed the Forestry Corporation of New Zealand) was formed to take control of forests on the central North Island and the country's largest sawmill, Waipa. Subject to the resolution of contractual difficulties with respect to the supply from these forests, this state-owned enterprise remained on the government's sales agenda.

State-owned production forests on the West Coast were withdrawn from the sales agenda. Bids received did not reflect the true value of the forest resource. Timberlands West Coast was formed to manage these resources, which included 21,000 ha of natural forests. The remaining unsold forests became the responsibility of Timberlands New Zealand Limited (Figure 2). The next chapter in the privatization of New Zealand's state forest assets picks up from here.
**Sale of New Zealand Timberlands**

The government's intention to sell New Zealand Timberlands Ltd. was announced in 1991. The plantations managed by the state-owned enterprise totaled 109,000 ha (36 forests throughout the North and South Islands of New Zealand).

In announcing its decision, the government indicated that it would maintain a flexible sales approach. Bids for individual forests, regions of forests, and the entire planted forest estate managed by the state-owned enterprise would all be considered.

Two key changes in sales conditions were the inclusion of a replanting covenant, and five-year sales contracts to New Zealand Timberlands Ltd. existing clientele. The replanting condition applies unless the licensee wishes to use the land for an alternative sustainable purpose approved by the Crown.

Indicative bids were received in February 1992, and parties approved to enter due diligence were identified quickly. The tender was competitive with a healthy number of bids received in early April 1992. On the last day of April it was announced that New Zealand Timberlands Ltd. had been sold to ITT Rayonier New Zealand (now known as Rayonier New Zealand) for NZ$ 366 million. Some forests were excluded from the sale because of environmental concerns or grievances of New Zealand's indigenous people - the Maori.

**Sale of the Forestry Corporation**

In 1996 the Minister of Finance announced the government's intention to sell its shares in the Forestry Corporation of New Zealand. The Corporation's assets were Crown Forestry Licenses to 188,000 ha of planted forests in the central North Island, processing plants in various locations, a nursery and a seed orchard.

The resolution of the contractual supply dispute between the Forestry Corporation and Tasman Pulp and Paper towards the end of 1995 had enabled the government to consider its options in respect of the Corporation, including sale. Following the announcement to sell, potential bidders were faced with what ultimately became a three-step process.

The first step required them to pass a threshold of confidence that they planned to add value to the woodflows from the Corporation's forests. The means of holding the successful bidder to its claimed intentions was by making breaches known to the general public. Stricter controls risked
limiting the successful bidders flexibility to respond to market changes, and were determined to be difficult to police.

Once past the threshold, step two was the tendering of closed bids. The sole criterion was price. A handful of large forestry companies and consortia submitted bids. However, as the strength of the bids was not as great as hoped, a third step was introduced into the sales process: bidders were asked to re-submit their bids.

In August 1996 it was announced that the Forestry Corporation had been sold to the Fletcher Challenge led consortium in a deal that valued the assets at NZ$ 2.026 billion. The other partners to the consortium were China International Trust and Investment Corporation (Citifor), and Brierley Investments.

**Issues and Outcomes**

The devolution, i.e. privatization, of New Zealand's state forest assets gave rise to a number of issues. These included:

- How best to preserve the rights of the Maori to reclaim land that is proved to be rightfully theirs?
- What would be the implications of the institutional changes for the competitiveness and profitability of forestry?
- How would jobs be affected?
- Would the new owners re-plant and expand plantations?
- Would devolution enable greater on-shore processing or further encourage log exports?

**Preserving the Rights of the Maori**

The Treaty between the Crown and Maori signed in 1840 guarantees Maori ownership and governance of their land and other possessions. However, throughout New Zealand's history successive governments took land from the Maori for a variety of purposes and by a variety of means, some more questionable than others.

Recognizing this, in New Zealand's more recent history, legal and institutional mechanisms have been put in place to hear Maori grievances and work towards a resolution. There are an average 1.5 claims by Maori on the land in respect of the 90-odd forests owned by the state before 1990. Most forests on the North Island have claims against them - one has as many as 5 claims from different tribal groupings. All forests on the South Island have been subjected to claims.

Among other things, the Forestry Working Group of 1988, which informed the government's privatization process, was directed to analyze and make recommendations on how to preserve the rights of Maori, without compromising the government's objective of revenue maximization. Following consultations with representative Maori groups, the recommendations of the Working Group were to:

- sell the trees and not the land;
- charge a land rent and hold proceeds in trust for whomever the Waitangi Tribunal rules to be the ultimate owner of the land;
- provide for the gradual return of land to successful Maori claimants as the existing tree crop is harvested; and
- pay Maori compensation for the lost opportunity to utilize their land, as they see fit.
These recommendations were given legislative effect in the 1989 Crown Forest Assets Act. To date, only one claim has been fully resolved. The resolution sat largely outside the strategies contemplated in the legislation. Resolution strategies are being developed in respect of another two successful claims. Many more claims remain. There are concerns about the capacity of the Waitangi Tribunal to hear and rule on claims; there are issues about whether alternative resolution processes should be followed.

**Competitiveness and profitability**

The New Zealand Forestry Corporation successfully turned the losses of its predecessor into profits (Figure 3). Despite this success, many felt that the profits could be higher still if the forest assets were owned by the private sector.

![Figure 3: Turning losses into profits (in million NZ$)](source: Kirkland (1996))

Prior to the sales, the New Zealand forestry industry was dominated by the government (which either owned or leased 52 percent of the forest estate) and a handful of large domestic corporates. Australian company Elders Resources NZFP was the only significant foreign investment in the industry (Figure 4).

As a result of the sales and subsequent private sector transactions, the government now owns less than 7 percent of the planted forest area. New foreign players have entered the industry. The first round of forest sales in 1990 and 1991 saw the entry of Asian investors, who today account for just over 12 percent of the forest estate. The second round of forest sales, International Paper's acquisition of a controlling interest in Carter Holt Harvey in 1995, and the recent sale of Nelson forests to Weyerhaeuser, has meant that United States investors now account for a third of the New Zealand forest estate (Figure 5).
Have these changes enhanced the competitiveness and profitability of forestry, as many of the proponents of change claimed it would? It is not easy to answer this question. However, the following graph helps to shed some light on this issue (Figure 6). The line resembles the rate of mark-up on input prices in forestry relative to the non-tradable sector. This is an internal rate of exchange that measures the relative ability of forestry to attract resources from other sectors of the New Zealand economy. Graphically, an upward movement represents a deterioration in competitiveness and, conversely, a downward movement represents an improvement.
Clearly forestry has improved its competitive position since the late 1980s, concurrent with the period of corporatization and privatization. However, to attribute this entirely to the two processes would be misleading. A key factor underlying the movements in the graph is the log price spike in 1993. Nonetheless, economic theory, which tells us that contestability increases as the number of players in the industry increases, suggests that we can reasonably ascribe part of these movements to devolution.

Figure 6: Competitiveness of forestry

![Graph showing competitiveness of forestry](image)

Mark-up relative to the non-traceables sector

Source: Malcolm 1996 (updated)

**Employment**

In 1987, when the New Zealand Forestry Corporation opened its doors, it was a much leaner organization than its predecessor. To improve labor efficiency, its deliberate strategy was to place heavy emphasis on contractors and cut back heavily on head office staff (Table 1).

**Table 1: Employment changes**

<table>
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<tr>
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<tr>
<td>Salaried staff</td>
<td>1,990</td>
<td>662</td>
</tr>
<tr>
<td>Wage workers</td>
<td>3,780</td>
<td>689</td>
</tr>
<tr>
<td>Contractors</td>
<td>1,300</td>
<td>1,419</td>
</tr>
<tr>
<td>Total</td>
<td>7,070</td>
<td>2,770</td>
</tr>
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</table>

Whether jobs have been gained or lost as a result of privatization is a debate that has generated more heat than light, which is compounded by a scarcity of empirical studies. Some jobs were simply transferred following acquisition, some new owners have reduced staff numbers in pursuit of labor efficiency gains, others have created new jobs as they diversified forestry and wood processing activities. To illustrate the murkiness of this issue, examples on the positive side include:

- Juken Nissho's new investments in wood processing, following its acquisition of Crown Forests Licenses, has created new jobs; and
- The significant increase in the number of full-time and contract staff employed by Wenita above its 1990 start-up level.
On the negative side of the ledger the Fletcher Challenge, Brierley Investments and Citifor consortium has rationalized its activities following its acquisition of Crown forest assets in the Bay of Plenty.

Whatever the net outcome, one should not place too much weight on its importance: forestry is not the fountain of jobs that many within New Zealand perceive it to be. The average number of persons employed in overseas-owned agriculture, forestry and fishing enterprises in New Zealand is 19. While this is certainly greater than an average of three for domestic enterprises in the same industries, it is a long way off the average for overseas-owned enterprises in the communication services industry, for example, which is more than 300 (Figure 7).

Furthermore, the larger numbers of people employed on average by overseas enterprises are insufficient to prove that privatization has led to net employment increases. In the case of forestry, at least, more plausible explanations include the larger sizes of overseas enterprises and that forestry contractors with profits below NZS 30,000 are excluded from the official statistics.

Figure 7: Average number of full time equivalent persons per economically significant enterprise

To plant or not to plant?

When the government first announced its intentions to privatize its forest assets, there was a considerable debate regarding whether a condition of ownership should be the reforestation of logged areas.

The first round of sales in 1990/91 excluded any replanting requirements (unless conservation or other objectives deemed such necessary). The prevailing school of thought was that the new owners should be free to put the land to its most profitable use. Given the land was already in forests and, at the time, forestry was proving itself to be a profitable activity, reforestation and
afforestation were expected to be attractive options. Furthermore, the government was concerned not to include any sale condition that could result in a discounted price for its assets.

By the second and third round of sales (in 1992 and 1996, respectively), the political sentiment had swayed. A condition of these sales was that the land be replanted unless the forest owner intended to convert the land to some other government approved sustainable use. This provision was not introduced because planting levels had declined, rather it was introduced to provide assurances to the advocates of reforestation. Such assurances were, arguably unnecessary as a range of factors (tax changes, forest product price increases, hype) culminated in the 1990s to encourage replanting and caused afforestation levels to surge to new historical heights (Figure 8).

![Figure 8: Annual planting area (in ha)](image)

Source: Ministry of Forestry (1998)

**Processing**

The New Zealand Forestry Corporation was constrained in its ability to process the wood derived from its forests. Some argued that its contractual supply arrangements with processors did not provide sufficient resource security to enable processors to expand their operations or establish new facilities. Privatization, many argued, would overcome both these impediments.

Others were not convinced. Independent processors were concerned that existing supply arrangements, however imperfect, would be threatened. Others still argued that the new owners would export logs to provide an immediate cashflow to cover their purchase costs and have little intention of processing the wood within New Zealand. The government paid increasing attention to these concerns with successive sales:

- No supply constraints or processing requirements were a condition of sale in 1990/91. As with replanting, it was argued that the purchasers should be free to put the resource to the uses they judged to be most profitable.
- Rayonier New Zealand, which purchased state forests in 1992, was required to honor five-year supply arrangements with existing clients.
The 1996 sales process required potential tenders to first pass a hurdle whereby they demonstrated their intention to add value to the resource within New Zealand. Public pressure was judged sufficient to hold the new owner to its intentions. Regulations were regarded as unduly restrictive on commercial flexibility, and difficult to police. What has been the reality? All new forest owners have, or intend to, invest in value-added processing. This includes the establishment of an MDF plant by Rayonier New Zealand. This is significant, as when the company first brought forests it had no intention of processing; it was up-front about its plans to export logs. Of the NZ$ 1.6 billion of announced intentions to invest between 1990 and 2005, 90 percent is attributable to the purchasers of state forest assets.

Figure 9: Announced wood processing investment intentions (in New Zealand dollars millions)

While processing intentions have picked up in the late 1980s, a large and increasing volume of logs continues to be exported (Figure 9). As New Zealand's wood supply grows, it is very likely that log exports will continue to increase. Between NZ$ 4 billion and NZ$ 6 billion has been estimated as the investment necessary to process the wood within New Zealand. Investment intentions are nowhere near these levels. The debate is continuing why this is so: is this the optimal market outcome, or are there market failures (such as investment information gaps or the like) standing in the way of more domestic processing?

Conclusion

Devolution, i.e. privatization, was a natural and logical change in the way New Zealand managed its planted forestry resources, consistent with the maturing of the industry. In some areas of the industry, however, different considerations have proved themselves to be prevailing. For example, the Crown continues to lease Maori land for wood production. Treaty partnership considerations explain its continued role in this respect. Changes in political sentiment and the commercial operating environment shaped outcomes, and include:

- The rights of New Zealand's indigenous people to claim land that is rightfully theirs is preserved in legislation. However, the process of advancing these rights has been slow.
- The profitability and competitiveness of forestry has been positively influenced. Devolution can claim part, but certainly not all, of the credit for this.

Source: Ministry of Forestry (1998)
• Whether devolution has led to a net gain or loss in employment levels remains unclear. However, given the very low labor intensity of forestry in New Zealand, this is more of a perceived than real issue.
• Market fundamentals rather than policy prescriptions have seen investment in afforestation surge to new historic highs.
• On-shore processing has been facilitated. However, the level of investment is far short of the supply-determined potential. Whether it accords with the market potential is debatable.

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Issues Relating to the Reform of Forest Management in China

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Introduction

Since the foundation of the People's Republic of China in 1949, the government has formulated and issued numerous policies, laws, rules and measures designed to achieve a flourishing economy and gradually enhance people's living standards. In the late 1970s, China began a period of unprecedented reform.

Reform has taken place in all sectors, and in the forestry sector a range of policy reforms and incentives for farmers has transformed forest management. Prior to the late 1970s, forest management was based on two operational modes: government managed forestland and collectively managed forestland. Even though the country always stressed that both development and protection were at the heart of forest resource management, the reality on the ground was an overwhelming emphasis on timber production. This type of management progressively led to a decrease in forest resources.

Since the 1970s, the government has implemented a number of programs to shift control of forest management from the central level to the local government level. Subsequently, forest management principles were diversified and operational modes experienced significant alterations. It is during the last 20 years that the greatest achievements in forest resource reconstruction have been achieved. This paper briefly describes some of the important reforms and outstanding issues.

Distribution of Hilly Forestland to Individual Families

Between the late 1970s and early 1980s, the government transferred management rights of large areas of the country's barren lands to individual families. On one hand, these measures aimed to address the shortages in forestland for fuelwood and other on-farm needs. On the other hand, the transfers sought to encourage farmers to afforest and protect barren hills. Up to 1984, some 50 million families were granted management rights to a total of 31.33 million ha of barren hills and about 40 million ha of so-called "responsibility hills" - usually forested (Newsroom of China Forestry Yearbook 1987). This contracting of responsibility changed the face of Chinese forest management and gradually led to greater forest production and protection. However, in some areas the initial effects of the policy were mixed. In many instances, farmers continued to neglect forest areas because they feared a reversal of such unprecedented policies. To assure farmers of their newly gained rights and reinforce incentives, in March 1981, the government issued the so-called "Three Clarifications" to stabilize forest management responsibilities and use rights and further encourage farmer participation.

The Three Clarifications

The Three Clarifications addressed the stabilization of ownership of, and management rights to forests and hills, the distribution of Forest Lands for Family Needs (FLFFN), and the formulation of a responsibility system for forestry production. The following policy measures were stipulated by the Three Clarifications. First, forestry department staff were directed to prepare an inventory of state-owned and collective forestland, private forest area and forestland where use rights could
be granted to individuals. Second, local governments at the county level issued inventory-based use right certificates, which clarified the tenure systems on FLFFN and "responsibility hills". Whereas the collectives retained ownership of FLFFN (usually barren hills), farmers assumed long-term use rights. Third, for the period under which families were granted use rights, those rights could be inherited or transferred through a market-based system. Fourth, management rights to forested "responsibility hills" owned by collectives were distributed to individual families, which are to manage them according to assigned responsibilities, usually expressed as specific tasks, criteria and duration. Income from the "responsibility hills" is to be divided between farmers and collectives at a predetermined ratio. Farmers who fail to fulfill their responsibilities lose their management rights. Usually the use-right terms for "responsibility hills" is shorter than for FLFFN areas because the forested hills usually regenerate quicker.

The effects of the Three Clarifications in general have been beneficial, and forest area and production has expanded because:

- a direct link was made between production and producers' material benefits;
- the management of collectively owned hills was decentralized to the local managers with real use rights; and
- specific responsibilities were attached to the newly acquired rights and the fulfillment of these responsibilities was based upon incentives and material benefits.

**Cooperative Shares System**

Even though the Three Clarifications have encouraged farmer participation, a number of problems have arisen. In some areas, single families manage entire hills, in other areas hills have been subdivided into a number of small plots, and yet in other areas families manage plots on several different hills. These complexities create problems of inadequate investment, small-scale operations and inefficient production. In order to address these shortcomings, the Cooperatives Shares System was created. This new arrangement has two distinct management mechanisms.

The first mechanism emerged in the late 1980s in the collective forest regions of South China, where families' hill forests (including FLFFN and "responsibility hills") were converted into shares and cooperative operations and contractual management agreements were introduced. In other areas of China, management rights were not transferred to families but were retained by the collectives that managed the forests through a representative organization. The second mechanism consisted of converting entire collective forest areas into shares and then distributing those shares to individual families. Collective operations and contractual management systems were established in both instances and the redistribution of profits, rather than actual forests, was emphasized.

One of main differences between the two systems is that the second mechanism did not distribute forest use rights to individual families. Another difference is that under the first system ownership and use rights are linked (families decide on management questions), while in the second system they were separated (shareholder committees determine the nature of management and employ forest managers through a public bidding process).

Production can be contracted not only to a group of families but also to individual families. This type of arrangement is essentially of a cooperative nature, with respect to labor, capital and other production inputs. The cooperative shares mechanisms resulted in expanding production, improved forest protection, and direct linkage between development and utilization.
Contractual Management in State-owned Forests

Another area that underwent major reform were the state-owned forest enterprises. In order to improve the performance of state-owned forestry enterprises, in 1984 the government initiated a contractual management system which gradually linked rights, responsibilities and benefits to the market economy. Based on the separation of ownership and management rights, employees were allowed to contract projects from their enterprise, which determined duration, product criteria, production tasks and bonuses. This generated positive incentives for increased production, augmented staff salaries, and enhanced the quality of reforestation activities.

Adoption of market principles in forest management

Formerly, state forest enterprises integrated all production stages and transferred raw and intermediate products between them at no cost. The primary shortcomings of this system were the inefficient use of forest resources and equipment. From the late 1980s to the early 1990s, these problems were gradually addressed through the introduction of independent sub-enterprises for reforestation, harvesting, transportation and processing. Intermediate products were now bought and sold within a market-based system at the time of transfer to the next production stage within the company. Thus, afforestation units "sold" their allowable cut to harvesting units at prices based on planting costs, which then "sold" the wood to transportation units at prices based on harvesting costs. Transactions were handled by the company's internal bank. In addition, previously fixed wages were complemented by performance-based bonuses.

These innovations drastically changed the forest economy as each sub-enterprise was forced to keep careful account of its operations. The main effect of these measures was more efficient resource utilization (particularly on the part of the reforestation units) which helped generate higher quality forests and enlarge reforested areas.

Transfer of Forest Resource Ownership through the Market Economy

In the late 1980s, the transfer of forest resource ownership through a market-based system was introduced nationwide. The transfer of forest resource ownership also meant that young and middle-aged stands could now be sold and thus, some of the notorious difficulties which stem from the slow pace of forest capital maturation were relieved. Forest managers are able to recover initial capital outlays and obtain profits much earlier than hitherto possible. This early realization of benefits has provided forest managers with much greater flexibility in dealing with evolving needs and changing economic conditions. The effects of this innovation have greatly improved farmers' attitudes towards forest cultivation and protection, and encouraged more individuals to participate in reforestation projects.

Auctioning of use rights for wastelands

A large share of the country's wastelands (including barren hills, gullies, and undeveloped waterways) consists of lands designated for forestry use. In 1992, some local governments introduced a competitive auctioning system for the use rights of these lands. Under the new system, management rights to previously unallocated, or long unused, wastelands (and the resources on them including sparse trees, grass slopes, dykes and dams) were auctioned to individuals (mostly farmers), and organizations using a process of competitive bidding.

Through the initiation of such transfers, the government encouraged the use of idle capital in wasteland development. According to recent statistics, about 1.92 million farmers have bought...
use rights to wastelands, and about 106,000 laid off personnel in 14 provinces have invested in the improvement of wastelands (Yongjian 1998). At the same time, farmers’ incomes increased through the sale of products from greened wastelands (such as fruit and bamboo), collectives benefited materially from the sale of use rights, and society at large gained from an improved environment. These examples show that the auctioning of use rights for wastelands has proven to be an effective means both for mobilizing society to take part in forest conservation and for encouraging farmers to generate wealth from reforestation activities.

**The Comprehensive Development of Mountain Areas (CDOMA)**

In China, mountains and hills make up nearly 70 percent of the whole country, and the population in mountainous areas represents about 57 percent of the population. Of China's 58 million poor people, 90 percent live in mountainous areas. In 1994, the government initiated CDOMA to improve the environment, living conditions, and alleviate rural poverty through soil improvement, harnessing of waters, reforestation, road construction, and generation of electric power.

CDOMA has been carried out through pilot projects, and at present, 114 counties participate in these pilot projects. In the last two years, some of the main achievements include:

- improvement of about 168,000 ha of low and middle-yield fields;
- construction of 170,000 hydro-engineering units;
- reforestation of 325,000 ha of land (of which economic forests were 130,000 ha);
- construction of 12,000 kilometers of rural roads; and
- construction of more than fifty small-scale hydraulic power plants.

In these pilot projects' areas, the average farmers' net income has increased by more than 10 percent, and now exceeds the average farmers' net income in surrounding counties by more than 20 percent (Lei 1998).

**Forest Ecological Programs**

In 1978, the government initiated the world's largest shelterbelt forest program in the wind erosion-prone regions of the North. Nine other large-scale ecological programs were successively initiated to address a variety of ecological problems. These ten shelterbelt programs cover a total of 7.06 million km² or 73.5 percent of China. Collectively, they constitute the basic framework for the national forestry ecological program. More than 20 million ha are designated for reforestation. By the end of 1995, 18.51 million ha had been reforested under the "Three-Norths" Shelterbelt Development Program, and forest coverage increased from 5.05 percent to 8.28 percent. Due to the establishment of these shelterbelts, more than 4 million ha of deserts have been greened and more than 1.3 million ha of sandy lands transformed into good farmland, pasturage, and orchards. In addition, more than 12 percent of desert areas have been improved and desertification checked on another 10 percent (Newsroom of China Forestry Yearbook 1995). Soil erosion has decreased to varying degrees on 8.8 million ha, and grass harvests on 8.93 million ha of recovered grassland increased by over 20 percent (Newsroom of

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5 They include the Program on Soil and Water Conservation Forests along the Upper and Middle Reaches of the Yangtze River; the Coastal Shelterbelt Development Program; the Plain Farmland Shelterbelt Development Program; the Taihang Mountain Afforestation Program; the National Program to Combat Desertification; the Shelter-belt Program to Comprehensively Harness the Valley of Huaihe River and Taihu Lake; the Shelterbelt Program to Comprehensively Harness the Zhujiang River Valley; the Shelterbelt Program to Comprehensively Harness the Liaohé River Valley; and the Program on Soil and Water Conservation Forests along the Middle Reaches of the Huanghe River.
China Forestry Yearbook 1996). One-third of the land in the "Three-Norths" region has sufficiently improved for agricultural use. Several of the ecological programs, begun after the "Three-Norths" Shelterbelt Development Program, have already generated significant ecological benefits.

The extensive flooding in 1998 prompted the government to focus on arresting ecological deterioration in the Yangtze and Huanghe river valleys. Aside from accelerating progress in the ten shelterbelt programs, the government has recently decided to initiate the Protection Program of Natural Forest Resources. This policy will force wood-based industrial enterprises in the ecologically fragile river valleys to abandon harvesting and processing and switch to reforestation and forest protection. The phasing-out of harvesting from natural forests has started in parts of the provinces and autonomous regions of Southwest and Northwest China.

This program will require the redeployment of a large number of workers and staff after harvesting is completely phased out; a burden the central government announced it will share with local governments through the provision of necessary funds (Yongjian 1998). On the other hand, local protection programs will be supported exclusively by local government finances. In concrete terms, workers and staff will be able to choose among four options:

1. Forest resource protection, where they will be organized as an institution funded by the central and local governments;
2. Plantation of ecological forests (government financing) or commercial forests (financed through low-interest national forestry loans);
3. Diversified management including crop farming, livestock breeding, mining and tourism evolving around the utilization of non-timber forest products (financed through low-interest national forestry loans); or
4. Staff who cannot be redeployed will be listed in the local insurance system.

Conclusion

China's extensive forest management reforms over the past twenty years have produced several tangible results. According to the data of the fourth national forest resources inventory (1989-1993), both forest area and volume of forest stands have increased and forest growth has exceeded consumption. Compared with data from the previous forest resources inventory (1984-1988), forest area has increased from 120 to 130 million ha, standing volume from 10.6 to 11.8 billion cubic meters, of which forest stock has grown from 9.141 to 10.137 billion cubic meters, and forest coverage from 12.98 to 13.92 percent.

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A National Advocacy for a Holistic and Decentralized Approach to Forest Management in Lao PDR

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Introduction

The Lao People's Democratic Republic (PDR) has a total land area of about 236,800 km² and a population of about five million people. Much of Laos is mountainous, which restricts access, communications and the development of modern irrigation systems. The country is divided administratively into 17 provinces and one special zone. These are in turn divided into 138 districts, 11,640 villages and 748,529 households (MAF 1997). About 83 percent of the population lives in rural areas, and some 66 percent rely on subsistence agriculture. The incidence of poverty is greatest in the upland rural areas and varies between regions as follows: central region (33.6 percent), northern region (26.5 percent), and southern region (16.2 percent) (World Bank 1998). Based on the poverty incidence measures, more than two million people are considered "poor" in absolute terms.

Agricultural production in upland areas is still dominated by subsistence cropping under a shifting cultivation or swidden (slash-and-burn) farming system. Shifting cultivators in the upland areas can only produce enough rice for seven to nine months of their annual consumption. Rural poverty in the uplands is directly linked to land degradation which results from inappropriate agricultural systems. The challenge of stabilizing shifting cultivation and conserving the environment in the upland areas cannot be met unless the issues of poverty alleviation, provision of alternative sources of livelihood, food security, and security of land tenure are addressed simultaneously.

To address the diversity of upland livelihood and socio-cultural systems, the Government of Lao PDR has devised a "focal site" approach to support sustainable decentralized forest management in the uplands. This paper presents the on-going development process in Lao PDR including the efforts of the Ministry of Agriculture and Forestry (MAF) to develop new approaches and mechanisms in supporting decentralized rural development interventions. It also looks at some of the new strategies undertaken among major central line agencies, and between central agencies and local governments to respond to the real needs and expectations of local communities.

The Main Thrust of Decentralized Forest Management

Decentralized rural development policies have long been recognized as a key to alleviating poverty and improving the socio-economic well-being of rural people. Decentralization is one of the eight national priority development programs in Lao PDR. Government policies for improved social and economic systems are largely geared towards efforts to stabilize shifting cultivation. Implementation of these policies is constrained by many factors, including the

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6 Shifting cultivation is the agricultural system involving an alternation between cropping for a few years on selected and cleared plots (of forest land) and a lengthy fallow period when soil is rested. With a long fallow period (10 to 20 years) to restore soil fertility by accumulation of biomass, it is a sustainable agricultural practice in mountain environments. However, in areas with increased population density, the length of fallows has been reduced to 4-6 years, causing rapid deterioration of soil conditions.
remoteness of most upland areas, lack of roads, diversity in livelihood and socio-cultural systems, a predominant barter economy, limited access to credit, and the continuing dangers of unexploded ordnance left from past military activities.

To ensure that the rural poor benefit and greater efficiency in planning and implementing upland development programs is achieved, the government established a National Leading Committee for Decentralized Rural Development in 1994, which was subsequently reorganized in 1996 and 1998. The main role of this Committee is to ensure concerted interventions to designated sites called "focal areas or focal sites". Because agriculture and forestry are still the major sources of livelihood for rural people, MAF and the State Planning Committee (SPC) are the leading agencies in planning and implementing upland rural development programs.

Developing the lowlands for irrigated agriculture was the main tool for overcoming the practice of shifting cultivation. This approach was considered feasible in the upland rural areas of the central and the southern parts of the country due to a relatively higher proportion of flatter lands. However in the northern region, this approach is not viable as the topography is much more mountainous. Thus, policies have shifted to in situ stabilization of upland forest land use, through a gradual reduction of unsustainable (short fallow) shifting cultivation practices. In this adjusted policy, the government strongly supports an integrated and decentralized approach to resource use and management, where the shifting cultivators are considered the central actors in resource management and development.

**The essence of the "focal site" approach to decentralized forest management**

The focal site approach is an area-based livelihood systems approach to decentralized rural development in which interventions are tailored to the area's specific needs. Such an area-based approach is geared toward promoting locally owned "centers for change and learning". The main goal is to increase food and commodity production, to create employment opportunities, and develop the conditions for improved living standards. The success of the focal site approach is dependent not only on an enabling policy framework, but also on the way the districts and local institutions are empowered, human resources are developed, and capacities are built for public management and participatory community development.

Thus, development is being concentrated in these focal sites (at the district level) within each province, so that limited human and financial resources are not spread too thin. Likewise, this helps to foster cooperation amongst ministries and harmonize allocation of resources. The main thrust is to ensure integration of macro and mezo-plans so that activities from different sectors can converge at the district level, and respond to the diversified needs of local people. Moreover, the focal site strategy emphasizes the devolution of power to the district-level administration so that development activities and the management of natural resources are directly overseen by local institutions. This strategy views shifting cultivation more positively, meaning that it recognizes improvements of livelihood systems within existing settlements as more sustainable and more socially acceptable alternatives to the development of the uplands.

The main legal framework for decentralized forest management is found in the Land and Forest Laws and corresponding Decrees 40 and 131 (1994 and 1996, respectively). These support the devolution of the responsibility for planning and implementation of rural development and management of agricultural and forestland to provincial and district authorities with required advisory and technical assistance to be provided by the concerned central agencies.
The laws and decrees also strongly support increased participation of villagers in the development process. The government support of decentralization for resource use and devolution of management to local authorities and communities is also contained in Decrees 169 and 186 (1993 and 1994, respectively). In addition, Decree 102 (1993) identifies the "Organization and Management of the Villages", a formal document underpinning the rights, duties and responsibilities of village communities in the use and management of natural resources within their domain. A draft decree prepared by MAF also attempts to clarify the exercise of customary rights as they apply to the use of forest resources.

**On-going institutional changes within MAF**

The acceptance of a focal site strategy for managing upland forest resources has necessitated that improvements be made in developing a policy framework and structure of governance based upon holism (complexity), spatial variations (diversity) and recognition that there is a need to work both with individual farm families, the communities, and existing local institutions.

Holism implies a recognition that agencies need to coordinate development programs. The focal site approach is not the task of a single agency. Thus, there is a need to shift to an area-based livelihood systems approach to develop planning and programming of resources (such as staff, financial, aid, and credit).

Spatial variation implies the effort is decentralized to provinces and districts. Districts should be able to determine "what is possible where" and are the coordinating points for combined efforts among concerned agencies. Projects need to fit into such frameworks and not create their own separate "super-structures".

Greater community participation implies partnerships between government line agencies and communities, building upon what is already there (e.g. indigenous land-use systems/technical knowledge and local regulatory systems). This suggests flexibility in implementing rules and regulations and the need to adjust to national programs and regulations.

As a result, the following structural adjustments are being implemented in MAF to ensure a more integrated approach to decentralized forest management in the uplands.

**Establishment of a supportive policy framework**

**Creation of lead coordinating bodies for harmonizing planning, development aid and extension within MAF**

MAF has established a number of lead coordinating offices for harmonizing planning, development aid and extension activities among concerned technical departments and between the central departments and the provincial/district agricultural and forestry offices. This allows MAF to integrate strategic plans and programs at central and provincial levels and, facilitate the convergence of sub-sectoral activities at the micro-level (district level) tailored to specific recommendations. It is hoped that this approach will assist government-supported programs and projects (including international assistance) to be more effective and ensure more coherence in the provision of aid assistance to the target areas, groups and individuals. At present, all concerned technical departments are "obliged" to coordinate and develop more responsive integrated upland forest land-use programs that better reflect the diversity of present livelihood systems (this means "breaking down walls" among departments).
Streamlining of local resources and aid coordination within MAF in parallel with the upgrading of local capacity to manage development programs

Most donor projects in MAF are developed in relative isolation and tend to superimpose "effective" organizational structures and administrative procedures on the prevailing Lao system. Past and present development efforts and activities were, and are still, directed through parallel structures (e.g. project offices) created alongside existing district offices and services (see Figure 1). This often has the effects of taking resources from existing systems. These so-called "superstructures" do not strengthen local people's ability to manage their own resources.

Efforts have been initiated to strengthen existing local organizational units responsible for development support. This includes improving local capacity to plan and implement development programs at the district level with increased human and financial resources. At present, resource allocation (including foreign aid) is broken down into three intertwined levels of management: central/MAF, provincial and district levels (Figure 2). To the extent possible, all development activities are to be directed through district offices, utilizing and improving upon existing services. The technical departments and the concerned provincial offices are to play an advisory and facilitating role, which includes provision of technical services, coordination of financial support and credit schemes, training, technical innovations, market information, and developing the necessary marketing channels and systems. The key objective is to ensure that these services are effective, reliable and compatible with local people's aspirations.

Figure 1: Build in a planning and aid coordination body within MAF to promote an “area based livelihood system approach to development
Efforts to devolve decision making and resources to provinces and districts allow for the relatively scarce financial resources (both local and foreign-funded) to respond effectively to the needs of specific focal sites. It is now the duty of the coordinating bodies in MAF, in collaboration with the technical departments and concerned aid agencies, to ensure that this happens through a clear strategic plan for the sector.

Figure 2: Decentralized organizational structure in rural development (focal site strategy)
Implement research and development activities through existing grassroots institutions

Different mechanisms and modalities have been devised so that research and development activities are geared towards improving cultivation-based livelihood systems in the context of sustainable forest use. This includes various forms of agroforestry development executed through existing grassroots institutions (such as village forestry programs and local political institutions) which take into account traditional resource use and management regimes. In the past, the ability of development agencies to deal with communities and farmers as groups was weak because of the individual household orientation of most technology transfer approaches. Given the fact that common property and open access systems play a pivotal role in upland areas, development agencies have learned to deal with problems of collective decision making (Figure 3).

Figure 3: Working though local institutions to develop community-based land management systems
Current pilot agroforestry research and development activities are entrusted to village organizations (rather than to individual farmers) consisting of the village authority, the party and the mass organizations (representing different interest groups). Guidance and support are provided by the district office. The emphasis is to strengthen the managerial capacity of village organizations, groups and individuals to use resources efficiently. This includes upgrading organizational and managerial efficiency, skill enhancement through village-based development programs, development of local enterprises, and promotion of capital formation to undertake new ventures that the traditional subsistence economy did not allow (e.g. micro-finance support programs). This approach to development will fit better into the existing collective management system that characterizes most Lao villages. It is believed that cooperative behavior can be ensured in circumstances where the state, community and individuals are on equal footing. The key objective is to avoid interventions that promote one-sided or overly individualistic outcomes that could undermine the effectiveness of local regulatory systems.

**Developing sustainable upland land-use and management practices by grafting exogenous land-use practices onto viable indigenous land-use systems**

Current forest management policies take into consideration the fact that the real forest managers are the communities who use and manage the land. To be effective, forest management and land-use planning must involve communities in the planning process and provide incentives for long-term sustainability.

Different mechanisms and modalities are being developed and tested to support the move toward flexible approaches to forest management. This approach combines indigenous knowledge of sustainable forest management with appropriate land management technologies. The government, in collaboration with international agencies such as the World Bank, ADB, IFAD, SIDA, DANIDA, FINNIDA and the Dutch Government, is testing various approaches.

Implementation of existing strict land-use regulations (where forestland with slopes over 25 percent are not to be farmed) has proved impossible in many places because of the lack of gently sloping land. Thus, while criteria for upland forest use are needed, such criteria should be flexible and take into the account the local context. Given the large variations in local production conditions, rotations over larger areas (e.g. over 6-7 fallows) are still permitted, especially where smaller areas (that is under four fallows) are unable to secure a reasonable level of productivity and stability. The present forestland allocation program allows shifting cultivators to farm up to 23 ha of land, depending on the types of farming enterprises and availability of land resources (e.g. in livestock-based farming systems larger land holdings are allowed per household). High priority is also given to develop appropriate technologies and land management practices in upland areas, including technologies and management interventions to improve the present practice of shifting cultivation. The government recognizes that it is unreasonable to strictly enforce regulations on shifting cultivation until viable alternatives are available.

Most importantly, the government strongly supports the co-existence of different property rights regimes in the same community (state, corporate/collective and private ownership). The tradition of resource sharing among neighboring villages is also considered as one viable resource management strategy and such customary practice is protected by legal recognition and incentives.
Developing appropriate approaches and tools for classification of "type areas"

As mentioned above, an area-based livelihood systems approach is used to guide present and future research and development activities. This approach implies the identification and classification of "type areas" in the upland zones. These are based on spatial variations which serve as a basis for more detailed analysis of farming and livelihood systems, and for planning, programming and developing the required research and development interventions. These interventions need to respond to each recommendation domain for the effective allocation of financial and material resources (including foreign aid).

A model for classifying "type areas" (at district and village level) has been developed by MAF in terms of resource use, socio-economic conditions and the local regulatory system. Broad development recommendations by "type-areas", to which research and development interventions need to respond, can be based on the profiles of diversification and development opportunities (Table 1).

The methodological tool for analyzing both the existing situation and the sustainability of the technical and managerial adjustments made in upland systems by local communities and external assistance consists of a simple table of inquiry. This focuses on understanding the behavior and important properties of concerned farming and livelihood systems in a particular district and village, using only a few key functional relationships. Accordingly, the concept of the agroecosystem analysis and the farming systems research approach are employed. These are slightly modified so that resource assessments are set in a much wider framework, including social and economic factors such as market access, alternative employment opportunities and local implementation of national policy measures. The emphasis is thus based more on livelihood systems, rather than on the farm or the family as a farm management unit.

Developing technical interventions within the established framework

Technical inputs are also necessary after the policy framework is provided. Specific technical interventions, and delivery of technologies need to take into consideration the existing traditions of community solidarity in resource management. Thus, mechanisms and arrangements need to be developed which aim to combine group (and individual) oriented approaches to technology transfer. The group-oriented approach is especially important for resources of corporate ownership and for actions where group efforts are more rewarding (such as marketing groups, credit groups, handicraft production groups, labor exchange groups, and cattle and goat herd management groups).

The village communities and concerned interest groups and individuals should be advised on the range of possible alternatives and given the freedom to select the type(s) of technical assistance that matches their needs and aspirations. This could be one specific technological option or a technological package. For example, in Phoukout District (Table 1), the most pressing technological needs are increased forage supply from the communal grazing land (especially in the dry season) and establishment of individual backyard forage and group-based animal health service units. Cross-farm visits have been encouraged so that farmers can learn from each other's experience in upland farming. It has been found that this approach is quite successful for the immediate transfer of technology.
Issues and Future Trends

The Government of Lao PDR considers decentralized forest management a key national strategy to alleviate poverty in the upland areas. A number of policy and legal frameworks and decentralized land management approaches have been formulated, adjusted and tested to support these efforts. However, there are still a number of constraints to filling the institutional vacuums that have emerged from this decentralization process.

One major deficiency is the limited capacities at the provincial and district levels for carrying out management and development activities. Continued training and establishment of support services are needed at provincial and district levels. This needs to include training on the interpretation of data and information collected to allow the identification and classification of "focal sites" to form the basis for developing forest land-use management and plans that are tailored to the local context.

Training is also needed for implementing, monitoring and evaluating programs on a regular basis. Documentation is necessary to assess whether the strategy and corresponding plans are progressing in the manner envisaged, and whether modifications of the original ideas are justified. It is believed that district and village organizations and program implementers (MAF technical departments and Provincial Agriculture and Forestry Offices) will be mutually responsive to each other's aspirations and interests as confidence grows and successes are achieved. Change in strategies and approaches, whether at the policy level or at the local level, is inevitable in the course of maturation, and careful monitoring and evaluation will ensure sound judgement.

The present stability in the Lao political system allows the government to gradually consolidate its efforts and make flexible adjustments to the on-going process of decentralization. These changes are not only based on approaches developed in Laos, but also on lessons and experiences from other countries in the Asia-Pacific region and around the world. It is believed that gradually strengthening the capacity of local government units and village organizations will play a pivotal role in ensuring long-term stability of shifting cultivation-based livelihoods and contribute towards a more individualistic and semi-commercial economy. In order for this to happen, the "area-based livelihood systems approach" needs to be based upon the concepts of holism (complexity), spatial variation (diversity) and decentralization (recognizing the roles of local institutions in the process of development).
### Table 1:
Profile of diversification and development opportunities for improving the swidden-based livelihood system by spatial variation

<table>
<thead>
<tr>
<th>Socio-economic status</th>
<th>Luang Prabang</th>
<th>Viengkham</th>
<th>Vienthong</th>
<th>Phoukout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountainous</td>
<td>Mountainous</td>
<td>Mountainous</td>
<td>Pine-based grasslands with mountainous areas</td>
<td></td>
</tr>
<tr>
<td>High population density</td>
<td>Low population density</td>
<td>Low population density</td>
<td>Low population density</td>
<td></td>
</tr>
<tr>
<td>Strict local rules for land use</td>
<td>Relatively flexible local rules</td>
<td>Relatively strict local rules</td>
<td>Flexible local rules</td>
<td></td>
</tr>
<tr>
<td>Good access and market opportunities</td>
<td>Very difficult access and barter economy</td>
<td>Difficult access and barter economy</td>
<td>Difficult access but a access market centers</td>
<td></td>
</tr>
<tr>
<td>Several support services, poorly managed</td>
<td>Lacking support services</td>
<td>Lacking support services</td>
<td>Lacking support services</td>
<td></td>
</tr>
</tbody>
</table>

1. Poor
1. Improve practice of Hai* & Hai-Na, where possible, open more Na**
2. Increase HG for sale (in the more areas)
3. Increase non-farm activities (in the more accessible areas)
4. Increase pig & poultry production
5. Stall-feeding cattle or increase goats to replace cattle
6. Increase fish production
7. Increase off-farm employment

2. Average
1. Improve practice of Hai-Na and Na-Hai, where possible, open more Na
2. Increase cattle production (in weight)
3. Increase pig & poultry production
4. Increase fish production
5. Increase non-farm activities

3. Better off
1. Improve practice of Na-Hai and Hai-Na, where possible, open more Na.
2. Improve the land tenurial system, to recognize the local regulatory system
3. Increase fish production
4. Increase off-farm employment

Required support interventions
1. Improve practice of Hai-Na, where possible, open more Na
2. Improve practice of Na-Hai & Hai-Na, where possible, open more Na
3. Improve practice of Na-Hai & Hai-Na, where possible, open more Na

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### References

People's Participation in Forest Management in Viet Nam

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Background

Since 1986, Viet Nam has embarked on an ambitious program of reform (Doi Moi). The transition to a market driven economy has benefited and affected people at all levels. At the same time, forest management policies and practices have also greatly shifted in emphasis.

After reunification in 1975, a central framework for forest management was developed which focused on utilizing forest resources for fueling national development. The government designed and implemented various measures to facilitate forest protection, and state-owned forest and agriculture enterprises were established to develop forest production systems. However, most of these policies did not adequately consider the needs of local communities (Cai 1999). As a result, local people paid little attention to these policies and programs, and deforestation and forest degradation continued.

The government has generally acknowledged that centralized forest management through the state-run institutions has failed. It now recognizes that local communities living in or near forest areas are in a key position to effectively implement forest management. Thus, the Government of Viet Nam has increasingly taken a "people centered approach" to forest management, which focuses on developing support projects to improve local people's livelihoods and well-being. One of the main thrusts of these policies is allocating forestland to rural households and allowing these households to share in benefits from forest management and protection. This paper focuses on some of the policies stimulating local people's participation in forest management in Viet Nam and the challenges in implementing these programs.

General Status of Forest Organization and Management in Viet Nam

In Viet Nam, land designated as forest area covers more than 17.6 million ha (54 percent of the country). However, land with actual natural forest cover constitutes only 9.3 million ha (28.2 percent of forest area). Forestland is divided into three types of forest: special use forest (2 million ha), protection forest (6 million ha), and production forest (9.6 million ha). In 1997, 107 special-use forest areas were designated by the government, including:

- 10 national parks covering 254,000 ha;
- 65 natural forest reserves covering 1.7 million ha;
- 32 historical and cultural sites covering 145,000 ha; and
- other areas which have been assigned to local forest inspection stations for their direct management and protection.

Four critical protected watershed areas have also been established by provincial authorities. In addition, the government has planned to set aside 39 areas as water-catchment areas. A total of 9.6 million ha planned as production forest (including natural forest, plantations and land without forest) was divided and distributed for management.
The Role of Farm Households in the Process of Forest Management

Allocation of land and forests to households

Since 1986, the government has initiated a policy of allocating land and forests to households in order to facilitate the development of mountainous regions. While *Doi Moi* has had remarkable success in transforming both national and local-level economies, ethnic people living in the highlands of Viet Nam have not benefited greatly due to poor infrastructure, mountainous terrain, cultural and linguistic differences among the ethnic population, and limited market development and resource opportunities. Recognizing this, the government has developed a number of programs to help rectify the situation. One major component has been the change from collective agricultural production to household-based production. Local-level forest management has primarily mirrored the agriculture land allocation process under various arrangements which allocate forestland to households.

This is viewed as the first step in alleviating poverty for people living in mountainous areas. However, the program is still small in scale and policies have not been completely clarified. Since 1986, numerous policies, directives and regulations have been developed to implement forest allocation (see Table 1). The Law on Protection and Development of Forests (1991), in combination with the Land Law (1993), reaffirms the legality of long-term allocation of land and forests to households and individuals for agricultural purposes and forest production. This promotes effective management, development and exploitation of forestland, and provides households and individuals with greater choice and autonomy. The central mechanism of the Land Law is allocation of land-use rights to individual households or organizations, which may be state or private, but not foreign. Land allocated for one purpose may not be used for another. Forestland is for "silviculture production" which includes natural and planted forests as well as nurseries. Land-use rights allocated to households or individuals may be exchanged, transferred, leased, inherited or mortgaged. If land is used for another purpose, or other obligations are not met, it may be recovered by the State.

The Law on Forests established the basic principles for management of wood and non-wood forest resources, including wildlife. It specifies the criteria of forestland allocation and forest users' rights and obligations, as well as assigns administrative responsibilities and defines offenses and penalties.
Table 1:  
Main Policies relating to decentralized forest management in Viet Nam

<table>
<thead>
<tr>
<th>Year</th>
<th>Policy Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>Decision No. 1171/QD dated 30 December 1986 on management regimes of production, protection and special-use forests</td>
</tr>
<tr>
<td>1990</td>
<td>Decision 72-HDNT dated 13 March 1990 on socio-economic development in the uplands</td>
</tr>
<tr>
<td>1991</td>
<td>Law on Forest Protection and Development</td>
</tr>
<tr>
<td>1992</td>
<td>Instruction No. 69-CT on the establishment of socio-economic development programs in the uplands of the northern provinces</td>
</tr>
<tr>
<td>1992</td>
<td>Instruction No. 327-CT on barren land development</td>
</tr>
<tr>
<td>1993</td>
<td>Decree No. 11-CP on the organization, functions, responsibilities, and rights of the National Committee on Ethnic and Mountain Areas Issues</td>
</tr>
<tr>
<td>1993</td>
<td>Law on land use management</td>
</tr>
<tr>
<td>1993</td>
<td>Order no. 525-TTG on measures for the continuation of the socio-economic development of the uplands</td>
</tr>
<tr>
<td>1994</td>
<td>Decree 02/CP on forestland allocation for forestry purposes</td>
</tr>
<tr>
<td>1994</td>
<td>Decision No.202/TTg on contractual forest management and reforestation</td>
</tr>
<tr>
<td>1995</td>
<td>Decree No. 1-CP on contractual allocation of land to the state enterprises for agriculture, forestry and aquaculture</td>
</tr>
<tr>
<td>1999</td>
<td>Decision 245/TTg on state management of forests (with recognition of the role of communes)</td>
</tr>
</tbody>
</table>

In 1998, 7.7 million ha of forestland (43.8 percent of the total forest area) have been allocated to various users, including:

- **State forest organizations**: 5.1 million ha (74.6 percent of total land allocated);
- **Households**: 500,000 households have been allocated a total of 1.4 million ha (17.5 percent);
- **Other users**: 600,000 ha; and
- **Local administration and forest inspection units**: Land that has not been allocated.

State forest enterprises, companies and management boards of protected and special-use forests have contracted the allocated forestland under long-term, stable tenurial arrangements for forestry purposes to households and individuals. Forest protection units and forest enterprise divisions have allocated to households either barren land, which they can plant with long-term agroforestry crops, or existing forestland which households are supposed to protect on an annual basis (previously called the 327 program but now called the "5-Million Hectare Reforestation Program"). Farmers can be allocated the following types of land:

**Special-use forest**: Special-use forest management boards directly manage, protect and develop forests. Contracts are made on a long-term basis (usually 50 years) with households in ecological restoration and administrative sub-areas for afforestation and protection. Households are entitled to collect dead wood for their own use provided that they do not damage the integrity of the forest ecosystem.

**Protection forest**: Protection forest management boards make contracts with households, communities, individuals or organizations to protect and regenerate forestland. Contracted persons have to meet all provisions under the contract. In return, they enjoy the following benefits:

- They can collect dead branches and non-timber forest products from the contracted land without paying taxes.
• They can harvest dead wood and old trees (free of charge) while keeping the forest clean. Harvesting and use have to be according to the rules of the forest management boards and approved by competent authorities.

• With regard to plantation forests, they can harvest trees with a tax exemption when the forest matures, and with approval from the forest management boards and the competent authorities.

• Contracted households can farm on their existing cultivated areas, but are not allowed to expand agricultural land into forest areas.

**Production forest:** Currently, all state forest enterprises have contracted land to households, individuals and organizations to protect forests located close to communities. Contracted households receive funds for forest protection and are obliged to protect the area for regeneration. Most of the forest enterprises apply the following contract types for planting in production forest areas:

• **1st form:** Contractor (A) advances surplus and loan funds to the contractee (B) in accordance with plantation progress. At harvesting time, "B" hands over a specified amount of harvested forest products to "A" in accordance with the agreement in the contract and "B" has the rights to the surplus.

• **2nd form:** "A" receives financial resources and loans provided by the State, while "B" provides labor to plant and protect the forest area. After harvesting, "B" sells the harvested wood to "A" at the current market price. After paying back the invested capital including interest, taxes, harvesting, transportation, and other costs, the final profits are divided according to the capital contributed in the beginning.

• **3rd form:** "B" is contracted to plant and develop forestland with his or her own capital. After the harvest, "B" has to submit to "A" between 5 and 20 percent of the profit made on the main wood products.

**Achievements in the forestland allocation process**

It is recommended to further support the implementation of long-term forestland allocation contracts. Support from local authorities to household forestry, particularly from village and hamlet authorities, is the most effective form of forest management. Since the introduction of the forestland allocation process, there have been a number of achievements.

• Between 1993 and 1997 households, individuals, and communities received contracts to protect more than 1.9 million ha of forestland, regenerate 224,000 ha, and develop new plantations on 559,000 ha.

• Due to forest and land allocation programs and supporting policies, a number of farming sites in midland and mountainous areas have been reforested or developed to produce agroforestry products. In Yen Bai Province, there are 9,500 agroforestry farms with an average size of 5 to 10 ha. In Lao Cai Province, there are 1,500 farms with an average size of 3 ha. Annual income ranges from US$1,300 to $1,800. In Thanh Hoa Province, 13,000 households have established forest gardens and farms and receive an annual income of US$800 to $1,800.

• Around 200,000 households have been allocated barren land. From this, and support from the World Food Program and other international donor organizations, 400,000 ha have been planted to provide firewood and other wood products and to support environmental conservation, and land improvement.

• Other positive impacts from forestland allocation are that forests are now better managed, and deforestation rates have decreased. In some areas, there is no evidence of illegal exploitation. In addition, the reforested areas show great economic potential and healthy growth rates.
Existing Problems

While there has been much progress in forestland allocation, several problems still exist:

- The rights and benefits of households that receive forestland have not been well defined. Therefore, farmers are often not convinced that allocation programs will last, and hesitate to invest capital and labor in forest production activities.
- Species selection and business decisions are still highly centralized. Farmers do not have the rights to choose tree patterns and land-use methods. They have to follow the instructions of state management agencies.
- State investment capital is deficient to support households.
- Incentives to encourage and develop marketing systems in mountainous areas have not been designed.
- Technical support, transfer of market information and other government support services are weak.
- Regulations on benefits and responsibilities of households have not been fully clarified.
- Concrete regulations that allow people who receive contracts to use their land for agroforestry as well as to benefit from products and off-takes are absent.
- Too much emphasis has been placed on conservation and protection, which provide a disincentive for farmers to participate (Cai 1999).
- Those who harvest forest products are usually "victims of unequal distribution of land" and thus are usually landless and have not had an opportunity to participate in forestland allocation programs (Cai 1999).

Measures and Policies in Support of Participation

While much has been achieved in decentralizing forest management in Viet Nam, there are still several issues that need to be clarified. Some of the suggestions to strengthen forestland allocation and contracts for forest protection and development, include:

- Allocate less-crucial protection forests nearby communities for household or community management.
- Allocate natural, fragmented and poor forest areas nearby communities to households and individuals for forest protection, management and enrichment.
- Allocate forestland without forest cover for 50 years to households, and individuals who have the need and capacity to manage trees.
- Non-farm households and individuals should be able to lease land for agroforestry production.
- Management boards of both special-use and protection forests should be able to contract land to households and individuals to protect and develop forests.
- State forest enterprises should provide long-term forest business contracts to households and individuals.
- Encourage investment in protection, regeneration and plantations of special-use and protection forests by:
  - allowing contracted households to benefit from protection activities by collecting dead wood, fruits and other forest products as well as being allowed to cultivate agricultural products within forest areas; and
  - allowing contracted households to plant and benefit from economically viable tree species in protection forests, and receive benefits from these products including a portion from the main harvest.
State support for planting in production forests

The State should play a catalytic role in supporting household forestry by mobilizing people and resources and by providing favorable legal environment. In addition, the State should also assist in transferring appropriate technology and developing market opportunities for participating households. The State should equally develop incentives to harvest forest products and guarantee benefits for people who are involved in forest plantation management.

Conclusions

Since introduction of Doi Moi in 1986, the Government of Viet Nam has actively sought to transform the forestry sector through the forestland allocation process. The process is still evolving, but it is evident that if greater success it to be achieved more choice and autonomy will need to be given to households and communities who are responsible for protecting and managing forestland in Viet Nam.

References

Local Practices and Decentralization and Devolution of Natural Resource Management in West Africa: Stakes, Challenges and Prospects

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Introduction

Decentralization is a burning issue in most countries of the world. Whether it is a requirement of donors, part of the general globalization process and downsizing of state bureaucracies, or a response to an emerging civil society within a particular country, decentralization offers an unprecedented opportunity to change how natural resources are managed. This does not mean that decentralization will solve all the ills of past flawed approaches to development and forest management. It offers an opportunity to reshape how central governments and communities relate to one another and provides space to build new socio-economic and institutional approaches to how forests are managed.

One of the major issues from the standpoint of community forestry is how decentralization processes affect traditional local management strategies. In West Africa, local institutions and practices have played an integral role in traditionally managing natural resources.

In this context, "local practices" encompass two aspects. The first are the local approaches, methods and techniques for managing natural resources. Approaches and methods can include rules and regulations, harvesting regimes, customary tenure, and local silvicultural techniques. The second are the local institutions, that are actively involved in managing natural resources. These can include NGOs, small farmers' associations, youth associations, local administrative units, traditional and local chiefs, and decentralized technical and administrative structures.

This contribution is not intended as a study of decentralization of natural resource management in West Africa, nor as an appeal for or against the decentralization of natural resource management. The purpose of this paper is to reflect on the role of local institutions, which traditionally managed local resources, in the decentralization process. This paper focuses on identifying the main issues and challenges affecting local institutions in decentralization. In addition, the paper discusses how various actors in general, and the Forests, Trees and People Program (FTPP) in particular, are responding to these challenges.

Natural Resource Management in the Region: Ambivalence

Traditional systems that are functioning but lack a legal basis

It is generally recognized that communities throughout the region have established customary systems for managing all types of natural resources. These systems struck a relatively satisfactory balance between such values as equity and social justice, efficiency, sustainability and the preservation of biodiversity. Many examples of such systems have been documented in West Africa. They include studies (Drijver et al 1995) on local systems of fishery management.
in the floodplains of the Logone River in Chad and Cameroon, and Onibon's (1995) work on traditional systems of land and forest management in Nagot, Benin.

Both studies share the same conclusion that traditional systems of natural resource management are based on dynamic institutional and regulatory frameworks. In other words, frameworks well adapted to the social and environmental conditions of their respective milieu. Keita (1985) describes a model of Sudano-Guinean savannah management fairly common in the southern Sahara, where local systems for managing fuelwood, required for cooking and other domestic purposes, were well adapted to local conditions.

Unfortunately, forestry authorities, both in colonial times and since independence, ignored customary practices when designing forestry policies. Instead, successive governments, developed strict command and control policies which deprived communities of their legal rights to manage their local resources. Despite this, the real power in natural resource management is still in the hands of traditional institutions.

Non-functioning legality

In almost every the country of West Africa, the state has declared itself the de facto manager of all natural resources, but has, in practice, been unable to assume this responsibility. Soumaré (1998) calls this a situation of non-functioning legality. According to Keita (1985) and Onibon (1995), the state's action, in stripping traditional institutions of their age-old rights, has plunged these functioning spheres into illegality. This situation supports destructive forces both from within the community as well as from the outside. On one hand, forests are valued by outsiders seeking to exploit its wealth. On the other hand, destructive forces within the community are also unleashed.

Ambivalence or the persistence of a sterile dualism?

The institutional and legislative framework for natural resource management in the region is thus distinguished by the persistence of what might be called a "sterile dualism". This means that the law entitles the state to be the main custodian of natural resources, but the state cannot handle this responsibility. Thus, traditional systems, which have no legal authority, remain the frame of reference for rural inhabitants in their day-to-day use of natural resources (Soumaré 1998).

This sterile dualism is the background against which the countries of West Africa have undertaken their decentralization processes. The aim is for the state to transfer authority to "local" spheres of responsibility (usually local administrative units). This leads to the question: can decentralization actually enable local communities to assume true responsibility for managing natural resources?

Decentralization: the Present Situation in West Africa

An opportunity or a crossroads for the countries of West Africa?

Decentralization and sustainable forest management are two major challenges facing all countries in the region. In fact, like the independence movements that broke the yoke of colonialism in the 1950s and 1960s, and the rise democracy and multi-party systems in the 1990s, decentralization is now increasingly seen as a non-negotiable alternative.
However, a historical analysis of the development of West African states shows that decentralization is not a new phenomenon, particularly in terms of territorial and administrative organization. This has led some analysts to conclude that decentralization is a political and legal constant. Nevertheless, talk of decentralization and natural resource management still generates much passion, for it assumes a certain way of using and preserving natural resources and also a certain way to redistribute power.

While advances in decentralization during the colonial period are certainly of some interest, commentators agree that the study of decentralization processes really becomes relevant only after independence (Fall 1998).

In most West African countries, decentralization represents a fresh opportunity, or at least a new crossroads, which must not be missed (CILSS 1994). Although the processes under way in most countries are not identical, they have three common features:

- They are fostered and carried out by the state;
- Their main stress is on the drafting of policies, laws and administrative decrees; and
- They are based on the creation and installation of decentralized institutions.

Currently, decentralization processes tend to stress reform of territorial administrative units functioning within the government bureaucracy. In this instance, decentralization is about transferring responsibility from higher to lower administrative units. Decentralization does not support the devolution of responsibility and authority for managing natural resources to the local people. This is why the transfer of responsibility for forest management is restricted within the bureaucracies themselves, taking no account of the people and bodies who for all practical purposes are in charge of using and managing these resources. In other words, the traditional institutions are not involved in this process. Even when the aim is clearly to devolve authority to local institutions, decentralization processes have too often been designed under conditions laid down by, or influenced by, outsiders.

**Providing the legal basis for decentralization**

In each West African country, decentralization has been accompanied by supporting legislation, formally enacted and promulgated laws, and legislative documents. Sometimes, it is even a constitutional requirement. It has also led to the establishment of various governmental institutions such as ministries, decentralization missions, and national commissions. Such heavy juridicial attention may turn out to be a major constraint, if decentralization is not accompanied by devolution of authority to those responsible for managing natural resources (such as local institutions).

**Content and scope of decentralization laws**

The institutional context is marked by the creation of structures and bodies generally known as "decentralized local administrative units" (collectivités locales décentralisées). Varying slightly from one country to another, these bodies are found at three levels: regional/provincial (or departmental), district (made up of several villages), and communal.

The principle is that the state divides authority over these spheres of responsibility, including natural resource management, among the various administrative units. With few exceptions, the commune is the only local level institution that exists as a legal entity, has autonomy in financial management, and is administered by an elected authority.
What place is there for traditional and local institutions?

In every country of West Africa, there are various local institutions (both traditional and recently developed) which are recognized by local people as having authority over a particular sphere (CILSS 1994). Although the legitimacy of some of these local institutions is sometimes challenged today, their power is still very much alive.

While the commune is generally the decentralized unit granted authority with regard to natural resource management, it may encompass a range of socio-cultural elements corresponding to different traditional systems for managing natural resources. In such cases, the commune, composed of many villages over a vast area, is not congruent with the local and traditional institutions that hold the real reins of power and decision making.

Points for Reflection: the Issues Challenging the Region

Who really transfers and who actually receives?

Given the de facto control of natural resources by local institutions, in what sense is the transfer actually made? Is it from the state to decentralized administrative units, or (which is closer to the truth) from local institutions to new decentralized administrative units? In the latter case, what are the implications for customary social interactions?

Which will be stronger, the new legality or the de facto situation?

In the future, decentralized administrative units will have legal responsibility over natural resource management, but surely local institutions will continue to claim their rights. Will the state be able to persuade customary holders to hand over their authority to these newly elected authorities? Supposing it can, is there any guarantee, given their limited financial resources, that these administrative units will be more effective than the central authorities in performing their allotted tasks? Seen in this perspective, the state seems to be in the process of off-loading legal responsibilities that it has been unable to fulfill properly, with no guarantee that the new institutions will do any better.

Will the transfer carried out under decentralization be able to solve the problem of sterile dualism?

As envisaged, decentralization processes simply transform the "state vs. local" conflict to a "decentralized administrative units vs. local" conflict. The local administrative units will be in a better position to exercise their authority based on ground-level realities, and they will have to respond to local-level grievances and problems in a more efficient manner. However, conflict could arise between the established local institutions and newly established political units. This new dualism may thus be even more ridden with conflict. The challenge of sterile dualism is as present as ever!

Can decentralization in certain circumstances undermine and distort customary social interactions?

In certain cases, the objectives of decentralization policies cannot be achieved because the process will be co-opted by the "neo-traditional elite". The new local elite use decentralization to reinforce their power at the expense of the real users and those most dependent upon forest resources (Abdoul 1996). This is a serious shortcoming which can only be redressed by
innovative and judicious ways to appropriately integrate locally accountable institutions into the decentralization process (Ribot 1995; Ribot 1996).

**Does decentralization, as conceived of and carried out in the countries of West Africa, raise new challenges?**

The weaknesses revealed above could imply that the state is unaware of the challenges raised by decentralization. But how aware are the other actors, in light of the great enthusiasm aroused by these processes? Can it be claimed that the challenges have been correctly identified? What are the responsibilities of the other actors (such as government agencies, local institutions, decentralized administrative units and NGOs)? Are there any relevant experiences upon which to draw?

**FTPP and the Decentralization of Natural Resource Management**

**FTPP: a framework for reflection and exchange**

The Forests, Trees and People Program (FTPP) is a global community forestry program that has been initiated by the FAO Forestry Department and is implemented through regional, national and local partner institutions. FTPP aims to boost the participation of rural communities in the sustainable management of their forest resources and profitable development by:

- developing and/or adapting community forestry knowledge, methods and tools;
- improving the capacity of institutions to use and/or develop such knowledge, methods and tools; and
- disseminating and exchanging experiences and information.

FTPP has grown steadily since 1978. At present, FTPP is comprised of a global component based at the Community Forestry Unit of FAO in Rome, a networking component based at the Swedish University of Agriculture Sciences (SLU) in Uppsala, and four regional components in Latin America, Asia, East and South Africa, and West and Central Africa. The West and Central African component was established in 1995 and carries out activities in six countries: Benin, Burkina Faso, Cameroon, Mali, Niger and Senegal. Activities are focused on four priority areas:

1. Participatory approaches;
2. Conflict management;
3. Local practices and farmer's research; and

Based on the experiences of the West African component and its partners, decentralization has been identified as one of the priority areas for action and research over the next three years. FTPP/West Africa will focus its attention and action on supporting local-level institutions and actors to improve their efforts and capabilities.

For a program such as FTPP, the challenge of decentralization can be summarized in terms of the following key goals:

- Promoting a clear understanding of local forest management practices, local and traditional institutions, and the regulatory framework on which they rest. This entails the use and development of tools for institutional analysis, the promotion of exchanges, and the dissemination of experiences of interest.
- Active involvement of local institutions in planning and consolidating the process of decentralization.
• Encouraging, promoting and facilitating a debate in the region, and in individual countries, on the strengths and weaknesses of decentralization, and the challenges raised with regard to forest and natural resource management.
• Supporting the development of mechanisms to enable devolution to be extended to local institutions that have traditionally had the responsibility for managing forests and other natural resources.

Mali case study: a first attempt to look at the challenges

To better understand some of the challenges in decentralization, FTPP/West Africa and the global component have teamed up with the Department of Sustainable Development at FAO. The main focus of this partnership is to the explore shifts in rights, responsibilities and benefit sharing, and the changes that accompany the process of decentralization. Under the supervision of the Land Tenure Institute in Mali, two case studies are being carried out in two regions of Mali.

The study in Mali is one of three comparative case studies, the other two being conducted by the Department of Sustainable Development in South Africa (Mozambique) and Near East (Yemen). As a contribution to the comparative study's assessment of relations between customary institutions and natural resource management, the Mali case study focuses on community forest management and issues of tree and forest tenure.

In rural Mali, decentralization has been interpreted distinctly as "power returning home". The implications of such an interpretation are in a context in which traditional power dominates (Béridogo 1997; Koné 1997). It should nonetheless be noted that in Mali there has always been a policy of integrating traditional institutions at the village level. The village chiefs and lineage councils (conseils de lignages) represent the official power of village authorities. The recent political events in the region, along with current decentralization policies being implemented, have made it critical to better understand which type of policies to adopt. This is especially true in a country where traditional institutions have a great influence over natural resource management and the center is gradually withdrawing its influence.

The overall objective of the studies is to initially develop tools and guidelines to better relate social capital, traditional institutions and ongoing decentralization processes. This in turn would help clarify how different institutions interact vis-a-vis rural development and natural resource management. Finally, it is expected that this would provide useful information to the various stakeholders involved in the decentralization process and stimulate further adaptive research and discussion on other issues.

The immediate objective of the two studies will be to provide an output that will contain preliminary answers to the following questions: Who are the main players of decentralization? How "uneven" is the playing field? What are the rules of the game? Who are, or would be, the "winners" and "losers" of decentralization at the local level? What is the price of (government/outside) interference? Is there a danger that the creation of new, prestigious local government positions will be used by the local elite to reinforce their power? Does legislation support local accountability? What are the types of administrative oversight and powers being entrusted to these bodies to enable them to truly participate in community based natural resource management?
Conclusion

FTPP/West Africa seeks to assess and better understand the uncertain impact of decentralization on traditional community institutions. This is done at the regional level to allow for the exchange the experiences of different processes of decentralization that are unfolding in the countries of West Africa.

Often decentralization is just a transfer of authority from the central government to the local government units, and fails to take into account the local institutions, which are the de facto local managers. It is increasingly important to consider the capacity of local institutions, not as an alternative but as a true complement, to both central and local bureaucratic institutions. Today, the key question remains "who transfers and who receives"? It is by no means evident that transfer of responsibility from the center to decentralized administrative units will empower local actors. In fact, the result can be quite the opposite.

References


Community Forestry Implementation:
Emerging Institutional Linkages

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Introduction

Nepal is generally seen as having one of the most progressive forest management laws in the world. The Forest Act of 1993 provides for the creation of Forest User Groups (FUGs), which are given power and authority to manage their local forest area. Over the last two decades, community forestry, by empowering forest users to manage and protect forest resources, has achieved the goal of sustainable forest management. The process of FUG development has been iterative and directly benefited from lessons learned in the field. As a result, various institutional arrangements have evolved which are tailored to the local context and encourage the participation of all the stakeholders (men, women, the poor, high and low caste, and different ethnic groups).

The development of the FUG is very much dependent upon the internal dynamics, links and functional relationship of the FUG to other organizations. These relations and linkages affect not only the FUG itself but also the other organizations it works with.

Some of the main organizations the FUG works with are: the District Forest Office and the Range Posts⁷, and the locally elected government organizations such as Village Development Committee ⁸(VDC) and District Development Committee (DDC) ⁹. While the FUG formation process has been studied in depth, there has been very little investigation into the functional relations, and the issues arising between FUGs and elected local government organizations. This paper examines the emerging relations and linkages amongst FUGs and local government institutions, and some of the issues and challenges arising from this relationship. In addition, this paper will look at the legal provisions which relate to local management of natural resources for these various institutions.

Background

Community forestry in Nepal is a partnership between the Government, which owns most of the forestland, and the communities which utilize forest resources on a daily basis. The primary partners are the FUGs, often represented by user committees, and the District Forest Office (DFO) and Range Posts (RPs). Others involved include local government organizations such as the VDCs, Community-based Organizations (CBOs), development projects and Non-Government Organizations (NGOs). From the Government side, the Ministry of Forests and Soil

⁷ Range Posts are the geographical areas within a district administered by a Forest Ranger. In the hill districts, there are eight Range Posts per district.
⁸ Village Development Committee refers to geographical sub-units of districts. Each VDC is made up of nine wards, with each ward having on average 90 to 120 households. Wards are run by a five member board made up of local residents. VDCs are run by locally elected officials. Each of the 75 districts in the country has an elected District Development Committee (DDC) and representatives in the national level parliament.
⁹ Each of the 75 districts in the country has an elected District Development Committee (DDC) and representatives in the national level parliament.
Conservation (MSFC) is responsible for formulating policies and coordinating forestry sector programs, and the Community and Private Forestry Division (CPFD) of the Department of Forests (DoF) is responsible for overseeing community forestry programs. The DFO implements community forestry programs in the field, with the assistance of Forest Ilaka (sub-district) Offices and Range Posts. At the village level, community forestry is a complex system that involves people:

- from different organizations, whose organizational and legal provisions, mandate and policies, including working practices, may differ;
- whose level of understanding regarding community forestry varies; and
- whose personal interest is predicated on his or her different socio-economic, political and cultural background.

Besides the differences mentioned above, the inter-personal relationships between individuals and institutions also affect community forestry at the village level. The FUG itself is a body which is embedded with heterogeneity in terms of gender, socio-economic class, caste and ethnicity.

Historically, the community forestry process in Nepal has gone through various stages. Bilateral projects involving the Australian, British and the Swiss governments have played important roles in the evolution of forest management in Nepal. In the late 1970s and early 1980s, community forestry focused primarily on plantation development. The species planted were chosen by outsiders and did not reflect the needs of the local people. Thus, many of the plantations did not succeed. Over the next 15 years, professionals and villagers working in community forestry gradually learned that viable institutional arrangements were needed in order to foster local interest and ensure sustainable forest management.

However, at this initial stage, the Panchayat, the lowest unit of political government (now referred to as the VDC), was considered the only viable institution for forest management at the local level. Many committees at the Panchayat and ward levels were formed as a result. A number of assumptions were made:

- There is a "local community" (i.e., a group of people with clear social boundaries capable of acting together cohesively);
- "Local community" and "local forest users" were synonymous;
- Forest users would come to public meetings on forest management;
- Those who attended meetings would speak openly and honestly;
- Meetings would be able to provide the information necessary for management plan (operational plan) formulation; and
- The forest committee formed at these meetings would be able to determine or understand its duties, authorities and responsibilities.

As work progressed in many of the community forestry projects around the country, it became clear that most of these assumptions were incorrect (Paudyal et al. 1987). This led to further experimentation and the realization that devolution (to the real forest users), rather than decentralization (to local government administrative units) was needed.

**General Context of Decentralization in Nepal**

Following the continued failure of centralized rural development projects to produce the desired results, a renewed attempt at decentralization was made. In the early 1980s, decentralization legislation was passed (the Decentralization Act of 1982 and the Decentralization Bylaws of 1984). The basic aims of the decentralization scheme were to:
• develop a participatory system of integrated, local-level planning;
• establish linkages between local governments and national planning;
• enhance the outreach capacity of the development administration;
• mobilize local resources to stimulate development; and
• create and strengthen local institutions for the sustained implementation and management of local projects.

To achieve these aims important structural and procedural reforms were made. The DDC Secretariats were expanded to embrace all line agencies within the district including the DFO. Multi-sectoral service centers were also established in the districts. One interesting aspect of the Decentralization Act was that it called for the organization of local users into "user groups" to approve and implement certain local level projects. In each district, five "Sectoral Planning Committees", including one for industry, forestry, and soil conservation, were established.

In addition, resource forecasts for each fiscal year are required several months in advance by the line ministries. This information provides a reliable estimate for improved district planning, whereas in the past forecasts were similar to "shopping lists". This new system also encourages the mobilization of local resources towards fulfilling local needs, on a greater scale than could be catered for by national government resources alone. On the basis of this, an integrated multi-sectoral district plan has to be approved by the DDC and District Assembly before submission to the central government and the National Planning Commission (NPC). The present planning process in community forestry is shown in Figure 1.

Decentralization Legislation in Relation to Community Forestry

The Decentralization Act provides the VDC and DDC committees with defined functions, duties, and authority for implementing projects funded through district, town or village development committee budgets. The following provisions of the Decentralization Act are particularly relevant to community forestry. The functions of the district, town or village development committee are to carry out afforestation, development and management of forestland by creating user committees from among the people who use that particular patch of forestland. Decision making by the forest user group is by consensus. Formation of the user committee is based on the following criteria:

- When a project to be implemented by a VDC is located within the area of one ward, a user committee with up to seven members will be formed by the VDC, under the chairmanship of the ward chairman;
- When a project is located in the area of more than one ward, a user committee with up to nine members will be formed under the chairmanship of any one of the wards; and
- When a project is located in the area of more than one VDC, a user committee with up to eleven members will be formed under the chairmanship of one of the VDC chairmen.

Functions, duties, and authority of user committees include:

- effective implementation of a given project;
- maintenance and operation of completed projects;
- mobilization of local resources for maintenance and operation, by levying taxes on users; and
- organization of a meeting of the users at least once a year to evaluate past activities and plan new activities.
Impact of Decentralization on Community Forestry Management Practices

The planning process

Based on the provision made in the Decentralization Act, community forestry has to be planned at the local level in coordination with other related sectors. The forestry component at the district level has to constitute a part of the District Development Plan. The national annual plans and budgets for the forestry sector reflects the District Forestry Plans and the requirements for resources from the central government.

Individual FUGs develop and approve their annual plans in FUG assemblies. The plans are then compiled and discussed at Range Post planning meetings where Range Post staff discuss them with FUG representatives and agree upon the program. These agreed upon programs are
compiled by the DFO into the district annual plan. While there is no need for any formal representation of VDC and DDC, many FUG members also serve as elected VDC members.

The Range Post staff also organizes an *Ilaka* Review Meeting where the representatives of the VDCs within the *Ilakas* concerned, and that of the DDC, discuss the annual plans and provide their comments and suggestions. The DFO then organizes planning meetings with the rangers. These meetings consider the points raised at the *Ilaka* review meeting, the FUG plans, the budget ceiling given from the center and the achievement of last year's annual target. The DFO then develops the district annual plan to present to the DDC. Council members include all VDC chairpersons, vice-chairpersons, members of the DDC and district parliamentarians.

The experience to date has shown that the DDC meeting is largely to create awareness among the members of political units as to how the district line agencies are going to implement their annual programs during the next fiscal year. Some representatives do comment and provide suggestions to different line agencies, but the further refinement and development of plans depends entirely upon the line agencies concerned.

**The role of beneficiaries**

According to the spirit of decentralization, the District Forestry Plan will no longer remain the prerogative of the forestry bureaucracy alone. It has to be approved by the DDC and District Assembly and therefore must reflect the needs felt in the district.

One of the main conflicts between the Decentralization Act and Community Forestry Act, is that FUG committees are not entitled to hold bank accounts, and all financial matters must be channeled through the VDC. However, the forest regulations allow FUGs to hold their own bank accounts as well as entitle FUGs to be legal autonomous organizations. The potential for conflict arises if funds raised by the FUG are used by a VDC in a fashion not acceptable to FUG members.

This problem could be resolved by passing laws specifically related to forest-based users within forestry or decentralization legislation. However, this shows that conflicting legislation can lead to problems on the ground if activities are not coordinated or transparent.

**Enhancing the outreach capacity**

These attempts at decentralization are to encourage a proliferation of development activities in different fields, including forestry, and catalyze VDCs and FUGs to play an active role in implementing them. Therefore, the support capacity of the district line agencies has to expand in order to provide the appropriate technical assistance and support. This will redefine the role of the district level organizations, which will have to devote more of their resources to planning and monitoring. The following are some examples of FUG support provided by the district authorities.

- Several FUGs have banded together to create a network of FUGs within their VDC to work on different issue-based activities such as: conflict management, sensitization and awareness raising on community forestry, and coordination of VDC, DFO and RPs.
  - Dhungedhara and Ramche FUGs of Khandbari Municipality of Sankhuwasabha District have initiated a "district bhetghat chautari" (a sharing forum) that brings together government line agencies, NGOs, and other VDCs, and projects in the district.
  - Belahara VDC of Dhankuta District initiated a FUG network within its jurisdiction to assist in FUG development and coordinate different line agencies. All the FUGs have
developed a 20-year vision and corresponding action plans. The VDC and other stakeholders have also committed their support to help the FUGs reach their vision.

- There are many examples where the previous chairpersons of FUGs have been elected to different positions of the VDC. These people have recognized community forestry as a grassroots and participatory program and have transferred the practices of participatory process, which they gained through working with the FUG, to the institutions they are currently working in.
- VDC support activities to FUGs are increasing. Some VDCs in Dhankuta have provided financial support to conduct workshops for forest users. Other VDCs have initiated coordination committees within their VDCs (such as in Baglung District and the Koshi Hills area). The Pala VDC, Baglung District has recruited women volunteers to monitor FUG performance; this has also occurred in some FUGs in the Koshi Hills. The main role of the volunteers is to increase the level of participation of the disadvantaged, poor and women in the decision-making process.
- Linkages between the FUGs and DDCs are also increasing. In Dhankuta and Tehrathum, the DDCs are supporting the FUGs in bottom-up planning processes through the Local Governance Program (LGP). In Dhankuta, the DDC has institutionalized an annual award for the "Most Active FUG". The criteria were formulated in consultation with the FUGs and the DFO. Many in Bhojpur District were impressed with this concept, and began their own development of programs and strategies to reach a similar stage within five years. The plan also includes a strategic plan to support FUGs within the district.

The role of central government

While most plans are made and implemented in the districts, support from the center is critical. Central government agencies have to continuously update the overall picture of the country in the field of forestry, provide necessary guidelines, training and resources to the districts, continuously monitor their performance, and advise on better policies and programs to enhance their effectiveness.

One problem is that investments by FUGs in community development activities have not been linked with national development plans or recorded properly (see Box 1).

**Box 1: Conflicting roles and responsibilities of the VDC and FUG**

In Tukucha VDC there are 13 forest patches that have been handed over to different FUGs. However, all the households of Tukucha VDC are users of different forests, and some households are users of more than one forest. The users of different forest patches have been managing their forests and also mobilizing their resources (human and financial) for different activities. Users are capable of effectively planning and implementing their own activities. The VDC members are also participating as users and contributing to FUG development and management. The VDC chair of Tukucha has asked other FUGs to submit financial status reports and work under his control. However, he does not think that his own FUG needs to do the same. The FUGs are not keen to provide the information to the VDC. They neither expect the VDC to contribute nor are they keen to share their funds with the VDC since they have been undertaking activities on their own. All records of the programs undertaken by the different FUGs are kept by the individual FUG, and there are no records at the VDC/DDC level. Thus, there is neither national nor district data about FUG planning and completed programs, though FUG contribution is substantial. It has been estimated that the percentage of FUG investment in development activities is almost double the development fund provided by the Government to the VDC.
Discussion

This study recognizes certain strengths at the VDC and FUG level, which could potentially facilitate the development of acceptable forest management strategies. FUGs are becoming richer in resources and are capable, as independent institutions, to explore the ways and means to support other community development activities. However, a number of weaknesses and conflicts can potentially hinder this development.

The acceptance of FUGs as viable institutions for sustainable forest management, the involvement of INGOs and NGOs in the community forestry process, and the development of partnerships and linkages among different stakeholders have evolved over time. The process of developing management plans at the FUG level is necessarily slow, as it involves careful collection and assessment of information, and the building of trust among forest department staff, the FUG, and its members.

The Decentralization Act provides the VDC with the authority and responsibility to form user committees, which then decide how to manage the resources within the identified VDC boundary. However, the Forest Act and legislation gives authority to the DoF to hand over forestland to a FUG which then becomes the overall decision maker and manager of the designated forest area. Due to the overlap in both acts, conflicts between FUGs and VDCs and between the DDC and DoF for control over forestland have been increasing. Recently in Sindhupalchok District, there was a conflict between the DDC and DoF over the control of funds from the sale of stones and sand from riversides. The DoF and FUGs felt they had the right to benefit from the sales of these products, while the DDC felt the riverside was under its jurisdiction.

Another problem concerns the rising level of party politics within the VDCs and DDCs. Decisions are usually made along party lines, whereas many FUGs have demonstrated that people with different political ideologies can work together without getting into party politics.

If integration between the VDC and FUG is to be achieved, a bond of trust is necessary. Experiences regarding relationship building between the DoF and FUGs show that this type of cooperation and mutual trust can be achieved. However, the links between the FUG and VDC are still not clear. The VDC could become a forum for the development of wider resources, whilst decisions regarding individual forest patches could remain under the direct control of the FUG.

The bottom-up planning approach practiced by DoF staff could help to minimize local level institutional conflict as issues related to community forest management would be discussed during the planning stage among the various line agencies, individuals and local level organizations.

Experiences gained in the field, suggest that the successful development of sustainable forest management strategies and solutions need to be worked out at the FUG level. The VDC is not a suitable level to attempt this, but may be the appropriate place for facilitating and incorporating the forest management needs of all concerned stakeholders. The attempt of involving the VDC and real users of forests covering more than one VDC is too complex. In fact, the question of who controls a particular tract of community forest can be quite complex: some forests are used by people from several VDCs, or even different districts; and some groups of people use different forests, in different people-forest combinations, and for different purposes. It is generally assumed that users groups have full ownership, but the VDC also has quasi-ownership
over the forests. The FUG, VDC, and the government need to develop an atmosphere of trust and mutual understanding amongst themselves.

The type of support demanded by the FUGs is of a different nature and magnitude than what DoF staff can offer in terms of expertise. At the user group level, the strength lies in the users' intimate knowledge of their forest area and their desire and ability to benefit from the management of their local forest resources. Major FUG weaknesses lie in the lack of organization, the presence of internal conflicts, and lack of technical knowledge. These weaknesses can perhaps be improved through the involvement of CBOs and NGOs with practical experience at the grassroots level. In the changing political context many stakeholders (CBOs, NGOs, INGOs, VDCs and DDCs), which act as local facilitators, have added a new dimension to FUG support and can play a vital role in the devolutionary process of community forestry management of Nepal.

Acknowledgments

We are deeply indebted to RECOFTC and FAO for providing funding and the opportunity to develop and share our experiences at the seminar. We extend our thanks to Mr. K.P. Siktel, Lila Paudel, S.P. Dahal for providing information from the Nepal-Swiss Community Forestry Project and Nepal UK Community Forestry Project for this paper. Last, but not least, thanks go to the Team Leader of Nepal Australia Community Resources Management Project his advice and help to make the paper more readable, and to Ms Kunta Rawat for her support in typing this paper.

References

Introduction and Background

Dynamic trends and processes in Southeast Asia

The global trends toward decentralizing and devolving forest management responsibilities and benefits to local stakeholders - households, user groups, communities, non-governmental organizations (NGOs), as well as the private sector - are resonating strongly in Southeast Asia.

Some of the key driving forces behind these trends are: renovation of central government bureaucracies; IMF and related pressures to reduce public-sector spending; rapid transition toward market economies in some countries; increasing commitment to community-based forest management; growing concern for more equitable sharing of benefits; and realization that centralized forest management approaches have been ineffective in protecting forest resources during the past several decades.

In Southeast Asian countries, there are several interesting examples of how national and grassroots organizations are experimenting and embarking on their dynamic processes of decentralization and devolution. Underpinning the devolution of forestry responsibilities and rights to the local level are various efforts to:

- provide enabling policies and legislation, and remove disincentives;
- allocate long-term land and forest use rights to households, communities, indigenous peoples, and local organizations;
- empower local communities through appropriate capacity-building programs and support services; and
- jointly discover and disseminate technical and institutional innovations that can support and sustain effective decentralized forest management initiatives.

Many of these initiatives - while showing much promise - are still in nascent stages. As these dynamic processes evolve, new challenges and problems will inevitably arise. This paper will share some emerging lessons from Southeast Asia based on the collaborative work undertaken and supported by the International Centre for Research in Agroforestry (ICRAF) and numerous partner institutions.

The first section will briefly highlight recent developments related to decentralization policies and implementation in Indonesia and the Philippines. The second section will present highlights and lessons learned from three case studies:

1. The damar agroforests in Krui, Lampung Province, Sumatra, Indonesia;
2. The municipal-level natural resource management planning process in Lantapan, Bukidnon Province, Mindanao, Philippines; and
3. The Landcare approach to conservation farming in Claveria, Misamis Oriental Province, Mindanao, Philippines.

The last section will attempt to articulate some general principles and lessons, which may be useful in considering how successful pilot efforts may be scaled-up to generate wider positive impact in the future.

Recent Developments in Indonesia
Reformasi

Since May 1998, Indonesia has been undergoing a dramatic reformasi (reformation) process in virtually all economic sectors. In the forestry sector, the government is in the process of drafting new laws and policies that will redefine the roles of the State and local stakeholders in forest management. Three draft bills of paramount importance are: the Basic Forestry Law (regarding government regulations on the utilization of production forests); the Land Ownership Law; and the Local Governance Law. Key new policies have been drafted for nature reserves and conservation areas, and idle land

If passed and implemented, these new statutes may profoundly change the way in which Indonesia's vast forest resources are managed, and provide the basis for more equitable community-based management responsibilities and rights.

Preceding these recent developments is the historic decree issued in January 1998 (SK No. 47/Kpts-II/1998) by the former Minister of Forestry, Djamaloedin Soeryohadikoesoemo, that provided an official precedent for community-based natural resource management. The decree established a distinctive forest-use classification known as Kawasan dengan Tujuan Istimewa (KdTI-zone with distinct purpose), which covers 29,000 ha of damar (Shorea javanica) agroforests in Krui, Sumatra. Details of this landmark policy decision will be given in the Krui case study below.

On 7 October 1998, the Ministry of Forestry and Estate Crops signed a new decree on community forestry (SK No. 677/Kpts-II/1998) that revised a ministerial decree issued in 1995 (SK No. 622/Kpts-II/1995) (Sirait 1998). This appears to be quite a progressive policy regarding the role of communities in the management of old growth forests or good secondary forests. However, the new decree may not help much to solve the problems and conflicts on lands currently being used for agriculture and/or agroforestry that have been classified as State Forest Land without provisions for such activities (de Foresta 1998).

The civil society voice

The era of reformasi has opened up the role of the civil society in the debate on how Indonesia's forest resources should be managed. On 11 June 1998, a political statement was issued by KUDETA (Coalition for the Democratization of Natural Resources), a group representing 66 Indonesian NGOs, networks, and student organizations (KUDETA Secretariat 1998).

The statement implored the government to "return natural resources to the people!" It highlighted the mistakes and failures during the 32 years of the New Order regime that caused the systematic destruction of forest resources. The Coalition called upon the transitional government to take remedial actions to address the undemocratic industrial development of Indonesia's natural
resources that largely benefited corporate entities, and to recognize and restore the rights and responsibilities of forest-dependent communities and indigenous peoples.

It is questionable to what degree the government will respond to these demands. However, the strong voice and role of NGOs and the civil society has been firmly established in the process to democratically decentralize and devolve forest resources management in Indonesia.

**Recent Developments in the Philippines**

In the Philippines, there is a relatively long history of community forestry development. Since 1971, a series of policies, programs, and projects have attempted (with varying degrees of success) to incorporate and implement community forestry concepts.

During the past three decades, the development of policies underpinning community forestry in the Philippines has supported the following trends (Pulhin 1998):

- Intensifying efforts towards the democratization of forest access and benefits through the issuance of various types of tenure instruments;
- Increasing involvement of upland communities in the management of their local forest resources through the use of various participatory techniques and procedures;
- Incorporating key principles such as social equity, poverty alleviation and sustainable resource use in the design and implementation of community forestry projects;
- Increasing emphasis on decentralization and local governance in forest management through the involvement of people's organizations (POs), NGOs, and local government units (LGUs);
- Spreading interest and support from different funding institutions; and
- Expanding coverage and institutionalization.

The Philippine Master Plan for Forestry Development, a 25 year plan approved in 1990, stipulates that 1.5 million ha of the remaining 2.8 million ha of second-growth forest on land below 50 percent in slope should be put under community forest management over a ten year period.

**Key supporting policies and laws**

Three key events that supported the decentralization and devolution of community-based forest management (CBFM) were the enactment of:

1. *The Local Government Code of 1991 devolving significant functions, powers and responsibilities to LGUs*: In particular, Section 15 of the Code mandates LGUs to ensure the right of their inhabitants to a balanced ecology, and expects them to undertake community-based forestry efforts as well as other initiatives to protect the natural ecosystem (Brillantes 1996; DENR 1998a).
2. *Presidential Executive Order No. 263 (July 1995) adopting community-based forest management as the national strategy to ensure the sustainable development of the country's forest resources, and providing mechanisms for its implementation*: This led to the creation of the process and procedures for the CBFM Agreement (CBFMA) - a 25-year production-sharing arrangement entered into by a community and the government to sustainably develop, utilize, manage and conserve a specific portion of forestland (DENR 1998a).
3. *Indigenous Peoples' Rights Act of 1997 (IPRA, Republic Act 8371) establishing definitions, principles and rights related to resource management in ancestral domains*: The Act and its implementation rules and regulations strengthened the role of
indigenous peoples, and provided participatory guidelines for the recognition, delineation and award of the Certificate of Ancestral Domain Claim (CADC) or Title (CADT) (UNAC/KSP 1998; Guiang and Harker 2000).

Emerging problems

CBFM and IPRA are predicated on participatory planning and bottom-up approaches for identifying and articulating the communities' resource development and protection objectives and activities. Strong POs are the keys to successful CBFM implementation. However, a number of serious problems are evident in the field (Guiang and Harker 2000), including:

- Many POs lack the organizational and technical capacity to properly manage commercial aspects related to CBFMAs.
- Many communities lack working capital and have little or no previous financial management experience.
- POs now need to function as business enterprises, and most have difficulties in negotiating fair market prices, finding affordable transport, arranging payments, assuring quality and scaling standards for forest products, and meeting pre-payment requirements of the Department of Environment and Natural Resources (DENR) for forest charges.
- DENR field offices are usually unable to provide all the assistance needed by forest communities, especially with regard to cooperative business management.

Three Case Studies

A policy breakthrough: the case of Krui agroforests

In January 1998, former Minister Djamaloeedin signed a historic decree that established (for the first time in Indonesia) an official precedent for community-based natural resource management. Based on the minister's concept for a distinctive forest-use classification, Kawasan dengan Tujuan Istimewa (KdTI), the new decree recognizes the legitimacy of community-managed agroforests on a significant area of State Forest Land.

This decree recognizes the environmental and social benefits of an indigenous land-use system (damar agroforests), the role of indigenous institutions in ensuring the sustainability of this natural resource management system, and the rights of smallholders to harvest and market timber and other products from trees they planted. While the new KdTI area still is part of the State Forest Land, this classification is unprecedented in that:

- it sanctions a community-based natural resource management system as the official management regime within an area of the State Forest Land;
- it allows local people to harvest timber from within the State Forest Land;
- it allows limited harvesting of timber from within a watershed;
- it devolves the management responsibility of State Forest Land to a traditional community governing structure; and
- these rights are provided without a time limit.

The first KdTI area is in the heartland of the Krui damar agroforests in Lampung Province on the island of Sumatra. Through a process developed by the Krui people a century ago, these agroforests begin with land clearing and planting of upland rice, which is followed by a succession of tree crops, including coffee, fruit trees, various timber species and damar, which produces resin as well as timber. Managed by a succession of farmers, these agroforests develop

10 Adapted from Fay et al. 1998.
over many decades into complex, multi-strata agroforestry systems that replicate a number of forest functions, including biodiversity conservation and watershed protection. Satellite images indicate there are approximately 55,000 ha of these mature agroforests in Krui. The new KdTI area covers 29,000 ha of damar agroforests at various ages that fall within the State Forest Zone, with the balance being on private land.

**Impact of the decree**

At least 7,000 families in the KdTI area will benefit directly from the decree's official recognition of their rights. If this pilot effort is implemented successfully, the KdTI prototype may be applied in other locations in Indonesia, with benefits for many households through poverty alleviation, improved resource management and reduction of social conflict.

Until this decree was issued, the Krui agroforests were at risk because of the uncertainty of farmers' tenure status in the State Forest Land. A private company held the government-awarded right to manage the area, including the right to harvest an estimated 3 million commercially valuable trees planted by local people, who could legally be fined or jailed for establishing and managing their agroforests. In addition, local farmers expressed growing concerns over the uncertainty of their rights to the damar agroforests they planted and are currently managing.

Many damar farmers adopted a "wait-and-see" strategy and chose not to plant damar and fruit trees. This uncertainty clearly endangered the very future of a system that is renowned worldwide as a rare example of successful and sustainable management of forest resources by a local community. Due to the new decree, damar farmers and their forests in the KdTI area should now be safe from such threats.

**Implications for scaling-up**

The KdTI breakthrough sets an important official precedent for community forestry in Indonesia. Former Minister Djamaloedin has pledged to continue working in his professional capacity to explore how this type of tenure instrument may be extrapolated to other areas where there is well-grounded and effective community forest management. Numerous ongoing community forestry programs and projects in Sumatra and Kalimantan would be keen partners in this process, and many forest dependent Indonesian families could potentially benefit from new arrangements to provide secure forest-use tenure.

A recent decree on community forestry, signed in October 1998, appears to be quite a progressive policy vis-a-vis the role of communities in managing old-growth forests or well-established secondary forests. This may act as a further incentive towards official recognition of community rights and responsibilities in forest management, and the development of appropriate tenure instruments to legitimize these rights.

**Decentralized natural resource management planning: the case of Lantapan**

Research will play an increasingly important role in providing options and insights for integrated conservation and development approaches. At the SANREM research site in the Manupali watershed in Mindanao, Philippines, a consortium of partners is working together. The research team comprises scientists and practitioners from many institutions, including ICRAF, NGOs,

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11 The Sustainable Agriculture and Natural Resources Management (SANREM) Collaborative Research Support Program is a global USAID-funded project that takes a landscape approach with a strong participatory bias.
universities, the tribal community, and local and national government institutions (Lai and Garrity 1998). The objectives are to:

- develop the elements of a practical social contract for buffer zone management;
- develop improved agroforestry systems for the buffer zone; and
- assemble a natural resource management system for the Katanglad National Park.

In 1996, a unique, local-level natural resource management (NRM) planning process began in the Municipality of Lantapan. This process was supported by research-based information and technical assistance from the consortium partners. At that time, the Mayor of Lantapan felt that the municipality would benefit from having a plan that could incorporate all the scientific and research outputs that had been assembled (Garrity and Amoroso 1998). The SANREM partners made significant contributions to the planning framework and the technical contents of the municipal Natural Resource Management and Development Plan (NRMDP). ICRAF helped to influence the perceptions of local planners that, indeed, natural resource conservation and management can be profitable. And ICRAF's technical contributions to the plan stemmed mostly from research work on soil and biodiversity conservation.

The NRMDP was adopted by the Lantapan Sangguniang Bayan (Legislative Council) in March 1998, and is the first of its kind in the Philippines. It is a five-year indicative plan, with the following vision (Local Government of Lantapan 1998):

A stronger community partnership towards well-managed natural resources and ecologically-balanced environment for sustained development in Lantapan by the year 2002.

The plan is now being implemented. ICRAF is maintaining a strong partnership with the local government to help achieve mutual goals and benefits for the farmers of Lantapan, through collaboration with the LGU in institutional development and working directly with the farmers on technology development, dissemination, and adoption. ICRAF is currently leading a major dissemination effort under the NRMDP's soil conservation component, using the Claveria Landcare approach (see the next case study) for dissemination and adoption of conservation farming techniques such as natural vegetative strips (NVS) and improved agroforestry systems.

Innovative features

Some innovative features of the Lantapan NRM planning and implementation process—which potentially could be extrapolated to other municipalities in the Philippines and elsewhere—include:

1. Organization of a multi-sectoral Natural Resource Management Council (NRMC), which represents a cross-section of community groups, local legislators, and municipal and provincial government line agencies that, by goodwill, serve as voluntary local planners.
2. Backed-up by research-based information and technical assistance from different local, national and international stakeholders and partners.
3. The NRMC underwent capacity-building activities, which is also a way of leveling-off the council members' expectations and roles, and to address the information needs and planning skills of the diverse members.
4. Adopted the "technology of participation" (TOP) approach (developed by the USAID-funded Governance and Local Democracy (GOLD) Project) in eliciting information and ideas from the participants during workshops on envisioning, strategic directions and action planning.
5. Systematic verification and consultations with local government officials at the barangay (village) and municipal levels, and with local people during public assemblies. The different barangays passed a resolution to manifest their approval and support of the plan.
6. The Sangguniang Bayan (Legislative Council) legitimized the plan, and executive support is assured through the approval of the Municipal Ordinance that set forth the implementing guidelines of the plan.
7. The plan is implemented using a participatory approach. The approach utilizes the presence and participation of various GO and NGO partners in the area by inviting them to focus their work towards achieving the objectives of the plan. A formal partnership was forged by the LGU and various stakeholders in implementing the plan through a Memorandum of Understanding signed by all concerned parties.
8. The LGU is contributing financially to the implementation of the plan from the budget allocation for its Human and Ecology Security (HES) Program, as mandated in the implementing guidelines.

Some Lessons Learned

While the Lantapan NRM planning experience is quite recent, some important lessons are already emerging. These include:

- Local NRM planning and implementation may not require large sums of money and a highly structured bureaucratic procedure.
- Many local governments in the Philippines have the potential to manage their own natural resources. Therefore, forest management authority, functions, and responsibilities can be decentralized, just as municipal agricultural offices have been devolved.
- LGUs can tap the resources of different external programs, and coordinate, channel and focus them to help resolve local environmental and resource degradation problems.
- The keys to success are: partnerships, collaboration, and cost-sharing.

Implications for scaling-up

ICRAF will take a leadership role in helping to scale-up the Lantapan NRM planning process and the Claveria Landcare approach. It will be important to link the Lantapan plan with the Ancestral Domain Management Plan, the Mt. Kitanglad National Park Management Plan, as well as with other municipalities in Bukidnon and Misamis Oriental Provinces which are currently developing their own plans.

Based on the experiences in Claveria and Lantapan in developing technical and institutional innovations for NRM, collaboration will be developed with DENR in the implementation of the Philippines Strategy for Improved Watershed Resources Management. This new national strategy, finalized in August 1998, has incorporated the Claveria Landcare and the Lantapan NRM planning approaches into its key institutional elements, in order to recognize and build upon local demand and voluntary action (DENR 1998b). DENR also recognizes the urgent need for a capacity-building program to support the implementation of the new watershed strategy, and possible collaboration will be explored with ICRAF.

The Land Care approach: the case of Claveria

ICRAF has been instrumental in developing a farmer-led approach to technology development and dissemination, which has resulted in an unexpected boost in farmer adoption of soil conservation technologies and agroforestry practices at its outreach site in Claveria, Misamis Oriental Province, northern Mindanao, Philippines. The key institutional innovation for effective
conservation farming technology dissemination is the Landcare approach: a process that is led by farmers and community groups, with support from local government and technical backstopping from ICRAF.

**What is Landcare?**

The most well-known Landcare movement originated in Australia, where it has evolved as a participatory community-based approach and grounded model designed to effect change in complex and diverse situations (Swete-Kelly 1998). Landcare is a method to rapidly and inexpensively diffuse agroforestry practices among upland farmers, based on the farmers' innate interest in learning and sharing knowledge about new technologies that earn more money and conserve natural resources (Garrity and Mercado 1998). It is a group of people, concerned about land degradation problems, who are interested in working together to do something positive for the long-term health of the land.

The core of the Landcare model is two fold: effective local community groups and partnerships with government (Campbell and Siepen 1996). This grassroots approach is generally recognized as a key to success in all community development activities. Groups are to respond to the issues that they see as locally important, solving problems in their own way. Thus, Landcare depends on self-motivated communities responding to community issues, not issues imposed by any external agency. Approaches that use well-grounded theory (where participants determine the key issues rather than these being pre-determined) are more likely to effect permanent and positive change.

Landcare groups are supported by the government and are networked to ensure ideas and initiatives are shared and disseminated. This is a partnership between local communities and the government - working together to change the way the land is used is an important feature of Landcare.

**Steps involved in the Landcare Approach**

Based on the gestation and evolution of Landcare during the past several years in Claveria, the major principals and steps in developing this approach are (Garrity and Mercado 1998):

1. **Select sites with good potential**
   This is to bring conservation farming technologies to where they are needed most - on sloping lands where soils are prone to erosion and degradation. This initial step also involves meeting with key leaders in the LGUs (municipal or province), interested farmers, and other stakeholders. Their understanding of the issues that need to be addressed, as well as their willingness to support and complement the program are crucial to the success or failure of Landcare at a given site.

2. **Expose key farmers to successful technologies and organizational methods**
   The aim is to develop strong awareness among prospective key actors (especially innovative farmers and farmer leaders) of the opportunities to effectively address production and resource conservation objectives through new technologies. The success of these activities can be measured through the development of enthusiasm within the community. Exposure activities include cross field visits, training and participatory research.

3. **Organize conservation teams at the local level**
Once it is clear that there is a critical threshold of local interest in adopting the technologies and a spirit of self-help to share the knowledge within and among the villages of a municipality, then the conditions are in place to support the implementation of a municipal conservation team. The team is composed of an extension technician from Department of Agriculture (DA) or DENR, an articulate farmer experienced in the application of the technology, and an outside technical facilitator (Figure 1).

The team will initially assist individual farmers in implementing their desired conservation farming practices. Later, they will give seminars and trainings at the village level if sufficient interest arises. During these events they will respond if there is interest in organizing more formally so as to accelerate the spread of agroforestry and conservation practices.

4. Evolve Landcare farmers organization
If and when the preconditions are in place for a Landcare farmers organization, then the facilitator may assist the community in developing a more formal organization. A key ingredient of success is identifying and nurturing leadership skills among prospective farmers in vision and organization. This may involve arranging for special training in leadership and management for the farmer leaders, and exposing them to other successful Landcare organizations.

Each barangay may decide to set up its own Landcare Association chapter and barangay conservation team. A village may organize Landcare Association sub-chapters in their puroks or sitios (sub-villages). A purok conservation team usually includes a local farmer-technologist, the purok leaders, and the district kagawads (councilors). The purok-level teams are the front-liners in conservation efforts, providing direct technical assistance, training, and demonstration to farmer households. They are backstopped by conservation teams at the barangay and municipal levels.

At the municipal level, the Landcare Association is a federation of all of the barangay Landcare chapters. The municipal conservation team is part of the support structure, which also includes other organizations that can assist the chapters (e.g., DA, DENR, NGOs). See Figure 2 for the organizational setup of the Claveria Landcare Association.
The Landcare Association may opt to be registered as a People's Organization (in the legal form of a cooperative, association, or corporation). The Claveria Landcare Association (CLCA) was initially formed in March 1996, and formally registered as a PO with the Philippines Securities and Exchange Commission in September 1997.

5. Attract local government support
Local government can provide crucial political and sustained financial support to the Landcare Association to assist it to meet its objectives. The municipality has its own funds that are earmarked for environmental conservation. These can be targeted for Landcare activities that enhance natural resource conservation. The municipality can be encouraged to develop a formal NRM plan—such as the one in Lantapan described in the preceding case study—which can help guide the allocation of conservation funds.

The barangays can also allocate financial resources from their regular internal revenue allotment (IRA) through the Human and Ecological Security (HES) Program, which represents one-fifth of the total development funds of the barangay. These funds can be used to organize the conservation teams and Landcare Association activities at the barangay and purok levels, and support trainings and honoraria for resource persons. The municipality can also allocate HES funds to compliment the barangay budget. For 1998, the Claveria municipal government committed 50,000 pesos (40 pesos = USD 1) to each barangay to support Landcare activities.

Figure 2: Organizational structure of Landcare in Claveria

External donor agencies can best support Landcare development by allocating resources for leadership and human resources development, communications equipment (e.g., handheld radio sets), and transportation (e.g., motorcycles).
6. Monitor and evaluate
Monitoring is necessary to assess the progress of the activity, and use outputs for strategizing activities or planning actions to make the program more dynamic and relevant to the need of the target community.

For monitoring purposes ICRAF has been keeping records of all those who have attended a training or had been assisted with establishing NVS on their farms, as well as of farm boundaries. They were also able to get funding for 75 draft animals for dispersal to Landcare members.

The greatest success of Landcare is changing the mindset of farmers, policymakers, LGUs, and landowners about how to use the land to meet their current needs while conserving resources for future generations. There are now farmers who voluntarily share their time and efforts. There are also policymakers who urge farmers to adopt conservation farming practices, and support these efforts by allocating local government funds and enacting local ordinances. These are the important success indicators of the Landcare approach that enable local people to conceive, initiate and implement plans and programs leading to the adoption of profitable and resource-conserving technologies.

Decentralization and devolution of NRM to the grassroot level enables local governments to allocate resources and provide policy support to complement farmer and community-led efforts to conserve resources for sustained production and use. The Landcare approach provides:

- A vehicle for interested farmers to learn, adopt and share knowledge about new technologies that can generate more income and conserve natural resources;
- A forum for the community to respond to issues that they see as important;
- A mechanism for local governments to support; and
- A network for ensuring that ideas and initiatives are shared and disseminated.

Landcare is emerging as a method to empower local governments and communities to effectively and inexpensively disseminate conservation farming and agroforestry practices. The experiences and lessons learned in Claveria provide a strong basis to scale-up to the regional and national levels, and to scale-out to other municipalities (see the vision for this national Landcare movement in Figure 3).

The adjacent Municipality of Malitbog, Bukidnon Province has approached the Claveria team to assist them in developing Landcare activities. Farmer cross visits and training were arranged, an ICRAF field extension staff has recently been posted to Malitbog, and the local government has formed a conservation team to help start-up Landcare activities in three pilot barangays (Saguinhon 1998). Based on specific requests, various study tours and trainings have been organized for farmers, NGOs, and LGUs interested in the Landcare approach.

The ICRAF-Lantapan team has also started applying the Landcare principles and approach to its work on decentralized NRM planning and implementation, as well as with the farmer agroforestry tree seed association in Lantapan.

As already mentioned, the new Philippines Strategy for Improved Watershed Resources Management has incorporated the Claveria Landcare and the Lantapan NRM planning approaches into its key institutional elements and operational framework. As the strategy moves into the implementation phase, this provides a good opportunity to scale-up useful Landcare principles and experiences in other parts of the Philippines. However, this scaling-up process must respect and adhere to the critical, underlying elements - such as voluntary farmer action and
LGU partnership—that made Landcare successful in Claveria. Landcare should not be viewed as a technical and organizational model that can be replicated systematically in projects everywhere.

Emerging Principles and Lessons

ICRAF’s collaboration in research and development work related to decentralization and devolution of NRM in Southeast Asia is enriching and revealing. The processes underpinning decentralization and devolution are dynamic, crosscutting and fascinating. It is about change. It is about issues that cut across policy, institutional, technical, ecological and socioeconomic domains.

Based on some of the recent and rapidly evolving developments that are taking place at national levels as well as in local settings, some guiding principles and lessons learned may be generalized as follows.

1. **Devolved NRM can be cost-effective, but requires significant commitment and voluntary action**: The key is to find the motivated and committed people who can positively influence and support devolved functions and activities, and who are willing to volunteer some of their time. In Claveria, finding the right leaders to support Landcare, especially at the sub-village level, has been identified as the biggest problem in promoting the Landcare movement (Patindol 1998).

2. **Enabling policies can legitimize and stimulate decentralized NRM**: The policy breakthrough of issuing a ministerial decree to provide a distinctive forest-use classification (KdTI) that covers 29,000 ha of Krui damar agroforests will benefit some 7,000 households living in that area. Moreover, it provides an official precedent that may be useful in other community forestry areas of Indonesia, as well as in other countries and regions of the world. Likewise, the policies that support and refine the land allocation programs in Viet Nam and Lao PDR are leading to dramatic and positive changes in the way that households, communities and local authorities are involved in managing forest land and natural resources.

3. **Secure tenure instruments are essential, but not sufficient**: Just having a certificate granting secure tenure on a given area is not enough. The right enabling policies and critical support services must also be available to simultaneously address the production and conservation objectives and needs of households, communities and local governments engaged in decentralized NRM.

4. **Scaling-up of Landcare should not be "projectized"**: What is meant by "projectization" is deliberately influencing the farmer processes, through a system of incentives and disincentives, to achieve time-bound physical targets. One inevitable and unfortunate result of the "projectized" approach is that farmer participation deteriorates (sometimes completely) after the external support is withdrawn (Queblatin 1998).

5. **Local government must "buy into" the process, and be willing and able to provide policy and financial support**: For decentralized NRM to work, local government must become the chief partner of the State to households and communities. They must contribute to the process through local policy support (e.g., ordinances that act as effective incentives or disincentives) and financial allocations.

6. **Consortium approach to NRM research and development is the most effective**: The research consortia or, to a simpler degree, the conservation teams described in the three case studies show the effectiveness of developing multi-disciplinary and inter-institutional teams to provide key technical support and policy advocacy. Different stakeholders bring a variety expertise and experience to the consortium, and both insiders as well as outsiders play useful roles. The consortium approach also helps to foster networking and linkages with other like-minded groups.
7. **Civil society can play an important role to democratize NRM processes.** As some countries in Southeast Asia move toward greater democratization, the role of civil society (including POs, NGOs, professional associations, student organizations, public interest groups and private sector concerns) is enlarging. This role includes being the voice for the poor, the disenfranchised, and the marginalized sectors of society. In the decentralization and devolution process, civil society can help advocate the rights and responsibilities of communities and indigenous peoples in managing their forest resources in a sustainable manner.

8. **Community organization and participatory approaches can be effective vehicles for delivering NRM innovations:** But community organization needs to be grounded in concrete purposes and results that bring direct benefits to community members. Participatory approaches can be used to transfer principles rather than standard solutions, and make available a basket of choices rather than a set package of practices. Community-organizing activities that are too general or without well-defined purposes run the risk of taking up too much of the local people's time, as well as inflating their expectations.

9. **Capacity-building is fundamental to decentralizing NRM:** From the sub-village up to the national as well as international levels, there are enormous capacity-building needs related to: training in leadership, management, technical and entrepreneurial aspects; information support (including marketing); institutional strengthening and reform; stakeholder analysis and conflict management; and other needs emerging from NRM decentralization work. The challenge is to identify the priorities, the entry points, and the resources needed to mount such an ambitious capacity-building program.

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**Figure 3: Conceptual framework of scaling-up Landcare into a national movement**
References


Reformasi\textsuperscript{12} and its Effects on Forest Management Policies in Indonesia

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Introduction

Indonesia is endowed with an extensive tropical forest resource covering 143 million ha. It is the prevailing land cover on the large islands of Sumatra, Kalimantan, Sulawesi and Irian Jaya as well as the smaller, but less populated, islands. For centuries, however, commercial forest management concentrated on the island of Java, Indonesia's fifth biggest and most densely populated island (900 persons/km\textsuperscript{2}). The vast forests of the outer islands had remained virtually untouched by the forestry sector due to lack of technical expertise and infrastructure. To utilize the forest resources of the outer islands for national economic development, the government created incentive systems for local and foreign forest harvesting operators. The Forestry Act of 1967, more commonly known as \textit{Undang-Undang} (Law) No.5/1967, was particularly aimed at stimulating investment in forestry. Within five years of the promulgation of the act, annual log production from the outer islands increased sharply.

The only reference law available in Indonesia for formulating \textit{Undang-Undang} No.5/1967 was the existing forestry law of 1927 for Java-Madura. This law was drafted by the Dutch colonial government to secure raw material from teak plantations for the shipyards in the Netherlands. At that time, social issues were of little concern and received no mention in the law. The 1927 forestry act focused on timber production only, as did the \textit{Undang-Undang} No.5/1967.

Ten years before passing \textit{Undang-Undang} No.5/1967, the Indonesian government had actually drafted a regulation for decentralization (PP No.4/1957)\textsuperscript{13}. According to the 1957 regulation, local governments could permit logging by local people in forest areas not exceeding 10,000 ha (with permission from the Governor, who is the Head of Province) or 5,000 ha (with permission from the Bupati, Head of Regency). Above 10,000 ha, permits were issued by the central government. The new \textit{Undang-Undang} (No.5/1967) replaced this earlier regulation as it was viewed as inefficient. PP No.4/1957 was replaced by PP No.21/1970, which vested all control over forest concessions with the central government. As a result, local people's access to forest resources was severely restricted and conflicts between local communities, concessionaires and government officials increased steadily. Until the end of 1997, conflicts were usually resolved in favor of the government and concessionaires, leaving local people at a disadvantage. However, this has changed drastically since May 1998 when Suharto stepped down as the Indonesian President.

The Problems

After only two decades of timber extraction in Indonesia, the vast natural forest is severely degraded. Due to supportive government policies, the number of wood-based industries increased rapidly; as has the demand for logs as raw material, which has tremendous implications for the forestry sector. The unsuccessful regeneration system, TPI (Indonesian Selective Cutting) and

\textsuperscript{12} Reformasi is a general term in the Indonesian political context used to denote the change from the authoritarian Suharto regime to a more democratic system of government

\textsuperscript{13} PP is the abbreviation of Peraturan Pemerintah (Government Regulation)
Planting). However, forest regeneration in logged-over areas did not improve. Instead relogging became a more common practice.

As the forest conditions continued to decline, conflicts between the local people and the concessionaires as well as government officials increased in intensity, which exacerbated the forest fires of 1982/83 and 1997/98. All of these developments have added pressure on the forest resources of the outer islands with the following associated problems:

- Due to poorly planned logging operations, natural forest resources have been degraded;
- Large-scale fires have seriously damaged the rich flora and fauna of Indonesia's forests;
- Degraded forests provide less non-timber forest products required by local people and industries;
- The degrading Indonesian tropical rain forests are affecting the stability of the global climate;
- TPI as well as TPTI regeneration systems have failed;
- Growing imbalance between authorized supply and demand of timber (more than 30 million cubic meters per year); and
- As decentralization has not been supported by appropriate policy instruments, it has remained official rhetoric without any positive changes and impacts on the ground.

**Forest Distribution and Population**

Forest distribution on Indonesia's main islands is uneven (Table 1). More than 47 percent of Sumatra is covered by forests, although coverage ranges from 30.6 in southern Lampung to 68.6 percent in West Sumatra. The forest cover of East Kalimantan is 75.6 percent. Less than 24 percent of Java is covered by forests. Nationwide, 30 million ha of forests have been classified as conversion forest, to be used for agriculture, estate crops and settlements. While the forest area is still extensive, it requires a comprehensive strategy for its management and conservation.

<table>
<thead>
<tr>
<th>Island</th>
<th>Total Area (’000 ha)</th>
<th>Forest Area (’000 ha)</th>
<th>Forest cover (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumatra</td>
<td>48,239</td>
<td>22,696</td>
<td>47.1</td>
</tr>
<tr>
<td>Java</td>
<td>12,750</td>
<td>3,013</td>
<td>23.7</td>
</tr>
<tr>
<td>Nusa Tenggara</td>
<td>8,774</td>
<td>3,356</td>
<td>38.3</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>54,789</td>
<td>36,674</td>
<td>66.9</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>19,180</td>
<td>12,060</td>
<td>62.7</td>
</tr>
<tr>
<td>Moluccas</td>
<td>7,787</td>
<td>5,097</td>
<td>62.8</td>
</tr>
<tr>
<td>Irian Jaya</td>
<td>42,198</td>
<td>28,817</td>
<td>68.3</td>
</tr>
<tr>
<td>Total Indonesia</td>
<td>193,718</td>
<td>111,713</td>
<td>57.6</td>
</tr>
</tbody>
</table>

The uneven distribution of the forest is mirrored by the differences in population density. While Java is extremely densely populated, very sparse populations characterize Irian Jaya and Kalimantan (Table 2). The uneven distribution of forest resources and population are aggravating circumstances in national economic development planning, particularly from the forestry sector's point of view. A decentralized system will be more appropriate if maximization of forest benefits for the welfare of local people is the goal. However, such a system needs proper planning and management. It also requires people skilled at all levels of the administration. Finally, it must be supported by strong local governments and people's organizations at the community level.
Table 2:
Population and population density in Indonesia

<table>
<thead>
<tr>
<th>Island</th>
<th>Total Area (km²)</th>
<th>Population</th>
<th>Density (Prs/km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumatra</td>
<td>482,393</td>
<td>40,830</td>
<td>85</td>
</tr>
<tr>
<td>Java</td>
<td>127,499</td>
<td>114,734</td>
<td>900</td>
</tr>
<tr>
<td>Nusa Tenggara</td>
<td>87,744</td>
<td>10,959</td>
<td>125</td>
</tr>
<tr>
<td>Kalimantan</td>
<td>547,891</td>
<td>11,470</td>
<td>19</td>
</tr>
<tr>
<td>Sulawesi</td>
<td>191,800</td>
<td>13,732</td>
<td>72</td>
</tr>
<tr>
<td>Moluccas</td>
<td>77,871</td>
<td>2,087</td>
<td>27</td>
</tr>
<tr>
<td>Irian Jaya</td>
<td>421,981</td>
<td>1,943</td>
<td>5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1,937,179</td>
<td>194,755</td>
<td>101</td>
</tr>
</tbody>
</table>

Reformasi in Forestry

Total Reformasi was proclaimed by the people, especially students, when President Suharto was replaced by President Habibie on 21 May 1998. Forestry is one of the most important areas within Reformasi because it is contentious as well as economically very significant. Only 10 days after the new Minister of Forestry and Estate Crops was appointed, the Communication Forum for Community Forestry (FKKM) initiated discussions on how Reformasi should be implemented in Indonesian forestry.

On 22 June 1998, FKKM organized a national seminar in Yogyakarta, which was opened by the new minister. The seminar proposed that the export-earning objectives of forestry should be shifted towards improving local people's welfare. To meet this goal, the new vision of forest management in Indonesia is to manage the forests sustainably and democratically for the benefit of all people. More details of the vision were laid out in the following nine mission statements that indicate the necessity to:

- develop a mechanism to secure people's rights to the forests and to empower local institutions to manage forests to improve the economic well-being of the people;
- change the culture of the bureaucracy from authority to public service orientation;
- change forest management from pure timber extraction to forest resource and forest ecosystem management (during the transitional period, a timber management system can be applied in the outer islands by the "most qualified" concessionaires);
- decentralize policy making concerning the allocation and management of the national forest resource;
- make forest management transparent and fair;
- increase people's participation in formulating forest management policy and introduce the principle of accountability;
- establish a control system for forest management by the people;
- manage forests in environmentally sound and economically profitable ways; and
- improve the productivity of forestlands to supply raw material to wood-based industries and to enhance employment opportunities.

The new minister set up a Reformasi Committee to facilitate the shift in forest management. While the FKKM continues discussions on reforms in the forestry sector, differences in views and approaches are emerging between the Forum and the Reformasi Committee. Although the two institutions agree that the people's share in benefits and roles in forest management must increase, the different views on how exactly to involve people in forestry are obvious. The FKKM members have experience working directly with local people and are aware that solutions...
are not straightforward. The major difference between the two institutions concerns policies regarding the concessionaire system. FKKM has proposed new policies and management to gradually replace the old system, or at least to reduce the role of the concessionaires. What is obvious, is that forest management needs to change and follow the principles of proper forest ecosystem management.

The Solution

The immediate tasks for reforming the forestry sector are to:

   - The new organization must decentralize policy formulation and forest management. At the national level, the organization should be headed by an Eschelon I government official responsible for designing a long-term national management plan to be part of the National Economic Development Plan.
   - Indonesia can be divided into five regions, i.e. (1) Sumatra, (2) Kalimantan, (3) Java and Nusa Tenggara, (4) Sulawesi, and (5) Moluccas and Irian Jaya. Each region must have its own location-specific management plan, both long- and medium-term. The plans must be derived from the National FRM Plan, but the local characteristics of the people, economic development and forestry must be taken into account in the formulation of the management objectives to maximize the benefits of the forests for the people and regional development. The Regional Planning Board should be headed by an Eschelon II government official.
   - Each region should be divided into sections that manage certain forest areas. Each section should be headed by an Eschelon III government official. It should be the task of this official to draft a medium-term and operational FRM Plan for each district.

2. Perform forest management (at least initially) by one of the following three stakeholders.
   - Qualified concessionaires that apply Timber Management (TM) systems to supply raw material to the wood-based industries.
   - Government forest corporations (central and local) and Provincial Forest Services. And
   - Local institutions.

3. Change or improve the attitudes of all stakeholders involved in forest management in order to maximize financial and economic benefits.

Time Frame

Improving forest management in Indonesia consists of the following three stages, with the final stage only starting in 2025.\(^\text{14}\)

Preparation stage (1998-1999)
The objectives of the first stage are to:

- improve Undang-Undang No.5/1967 to institutionalize local forest management;
- reorganize the Ministry of Forestry and Estate Crops; and
- disseminate information on forest management changes (internal as well as external) to all stakeholders.

\(^{14}\) At this point in time it is not possible to outline the objectives of the final stage.
**Stage 2 (2000-2025)**

The second stage is broken down into five, 5-year periods. Its objectives are to:

- design long-term National and Regional FRM Plans and implement them;
- draft medium-term and operational management plans for each district; and
- evaluate the new system and mechanisms on the national and regional levels.

The first five-year period starts in the year 2000. Its specific objectives are to:

- improve the roles of the government forest corporation in setting-up "modified" TM, FRM, and FEM systems;
- introduce the concessionaires to forest management based on the principles of modified TM system; and
- develop local forest management systems (this will require considerable resources as systems will be location-specific depending on biophysical, economic and socio-cultural circumstances).
Balancing Power in Community Forestry: Decentralization and Devolution of Power

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Introduction

Many countries throughout the world are decentralizing forest management responsibilities in one form or another. In general, decentralization provides a means by which local people can more actively participate in decisions affecting their lives.

In Nepal, many forms of decentralized forest management have been attempted. The evolution of community forestry legislation and policy over the last two decades has encouraged community-based initiatives in forest management. In particular, the passage of the Forestry Sector Master Plan (FSMP) in 1989 and the emergence of democracy after the 1990 revolution spurred the development of community forestry.

Following these shifts in policy and political orientation, the institutionalization of the Forest User Group (FUG) as the primary body for local forest management has proved essential to community forestry implementation and sustenance. While the demand for FUG formation and hand over of community forests is increasing, different initiatives for strengthening the position of forest users and giving due attention to the principles, practices, and policies of community forestry need to be considered.

This is especially true in light of the Local Government Act, which was passed in 1991 and devolves many powers from the national government to local government institutions such as the District Development Committee (DDC) and the Village Development Committee1 (VDC). Like the FSMP, the main objective of decentralization is to mobilize resources (both human and financial) effectively, and to distribute benefits more evenly. The scheme also emphasizes the formulation and implementation of annual plans at the local level. However, certain provisions in the Decentralization Act conflict with the Community Forestry Act. These conflicts potentially undermine the decision-making authority of the forest users (which was enshrined in the Community Forestry Act), concentrating it back within the local government.

The government decentralization policy provides for a representative style of democracy with decision making by a majority, while the community forestry policy mandates a participatory style of decision making based upon consensus. Because the final authority to make decisions regarding forest resources could now be interpreted to rest with both the FUG and the VDC (and since each group uses a different decision-making process), there is a great potential for conflict. This paper explores the conflict between decentralization and community forestry policies, and possible ways to solve these problems. It does not argue against decentralization, but argues that decentralization could undermine community forestry as practiced in Nepal. It reviews the two policies that each process mandates and provides examples as to how this issue has been tackled by Women Acting Together for Change (WATCH) and the Federation of Forest User Groups in Nepal (FEFOFUN), two Nepali NGOs active in community forestry.
Community Forestry Policy and Legislation

Forest protection and management by local people has a long history in Nepal. In 1957, the nationalization of forests created a disincentive for local people to collectively manage their forestland which increased forest degradation. In the 1970s, to arrest growing fears that deforestation was occurring at an unprecedented rate, His Majesty's Government/Nepal (HMG/N) initiated a series of "community-oriented" forest legislation. At this time, several bilateral forestry projects began testing new approaches to forest management. However, for the most part they still focused on the technical aspects of reforestation, such as nursery establishment and planting of fast-growing species. Most of these initiatives did not look at traditional management regimes or local forms of management and use. The Forest Act of 1961 was amended in 1978 to allow the government to hand over primary and degraded forestland to the local government council (Panchayat). However, local people had only a limited role in the management of Panchayat Forests as most decisions were taken by the central government or local elite.

Towards the middle of the 1980s, community forestry professionals began to realize that local people had a very limited role in actual management of Panchayat Forests. At this time, the MPFS was being prepared by the Ministry of Forests and Soil Conservation. Decision makers in the forestry sector and local leaders were convinced that further liberalization was essential for expanding the scope of community forestry. As a result, the MPFS of 1989 recommended that there should be no ceiling on the area of forestland handed over to communities and that these forests should be handed over to local users - not local government units. In addition, the MPFS asserted that women and the poor should be actively involved in community forestry activities and that benefits should be shared among local users. The Plan emphasized that forest user groups should be established as the appropriate local institution responsible for the protection, development and sustainable utilization of local forests. Furthermore, under the Master Plan, Community and Private Forestry programs were given highest priority.

The Forest Act of 1993 and the forest regulations framed in 1995 have reaffirmed the government's policy of assigning more responsibility to FUGs. According to this legislation, District Forest Officers can directly hand over forestland to user groups. Furthermore, FUGs are recognized as self-governing institutions with rights to acquire, sell, or transfer forest products. Thus, although the basic objective of the community forestry program is to fulfill the subsistence needs of local people, the new policy allows user groups to cultivate non-timber forest products (NTFPs) and perennial cash crops, and to commercially process forest products for sale. FUGs can use the income generated for managing and developing their community forests and for other community development activities.

The response to changes in forest policy has been immense. Within the revised framework, the area of forestland managed by FUGs is expanding and foresters are learning to work with, and through, user groups. Fifty-two of the 75 districts in Nepal have active community forestry programs. At present, nearly 500,000 ha of forest have been handed over to more than 7,000 user groups, with thousands of other user groups awaiting formal registration. While these figures are impressive, they are a fraction of the potential. It is estimated that as much as 3.5 million ha of forests, or 61 percent of the total forest area, can be handed over to more than 50,000 forest user groups.
However, the community forestry process is mostly confined to the hills, and has not spread to the Terai (southern plains of Nepal) where the richest and most productive forests are located.

**Decision-making processes in community forestry**

The FUG formation process is experiential and interactive. It is a process of generating consensus, and building confidence and commitment among the forest users and other stakeholders. Only those users who are aware of their legal rights and social responsibilities can make judicious and egalitarian decisions about forest management, responsibility taking, and benefit sharing. Thus, the process must enable users to make informed decisions and accommodate the diverse interests, and needs of various users. While the FUG formation process has been adapted by different NGOs, projects and government institutions, the general process includes the following steps.

1. **Preliminary investigation**

The objective at this initial stage is to identify potential users, explore their interest in being involved in community forestry, and acquire a basic understanding of the local forest area and its users. For this, forestry and NGO staff talk to formal and informal leaders, forest guards and watchers, nursery foreman, and a cross section of women, men, the poor and minority groups.

The extension activities at this stage include awareness raising and identification of traditional forest management regimes. On the one hand, the users need to be informed about community forestry policy and legislation. On the other, staff need to learn about the local community and their forest(s), and any existing forms of forest utilization.

Extension has to address the needs and interests of various users. Some users may need to be instilled with confidence, others may need information, some may need empowering, and others may need to be kept in check. Thus, time is needed to build confidence, arrange negotiations between factions and groups, and come to an agreement by consensus.

2. **Investigation**

During this phase, the objective is to gain detailed knowledge about the forest and the users. Contacts must be made with all the types of users. Identifying actual users is essential to ensure that no one is excluded from the decision-making process. Users must be identified at the household level, not by political or social boundaries. A detailed forest assessment is also made at this point. For this, participants, in groups of four to five, undertake transect walks through the forest.

The process of user identification helps to build an understanding of the local socio-cultural and institutional context of community forestry. This understanding helps outsiders to facilitate discussions and build consensus among the users. Imposing views, preaching, or lecturing by outsiders (or local elite) undermines the confidence building process and the users' feelings of ownership.

3. **Consensus building and negotiation**

The objective of this step is to aid discussions and other negotiation activities so users develop a consensus regarding the FUG's constitution and operational plan. Various user groups must take part in the decision-making process. For this purpose, users are often categorized into sub-groups
based on interest, gender, caste, or socio-economic status. Meetings of 10 to 15 members of these sub-groups are convened to discuss forest management, organizational and institutional issues. All decisions must be made by consensus to engender commitment and build group confidence. In essence, draft constitutions and mini-operational plans can be prepared at these group meetings.

While analyzing the draft constitutions and operational plans, facilitators identify contentious issues and challenges. These then are further negotiated by the sub-groups involved. All outstanding issues need to be resolved before proceeding to the next step.

4. Management planning and hand over

The objective of this step is to prepare and pass both the FUG constitution and operational plan. When the previous step is complete, a users' assembly is called. The constitution and operational plan are re-drafted by the users as a whole. This provides everyone with a feeling of ownership over these agreements. The written constitution and operational plan are voted on and passed by consensus. These are then submitted to the District Forest Officer for approval. Once the plans are approved, the users have the right to manage and benefit from the forest according to the plan.

5. Post FUG formation support and implementation

The users may elect a committee to oversee and manage the implementation of the operational plan, or implement it as a group. Either way, they are responsible to implement activities outlined in their plan. They also need to develop a system of record keeping and monitoring. Monthly and annual progress reports need to be prepared and approved by the users' assembly. The FUG (and committee) require various kinds of support. However, care must be taken so that they stay self reliant and do not become dependent upon the government or other support organizations.

6. Review and Revision

If certain decisions have to be made or changed, this can be done at regular or specially called users' assemblies.

Government Decentralization Policy and Legislation

The Local Government Act empowers local government units to make many decisions previously made by the national government, and provides the resources to implement these decisions. The process followed is outlined below.

The VDC develops its own plan and submits it to the DDC. These are reviewed by the district-level planning formulation committee where a meeting is organized and chaired by two DDC members. The annual program and budget proposed by the committee are then submitted to the meeting of a joint committee that represents all the line agencies in the district for discussion and information.

According to the Decentralization Act, budgets and programs must be submitted to the District Assembly for approval to provide the programs with legal validity. The programs approved by the District Assembly Meeting are considered final at the local level. The proposed programs and budgets are then sent to the National Planning Commission (NPC) through related departments and ministries.
The NPC sends the programs and budgets to the council of ministries which then forwards them to the parliament. The minister of finance then presents the programs and budgets in front of both houses where approval is made and sent back to the district through the concerned departments and ministries.

Contradictions and Potential Problems

The main contradiction concerns who has the final authority over forest resources within the VDC. The Community Forestry Act (implemented through the forestry department) provides FUGs with the authority to manage the local forest resources they use on a daily basis. However, the Local Government Act provides locally elected VDC officials with the same powers. Thus, it is not clear who has the final authority over forest resources. Table 1 provides a comparison of the contradictions between the Local Government Act and the Community Forest Act. After the approval of the Local Government Act, conflict has occurred between local governments and FUGs. An example of this type of conflict is presented below.

Table 1:
Contradictions between different government acts

<table>
<thead>
<tr>
<th>Act</th>
<th>Local Institution</th>
<th>Legal rights and responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDC Act, 1991</td>
<td>Village Development Committee</td>
<td>Provides control over forest resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can transfer forest resources as their own property</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can sell and supply forest resources.</td>
</tr>
<tr>
<td>Municipality Act, 1991</td>
<td>Municipality</td>
<td>Can protect forest, and transfer the resources as their property</td>
</tr>
<tr>
<td>DDC Act, 1991</td>
<td>District Development Committee</td>
<td>Can sell and supply forest resources.</td>
</tr>
<tr>
<td>Forest Act, 1993 and</td>
<td></td>
<td>Can determine the rate of royalty for resource use</td>
</tr>
<tr>
<td>Regulation, 1995</td>
<td>District Forest Office</td>
<td>A users group shall be an autonomous and corporate body with perpetual succession. Furthermore the Act states that the users group may acquire, use, sell, or transfer or otherwise dispose of movable and immovable property like an individual.</td>
</tr>
</tbody>
</table>

Case study

In Arghakhanchi District in western Nepal, the Ghorabanda Community Forest (CF) of Sitapur VDC was handed over in 1993 and the Guranse Masine CF of the same VDC was handed over in 1995. However, there has been conflict between the traditional users of the forest and the "new" user committee that has been established.

The forest users of Ghorabanda CF had occasionally used the Guranse Masine forest to collect fuelwood. The Ghorabanda FUG is primarily comprised of Gurung and Magar people (two ethnic groups) who used the fuelwood from Guranse Masine to produce alcohol which is a primary source of income for them. Similarly the users of Guranse Masine CF, which is primarily comprised of the Brahman and Kshyatriya caste, traditionally collected Chiuree (Bassia butyracea) fruit from the Ghorabbanda Forest during the Dashain festival to produce ghee (butter). In neither instance were these groups identified as users of the forest and thus, were not allowed to collect the products they traditionally had harvested. Moreover, users from both FUGs did not fully understand the community forestry policy, legislation and process, and rigidly implemented their operational plan. As a result, this minor conflict turned into a major dispute. In order to solve the problem, they took their complaints to the VDC.
The VDC officials were also unclear about community forestry policies. However, they were intent to assert the VDC's right to manage forest area as mandated by the VDC Act. Thus, it was decided that both FUGs had to pay a certain percentage of their income from the forest to the VDC as a royalty. Thus, instead of solving the original problem the VDC created a new problem. Now neither FUG has an interest to manage their forest area, nor can they reach a compromise regarding the original dispute. In addition, both FUGs refuse to pay the royalty and exchange products on an informal basis. The VDC officials have been just as intransigent by refusing to withdraw their decision.

Means for Potential Solutions: Making Government more Participatory

The way to solve these problems lies in finding opportunities for forest users and elected government officials to work together. Ideally, elected government officials make decisions based upon their constituents' needs. However, many times VDC and DDC officials and FUGs are unsure about government policies and legislation and do not know how to solve the contradictions in them. As a result, conflicts are on the rise.

One way WATCH and FECOFUN have approached this problem is through raising the awareness of FUGs and VDC officials on community forestry policy, legislation and process. In one of WATCH's field sites in Chhaimale VDC, a network of FUGs (the Community Forestry Action Committee) has been formed. They have been working closely with VDC officials to plan and implement community forestry activities within the VDC.

In another field site in Rupandehi, a network has been formed consisting of officials and ex-officials from four VDCs, forest users and WATCH field staff. This network approached the District Forest Office to stop the Timber Corporation of Nepal from harvesting valuable Sal (Shorea robusta) trees from community forestland. They demanded the land be handed over to FUGs that are now being formed. These actions have postponed the Timber Corporation's plans.

In a third area in Bara district, a Finnish multinational was on the verge of being granted a concession for 30,000 ha of Sal forest. Upon learning of this plan, WATCH and FECOFUN alerted VDC officials and forest users and facilitated their organization to protest the granting of this concession. They successfully promoted the concept that this forest be handed over to the users. The Finnish Company's request for a concession was not granted.

The successes in Chhaimale VDC and Bara district, and the potential success in Rupandehi helped develop the confidence of the users and local government to make a concerted stand against outsiders usurping their traditional authority over forestland. They have learned to work collectively to promote their own local development as well as keep control of their local resources. WATCH and FECOFUN have learned that once users and local governments understand their rights and responsibilities, they are able to pressure local and national-level government officials to ensure they are given what they are entitled.

Conclusions

The case studies presented have led WATCH and FECOFUN to the following conclusions:

- All forest users and local government officials must be made aware of the community forestry policy, legislation and process. Only by doing this can forest users and communities benefit from the opportunities offered by community forestry.
- Democratically elected government officials need to be active and seek out the opinions and aspirations of those in the community who are poor, oppressed, or exploited. They...
must become aware that they represent all of the people in their constituency, not just the elite. They need to take in a wider range of views before making decisions.

- When forests users and local government officials work together to manage their local forest resources both parties benefit. But when they fight for power and resources, there will be problems that negatively affect all.
- The role of outside facilitators is very important (NGOs, District Forest Officials and project staff) to help solve potential conflicts between the VDC and Community Forestry legislation.
- The overlapping legislation regarding roles and responsibilities needs to be clarified by the government so all forest users and VDC officials can understand what power and authorities they have.
Recent Decentralization Plans of the Royal Forest Department and its Implications for Forest Management in Thailand

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Introduction

Over the last 50 years, Thailand has undergone rapid political, social, economic and environmental change. During this period, much of the natural forest area in Thailand has quickly been logged or converted into agricultural areas to spur national development. While there has been much criticism of its failure to stop forest loss, the Royal Forest Department (RFD), which is responsible for managing all forest resources in Thailand, has been constrained in developing appropriate forest management practices by higher political influences and an increasingly polar public opinion regarding how the country's remaining forest area should be managed (Pragtong and Thomas 1990; Sato 1998). This paper traces the evolution of forest management in Thailand and discusses the decentralization and forest management plans of the RFD.

Evolution of Forest Management in Thailand

Before the establishment of the RFD in 1896, forestland was managed by autonomous local fiefdoms, many of whom profited from logging contracts with European companies. The central government reorganized the forestland administration by establishing the Royal Forest Department which was charged with managing all forest area in Thailand. Since then, forest management strategies have evolved along with the socio-economic and political conditions in the country. The evolution of forest management in Thailand can be divided into four phases (Pragtong and Thomas 1990).

Phase 1, 1896 - 1953: developing forest management systems and a forest industry

During this period, forestland was managed primarily for commercial timber extraction to meet both domestic and foreign consumption. The Forest Industry Organization (FIO) was established in 1947 as a public forest enterprise for timber and wood, and the Thai Plywood Company was established in 1952 to promote in-country wood processing. During this phase, forest and agricultural land were abundant and population densities were still low. Until 1953, about 60 percent of the total land area was still forested.

Phase 2, 1954 - 1967: state allocation of land for economic development

This period saw a push to use forestland to support national economic development. In 1954, agricultural land was allocated to small farmers under the Land Act 1954 which provided the legal basis for land classification and private ownership. In 1961, the first national social and economic development plan (1961-1966) was launched. Fifty percent of forestland was to remain forested, but by the second national plan the target was reduced to 40 percent. Forestland was quickly cleared by logging concessions which were granted on a large scale to provincial timber companies, by other governmental organizations which cleared land for dams and road construction, and by landless farmers who settled in these opened, frontier areas. Transformation
of the landscape accelerated during this period, and by 1967, forest cover was reduced to 48 percent of the kingdom while the farm land increased to 26 percent.

**Phase 3, 1968 -1980: the vanishing forest frontier**

In 1968, the government decided to extend long-term harvesting concessions. The program resulted in more than 500 concessions being granted, covering half the country. There were many disputes between forest officers and migrants who settled in the logged over areas. This led to an amnesty in 1974 for those residing in reserved forestland. Two major factors led to this. First, the continuing worry over communist insurgents who had moved into forest areas throughout the country encouraged further clearance of forestland to flush the insurgents out. The second was mass migration of hilltribes escaping the conflicts of neighboring countries into the mountainous forest areas of North Thailand. Reflecting the political events of the time, the RFD began playing a more active role in working with communities. In 1975, the National Forestland Management Division (NFLMD) was created within the RFD to administer the Forest Village Program. This and other rural development programs are generally recognized as having stabilized forest encroachment by setting limits for how much land households could claim (Poffenberger 1999).

By 1980, reserved forest area covered 36 percent of the kingdom, with national parks and wildlife sanctuaries covering six percent. Most of these areas were also under timber concessions, although minor withdrawals were made for national security considerations in highly sensitive areas. Deforestation accelerated, leaving only 32 percent of the kingdom under forest cover.

**Phase 4, 1981 - 1990: transition to collaborative forest management**

By the early 1980s, the government began recognizing the magnitude of forest loss. During this period there was increasing recognition that local participation in forest management could assist in forest conservation as well as in stabilizing agricultural encroachment into forestland. Thus, the RFD initiated the National Forestland Allotment (STK) Project, which provided land usufruct certificates to households occupying degraded reserved forest areas before 1982. STK land-use rights were similar to those issued under the Forest Village Project, but the program did not include infrastructure development and government services. Also in 1981, the RFD initiated village woodlots. These woodlots were aimed at increasing forest production for local needs by communities outside forest reserves. In 1985, The National Forest Policy targeted 40 percent of the country to be under forestland and stressed the need to involve local communities, the private sector, academia, and other agencies concerned with forest management. Other pilot projects were initiated to boost forest cover and reforestation efforts. The RFD once again responded to the problems by reorganizing itself and placing more emphasis on forestry extension and supporting local community efforts.

In 1988, serious flooding and landslides in the South generated public concern and an outcry for more conservation oriented policies. A rising urban middle class, with increasing environmental awareness, pressed for action to halt forest degradation. This led to the 1989 national logging ban. The logging ban pointed towards a shift in national forest management policies toward local participation and forest conservation (Poffenberger 1999).
People's Involvement in Forest Management

Forestry policies in the 1990s have echoed the concern raised by the general public. In 1979, Thailand had only 16 national parks covering an area of 9,357 sq. kms. By 1996, this had increased to 81 national parks covering an area of 41,738 sq. kms (Pipithvanichtham 1997). In addition, a number of programs were initiated to encourage people's participation in forest management.

In 1991, the RFD began a process to develop a Community Forestry Bill to involve local communities in managing communal forest areas. The bill has passed through many processes of public involvement and it is hoped that it will become law in the near future. There are many who oppose the Community Forestry Bill and fear that the bill will cause further forest encroachment and degradation. Thus, while many in the RFD see the bill as the only viable way to solve land disputes, forest encroachment and increasing rural discontent, the RFD is tied down by political considerations and has to wait for formal approval by the Thai Parliament. Other initiatives of the RFD include:

- **Private forest plantation:** The Reforestation Act of 1992 was initiated to promote tree farming on the private lands. Private plantation cooperatives were organized in 1996.
- **Forestland use zonation:** Forestland was reclassified into three use zones: conservation forests, economic forests and agricultural lands.
- **Public involvement in degraded watershed rehabilitation:** In 1994, a reforestation campaign in commemoration of the Royal Golden Jubilee was initiated to promote tree planting in degraded watershed areas, national parks, wildlife sanctuaries, roadsides, riversides and urban areas. The five-year program involved people from all sectors.
- **Ecotourism for forest conservation:** Over the last five years, ecotourism has become a popular and economically viable form of tourism. In 1997, the RFD began ecotourism projects in a number of national parks and wildlife sanctuaries. The RFD has tried to include local communities living in or near these areas in ecotourism activities so they will benefit from, and help to ensure, forest conservation.

In addition, the Eighth National Social and Economic Development Plan (1997-2001) emphasizes human resource development as its main thrust. Many of the strategies in the plan focus on people's participation in national resource management.

The new Thai Constitution and decentralization to local governments

The 1992 Tambon Administration Act (TAO) provides a greater role for local government units in forest management. Under this act, TAOs (sub-district governmental units) have responsibility for managing all natural resources within their boundaries. This decentralization plan was further supported by the new Thai Constitution which came into law in 1997. The constitution states that local people and organizations should be involved in managing their natural resources. Both of these laws further enshrine people's participation in forest management and pave the way for clarifying land-use issues and people's role in forest management (Poffenberger 1999).

Adaptation to Decentralization

While formal adoption of the Community Forestry Bill is still pending, the RFD has been testing out a number of pilot projects which will prepare the department for when the bill is eventually approved. This includes:

- **Community Forest and Bufferzone Pilot Projects:** These projects are implemented in forest reserves surrounding national parks and wildlife sanctuaries. They aim to increase...
understanding on local tools and processes for developing collaborative management arrangements between local organizations and the RFD to manage natural forests in bufferzone areas. The projects began in 1997 and are currently being carried out in six regions of the country.

- **Small-scale Forest Plantations:** This project encourages job creation in rural areas for workers who have returned home since the economic crisis that started in July 1997. The project aims to support the TAO in its role as primary local manager and encourage small-scale enterprises and employment. Areas of 10 - 20 ha are allocated to the TAO for reforestation. The RFD works with the TAO to ensure sustainability.

- **Forest and Forest Fire Protection:** Initiated in 1997, this five-year project promotes people's involvement in forest fire protection. The RFD aims to support TAOs in developing forest fire protection plans to lessen the impact of forest fires on local economies and ensure that fires do not devastate national parks and other sensitive forest areas.

- **Forest Management and the TAO:** This pilot project covers all 75 provinces in the country and aims to develop procedures for local forest officers to work effectively with the TAO administration to manage forestland in their territories. TAOs can now develop five-year plans for their sub-districts which include forest management activities. The local forest officers play a crucial role in providing extension support to plan and implement forest management activities.

### RFD and the Economic Crisis

To ease problems caused by the economic crisis, the government launched the public sector adjustment policy to review the role of government agencies. It was decided that all work that can be carried out by the private sector should be privatized. Correspondingly, all work which can be undertaken by local people should be transferred to local organizations. Under this policy, the RFD will terminate government reforestation projects, private plantation promotion, seedling distribution, and wood and non-wood checkpoints. These activities as well as all the work concerning forest engineering (such as road construction, forest boundary survey and all mechanical engineering) shall be transferred to the private sector. Plantation and forest protection activities will be transferred to local organizations. The process of the adjustment was initiated in 1998 and is ongoing.

### Conclusion

Thailand has gone through dramatic changes over the last 50 years and the RFD has tried to keep pace. Increasing public concern over the environment, pressure to downsize government in the face of the economic crisis, and the recognition that local people should play an active role in forest management have all encouraged decentralization of forest management responsibilities in Thailand. All sectors of Thai society (government, private, urban and rural) recognize the need to balance rapid socio-economic development and environmental conservation, however, there are diverse opinions as to how to best meet these goals. The difficulty of reaching a consensus on how best to achieve improved forest conservation and rural development, and in turn implementing policies which support these goals, are the major challenges ahead for forest management in Thailand (Sato 1998).
References


The Role of Community-based Enterprises and Monitoring: Experiences from Biodiversity Conservation Network Funded Projects in the Asia-Pacific Region

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Introduction

One of the main questions concerning the decentralization and devolution of forest management is whether local institutions and communities have the capability and political will to manage and protect their natural resources. Given the above concerns, community-based enterprises and monitoring play an important role in the processes of decentralization and devolution. Community-based enterprises can provide appropriate incentives to protect the biodiversity, strengthen local systems and create opportunities for community participation. Formal community monitoring on the other hand is critical in assessing the ecological, economic and social sustainability of the enterprises. It also improves local conservation knowledge and awareness that are necessary in aiding a community's resource management capability.

This paper looks at the role community-based enterprises and monitoring through the work of the Biodiversity Conservation Network (BCN). To illustrate these points, this paper is divided into three parts: (1) a brief outline of BCN's overall program goals, hypothesis, and methodology; (2) a case study of the Kalahan Forest Farm Development Project illustrating the relationships between decentralization and devolution, enterprise development, monitoring and conservation; and (3) a discussion of the key principles linking these processes from the experiences of other BCN-funded studies in the Asia-Pacific region.

BCN Analytical Framework and Communication Strategy

BCN's two main program goals are to:

- support enterprise-oriented approaches to biodiversity conservation at a number of sites across the Asia-Pacific region (specifically in Nepal, India, Indonesia, Philippines, Papua New Guinea, Solomon Islands and Fiji); and
- evaluate the effectiveness of these enterprise-oriented approaches to community-based conservation of biodiversity and provide lessons and results to BCN's clients and audiences.

Its core hypothesis is that "If enterprise-oriented approaches to community-based conservation are going to be effective, then the enterprises must:

- have a direct link to biodiversity, i.e. the enterprises must directly depend on the in situ biological resources of the region. BCN thus seeks to develop enterprises that would fail if the biological resource base upon which they depend was significantly degraded;
- generate short- and long-term economic, social and/or environmental benefits in order to encourage local people to protect biodiversity; and
- involve a community of stakeholders at the site, i.e. the enterprises must involve members of the local community, and often others, who are stakeholders in the enterprise and biodiversity conservation in a particular area.

BCN considers numerous variables when measuring and analyzing the efficacy and conservation impact of the community-based enterprise approach at a given site. BCN together with its grantees, attempt to annually measure these variables in the course of the project (Figure 1).
Figure 1: Measuring and analyzing efficacy and impact

1. Gathering Baseline Data: In 1993, BCN gave a total of 34 planning grants to determine the viability of the different proposed projects. The information gathered during this period formed part of the baseline of the 20 sites that were eventually funded.

2. Defining Biodiversity: BCN terms this as its “Dependent Variable” since the biophysical environment is considered as the direct indicator of conservation in an area. BCN in its Analytical Framework analyzes the changes in the dependent variable by monitoring ecosystem changes, resource sustainability (e.g., NTFP stock and regeneration) and threat reduction (e.g., reduction in illegal NTFP gathering activities).

3. Conservation Variables: This is what is labeled as the "Independent Variables" since BCN defines these in its hypothesis as the factors that determine the success of conservation. BCN’s Analytical Framework groups them into three categories namely: linkage of enterprise (e.g., enterprise ownership; ownership of benefits e.g., distribution of cash benefits); and community involvement.

4. Other Variables: Since the link between the dependent and independent variables is not linear but rather web-like, one must also take into account contextual or external factors that affect conservation and project impacts such as government policies, natural disasters and funding technical assistance given to the community and project partners.

The Interrelation of Enterprise, Monitoring, Decentralization-Devolution and Conservation: The Kalahan Forest Farms Development Project

Background

The Kalahan Reserve is part of the larger Cordillera and Caraballo mountain ranges that supply water to the agricultural areas of Northern Luzon. The reserve is spread over 13,894 ha and composed mostly of pine and dipterocarp forests. It is home to several endemic and endangered flora and fauna such as the Tarictic Hornbill. The Ikalahans (meaning people of the broad leaf forest) have lived here for centuries relying mainly on hunting, gathering and traditional swidden agriculture to survive. The natural resources in these areas remained relatively intact until the 1950s, when the Philippine government started to actively enforce the doctrine that all forests/uplands are government lands, and proclaimed all uplanders/indigenous people as "squatters". Realizing the futility of challenging the Philippine government (and military) over control of their land, their local attitudes changed from that of protection to full utilization. As a result, several traditional and indigenous technologies were ignored, and new destructive practices such as rearing cattle were introduced.

As early as the late 1960s, negotiations began for the control of the Kalahan Reserve in order to counter numerous external and internal threats such as land grabbing and harmful agricultural practices. In 1970, the Ikalahans tried to organize a Producers Cooperative to address the rampant economic exploitation of the resources at that time. Unable to negotiate with the government for the formation of a cooperative, they decided to form instead the Kalahan Educational Foundation (KEF) Inc. in 1973 to give the community legal representation. The purpose of KEF is to "promote the education and development of the Ikalahian people". KEF since then has been the main stakeholder organization in the reserve and has taken the lead in implementing many activities such as land tenure, resource management, policy formation, sustainable agriculture and education.
By 1974, KEF was finally able to negotiate an agreement with the now defunct Ministry of Agriculture and Natural Resources. This agreement, simply referred to as Memorandum of Agreement No. 1 (MOA1), gave the Ikalahans full and legal stewardship, management and utilization rights for 25 years in exchange for the protection and rehabilitation of the Kalahan Reserve. As the agreement neared its end, KEF secured three Certificate of Ancestral Domain Claims (CADCs) in the adjacent provinces of Nueva Ecija, Nueva Vizcaya and Pangasinan that expanded their rights and management activities to 45,000 ha.

The people of the Kalahan Reserve are highly homogenous. Of the 550 households, 547 are Ikalahan and three are Ifugao. The largest barangays (towns) are Imugan, Malico, Baracbac, Bacneng and Unib. The Ikalahans are indigenous swiddeners with *kamote* (sweet potato) being their staple crop. Other sources of income include small businesses and employment in the KEF and a nearby town. Historically, the Ikalahans were scattered around the reserve. The 1990 earthquake, however, forced the Ikalahans to settle in the flat areas, a trend that continues today.

**Forest Farms Development Project Framework**

The main vision of the Forest Farms Development Project is "to establish an effective resource management framework to ensure a stable and diverse forest ecosystem within the Kalahan Reserve". It is envisioned that the 550 Ikalahan families will be able to source most of their food, cash, domestic and knowledge needs from the 13,894 ha reserve. The main objective of the Forest Farms Development Project is to identify and develop income generating opportunities based on forest products, which would satisfy the needs of the community and in turn encourage the Ikalahans to conserve the biodiversity of the reserve. The underlying assumptions of the Forest Farm Development concept are that:

- understanding the ecological principles will contribute to environmental protection;
- the Modified Timber Stock Improvement (MTSI) will improve secondary growth;
- forest-based industries in the community will generate employment opportunities as well as add value which will reduce environmental degradation; and
- maintaining a "forest-based community" will provide opportunities to educate the younger generation who will in turn provide appropriate leadership for future community development activities.

**Goals of the BCN intervention**

BCN supported the Kalahan Forest Farms Development Project from 1994 to 1998. Its three major objectives were to:

- strengthen the existing KEF *Mountain Fresh* jams and jelly production;
- explore other livelihood niches, most notable the ongoing MTSI research aimed at determining sustainable yields for cutting; and
- assist in the various research activities of the KEF in support of the conservation efforts within the Kalahan Reserve including the documentation of existing flora and fauna and mapping based on a geographic information system (GIS).

**Bio-monitoring, enterprise and conservation activities at the Kalahan Reserve**

Determining the sustainability and conservation significance of the Ikalahan fruit harvesting activities.

The key question was whether there were sufficient fruits and regeneration of species to supply the *Mountain Fresh* venture. Research revealed that the quantity of fruits that are sold by
harvesters to the food processing plant does not limit production nor threaten the regeneration of fruit trees within the Kalahan Reserve. Research showed that one ha of *dagwey* trees can produce up to 891 kg of fruits per year. This considers the population structure and fruit-bearing capacity of each age class. There are an estimated 509 ha of *dagwey* trees within the reserve, which annually produce an estimated total of 45,387 kg. At present, the KEF food processing plant processes not more than 5,000 kg a year, or just 11 percent of total annual fruit production. Home consumption by the Ikalahans is estimated to be about 50 percent of total production. The research is important as the regeneration of fruit trees and the production of fruits also serve as indicators of biodiversity quality within the Kalahan Reserve.

**Economic and conservation benefits derived from fruit harvesting**

The Ikalahans sell on average 15,000 kg of fruits, worth about 60,000 pesos\(^{15}\), to the KEF each year. Almost two-thirds of this is guava, their best-selling product. Around 90-110 gatherers sell fruits in any given year to the food-processing unit. In 1996, the average revenue generated by each gatherer were roughly 687 pesos, which is about 2 percent of the Ikalahans' individual annual cash income of about 33,000 pesos. In 1997, the average revenue generated by each gatherer amounted to only about 1 percent of their annual income of about 38,000 pesos. Though this may seem like an insignificant amount, the KEF states that this is an important contribution to the Ikalahans cash accessibility. Since the KEF's policy has been to accept everyone offering fruits for sale, selling to the food-processing unit has become a source of "instant cash". This policy also encourages the gatherers to participate in the production of the jams and jellies, and to assist the KEF with the monitoring of fruit supply and production\(^{16}\).

**Sustainability of the Mountain Fresh Jams and Jellies Enterprise**

The main product of KEF is the *Mountain Fresh* line of jams and jellies. This enterprise has been supplying jams and jellies to major supermarkets in Manila since the late 1980s. BCN's objective was to strengthen the current operations and examine their links and contribution to conservation in the area. Analysis of sales and production show that gross revenue has declined to around 2,000 bottles or 650,000 pesos of sales annually between 1994 and 1997 (Figure 2)\(^{17}\). At this level, the enterprise is able to cover its variable cost but has not yet been able to cover fully its fixed cost. "The biggest challenge then at the present time is to bring the Food Processing Center to the point where its net profits can support the other activities of the KEF" according to Pastor Delbert Rice, the KEF Executive Director. To do this, KEF is strategizing with the Upland NGO Assistance Committee (UNAC) and the Philippine Business for Social Progress (PBSP) on ways to increase *Mountain Fresh* sales. Aside from promotions and increased marketing efforts, KEF will soon be introducing a line of low-sugar jams and jellies, which they expect will significantly add to their gross sales.

**Exploring the potential of MTSI for income generation**

KEF is now in the process of examining timber growth and harvest information from around 86 different MTSI sample plots throughout the Kalahan Reserve. KEF has placed the sustainable cutting rates per forest type as 10 percent of the annual volume of timber production. At present, the forestry team estimates that less than 10 percent of the growth increments is extracted by the local population.

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\(^{15}\) 38 pesos = USD 1.00 (December 1998)

\(^{16}\) Ten to twenty percent of the gatherers are students, while less than 10 are classified as consolidators, or people who buy from other gatherers and then sell them to the KEF.

\(^{17}\) The large amount of sales generated in 1994 was due to a one-time export order from Germany.
MTSI research also serves to determine the cash generating capability of the activity. As of now, extraction is only permitted for local use; commercial sale of lumber is prohibited. If studies show logging as a sustainable and profitable enterprise, then the TSI can be replicated in other areas both within and outside the reserve. Such monitoring and regulation can reduce "illegal timber cutting" for local use, as the scheme allows the community to cut provided regulations are followed.

**Strength of the KEF as a stakeholder organization**

Local organizations play a major role in the success or failure of enterprise and conservation efforts at the site. It is for this reason that BCN contracted a consultant to do a special case study of several stakeholder organizations across the Asia-Pacific region. Given the conservation milestones that the Ikalahans were able to achieve, the KEF was chosen as one of the stakeholder groups for study.

The KEF is governed by a Board of Trustees (BOT) that consists of eleven members elected by the different communities within the reserve. The BOT has two basic functions, to manage the KEF and to manage the Kalahan Reserve itself. BOT members are required to regularly consult with their respective town members and personally make their 'monitoring rounds' to formulate and re-enforce necessary resource management policies. Designated staff members organized into project teams implement project activities. An administrative team headed by an Executive Director oversees the implementation of project activities.

**Table 1:**

<table>
<thead>
<tr>
<th>Forest Class</th>
<th>Volume Produced 94-97 (Vol. Increments)</th>
<th>Volume of Extraction 94-97</th>
<th>Recovered Volume*</th>
<th>Rate (C/B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All types in the Kalahan Reserve</td>
<td>8,716 cum</td>
<td>863.00 cum</td>
<td>616.43 cum</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

*This is less the wastage from cutting

There are three basic leadership requirements in an undertaking such as the Forest Farms Development Project. The first is leadership to spearhead the community development-organizing process. KEF certainly ranks high in this regard, not only because of its achievements, but also because of its ability to integrate traditional leadership with new democratic processes such as elections and policy enforcement. Its organizational structure also
allows for appropriate representativeness that has resulted in establishing the KEF as the main stakeholder organization in the area.\textsuperscript{18}

The second requirement is project administration and enterprise management. KEF's performance in this area has received mixed reviews. The main issue here is the question of the development of "second liners". Pastor Rice, currently the KEF Executive Director who has lived in the reserve for nearly forty years, has been recognized as an important asset and has considerable influence in the organization of the Ikalahans. However, there have been some critics pointing out the dependence of the Ikalahans on the Pastor and the questions of his eventual replacement upon his retirement. KEF has recognized this problem and taken the first steps to address this issue.

The third important aspect is the relationship between stakeholder organizations and the local government. In the Philippines, several barangays make up a municipality and each barangay has a set of elected local government leaders. The KEF therefore is not the only stakeholder organization in the Kalahan Reserve influencing its development. There is a strong relationship between the KEF and the local government. The barangays, municipal government and the KEF took a united stance against the national government on a proposed new highway. Also, because the Local Government Code devolves a considerable amount of authority to the municipal government for the protection and rehabilitation of natural resources, the KEF closely coordinates its management activities with local government officials. In fact, several elected town officials are also KEF members. This arrangement has greatly strengthened the existing conservation efforts, not just at the Kalahan Reserve, but in the adjacent areas as well.

\textbf{Examining the implementation and efficacy of resource management policies}

Table 2 illustrates the different resource policies and guidelines that are implemented by KEF. These rules are enforced by KEF staff, including forest guards and agroforestry staff, barangay officials, and BOT members themselves. A system has been developed between KEF and barangays whereby 75 percent of the fines collected are transferred to the apprehending body. For example if a barangay official catches an offender, the barangay receives 75 percent of the fine and 25 percent goes to the KEF. The BOT gets an overview of the implementation of resource rules during annual monitoring visits to all the barangays in the reserve. Rewards may be presented to barangays where policies have been well implemented, for example where there have been no illegal fires during the year. This provides a further incentive for strong enforcement of resource policies by barangays.

\textbf{Examining the changes in land use and vegetation cover in the Kalahan Reserve}

Between 1994 and 1997, there has been a slight decrease in mossy, pine and dipterocarp forests in the Kalahan Reserve (Table 3). Lowland agriculture has remained stable - neither increasing nor decreasing in area. There has been a slight increase in the area of grasslands. The increases in upland agriculture (resulting in the loss of upland forests) are due to the needs of a growing population. However, the 67 ha additional upland agricultural accounts for less than 0.5 percent of the reserve.

The KEF estimates that when the Ikalahans assumed responsibility for the management of the reserve in the 1960s, around 35 percent of the upper half were grasslands and thinly scattered

\textsuperscript{18} KEF reports that in the 1960s, there were only two high school graduates out of the entire population of 2,000. Now there are three Ikalahans with graduate degrees, and 95 percent of the present population is able to attain at least seven years of formal schooling.
pine, while several areas around Imugan, Malico and Baracbac were grasslands. More than 30 years later these areas are mostly covered with secondary pine and dipterocarp forest.

**Table 2:**
Rules and their enforcement

<table>
<thead>
<tr>
<th>Resource use/issue</th>
<th>Nature of restriction</th>
<th>Fine/penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use rights</td>
<td>- Kalahan residents only access to resources in secondary forest areas subject to resource guidelines below. - New residents need permits for resource use</td>
<td>- Non-residents reported to DENR for prosecution</td>
</tr>
<tr>
<td>Firewood and lumber</td>
<td>- For use on the reserve only, not for external sale - Harvesting restrictions marked trees only to be cut - Cutting permit required - Registration of chainsaws with AF office</td>
<td>- 400 pesos per tree cut - Confiscation of all produce - 500 pesos for unregistered chainsaws and reported to DENR for prosecution</td>
</tr>
<tr>
<td>Swidden farming</td>
<td>- New clearings must have permit from AF office - Cultivated lands to be interspersed with forest and not on land susceptible to slides</td>
<td>- 500 pesos in dedicated watershed or sanctuary (primary forest) areas and required to cover cost of reforesting area - 100 pesos anywhere else</td>
</tr>
<tr>
<td>Forest fires</td>
<td>- No burning except for 'proper agricultural development' Guidelines for firelines and burning times</td>
<td>- 500 pesos, plus payment for damages and reforesting area plus remuneration of people involved in putting out fire</td>
</tr>
<tr>
<td>Orchid collection</td>
<td>- Strict guidelines on methods for orchid collection complete ban on collection of endangered orchids</td>
<td>see below</td>
</tr>
<tr>
<td>Wildlife and flora</td>
<td>- In sanctuary areas: no harvesting of trees, orchids, rattan, bamboo, birds or other animals - Outside sanctuaries: hunting of animals permitted from July-August; birds from September-October</td>
<td>- 1st offence: pesos 1000 + confiscation - 2nd offence: pesos 2000 + confiscation - 3rd offence: pesos 3000 + confiscation of resources (this fine also applies for hunting wild pig and other big animals in sanctuary areas on the 1st offence)</td>
</tr>
</tbody>
</table>

Source: KEF, 1995, Development Plan: Ancestral Domain Kalahan Reserve Phase 2

After attaining land-use rights, the Ikalahans established rules and regulations for protecting the forest. One of the activities was the development of a land-use classification system (Table 4). Since the Ikalahans recognized the importance of watershed protection and biodiversity preservation early on, they decided to classify 3,159 ha of the reserve as a "Sanctuary Area" where extraction, hunting and agriculture are not permitted. The vegetative cover in this area was composed mostly of mossy forest, some primary dipterocarp forest and a small portion of grasslands with scattered dipterocarp forest. In 1997, the Sanctuary Area was expanded to 4,224 ha to include some primary pine forest and secondary mossy forest. The Ikalahans and the KEF also decided to designate parts of the reserve as Protection Forest (which are steep areas that cannot be exploited anyway) and Production Forest that are open to regulated exploitation.
### Table 3:
Changes in land use and vegetation in the Kalahan Reserve between 1994 and 1997

<table>
<thead>
<tr>
<th>Vegetation Cover</th>
<th>1994 Cover in ha</th>
<th>% of Class Cover</th>
<th>1997 Cover in ha</th>
<th>% of Class Cover</th>
<th>Hectare Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mossy Forest</td>
<td>2,403</td>
<td>17.19</td>
<td>2,404</td>
<td>17.3</td>
<td>1</td>
<td>0.04</td>
</tr>
<tr>
<td>Primary Pine Forest</td>
<td>476</td>
<td>3.42</td>
<td>439</td>
<td>3.16</td>
<td>-37</td>
<td>-7.8</td>
</tr>
<tr>
<td>Secondary Pine Forest</td>
<td>241</td>
<td>1.73</td>
<td>241</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scattered Pine Thick Stand</td>
<td>370</td>
<td>2.66</td>
<td>370</td>
<td>2.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scattered Pine Medium Stand</td>
<td>1,871</td>
<td>13.47</td>
<td>1,873</td>
<td>13.48</td>
<td>2</td>
<td>0.11</td>
</tr>
<tr>
<td>Scattered Pine Few Stand</td>
<td>434</td>
<td>3.12</td>
<td>434</td>
<td>3.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Classification Sub-Total</strong></td>
<td>3,392</td>
<td>24.41</td>
<td>3,357</td>
<td>24.16</td>
<td>-35</td>
<td>-1.03</td>
</tr>
<tr>
<td>Mixed Dipterocarp Pine Forest</td>
<td>640</td>
<td>4.6</td>
<td>640</td>
<td>4.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Dipterocarp Forest</td>
<td>709</td>
<td>5.1</td>
<td>707</td>
<td>5.09</td>
<td>-2</td>
<td>-0.28</td>
</tr>
<tr>
<td>Secondary Dipterocarp Forest</td>
<td>1,322</td>
<td>9.51</td>
<td>1,305</td>
<td>9.39</td>
<td>-17</td>
<td>-1.29</td>
</tr>
<tr>
<td>Scattered Dipt. Thick Stand</td>
<td>291</td>
<td>2.09</td>
<td>291</td>
<td>2.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scattered Dipt. Medium Stand</td>
<td>1,230</td>
<td>8.85</td>
<td>1,230</td>
<td>8.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scattered Dipt. Few Stand</td>
<td>722</td>
<td>5.2</td>
<td>724</td>
<td>5.21</td>
<td>2</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>Classification Sub-Total</strong></td>
<td>4,914</td>
<td>35.37</td>
<td>4,897</td>
<td>35.24</td>
<td>-17</td>
<td>-0.35</td>
</tr>
<tr>
<td>Scattered Swidden w/Dipt.</td>
<td>678</td>
<td>4.88</td>
<td>732</td>
<td>5.27</td>
<td>54</td>
<td>7.38</td>
</tr>
<tr>
<td>Upland Agriculture</td>
<td>68</td>
<td>0.49</td>
<td>81</td>
<td>0.58</td>
<td>13</td>
<td>16.05</td>
</tr>
<tr>
<td><strong>Classification Sub-Total</strong></td>
<td>746</td>
<td>5.37</td>
<td>813</td>
<td>5.85</td>
<td>67</td>
<td>8.24</td>
</tr>
<tr>
<td>Lowland Agriculture</td>
<td>115</td>
<td>0.83</td>
<td>115</td>
<td>0.83</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Grasslands</td>
<td>2,324</td>
<td>16.73</td>
<td>2,308</td>
<td>16.61</td>
<td>-16</td>
<td>-0.69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,894</td>
<td></td>
<td>13,894</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4:
Land use classification of the Kalahan Reserve

<table>
<thead>
<tr>
<th>Land Use Classification</th>
<th>1994 Area in ha</th>
<th>% of class cover</th>
<th>1997 Area in ha</th>
<th>% of class cover</th>
<th>Ha change</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanctuary Area</td>
<td>3,159</td>
<td>22.73</td>
<td>4,224</td>
<td>30.4</td>
<td>1,065</td>
<td>25.21</td>
</tr>
<tr>
<td>Protection Forest</td>
<td>N.A.</td>
<td>2,481</td>
<td>17.86</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Production Forest</td>
<td>9,316</td>
<td>67.05</td>
<td>5,515</td>
<td>39.69</td>
<td>-3,801</td>
<td>-40.8</td>
</tr>
<tr>
<td>Upland Agriculture</td>
<td>466</td>
<td>3.21</td>
<td>386</td>
<td>2.78</td>
<td>-80</td>
<td>17.17</td>
</tr>
<tr>
<td>Pasture Land</td>
<td>468</td>
<td>3.37</td>
<td>804</td>
<td>5.79</td>
<td>336</td>
<td>41.79</td>
</tr>
<tr>
<td>Titled Land</td>
<td>485</td>
<td>3.49</td>
<td>484</td>
<td>3.48</td>
<td>-1</td>
<td>-0.21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13,894</td>
<td></td>
<td>13,894</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lessons learned**

The Kalahan Reserve is a good example of how enterprise development, monitoring, decentralization and devolution work together. The main concept of the Forest Farms Development Project is that, not only are people part of the ecology, but they are actually important partners in the protection and rehabilitation of biodiversity. However, the communities and local institutions must be able to reach a certain level of capacity to be able to manage their
affairs and the reserve. As demonstrated by the Ikalahans and the KEF, this involves the following basic processes:

- Community development and organization;
- Sustainable enterprises and alternative livelihoods development;
- Implementation of progressive government policies and programs that promote decentralization and devolution; and
- Continuous monitoring and evaluation for effective adaptive management.

By no means have the Ikalahans and KEF "perfected" the four processes. However, they have made significant progress in the last 30 years.

Key Contributions of Community-Based Enterprise and Monitoring to the Processes of Decentralization and Devolution

In "Rethinking the Decentralization and Devolution of Biodiversity Conservation", Enters and Anderson (see in this volume) have emphasized that both processes are not just concerned with the transfer of management authority from the state to local institutions or communities. Equally important are the development and transfer of business opportunities. Communities are not motivated to manage their land and resources if they are unable to reap the benefits of their labor. Conversely, they will not be able to implement enterprise strategies unless they attain legal and management control.

Indeed BCN has observed the necessity of securing tenure early on as one of the common themes throughout its projects, illustrated by the oak leaves and silkworm project in Garwhal, India (BCN 1997):

"The major problem remains one of tenure. The ultimate control of the forests and forest resources still largely rests in the hands of the government and not in the hands of the people who are directly involved and affected. This means that the funds generated by sale of wood, grazing rights to outsiders, fines and other fees are not at the disposal of the Van Panchayat [local forest user group] but rather under the control of the Revenue Department, which takes most of the funds for its own purposes. This arrangement is a serious disincentive for the villagers who feel that they don't have control over their resources."

Another point worth mentioning here is that community-based enterprises, decentralization and devolution are complementary processes that empower and encourage communities and local institutions to become what Mark Poffenberger terms "Keepers of the Forest". Then again we have the "Catch-22" situation where communities cannot be motivated to strengthen themselves and participate in the management of their resources unless they receive legal and management control. Vice versa, they cannot obtain such legal and management controls until they can demonstrate that their activities are sustainable. However, this should not be viewed as a "chicken or egg" situation, but rather that the interdependence of enterprises, monitoring, decentralization and devolution requires processes that support each component.

There is no need to expound on the economic significance of community-based enterprises, decentralization and devolution. The development of a community-based enterprise can produce a variety of non-cash benefits that strengthen a community's resolve for decentralization and devolution, and not to mention conservation. A good example of this is the BCN funded project with the Lumad in Bendum, Mindanao, Philippines. One of the main goals of the project was to revive Lumad backyard abaca (Manila hemp) growing. This practice helps to reduce the threats of over-extraction of forest resources and clearing of additional land for agriculture, since abaca
fibers can provide people with additional income. The project also assisted in the creation of buffer zones that have enabled the Lumads to assert their land-use rights in the area, thereby protecting their land and forest resources from further lowland encroachment. From six active Lumad groups in 1995, the number has grown to 38 in 1998. As of 1997, each Lumad grossed an estimated 700 pesos from *abaca* harvesting, which constitutes around 30 percent of their cash income.

The production of handicrafts by Lumad women is another interesting example. Although the Lumad women produce and sell only a few items each year, the non-cash benefits are integral to the process of community empowerment. First of all, the enterprise project promotes cultural integrity. The handicraft enterprise makes use of traditional skills that the women transfer to their children. In addition, the women are reviving their leadership roles in the community. The enterprise has allowed for a better understanding of the relationships between men and women (i.e. men needed for production and women needed for financial management). This has made communal labor and participation more effective. As a result, more families are now staying in Bendum, which indicates the community's increased self-esteem.

Both the activities have strengthened the Lumad's resolve to fight for their ancestral rights. In June 1998, the Department of Environment and Natural Resources (DENR) awarded the Bendum community its Certificate of Ancestral Domain Claim (CADC). This is a significant step towards community-based conservation since the CADC serves as a legal stewardship instrument that allows indigenous people to utilize and manage the resources within their ancestral domain.

The development of local associations and community participation is crucial for effective and decentralized forest management. The BCN-funded ecotourism project in the Khangchendzonga National Park, West Sikkim, in India is a good example of this. In 1997, the project organized a Naturalist Guide Training, the success of which led the community to form the Khangchendzonga Conservation Committee (KCC). With 10-15 "formal" members, this NGO, assisted by the project staff, has been able to solicit the commitment more than 200 lodge operators, guides, cooks, porters and vegetable growers from four communities to participate in training in alternative fuelwood use, trash management and enterprise skills. Lodge operators have reported increased revenue because of the training activities. The local government in the area has also deputized the KCC to apprehend illegal gatherers and poachers. The result has been the formation and implementation of local tourism and conservation plans for Khangchendzonga National Park and the surrounding forest. As Chewang Bhutia, an engineer involved in the project, has stated: "The project has empowered the local people to a great extent to take part in community initiatives and has set a trend to take actions instead of only talking".

Below are some examples of the influences of enterprise and monitoring activities on policies from across the BCN sites:

- In Gunung Halimun National Park, West Java, Indonesia, the Ecotourism Society (IES), the Ministry of Tourism and the Ministry of Forestry have decided to simplify the procedures for developing community-based ecotourism.
- In Nepal, the King Mahendra Trust for Nature (KMTNC) has led an effort to draft and pass legislation to share 30-50 percent of revenues earned on tourism taxes from the Royal Chitwan National Park with local communities.
- In Lore Lindu National Park, Sulawesi, Indonesia, the Indonesian office of The Nature Conservancy is drafting a 25-year resource management plan with the Directorate General of Forest Protection and Nature Conservation. Also, with testimonies from scientists and butterfly collectors, the TNC and WWF/Indonesia lobbied for lifting the
ban by the Indonesian government on the exportation of live pupae. Butterfly farming is a major source of income in the area and so the ban "is unnecessary from a technical and policy standpoint and detrimental to the local households who derive income from such sales" (BCN 1999).

- In Crater Mountain, Papua New Guinea (PNG), the Research and Conservation Foundation of PNG (RCF) and the Wildlife Conservation Society (WCS) collaborate with numerous national and international NGOs, the government of PNG and the Gimi and Pawaian landholders in drafting legislation for the Crater Mountain Wildlife Management Area (WMA). Under the arrangement "land-owning clans" in the WMA identify clan representatives to form Management Committees that create laws regarding the management of natural resources (within the parameters of the national law) and act in an official capacity to enforce them." (BCN 1999).

References

Rethinking the Decentralization and Devolution of Biodiversity Conservation

Introduction

This paper re-examines assumptions regarding conservation in light of opportunities for increasing the involvement of local communities in biodiversity conservation and forest management. It focuses on forest and forest margin dwellers and their livelihood strategies in tropical forests. At the same time, it recognizes that the role of policymakers, private sector and other stakeholders in the use of forest resources and their impact on forests are frequently more important. Perrings and his colleagues (1995) remind us of the massive ignorance and uncertainty about the extent and significance of change in the level of tropical forest diversity. Similar deficiencies remain with regard to forest resource use and its impact, although recently it has become evident that not all activities lead to biodiversity erosion and loss. Low intensity use can even enhance forest genetic diversity. Lack of knowledge is compounded by the distance between popular and scientific debate, and diverging perspectives of forest dwellers. Biodiversity means different things to different people.

Traditionally, local people and their economic activities have been viewed as threats to the undisturbed functioning of natural ecosystems. In the classical approach to conservation, people were the "problem" and were to be excluded from protected areas. Protected areas were conceived and designed in terms of biological concepts and scientific inventories. However, it became evident that the social costs of exclusionary conservation projects were sometimes high, and that their success rate, even in biological terms, was disappointing. As a result, the classical approach to biodiversity conservation was replaced by Integrated Conservation and Development Projects (ICDP), with the goal to "enhance biodiversity conservation through approaches which attempt to address the needs, constraints and opportunities of local people" (Wells and Brandon 1993). In this latest approach to conservation, local people are put at the forefront and viewed (at least in theory) as active partners, if not outright frontline managers.

The success rate of ICDPs and the "populist" approaches are also discouraging, however. Despite this, the general belief continues to be that only through the devolution of management responsibilities and authority can the desired result of maintaining ecosystems and their life-supporting functions be achieved. In fact, such is the enthusiasm for decentralization, devolution as well as privatization that it has become heresy to question them.

This paper attempts to re-examine the main assumptions upon which devolution and populist approaches to biodiversity conservation are based. To make a powerful and cogent argument, some positions in this paper have been simplified and a somewhat simplified dichotomy has been drawn.

The paper focuses on forests and local people in tropical countries although its observations may be relevant elsewhere. However, forest or forest-margin residents are not the only, and perhaps not even the most important, stakeholders who "ultimately decide the fate of much terrestrial biodiversity". Industrial logging, large-scale forest conversion, road construction, mining and
other activities may, as McGrath (1997) reminds us, pose greater threats. Besides rural people, many influential and powerful stakeholders influence biodiversity and affect the success or failure of conservation projects. They are not considered in this discussion, because first, their activities are easier to regulate (although rampant illegal logging and massive forest conversion to plantation crops in some countries has been equally hard to stop) and second, their dependence on natural forests is not crucial for their livelihoods, meaning that they are able to adjust more easily to a new situation or the imposition of restrictions.

**Setting the Scene**

The preservation of natural ecosystems has long been on the agenda of institutions concerned with biodiversity. Representative samples of ecoregions have been set aside and put under strict protection. This "northern" vision of an untouched wilderness has permeated global policies and politics for decades and has resulted in the classic approach to meeting biodiversity conservation needs, which is still at the heart of the conservation agendas (Gilmour 1995). Basically the conventional approach requires that we (adapted from Biot et al. 1995):

1. identify biodiversity loss as serious, indicating that conservation is urgently needed;
2. design a project in which, if exclusion is not an option, the cooperation of local communities is sought; and
3. implement plans through a combination of encouragement, persuasion, and subtle threats sometimes by more coercive powers.19

Key points are that local people are viewed as "the target population" or "beneficiaries" and that they are frequently excluded from the areas considered important for biodiversity conservation. Unfortunately, as numerous examples show (Braatz 1992; Pinedo-Vasquez and Padoch 1993; Colchester 1994; Fairhead and Leach 1994), conservation projects and programs that fail to consider the interest of local residents, undermine existing indigenous management systems and restrict local authorities in their decision making on resource management only intensify the loss of biological diversity. Furthermore, they raise highly contentious debates between national and local interests (McNeely 1997) and can lead to open protests and conflicts (Nepal and Weber 1993; Pimbert and Pretty 1995; Hirsch 1997a). Thus it is not surprising that the conventional approach produced disappointing results (see Box 1).

The recognition that the solutions to "ecosystem management" problems lie in social, cultural and economic systems, stimulated the development of a new paradigm which views local people as part of the solution and not as part of the problem. Thus, top-down, exclusionary management has been replaced with forms of participation and devolution. According to the new thinking, the conventional approach failed mainly due to the lack of coherence between interventions and local livelihood strategies and the exclusion of local people in project design, planning, implementation, monitoring and evaluation.

Further impetus to the earlier critique of the conventional approach has come from studies on traditional knowledge and practices. A consensus appears to have developed according to which local people do not pose a threat to biodiversity but rather they were the victims of its loss and most affected by forest degradation (Malla 1998). When they have been implicated in forest destruction they are seen to have been "obliged" to over-exploit resources because of inappropriate policies and legal systems. Hence, attention has shifted from blaming rural people

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Box 1: Provoking resentment of protected areas
By law or by administrative dictate, customary rights and activities have been curtailed in many PAs [protected areas] in India; in some, people have been summarily displaced. Almost never have adequate alternatives or rehabilitation been provided. As a result, village communities now have intense resentment for the PA concept; and it is associated with restrictions on access to resources, harassment by forestry officials, exposure of crops and livestock to ravage by wild animals, and invasion by noisy tourists - now given free rein in the same areas where villagers have been banned.

Source: Kothari (1997)

In the conventional approach, biodiversity is seen to be at its optimum in undisturbed natural areas. The national government is viewed as the guardian and supplier of biodiversity and has sovereignty and nominal control over the areas required for conservation (Panayotou and Glover 1994). In reality, however, effective control rests with any of a number of forest users (or stakeholders) and particularly with the resident population that live in and around the forests. In economic terms, they are the providers of biodiversity and its fate lies in their hands (Ferraro and Kramer 1997). As a result, use restrictions and the establishment of protected areas can represent substantial opportunity costs (Child 1994). Furthermore, it appears neither politically feasible nor ethically justifiable to deny the use of natural resources to the poor and marginalized without providing them with alternative means of making a living (Wells 1995) or compensatory payments. Thus proposing any activity that is not profoundly grounded in the involvement of local people is considered unacceptable. Most projects today emphasize community-based participation in decision-making, the devolution of management responsibilities, and tangible incentive systems that favor forest conservation over exploitation - or over-exploitation (Wells and Brandon 1993).

Yet, devolution or the participatory approach in many cases does not appear to be more effective than the conventional, technically oriented approach. An important reason for the poor performance is that genuine participation is still the exception rather than the rule. Most organizations pay only lip service to the goal of involving local communities. In reality, they "adopt a narrow technocratic and, seemingly, apolitical notion of participation" (Utting 1998), collaborate with more influential stakeholders and attempt to reach their, often unstated, objectives which may be diametrically opposed to the objectives of rural people (Malla 1998). Participation is also often part of the language of consensus and does not serve to underline differences but to assure "coercive harmony" around objectives, particularly those of the state or the project, which local people do not share (Brown 1998b; Anderson, Clement and Crowder 1998). In addition, most projects are deficient in clear criteria through which to determine whether local people benefit from conservation and/or whether conservation objectives are reached more effectively by devolving responsibilities and authority.

Challenging Assumptions

Within the realms of devolution and participation many conventional assumptions remain unchallenged, leading to unclear objectives (Wells 1994/95). A major problem is that the concept of partnership in conservation is often based on the following - frequently untested although often contested - assumptions:
1. Local populations are interested and skilled in sustainable forest resource use and conservation;
2. Contemporary rural communities are homogeneous and stable; and
3. Local community-based tenurial, knowledge and management systems are uniquely suitable for forest conservation.

The following discussion responds to Lynch's call for "challenging and revising inaccurate assumptions about the nature and causes of local environmental problems" (1998) and examines these three aspects in light of opportunities for involving local communities in biodiversity conservation projects and for advancing the devolution of forest management.

**Degree of interest and skill in sustainable forest resource use and conservation**

Devolution of natural resource management and conservation activities is predicated on the fact that local people have the motivation and the skills necessary for this management. This assumption will be questioned with examples from the management of non-timber forest products (NTFPs), often held out as a pathway to conservation of forests and natural ecosystems. Despite the contemporary forest dependence of many forest dwellers and local small-scale industries, it appears that many natural products are not managed sustainably, and over-exploitation is common. The fragility of extractive economies in general, and the unsustainable use of NTFPs in particular, have been pointed out by Homma (1992), Hall and Bawa (1993), Gupta (1994), Ros-Tonen *et al.* (1995), Antolin (1995) and Parnewell and Taylor (1996). While the diminishing natural resource can be partially explained by forest conversion and destructive logging operations, the reasons for over-exploitation in remaining natural forests are more complex.

In the past, a number of social and environmental constraints held over-harvesting of NTFPs and timber for local purposes in check (Peluso, 1991). Where population numbers were low, accessibility was restricted and subsistence use predominated, these factors combined to produce a scale of sustainable activities even if the same techniques on a larger and more intensive scale would produce resource depletion. In low-use areas, most products were still used sustainably and traditional restrictions and regulations were heeded. Today, however, even remote areas are often accessible, resulting in the breakdown of traditional controls and subsequently aggressive collection behavior for commercially important products. Empirical evidence suggests that few wild resources can sustain commercial exploitation, and that trade will either result in local depletion, extinction or initiation of the domestication process (Wilkie and Godoy 1996). As Peters (1996a) explains "although the fact is seldom mentioned in much of the literature on the subject, a large number of NTFPs are actually harvested destructively", which at times seriously reduces the abundance of particular species. Examples of various forest products include ironwood (Peluso 1992), wild honey (Kaplan and Kopischke 1992), sandalwood and fruits (Balachander 1995), mushrooms, rattan, bird nests and *gaharu* (Peters 1994), and mahogany and cedar (Kaimowitz *et al.* 1998).

Traditional collectors suffer most from the intensification of harvests, which partly explains why they are usually more concerned about the threats to forests posed by intrusions from outsiders than ecological sustainability *per se* (Utting 1998). Traditional collectors are often poorly organized, if at all. Their ability to take collective action in managing common pool or wild resources, including controlling access, is limited. Furthermore, the existence of monopolistic buyers leads to inefficiency in marketing and very low returns on labor to collectors. Market expansion for many products has led at the same time to greater competition among collectors and traders. As Basha (1996) pointed out for bamboo, the conventional NTFP sector is less harmful to the resource than the newer commercial sector.
Box 2: Unanticipated Environmental Change
"...villagers acting in this Kalimantan case are moving away from field and food crop agriculture and toward greater production of forests and agroforestry products. Over the past three generations, villagers have altered the hillside vegetation from a mixture dominated by swidden fields and fallows with patches of managed forests to a heavily managed forest landscape dominated by selected fruit trees. The villagers' increasingly intensive tree planting on village lands was stimulated not only by land scarcity engendered by enforced sedentarization and by the loss of their formal access (legal rights) to ancestral land when the colonial government carved a nature reserve from the villagers' land but also by the increased market access that resulted from road improvements, urbanization, population growth, and sedentarization."

Source: Peluso (1996)

While other studies generally confirm this finding, the issue is complex, particularly because there is no clear distinction between subsistence and commercial use. First, with the increasing monetization of local economies, forest products have become more important for income generation (Balachander 1995; Malla 1998). Second, the forest products sector is very dynamic. Products recently classified as belonging to the subsistence and traditional sector belong, today, to a very organized commercial sector (e.g., rattan and bamboo).

Even in the past, many traditional societies were not conservationist per se, but rather manipulators of the natural forests (Sekhran 1996). This is perhaps nowhere more evident than on the island of Borneo where many Dayaks have manipulated old-growth and secondary forests in order to raise their productivity for several hundred years (Peters 1996b). Such practices have been termed "forest agriculture" and Colfer (1993) has described the Dayaks as managers of the forests not as "marauders". Even though they exploit their forest fruit gardens actively, such forests have a species diversity and a vegetation structure resembling natural forests (de Jong 1995). Their impact on the forest cover - although not necessarily on plant composition and biodiversity - is minor, as long as population densities remain low and no other stakeholders appear on the scene. This is rarely the case. Colfer and Soedjito (1996) explain that an area that until the early 1960s was a lowland primary dipterocarp forest is today covered by a significantly different forest affected by fires, extensive large-scale logging and small-scale agroforestry activities. Landscape changes can often take on very different forms (Box 2), although the directional change of biodiversity under Dayak' forest management remains unclear.

There is archaeological evidence from areas west of the inland delta of the Niger River in Mali, West Africa, that traditional natural resource use was highly dependent on the ability to migrate. Renewable natural resources, particularly vegetation, were extensively used and depleted over a period of time and the populations then migrated to other areas. This allowed the environment time to recover and regenerate, to be later subject to another periodic episode of intensive (and unsustainable) use (Haland 1980). With increasing population levels the "sustainable migration strategy" is more and more difficult to sustain. Populations may be forced to remain in one area while not having faced the necessity to develop the wherewithal (knowledge, skills, techniques, etc.) for sustainable management.

Local communities' interest in forest conservation depends, at least to some degree, on how much they are still part of the ecosystem and how much their behavior directly affects their own survival. It appears that cultural mechanisms that have been developed as adaptations to the forest environment over hundreds of years are easily cast aside when trade and new technologies free people from traditional ecological constraints (McNeely et al. 1995). That means that
traditional resource use patterns are only sustainable under specific circumstances, usually characterized by low population densities, land abundance, use of simple technologies and limited involvement in the market economy (however, compare with Box 2). On the other hand, as Alvard (1993) points out, under such conditions people can be exceedingly wasteful of resources "yet not have a large enough impact to cause a significant negative impact...". Accordingly, it might as well be that they do not use their indigenous knowledge to maintain an ecological balance; they just happen to be biodiversity custodians by default.

But how many people still live under these conditions, and how many people want to live under these circumstances? Human relationships with the landscape are dynamic, not static activities that can be categorized as interactions independent of time (Zube and Busch 1990). It is particularly important to gain insights of the perspectives of the next generation. There is considerable evidence that younger people do not want to step into the footsteps of their forefathers, and non-farm employment opportunities are favored over agriculture (Parnwell and Taylor 1996; Rigg 1997). In Papua New Guinea, for example, younger people are alienated from traditional culture and oblivious to past natural resource management practices. Their harboring of high development expectations is viewed as a serious threat to biodiversity conservation (Sekhran 1996). Local people, whether the hill tribes of Northern Thailand, tribal people of India, Dayaks of Kalimantan, the Penan of Sarawak, or the native population of Amazonia desire many of the same material benefits that other more developed - in a technological and economic sense - peoples enjoy, including adequate nutrition, shelter, health care, education, watches, TVs and VCDs (Alvard 1993; Langub 1996; Ferraro and Kramer 1997). A common feature of community-based forest management and the devolution of decision making is that local people have difficulty recognizing just what benefits are supposed to come their way (GTZ 1995). Also, most people prefer immediate and secure returns over long-term and risky ones (Sekhran 1996), in particular when control over natural resources is constantly shifting (Malla 1998).

To assume that there are always ways to improve local incomes without depleting biodiversity is, at best, naive (Wells 1994/95). Even if it was possible, it is just as naive to assume that people are interested in conserving biodiversity and sustainable forest management and that they prefer to hang on to traditional practices and knowledge. Instead, many local people (even in remote locations) welcome the material goods they can obtain, although they knowingly destroy the resource that they depend on (Rajasekaran and Warren 1994). At the same time, they are reformulating their images of themselves, seeking the benefits of a fuller citizenship and demanding access to roads, education and health facilities, which in their view are symbols of modernity and development (Li 1995a).

The assumption that local people have an interest and knowledge of conservation and sustainable management needs to be reassessed. The low scale of impact may sometimes gives the illusion of sustainability when local people are in fact - like other stakeholders - susceptible to incentives to over-exploit natural resources.

The reality of contemporary local communities

Images of intact resource-managing communities are often used as a basis to advocate stronger legal rights and government recognition for community-based systems. Forward looking in intention, advocacy of this kind sometimes replaces the description of local communities, past and present, with descriptions of an ideal type (Li 1996; Hirsch 1997b). Many project surveys conducted for project implementation are biased towards men, the older generation, and people making their living primarily in subsistence agriculture and forest-oriented work (see Box 3).
The voices of the younger generation, whose activities, interests, perceptions and views are far more important for the long-term sustainability of conservation, are often not heard.

Box 3: The Continuous Problem of Survey Biases

It was decided to direct questions only to household heads over 25 years old. Younger men could provide only limited information about conditions before 1982 in households they now head. Thus, the survey was biased toward the perspectives and blind spots of middle-aged men, at the expense of those of women, younger men, or other groups. In addition, in the few villages where a substantial portion of the population support themselves primarily by work other than agriculture and agroforestry, the farmers and longer-resident ethnic groups are over-represented. This bias reflects the tendency to interview older and longer-term residents, rather than younger people and newcomers.

*Source: Mayer (1996)*

The result of biases and advocacy is a normative image of community and household behavior, particularly indigenous people, as having "a different world-view, consisting of a custodial and non-materialist attitude to land and natural resources, and want to pursue a separate development to that proffered by the dominant society" (Verlaat 1995). In fact, rather than being non-materialistic and separate from dominant society's development, examples from around the world indicate that local communities at the forest margin, and in the forests themselves, are increasingly affected by rapid marketization and modernization processes especially in the economies of Southeast Asia (Rigg 1997).

The term "local community" is often used quite loosely. As Gilmour and Fisher (1991) argue, it is a loose synonym for a group of people and of little use in implementing community forestry projects. They suggest to work instead with "interest groups", i.e. "a group of people who have similar sets of interests in respect of a particular situation". They acknowledge that shared resources and livelihood guarantees are characteristics of small groups, such as small tribes, neighborhoods or extended families, but seldom of whole village communities which tend to be rather heterogeneous, factional and stratified. This heterogeneity is dynamic and constantly changing, which explains why community regulations for forest use fail sometimes to continue effectively (Utting 1998).

Since conservation means different things to different people (Elliot 1996) and interest groups (Kremen et al. 1994) it is absolutely crucial to avoid a situation where a project negotiates with the wrong people due to ignorance about local power structures and the distribution of interest (Ingles 1996). However, who is to choose who is right and who is wrong?

The premise that local communities should be given a central role in reaching conservation objectives has the inherent dilemma of defining the "local community", their "indigenous knowledge" and "traditional culture". The attempt to catalogue tradition and locate an authoritative source able to present "the community" or "culture" leads to simplifications inevitably ridden with power (see Box 4), as articulate spokesmen, rendered more powerful by state support, overlook ambiguities in the meaning of indigenous terms and practices (Li 1996). It should also be noted that discourse and practice in support of community participation, organization or control remain problematic in some countries such as Indonesia (Barber 1997). In Thailand, on the other hand, it is the hierarchical nature of the society which provides much of the explanation for disappointing performance of participatory projects and grass-roots development (Rigg 1991).
Box 4: Inventing Traditional Communities and Imagining Communities

In an effort to consolidate land rights [in Upland Sulawesi, Indonesia], the state looks for simplified notions of tradition; in particular, it is interested in identifying the individual "owners" holding "traditional" rights to land. The 1947 Agrarian Law which recognizes the land rights of "traditional" communities (so long as these are compatible with the national interest) requires that the identity of this "community" and its "tradition" first be defined and pinned down. It is now, in these modern conditions and in the context of the commoditization of land that the Lauje are being "traditionalized" or "tribalized" for the first time. Historically, the Lauje were a scattered and individualistic group, without a strong sense of ethnic identity, and with little need for a formalized adat articulated in terms of "Lauje Tradition". They must now, however, begin to make land claims based on being a "traditional community". Without a centralized leadership structure, here is no agreement on who should speak for the group in articulating these questions of identity, community and tradition. Meanwhile, as some become quite effective in making and defending claims, colonizing and monopolizing land and having their names entered into government records, others are struggling to hold on to land and livelihoods.

Source: Li, T. Murray (1995b)

... the biodiversity issue in agrarian societies in the South revolves around competition for scarce resources, strategies for gaining access and struggles which sometimes involve direct physical confrontation as well as the creation, use and manipulation of legal means. There is a comforting and misleading notion of "community" which is used in many conservation documents. It has become a social construction which policy makers and foreign donors need and upon which they base assumptions about local management of resources. Anderson (1983) talks of "imagined communities" which meet policy objectives. In reality, "communities" are often highly differentiated - along lines of gender, age, wealth, for example - and therefore their members may have very different perceptions and definitions of biodiversity. Also, the implications of biodiversity loss - as well as the costs of conserving biodiversity - must be differentiated according to wealth, gender and age. There is a need to "deconstruct" the notion of community.

Source: Blaikie and Jeanrenaud (1996)

In addition, many local communities are not asking for less state involvement and more isolation, but rather a better state; a state that is more responsive to their needs and offers them access to services and facilities.

The most daunting problem is that different interest groups subsumed in the category "community" interact with the local environment and its resources in different ways. This interaction is constantly changing and depends as much on the type of prevailing agroecosystem as it does on the local economy and influences of external forces.

Today, many rural communities do not view society and nature as indistinguishable and regard themselves as controlled by the natural environment. Rapidly evolving social systems and community values defy any broad generalization but it appears that increasingly rural communities perceive that natural resources may be dominated and sacrificed for personal gain. Furthermore, the normative images of intact resource-managing communities are in many cases not only misleading, but defeat the purpose of constructive consensus building and frustrate those who view the empowerment of local communities as a precondition for successful biodiversity conservation.
As Neumann (1996) stresses, it is crucial that project design addresses the fact that villagers are often politically fractured and socially differentiated. Fractures in the local community may run along gender, wealth, class, age or ethnic lines of identity. Also, divisions within the communities shift perhaps as communities present a unified front to a perceived threat from outside, sometimes multiplying in internal struggles over land and resources.

**Appropriateness of community-based tenure, knowledge and management systems**

Community-based tenurial systems are rarely acknowledged by national governments or logging operators in any meaningful way (Lynch 1998). While changing forest ownership and transferring authority over forests to local communities is not a panacea to the problem of resource degradation, it is usually viewed as a prerequisite for biodiversity conservation. Increased tenure security has been linked to sustainable farming practices (Cook and Grut 1989; Lutz and Young 1992) and is assumed to also apply to forest management. People are only willing to invest their scarce resources if they know that ultimately they will reap the benefits of conservation activities.

Recent experiences with decentralization in Bolivia suggest that much uncertainty remains regarding the implications of tenure change and devolution for resource conservation (Box 5). Positive examples are just as common as negative ones and it remains to be seen "whether decentralization will lead to greater conservation of natural habitats and reduced threats to biodiversity" in the long run (Kaimowitz et al. 1998).

Although necessary, tenure security is not a sufficient condition for sustainable forest management and conserving biodiversity. In Papua New Guinea, for example, many communities have been campaigning for years, for various reasons, including the desire for rent capture and consolidating power, to attract extractive development, mining and logging, to their communally held areas (McCallum and Sekhran 1996). The benefits that miners and loggers can offer substantially outweigh the ones of conservation (Box 6). Freedom to use their natural resources as they please leads to forest degradation, which is not unlike the situation in other countries where natural resources belong to the state.

Resource and property rights are also changing in tune with the transformation of agrarian societies and livelihood strategies as well as the influx of migrants. For example, in parts of Kalimantan many of the forests managed by Dayak families, but communally shared for many products are rapidly being privatized (Peluso 1996; Peluso and Padoch 1996). In particular, where roads change the relative isolation of formerly remote areas and markets for land develop it is not uncommon to find parcels of forests, that *de jure* belong to the state, but *de facto* are traded in the market. The interest in communally held resources or common property is thus diminishing.

The relationship between devolving responsibility and community-based tenure on one hand and biodiversity conservation on the other defy any broad generalizations. However, if biodiversity conservation requires some management, the contested issue of land tenure cannot be spared in the discussion of viable options, but as the evidence suggests it should not be viewed as "the solution" for all the problems.
Box 5: Decentralization and biodiversity conservation in Bolivia

Local governments in the indigenous areas of San Ignacio de Moxos and in Alto Ivón in Riberalta patrol their areas to avoid encroachment from logging companies, ranchers, or agricultural colonists, ... In other cases, local indigenous governments have suffered from petty corruption and sold their timber resources to logging companies with little concern for sustainable production. In balance, the regional experience suggests that giving indigenous communities greater control over their natural resources, by strengthening both their land tenure security and their local governments positively affects resource conservation....Most groups concerned are still more concerned with their access to existing resources and short-time incomes, than with long-term sustainable development.  
Source: Kaimowitz et al. (1998)

Box 6: Communal Forests for Wholesale in Papua New Guinea

Many communities have a world view that is inclined towards the short-term, planning for their perceived immediate needs rather than for their long-term welfare necessities. The medium to long-term social, economic and environmental consequences of their current land use practices are poorly understood and often ignored.

In this context, forest-edge communities are opting to sell harvest rights to timber companies as a means of obtaining cash and social services. This provides "development", as they perceive it, and addresses their concerns regarding economic exclusion. The fact that it does little to establish a framework for durable development rarely enters the decision-making calculus. Conservation, because it yields future, diffuse and often intangible benefits, many of which have no direct monetary value, tends to be undervalued in this context and seen to conflict with community aspirations. This ethos tends to be reinforced by many developers and Government agencies.  
Source: McCallum and Sekhran (1996)

Conclusions

The discussion has focused predominantly on problems of involving people in "a project" or of devolving responsibilities for resource management during the course of "a project". There is more to biodiversity conservation than demarcating a protected area on the ground and implementing "a project". In fact, a project-based approach has inherent limitations that are often overlooked. Many factors leading to deforestation and forest degradation can neither be influenced by local communities, nor by project personnel during the course of even a long-term project. Neumann (1997) notes, "local participation and local benefit-sharing, however, are not the same as local power to control use and access, which, in the end, is what many communities seek".

Identifying the human consumers of natural resources requires considering all socio-economic and political groups. The needs and interests of other stakeholders frequently contradict those of the direct users. There is a need to recognize the stratified nature of many rural societies. While they may have been traditionally egalitarian and non-hierarchical (although this seems unlikely), internal divisions are emerging due to marketization, modernization and the commodification of the natural resources.
An important lesson is that biodiversity conservation must ignore or consciously abandon those areas where communities have already made choices that will likely cause long-term conflict with the imperatives for conservation. The solution to forest loss is not in finding additional economic incentives for the rural poor and in devolving more and more responsibilities, but in generating more attractive alternatives elsewhere. Although in certain low population areas livelihood enhancement may be a better option (Brown 1998a). There will always be the potential for conflicts of interest between rural people's ability to earn a living and the conservation of areas of high ecological value, especially when "communities are anxious to leap-frog the development process to get the rewards quickly" (McCallum and Sekhran 1997). Conservation projects can aim to mitigate such conflicts of interest by focusing on alternative income sources and education programs. However, some conflicts will persist and the need for protecting forest areas through policing and enforcement will often be inescapable (Wells 1994/95; Ferraro and Kramer 1997).

Finally, the results of devolving management responsibilities have been disappointing because the linkages between socio-economic development for local residents and the needed behavioral response to reduce the pressure on the remaining forest resources and adjust use intensities are not well established. In large parts, the inability to establish these linkages results, first, from a lack of understanding of livelihood strategies at the forest margin and their relationship with the forest resource. Second, our limited knowledge of household behavior prevents us from predicting the effects of many interventions. The assumption that the living standards of forest residents can be improved and biodiversity conservation objectives can be reached simultaneously remains untested. Hence, Ferraro and Kramer (1995) conclude that "if you cannot identify a very precise conceptual link between a proposed intervention and household decision-making, do not proceed with the intervention". The significance of this conceptual link is perhaps the most important conclusion. It should motivate us to re-examine our perceptions of what rural livelihoods and communities are all about. It should make us understand that communities are not only homogeneous entities but that also substantial differences among villages, districts, economies and forests exist. It should spur us to examine the potential nexus between the interest of resource users in devolution and the objectives of biodiversity conservation. This nexus and the ability to conserve and manage forests depends on numerous variables, such as: population density, the arrival of technological innovations (e.g. chainsaws), and improved access to infrastructure including education and markets. They are good indications of the extent of market penetration and modernization within a community. The more integrated - here again in a technological and economic sense - a community is, the more stratified are its members, which makes the introduction of community-based conservation and the devolution of forest management a considerable challenge. Education and modernization lead to a fast disappearance of local knowledge. It is futile to work with the oldest community members in an attempt to fix tradition when it is the younger people whose involvement in sustainable activities ultimately counts more.

While the "Copernican" revolution that takes governments out of the center of the universe is welcome, the reaction of uncritically putting local communities at the center may be equally unsatisfactory. Partnerships and dynamic interactions between different stakeholders may be at the heart of the future of biodiversity conservation. Most important for the development of conservation strategies is to challenge the "received wisdom" about forest dependence, stakeholder involvement, community cohesion and the interest of local people in biodiversity conservation and forest management. It is just as crucial as reconsidering the conservation-development orthodoxies that have historically influenced project designs and are leaving their marks on today's devolution, decentralization and privatization policies too.
A final point that needs to be stressed is what the purpose of protected areas is. If the purpose is the conservation of biodiversity, then the following observation by Melvin Bolton (1997) emphasizes that successful protected area management strategies are insufficient:

"It has become fashionable to say that 'parks are for people', but the other 97% of the Earth's surface is also for people so the important thing is to be clear about why parks are special."

References


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20 We are grateful to Douglas Williamson for bringing this issue to our attention


Local People Amidst the Changing Conservation Ethos: Relationships between People and Protected Areas in India

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Introduction

In India, as elsewhere, there is a move towards involving local people living in and around forests in biodiversity conservation. This is a response to the legitimate demands of local people to be involved in activities that affect their lives, as also a necessary precondition for the success of conservation efforts. But successful examples where local people's development needs have been effectively reconciled with biodiversity conservation are difficult to find. Presently the network of Protected Areas (PAs) in India covers an area of 8.1 million ha encompassing about 14 percent of the country's forest area and 4.61 percent of its landmass. From six National Parks (NPs) and 59 Wildlife Sanctuaries (WLS) in 1970, the number increased to 85 and 462 in 1998 respectively (WII 1998). The basic management approach of these areas has been the conventional isolationist approach, whereby management seeks to protect the park from people living in surrounding areas. The central concept has been to conserve the perceived "natural state" or "wilderness" (Pimbert and Pretty 1995). These areas were explicitly seen as "pristine environments similar to those that existed before human interference, delicately balanced ecosystems that need to be preserved for our enjoyment and use and that of future generations" (Gomez-Pompa and Kaus 1992). The philosophy behind this approach is thus of preservation or protection. The role of the government is to guard natural resources from 'inappropriate' uses, in order to shield wildlife and other natural resources from exploitation (IIED 1995), and this is achieved through strict enforcement of legislation, patrols to prevent illegal activities and infrastructure maintenance.

Out of a population of 900 million in India, 64 percent of the rural population and 100 million tribals (Lynch 1992) depend on the forests for their sustenance. Ninety million cattle graze inside the forests (Dwivedi 1993). Firewood consumption in India is 173,412 Ktons (RWEDP 1997), with 62 percent derived from forests (Leach 1987). Income from non-timber forest products (NTFPs) is important for the 60 million households living below the poverty line (World Bank 1991). According to a survey carried out in the mid-1980s, over 65 percent of the PAs were characterized by human settlements and resource use (Kothari et al. 1989). In such a scenario an attempt to protect the PAs from human intervention by coercion results in hostile attitudes of local people towards wildlife management and forestry staff. This often fuels open conflicts between communities and the forest department. Between 1979 and 1984, 51 clashes were reported in connection with NPs and 66 with WLS (Guha and Gadgil 1992).

Joint Forest Management and Ecodevelopment

Recognizing the futility of, and problems associated with, protecting forests and wildlife by excluding local people and without examining their dependencies, has resulted in a shift towards participatory approaches in forest and in situ biodiversity conservation. Via the National Forest Policy (1988) the Ministry of Environment and Forests, Government of India, declared that local...
communities were to be involved in natural resources conservation. Subsequently in 1990, the Ministry issued a circular for joint forest management and resource sharing. The Joint Forest Management (JFM) approach seeks to develop partnerships between state forest departments (as owners and co-managers) and local community organizations (as co-managers) for sustainable forest management. User groups receive usufruct rights only, clearly noting that land is not to be allocated or leased (Poffenberger and Singh 1993).

The Government of India provided further impetus to this declaration, particularly in the field of PA management by committing funds for ecodevelopment since 1991, with the basic objectives of reducing pressures on the core area of PAs. Ecodevelopment or Integrated Conservation and Development Projects (ICDP), as they are called otherwise, seek to conserve biodiversity through local economic development and by offering alternative income generating opportunities to reduce forest dependence. Ecodevelopment is a site-specific, conservation-friendly package of measures for rural development and use of natural resources by local people so as to contribute to PA conservation (Panwar 1992). Both JFM and ecodevelopment emphasize people's participation in natural resources management through empowerment. However, while in JFM villagers are able to obtain a share of forest produce, wildlife laws prohibit the extraction of forest produce for human use from NPs and WLS (Singh 1998). The scope for linking ecodevelopment with JFM is hence limited thus reducing a potentially important means of utilizing bufferzones in WLS to meet the resource requirements of the local people (Rodgers 1992).

The fundamental difference between ecodevelopment and rural development is that, while the main objective of rural development is poverty alleviation and raising living standards, the *sine qua non* of ecodevelopment is biodiversity conservation in PAs. Ecodevelopment attempts to create a legal and social environment for people's participation in conservation and seeks to build support for biodiversity conservation through improvements in the welfare of local communities. It tries to compensate (in cash and kind as well as through alternative off-farm income generating opportunities) local communities for the lost access to resources inside the PAs and the damage by wildlife.

Due to low initial investments in capacity building and implementation, field practitioners were grappling with the intricacies inherent in the new concept. Recently, investments have increased with additional resources made available through external sources such as the Global Environmental Facility (GEF) and the World Bank (from 1995 onward). The predominantly undocumented past experiences indicate mixed results. The apparently progressive concept needs to be assessed in light of its impacts particularly on the main actors *i.e.* the local communities. The following sections critically examine the ecodevelopment concept as well as a range of issues that have emerged during the last decade, and discuss some emerging lessons.

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22 Excessive concern for revenue, a disregard for people's needs and a lack of initiative in involving people in forest protection work need to be corrected (Indian Forest Policy Statement 1988).

23 Prior to the 1991 amendments to the Wildlife (Protection) Act, resource use in the buffer zone of PAs was regulated, while the core area was completely closed. Most PAs and Project Tiger areas in India have a core/buffer zonation; the core zone has the NP status while the buffer could either be a WLS or a reserved forest. The buffer zones were designed to reduce border conflicts by allowing regulated resource use. According to the 1991 amendment, in case of WLS, the Chief Wildlife Wardens have to certify that any manipulation does not harm wildlife, and this manipulation has to be approved by state governments.
Strengths of the Current Conservation Program

Ecodevelopment is based on the principle of equity. It recognizes that people living near PAs may have to bear enormous opportunity costs while deriving little tangible benefits from conservation. Conservation measures must therefore provide alternative livelihood strategies for natural resource dependent communities.

Ecodevelopment includes support to common and private property resources (Rodgers 1992). This is different from the earlier approach of bufferzone management that concentrated activities at the periphery of the PAs on government land. The new approach seeks to move beyond the dubious assumption of the bufferzone management concept with its limited benefits that were insufficient to motivate people to change resource use patterns in accordance with the conservation requirements. The new approach acknowledges instead, that the relationship of local people to forests is all-encompassing and permeates social, economic, cultural, religious and even political aspects. It therefore attempts to link conservation to the broader process of rural development considering the existing socio-cultural milieu (Badola 1995).

To ensconce development in conservation, ecodevelopment envisages the integration of its activities with other development agencies. The PA manager may link existing rural development programs to conservation projects. This is crucial to avoid the waste of funds and to ensure long-term sustainability of activities (Badola 1996). The proposition that all ecodevelopment funds should be channeled through the Panchyat (local administrative unit) institutions at the village level is an important step in this direction.

As the concept evolved, the role of the primary stakeholders shifted from supplicants hoping to become "beneficiaries" of the largesse distributed by the government (Mahajan 1991) to active partners in project design and implementation. Community participation increased efficiency - on the grounds that if people are involved, they are more likely to agree with and support any new development or service - and is a moral right. By empowering people it stimulates collective action and initiates institution building (Pimbert and Pretty 1995). By ensuring that tangible benefits flow from conservation, the conservation-development linkages are strengthened. The state government resolutions of West Bengal, Madhya Pradesh and Rajasthan, pertaining to sharing of consumptive and/or tourism benefits from PAs, are apposite examples.

Weakness of the Current Conservation Program

The concept as interpreted and implemented in India suffers from some inherent weaknesses. Under the present tenurial arrangements it is difficult to involve local people in conservation as the earlier concept relies on excluding people from the PAs rather than integrating them. Most definitions of the concept refer to reducing the "negative impacts" of people on PAs and PAs on people. With few exceptions, linkages of people with PAs in the form of access to resources are merely incidental to the management practices (Kothari et al. 1997). Although the exclusionary approach may achieve a reduction in biomass extraction from PAs, it fails to develop any interest in conservation among local communities. The approach has neglected to push for changes in land tenure legislation and agrarian reforms - factors that could promote genuine local interest in conservation - and, more generally, has not adopted a political economy approach to identify the underlying causes of environmental degradation (Blaikie and Brookfield 1987). Tenure insecurity reduces the incentive to invest in land improvement and conservation. Some activists can therefore be forgiven if they view the motives of the national governments for advocating ecodevelopment and JFM with suspicion. They consider both as tools by which the government...
attempts to gain support of the people on one hand - without being concerned about their welfare - and placates international donor agencies on the other.

Ecodevelopment by definition, under the present legislation, limits participation of people in PA management. The categories of NPs and WLS do not allow any space for managing resources by or for the local people. For ecodevelopment to achieve its basic objective of biodiversity conservation, people can only be empowered in aspects of development, including local resource management, that do not lead to exploitation of wildlife or forest resources. Participation is thus passive. Moreover the ecodevelopment approach rests on unproven assumptions that are now increasingly being challenged (see also Enters and Anderson in this volume).

**Challenging assumptions**

A number of assumptions on which biodiversity conservation is based remain untested. Some of these are as follows:

**Assumption:** All human use is detrimental to wildlife conservation interests.

**Reality:** Numerous ecological studies have shown this is not necessarily true (Saberwal 1995). In fact, in some cases excluding human activities from ecosystems can actually reduce biodiversity and lead to habitat deterioration. In India, in the Keoladeo National Park, a ban on buffalo grazing led to the invasion of the wetlands by *Paspalum distichum*. The area of open water for major waterfowls decreased and subsequently bird populations declined (Hussain 1996). Other studies have also pointed out that certain habitats have improved following human use/habitation (Arhem 1985; Western 1989; Balee 1989; Blackmore et al. 1990; Homewood and Rodgers 1991; Ramakrishnan 1992).

Conventional wisdom sees certain areas as pristine or primary. Accordingly, such areas receive high biodiversity values and top priority for conservation. Certain strands of recent thinking, however, strongly criticize such notions of originality (Fairhead and Leach 1996). In fact all over the world, present day forest quality and biodiversity patterns reflect the influence of past land-use practices (Fairhead and Leach 1993; Leach and Fairhead 1994; Gomez-Pompa and Kaus 1992; Foster 1992).

**Assumption:** Biodiversity conservation is generally compatible with economic development.

**Reality:** It is naïve to assume that people will be more inclined to conserve biodiversity if their living standards improve. Examples show that where tourist inflows and income levels increase pressures on forests resources increase too, as the scope for enhancing income through exploitation of biodiversity improves. This is the case in the Periyar Tiger Reserve and Borivilli and Mudumalai Sanctuaries, which are surrounded by economically well-off communities whose prosperity is increasing over the years due to tourism. But this prosperity has at the same time been detrimental to the surrounding PAs. Unless people are able to link tangible benefits with PA management and unless strong institutions are developed, as is the case of the Annapurna Conservation Area in Nepal, the above assumption may not hold. Moreover there may not always be a way to improve local incomes without depleting biodiversity.

**Assumption:** Resource-poor people living next to PAs will stop using forest resources due to the support and development of alternative livelihood strategies.

**Reality:** A complete stop of forest use by local people is generally not possible. First, none of the alternative opportunities tested so far generated sufficient interest and benefits to dissuade forest-dependent people from going to the forests. Moreover, in most cases it is difficult to develop sufficient and lucrative alternatives so as to involve most villages in and around PAs (Pandey
Secondly, resource use has more than economic dimensions. From the perspective of forest utilization, dependency as often assumed, is not a function of economic status alone. Forest dependence due to a lack of purchasing power or physical lack of access to alternatives can be termed "actual" dependency. However, forest use is often also a result of its free access and part of cultural and traditional lifestyles of the people. This can be termed "habitual" or "traditional" dependency, which most development activities do not address (Badola 1997b).

**Assumption:** There is a direct causative relationship between environmental degradation and poverty.

**Reality:** In many areas of northern, eastern and northeastern India the poor have managed their environment sustainably. A direct causative relationship between poverty and environmental degradation assumes that reducing poverty through development activities will automatically reduce environmental degradation (Lewis 1988). A number of studies (Gill 1993; Fairhead and Leach 1993; Leach and Fairhead 1994) have questioned the conventional wisdom that poverty leads people to over-exploit their natural resource base and that a declining natural resource base leads through a continued "downward spiral" to more poverty (Durning 1989). Poverty is frequently defined in quantitative terms and aggregated in terms of a "physical quality of life index". Rarely is poverty defined by the poor themselves (Chambers 1983). It is important to identify different dimensions of poverty such as social inferiority, vulnerability, seasonal deprivation and powerlessness. Where poverty-environment linkages are concerned, this is crucial as different dimensions of poverty are related to environmental change in quite specific ways. Hence they require different policy measures (Leach 1994). Further, factors such as tenure security, variability of income sources and social and cultural relationships also play a major role in determining the ways in which people view, manage and use natural resources.

**Achievements so Far**

The ecodevelopment approach heralds a new epoch in state-people relationship in conservation. For more than a century, the strained relationship between the forest department and local communities has prevented the effective protection of forest resources but generated conflicts instead. In such a climate, an approach which treats the forest department and local communities as partners in management, or tries to integrate welfare aspects with conservation, is important and timely. Ecodevelopment has been taken up in 80 PAs through a centrally sponsored scheme. The Government of India has also launched an ecodevelopment project in seven PAs with World Bank assistance and two PAs are being supported through the Forestry Research, Education, Extension Projects of the World Bank. Under the auspices of the ecodevelopment project numerous social welfare activities have been planned for local communities living in the vicinity of PAs. These have provided relief to people living in remote areas often ignored by development agencies. Activities such as the provision of drinking water and irrigation facilities, soil and moisture conservation, fencing, village roads, health care camps and employment generation have been undertaken by the forest department and have improved relationships between local communities and PA management staff.

All the ecodevelopment activities are administered by Village Ecodevelopment Committees (VEC) or Forest Protection Committees (FPC). The poor and marginalized community members are represented in these committees which has helped to generate an awareness of their knowledge and self-help capabilities. Under the ecodevelopment project there is also ample provision for capacity building activities for forest department personnel and local people. However, planning and implementation are still hampered by various constraints.
Constraints in Planning

There is a lack of understanding in the concept not only among local people but also among the forest department officials, particularly the field staff. The villagers’ perceptions - or misperceptions - include ecodesvelopment being a leopard imported from the United States, and some foresters view it as an opportunity to rid the environment of domestic livestock (see Box 1). The field staff considers it as extended duties that were hitherto restricted to the forests but now expanded to other areas as well. In fact, the situation is similar to the fable of the four blind men who managed to touch only parts of the elephant's body. When asked to describe an elephant, later, they could describe it only as the part that they had touched: a snake, a ladder, or a pole. PRAs (Participatory Rural Appraisal) and RRAs (Rapid Rural Appraisal) are reduced to fads with everyone using but no one actually understanding them. Frequently the outputs of PRAs are turned into annexes - a sometimes mandatory funding requirement - thus limiting the scope of application of the local expertise.

**Box 1: Perceptions about ecodesvelopment**

A micro plan for Bhetuli village located on the fringe of the Binsar WLS in northern India has been prepared. This is the first micro plan for this WLS under the ecodesvelopment project. The officials are curious to find out whether the participatory process has made headway and the draft plan is acceptable to the villagers. The meeting begins. The villagers do not know anything about the micro plan. They were not consulted. Suddenly one of the women starts shouting. "You first took our fingers then our hands and now you have come to catch us by the throat. You want to create walls around the WLS and put barbed wires. You want to bribe us and take away our rights by getting our signatures. We will not be fooled. Give us our rights". She thunders. Her statements draw applause from fellow villagers. To lend a dramatic touch to her statements, she sways her sickle and says that she will cut the neck of the *Sanctuarywallahs* (PA management staff). She is assured that no walls will be created. "Give me in writing" she retorts. "And give me your address too before you proceed to transfer". She has come without slippers and she does not have another dhoti (dress traditionally worn by Indian women). "And you want to take away whatever remains", she says. She is not correct. No wall is being created around Binsar WLS and no fence is being contemplated either. The newly constituted spearhead team is merely in the process of formalizing the ecodesvelopment micro plan.

Source: Bhartari (1998)

In a training workshop held at Corbett NP for the PAs of Uttar Pradesh all the teams had returned after preparing draft ecodesvelopment micro plans for their respective sites. They were required to make presentations regarding the process they had adopted for preparing the plans. One team presentation went like this. "Since the villagers were totally illiterate we prepared the village maps ourselves, during the PRA exercises".

Experience has shown that by the time concepts reach the lower project levels they are translated into a time-bound, target-driven action plan with a predetermined number of micro plans, to be prepared through people's participation in a fixed number of days. In addition, certain funds have to be spent within a limited time on activities specified within a broader framework. This hardly provides enough time and leeway to build a common understanding and sharing of norms. "The political expedience of working with existing structures of dominance is easily disguised by citing the importance of respecting traditional culture. This dilemma can only be resolved by long and painstaking work by PA staff who are themselves committed to progressive ideas. But this may set the time frame of ecodesvelopment awry and as the higher authorities are impatient
to achieve tangible targets, the PA staff will be asked to pull up their socks", observes Bavisker (1998).

In spite of its popularity, participatory approaches generally lack attitudinal changes amongst foresters (Badola 1998). "Participation", much needed to get plans approved, exists. However, it is usually limited to informal discussions. The forest department works in a manner that is hierarchical and almost totally non-participatory in its decision-making processes. How can it then be expected to behave in a manner that it did not practice and, until the very recent past, did not even preach?

**Constraints in Implementation**

The ecodevelopment approach has entailed a rapid change and expansion in functions. The jurisdiction of the forest department has now extended to villages, and under the ecodevelopment program a large number of rural development activities have to be taken up. In most areas, the staff is required to perform these additional duties along with their traditional protection duties, although staff capacities have remained unchanged. A lack of trained people in the field of ecodevelopment is obvious. In most cases training programs are conducted too late, i.e. only after plan preparation and consultations with local people (Box 2).

**Box 2: Training in ecodevelopment under the FREE Project (1995-1999), Great Himalayan National Park**

In principle, participatory management, ecodevelopment, and various aspects of biodiversity conservation were the required training areas for all staff under the FREE Project. Local institutions or *in situ* training programs were more effective. In practice, training programs could not be undertaken due to lack of planning and funding. The training that took place consisted of i) a four-month overseas training course on monitoring biodiversity, attended by the Park Director, ii) one-and-a-half month overseas training courses on project planning attended by the Deputy Director and a forest ranger. None of these people received training in community-based management. The *in situ* training to address the needs of the project staff, wildlife watchers, and ecoworkers took place only in the fourth year of the project.

Source: Pandey (1998)

Considerable bottlenecks exist at all levels in the funding mechanism. In most cases the PA management does not have financial, managerial and administrative autonomy. Mechanisms for plan approval, procurement of funds, expenditures and controls are unclear. Weak capacity within the PA agencies to handle the huge budgets and the lack of technical skills to deal with the new roles are major problems at practically all the sites. In addition, the PA staff is now required to elicit the participation of local communities in conservation, a new and dual role for which most officials are ill prepared. The concerns often voiced by this group is "how can we expect people to come to the meetings called by us or to believe in us when only yesterday we have impounded their cattle for entering the PA and tomorrow we may be required to punish them for gathering fuelwood?" and "to what extent is participation of the people required, if we go too far, they will take us for granted?". This dilemma although being voiced largely by the field staff haunts all ranks of the forest department.

So far the focus in ecodevelopment has been on activities rather than on processes. Activities are largely selected via a basket approach through a referral list. This list can be quite comprehensive but does not amount to a strategy. As a result, there are generally weak conservation-
development linkages. The forest department's choice of activities with direct conservation-development linkages might not find favor with the communities, who might prefer roads, micro-irrigation and other activities (Box 3). The field practitioners then struggle to prove that indirect linkages have been well spelt out (Rathore et al. 1998).

**Box 3: Establishing linkages**

One village demanded that ecodevelopment funds be used for street lighting in the main road. This proposal was not positively received because the implementing agency did not see a link between lights and reducing pressures on the PA. However, the villagers argued that many young villagers sneaked out at night to poach animals in the PA. If the streets were lighted they could be more easily spotted and prevented!

*Source: Singh (1998)*

Another problem with ecodevelopment is its failure to control land use on the fringes of the PAs (e.g., development activities taking place next to the Rajaji National Park, the proliferation of tourist resorts in the periphery of Periyar TR and the mushrooming of the cement factories on the fringes of the Gir Lion Sanctuary). Realizing the critical significance of including PAs in regional plans, the Staff Appraisal Report of the World Bank (1996) states, that "PAs can be successful in realizing their long-term conservation goals only to the extent that their priorities can become integrated into large-scale land-use planning initiatives and regulations at the local and regional levels". If various agencies work for the common agenda of development, which is rooted in conservation ethics, financial and technical resources could be easily pooled (Rathore et al. 1998). In view of the huge government outlay in rural development for the 9th plan, it becomes all the more sensible to integrate conservation with development. Although the ecodevelopment project envisages inter-departmental cooperation, the legal, policy and administrative frameworks to achieve this remain hazy. In most cases, the PA management staff does not even control the activities in the buffer zones. If the bufferzone does not have the status of a PA, jurisdiction is generally with the territorial divisions, in which case management objectives may be of a rather different nature.

Capacity building of local people remains weak especially in accounting and managerial skills, institution and team building, and leadership and technical skills such as processing and marketing. In the absence of capacity building there can be no meaningful partnerships and programs cannot be sustainable. Instead they may be appropriated by a few powerful individuals.

Inadequate representation of poor and marginalized people in VECs is a factor that the PA staff finds difficult to resolve. Although good VECs have adequate numbers of women and low caste representatives, they usually lack the ability to influence the decision-making process (Box 4). The key actors in the forest department who spend the greatest time and energy in translating the policies into activities are the field staff. In most cases, the PAs are in remote areas and the staff have to function in tough conditions alienated by the local communities. Most postings do not provide sufficient and comfortable staff facilities. In the absence of sufficient incentives, the wildlife sector does not attract talented staff. In fact, wildlife management is considered punishment by most. With the focus on participatory approaches, staff workload has increased and in the absence of any consideration of their problems it is difficult to maintain their commitment. The fragile relationship between the field staff and the local people can easily be destroyed and participation built on trust can be obstructed by staff members who fail to honor their commitments (Hobley 1995).
Box 4: Women and low caste people in Village Ecodevelopment Committees

The good VEC includes women and Dalits (low caste people), but if the forest guards want anything done, they know that they have to approach the traditional power center of the village - the Devta committee. This committee of upper caste men wields great power over resources and rituals.

The State Government authorities allow villagers on the periphery of Rajaji NP to collect Bhaber grasses inside the national park. As a trust-building measure, the order was issued in 1995 by invoking provisions of the Wildlife Protection Act. Women and children make the ropes and their sale constitutes the main income of the people. The villagers are allowed to go inside the NP on foot and collect the grass, for two months each year. In a meeting held at village Ganeshpur on the fringes of the Park in 1998, the village women were cursing the park authorities for not allowing them to collect the grass for which they had to pay a lot of money to the forest guards. The lady motivator for the village told them of the above arrangement. Most of them admitted that they were unaware of it.

A look at the state government order on ecodevelopment shows that the provision for membership of the VECs is either for one family member (e.g. in U.P and Gujrat) or for at least one member (e.g. Maharashtra). Only the West Bengal order mentions joint membership of husband and wife but here also either of the two can represent the household in meetings. There is thus very little scope for women to even attend these meetings.

Source: Bavisker (1998)

Ways Forward

The foregoing problems (existing and perceived) and lessons learned in the practice of ecodevelopment also point to ways forward.

The main partners in conservation, the local communities and the field staff need to be empowered through training and capacity-building programs. Flexibility in terms of time and fund allocation is needed at the planning stage itself. Conservation awareness has to become an integral part of each ecodevelopment program. Intensive communication efforts using a variety of media are necessary to create the right atmosphere in the villages, transfer technologies, build confidence in the participants and create a spirit of collaboration among PA personnel and village people (CEE 1997; Badola 1998).

In biodiversity conservation, local people need to receive tangible benefits even in the short run. The most significant benefits at the local level are the consumptive benefits such as fuelwood, fodder, and NTFPs, as well as benefits from tourism (WellIs 1992). To the extent that resource sharing improves living standards without jeopardizing the resource sustainability and overall conservation goals, ecodevelopment can contribute significantly by linking development with conservation (Rathore 1996). De facto use of resources is happening in most PAs despite legal restrictions. People tend to become indiscriminate in situations where they find no legal recourse. It is a question of interpreting the law creatively and taking decisions on a case to case basis.

Moreover social scientists also question the assumption that local communities living in and around forests should follow prudent and austere lifestyles when the society at large is allowed to lead extravagant and profligate lives. Conservation in key centers of biodiversity stands a better
chance of success if natural resource use is treated from a national perspective. Such a consensus will not foist conservation on to some villagers while other members of the society waste resources (Bavisker 1998).

To secure effective and active participation of the communities, programs must be able to restore the local institutions that are important for the environmental entitlements of various societal sections. According to Cernea (1987), "resource degradation in the developing countries, while incorrectly attributed to 'common property systems' intrinsically actually originates in the dissolution of local level institutional arrangements whose very purpose was to give rise to resource use patterns that were sustainable". It is important to acknowledge that resource priorities and requirements differ among the various sections within a community. Successful, people-oriented conservation must address not vague societal goals but socially differentiated ones in which the diverse perspectives and priorities of individuals, families, local communities and conservationists are accommodated (Fairhead and Leach 1994). In addressing the issue of participation, successful people-oriented conservation projects establish equitable partnerships, so that all stakeholders have an equal opportunity for control, management and receiving benefits. Stakeholders are given the chance to take part in joint analysis, development of action plans and implementation.

To ensure that all development activities are rooted in conservation ethics, institutional linkages with mainstream development programs need to be formalized. The 73rd amendment to the constitution of India (1993) offers scope for greater involvement of the formal *Panchayat* system in ecosystem management. The subjects that are now under the jurisdiction of the *Panchayats* include land improvements, implementation of land reforms, land consolidation and soil conservation, minor irrigation, water management and watershed development, animal husbandry, fisheries and NTFPs. To be able to make informed decisions the management of PAs needs professional researchers to collect baseline information and carry out ‘action research’. Quantitative and qualitative monitoring and evaluation indices are required to measure progress towards the objectives, guide project management and assess progress towards sustainability once external support is withdrawn.

To achieve all this requires a firm political will. Conservation and development issues are not only technical or economic in nature but also political. Development and politics are no longer separate entities. Politics is not only a part of the solution but is itself a problem that needs to be addressed (Hyden 1998). Attention is needed not only in terms of policy but also in terms of the rules that shape actions.

**Acknowledgments**

I thank S.K. Mukherjee, Director of Wildlife Institute of India for encouraging me to participate in the International seminar on decentralization and devolution of forest management in Asia and the Pacific, Nov 30-Dec 4, 1998, Davao City, Philippines. The funds for my participation were provided by RECOFTC, Bangkok. S.A. Hussain helped generating thoughts during frequent discussions and gave valuable comments on the manuscript. Discussions with B.M.S. Rathore and A.K. Bhardwaj helped in clarifying certain issues. Thomas Enters edited the manuscript. Steffan Weidner, FAO, Bangkok and Michael Victor, RECOFTC, Bangkok helped me in various ways for my participation in the seminar.
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Decentralization and Devolution of Forest Management in the Philippines: Uneasy Steps to Institutional Maturity

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A Commitment to Local Empowerment

In 1991, the Philippine legislature made a landmark decision in local governance by approving the Republic Act 7160 or "the Local Government Code of 1991". This law transferred to Local Government Units (LGUs) or authorities at the provincial, city and municipal level, the powers of taxation, budgeting, planning and management that were for decades exercised by central government authorities and agencies. The new law also made the LGUs directly responsible and accountable for basic public services in health, infrastructure and public works, agricultural extension, tourism, investment programming, and environmental management. In addition, RA 7160 established mechanisms for direct civic participation in local governance by allocating a number of council seats to civil society members in key centers of local decision making.

Through this law, policymakers in the Philippines gave flesh to the principle of local empowerment and people's participation in governance enshrined in the country's fundamental law - the 1987 Philippine Constitution.

It was, however, only a first step. Whilst broader fiscal and decision-making powers and responsibilities were given to local authorities, essential regulatory and rule-making functions remained with the central authorities. In most instances, local authorities continued to serve as key enforcers and implementers of centrally initiated and designed plans and programs.

In the Department of Environment and Natural Resources (DENR), for example, decentralization of natural resource management responsibilities was limited to the management of communal forests, community watersheds, and establishment of greenbelts and tree parks. It also covered approvals for minor mineral resource extraction activities such as sand and gravel quarrying. On the other hand, enforcement of forest protection laws against illegal logging and other resource extraction was entirely handed over to LGUs. This is also the case for environmental management. Local government powers in environmental management were concentrated in garbage collection and disposal, and the enforcement of environmental laws on smoke-belching and pollution.

Except for health service management and delivery, central government authorities (the DENR included) retained the vast rule-making, monitoring, standard-setting, and permitting of vital technical, legal and institutional functions. Their reluctance to relinquish power can easily be explained by the "fear of losing identity". This fear is based on the premise that central authorities provide a broader framework and therefore greater understanding of the issues and concerns affecting national policies and programs. Therefore, it is perceived that their technical and intellectual competence gives them ipso facto prior vested rights over local initiatives. What underpins these perceptions is the fear of being left out. Shielded by institutional mandates and legislated policies, local governments exercise their devolved functions and powers 'under the review, supervision and control' of central agencies.

Even people-oriented forestry projects and community-based forest management (CBFM) programs that were pioneered by the DENR in the early 1970s as a means to generate greater
local community involvement and partnership suffered in field implementation. Through the issuance of stewardship contracts and reforestation agreements, individual upland families and small community units were given responsibilities in the management and administration of forestlands. However, these programs achieved only limited success despite the enormous financial resources (mostly foreign donor funds) poured into these projects. Whilst the schemes intended to mobilize individual families and community groups, forest resource extraction and the promise of cash endowments primarily motivated community involvement in forest management.

As most of these people-oriented and community-based programs were project-driven policy initiatives, particularly by multilateral and bilateral aid agencies, their sustainability remained transitory. Internalization into the institution was superficial at best. In the long run, a sizable area of forestlands handed over to upland communities and individuals in these people-oriented projects remained unmanaged and unattended due to poor forest management skills and limited funds, while those who persisted incurred further indebtedness and greater economic dislocation. At worst, they added to the growing number of marginalized upland dwellers and their lands were added to the burgeoning tracts of "open-access" forests.

It should be made clear, however, that decentralization and devolution is a not substitute to people-oriented or community-based forest management. Nor is sustainable forestry identical with decentralized forest management. Indeed, decentralization and devolution may be the guiding principles for people-oriented or community-based forest management that will ultimately lead to sustainable forestry. They may need to serve but not substitute each other.

**From Centers of Authority to Centers of Partnership**

Despite its flaws and challenges, the DENR remains committed to people-oriented and community-based forestry. However, for sustainable forest management to work in practice, enabling policies that guarantee decentralized responsibilities, controls and authorities must be instituted. To do this, traditional forest management agencies must shift from being centers of authority to centers of partnership.

In the case of CBFM, the national government has adopted new policies as the national strategy for the sustainable management of forestlands. The declared national policy centers on the formation of strong partnerships among key forest stakeholders (e.g., between DENR and local governments). In this regard, decentralization and devolution of forest management responsibilities play a pivotal role.

For example, endorsements by local government authorities and barangays (smallest political unit) along with community members served as the basis for the selection of CBFM sites and approvals of CBFM Agreements (the tenurial instrument awarded to communities for 25 years, renewable for another 25 years). In more advanced CBFM areas, LGUs have undertaken and financed community organizing, forest land use planning, technical assistance, monitoring and evaluating activities of local communities.

A more established partnership arrangement exists in the recognition of rights by indigenous peoples to their ancestral domain claims. A special task force on ancestral domains composed of representatives from tribal group claimants, settlers, local government officials, DENR, and other concerned agencies process and endorse the granting of Certificates of Ancestral Domain Claims (CADCs) by qualified indigenous peoples (IPs).
A similar multi-stakeholder mechanism for forest protection has been established in most of the 14 regions and 76 provinces nationwide. These deputized multi-sectoral forest protection committees are composed of local church organizations, law enforcement agencies, civic and academic groups, members of civil society, LGUs, media representatives and local DENR and national agency officials. These committees have contributed to the reduction of illegal logging and timber poaching in many ‘hotspots’ in the country.

One of the main achievements in decentralized local forest management has been the creation of protected area management boards (PAMBs). Created by RA 7586 or the National Integrated Protected Area System (NIPAS) law, more than 100 local PAMBs serve as the main management bodies of the country's 209 protected terrestrial and marine areas.

The boards are deemed more responsive to local needs considering that they are chaired by a DENR field official, and composed of representatives of the provincial, municipal and barangay governments. Tribal communities and local non-governmental agencies are also represented. PAMBs are probably the lowest level, multi-sectoral group created by law with the mandate to formulate policies and programs as well as oversee the protection, development and management of declared protected areas in the Philippines, like the Mt. Apo National Park and the Mt. Matutum Protected Landscape.

As a further step to strengthening the DENR-LGU partnership, a joint memorandum circular between the Department and the Department of Interior and Local Government (DILG) clearly outlines the roles and responsibilities in forest management including conflict resolutions, joint sourcing of funds, information sharing and monitoring at the municipal, city and provincial levels.

More than a Change in doing Things, It's a Mind Shift!

The purpose of decentralizing and devolving forest management from central to local authorities is more than a change in doing things. Foremost in the paradigm shift of forest management, or any natural resource management for that matter, is a change in thinking and attitude.

Where traditional forest management practice calls for tight and linear approaches to maximize timber production and achieve efficiency, decentralization and devolution demand greater flexibility and innovation. Where sustainability is concerned, people come first. Such a frame of mind demands efforts towards a level of common awareness or consciousness to achieve success and accept failure in forest management. To make this work, tremendous efforts are made to reach out to every stakeholder in the uplands, including local members of DENR field offices. Accustomed to traditional command and control systems of authority, the DENR at all levels of responsibility has to reorient itself to accommodate new development and management functions under a decentralized system.

Internalizing the spirit and soul of the objectives of decentralization and devolution as well as sustainable forest management is a non-negotiable item in the process of institutional change in the DENR. Its absence in the overall management agenda of the central agency will only stifle the progress attained by local implementers and field partners in forest management.

The new DENR management has committed itself to a transformation of its traditional regulator and enforcer role to a more holistic and ecosystem-based player. Rather than being a "police dog", it now acts as an "ecological officer". In other words, the DENR has taken on a more facilitative, integrative and service-oriented role. This entails a complete reconfiguration of its
employees' ways of doing things and reinforcement of its technical and people-handling skills and capabilities.

On the other hand, internalization without implementation is only part of the process of strengthening local forest management. As central authorities restructure, devolution and delegation of authorities must be implemented simultaneously. In the DENR, approval of tenurial instruments for CBFM, CADCs and Socialized Industrial Forest Management Agreement (SIFMAs) have been devolved to local offices.

Even the approval of CBFM plans, like the Community Resource Management Framework and the Annual Work Plan, have been decentralized. In fact, CBFM communities with completed plans only need to deal with the Community Environment and Natural Resources Offices (CENROs) at the municipal level for plan approval. They only have to contact regional offices when they want to obtain permits to establish their own forest products processing plants, and transport and sell finished products outside the political boundary covering the CBFMA area. As a result, more than three million hectares of former 'open access' forestlands are under some form of CBFM.

**Going Beyond Forest Management**

Finally, the processes of decentralization and devolution of forest management must go beyond itself. Forest management in its very essence is situated within the broader system of intertwined networks of social, economic, physical, biological and political linkages that form a broader lifesystem or ecosystem - the watershed. As such it generates intense and sensitive vested economic and political interests and demands.

To manage such a situation requires a more dynamic, flexible, deliberate yet interactive approach to forest and watershed management. It requires political savvy and intuitiveness, skills that are neither taught nor learned in forestry schools but are critical elements to effectively manage the remaining forestlands in the Philippines.

However, because we share the same constituency as our authorities or political leaders, we inevitably are forced to deal with the body politic and its representatives. And this makes our work more challenging and exciting during the next cautious steps towards decentralization, devolution and local governance in sustainable forest and watershed management.
A Tale of two Provinces: An Assessment of the Implementation of Decentralized Forestry Functions by two Provinces in the Philippines

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Introduction

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair..." 24

Decentralization, as it is happening in the Philippines, is a critique to development approaches that have failed to respond to the needs of the people. The trickle-down approach did not eradicate poverty and draw in more of the public in the democratic processes. Widespread dissatisfaction from the grassroots triggered a rethinking of the development model, which eventually became a compelling reason for the Philippine government to initiate decentralization.

The decentralization process is anchored in the principles of devolution. In the Philippine's context, the term refers to "the act by which (the) national government confers power and authority upon the various local government units to perform specific functions and responsibilities" (RA 7160, 1991).

Republic Act 7160, otherwise known as the Local Government Code of 1991, is a bold move to give life and meaning to decentralization and local autonomy enshrined in the Philippine Constitution. The Act shifts powers, authority and responsibility from the national to the local governments. It is premised on the belief that effective local governance coupled with people's participation results in the empowerment of people and the improvement of their quality of life. In January 1992, the spirit of the law was put to the test.

One important and novel aspect of local governance espoused by the Code is environmental management. Local government units (LGUs) are mandated to integrate environmental aspects in local development planning, implement environmental protection programs and projects as well as enforce laws and regulations. Like other basic services such as agriculture, health, public works, social welfare and tourism, environmental management was devolved to LGUs. It is believed that since LGUs are closer to their constituents, they are in a better position to secure resources and to turn the theory of sustainability and ethics of equality into real activities.

The emerging issues: are we getting there?

Although the devolution process was initiated in 1992, the Department of Environment and Natural Resources (DENR) has yet to review the performance of LGUs in the implementation of the devolved functions. The five-year periodic reviews stipulated in DENR's administrative guidelines still remain to be conducted to identify problems and enhance implementation. Given the concern over the state of the environment, it is crucial to determine the extent and impact of the LGUs' accomplishments. There is a need to ask the questions: "What has happened and how far have we gone in the decentralization process?"

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24 All italicized quotes in this paper were taken from Charles Dickens' A Tale of Two Cities.
This paper aims to draw lessons from the performance and experience of selected provincial governments in devolving functions particularly in forest management. Using some indicators, it evaluates how far decentralization has enhanced the delivery of services to the DENR clientele and raised the ability of the LGUs to protect and develop its forest resources. Specifically, it attempts to compare the performance of two provinces - Capiz and Negros Occidental - in Western Visayas, using the following parameters:

- Organizational development, as an indicator of readiness;
- Allocation of resources, to ascertain priorities;
- Scope and level of devolved functions, to weigh competence;
- Linkages and alliance-building, to evaluate popular support; and
- Strategies and initiatives, to determine resourcefulness and commitment.

This paper also discusses emerging issues that affect implementation, and offers some final words that aim to contribute to the continuing debate on how best to improve the process of decentralization.

DENR's Preparation for Devolution

Principles governing the devolution of DENR functions

"The idea was so acceptable in the prevalent absence of any idea, that the crowd caught it up with eagerness..."

Administrative orders implementing the Code required the DENR to draft a set of guidelines for devolving its functions to LGUs (Department Administrative Order No. 30, series of 1992). Under the administrative order:

- The DENR shall remain the primary government agency responsible for the conservation, management, protection, development and proper use of the country's environment and natural resources and the promotion of sustainable development;
- LGUs shall share with the national government... the responsibility in the sustainable management and development of the environment and natural resources within their jurisdiction; and
- Implementation of the devolved functions... shall be pursuant to national policies and subject to supervision, control and review of the DENR (Section 1, DENR Administrative Order No. 30; emphasis by the author).

Environment and Natural Resources (ENR) tasks

The task of implementing the devolved DENR functions and projects in the various environment and natural resources sectors fell on the Environment and Natural Resources (ENR) offices of LGUs. They are as follows:

Forest management functions/programs/projects

- Implementation of community-based forestry projects.
- Management and control of communal forests (areas not exceeding 5,000 ha) provided that the concerned LGU endeavors to convert these into community forestry projects.
- Management, protection, rehabilitation and maintenance of small watersheds that constitute sources of local water supply, as identified by the DENR.
- Enforcement of forest laws in community-based forestry project areas, small watersheds and communal forests.
**Protected areas and wildlife**

- Establishment, protection and maintenance of tree parks, greenbelt areas and other tourist attractions in areas identified and delineated by the DENR, except those covered by the Integrated Protected Areas System, as defined by law, and the collection of fees for their services and the use of facilities therein; and
- Implementation of the Rescue for Important Conservation Hotspots (RICH) projects and the Community Awareness on Resources and Environment (CARE) project in areas identified and delineated by the DENR.

**Other ENR functions.**

Other related functions were devolved as well, such as the enforcement of pollution control and environmental laws involving sanitation, waste disposal and the abatement of nuisances. Lastly, the enforcement of small-scale mining laws and the implementation of cadastral surveys are also covered.

**Oversight mechanism of the devolution process**

Based on the DENR's Manual of Operations for the devolved General Management Functions, the following general procedures were prescribed:

- The smooth transition of functions is supported by a memorandum of agreement (MOA) signed by the DENR and the LGU. The MOA defines the roles and responsibilities of each party.
- The assumption of devolved functions carries with it the transfer of personnel, appropriations, equipment and other resources.
- In order to acquaint the LGU with their new functions, the DENR must conduct intensive briefings to the LGU's personnel.
- Under RA 7160, a monitoring system is established to: 1) hasten the decentralization process; 2) support the oversight committee in the supervision of the transfer of powers and functions; and, 3) provide LGUs with valuable information to promote local autonomy.

**Apprehensions Prior to Devolution**

'Is it possible?' ...'Yes. And a beautiful world we live in, when it is possible, and when many other such things are possible, and not only possible, but done...'

**DENR's perspectives**

Prior to devolution, some DENR officials harbored certain reservations regarding the capability and sincerity of the LGUs. They said that:

- LGU officials face elections every three years. Hence, efforts during their terms are geared towards their re-election.
- The administration of LGUs, which is affected by constant successions and political squabbles, is not appropriate to sustain long-term environmental projects.
- Regulatory and development projects require a special breed of people with a unique set of organizational values and work ethics. The LGUs might overlook this important requirement.
- Budgetary support for salaries and other benefits of the devolved personnel as well as the operational expenses for implementing projects might be beyond the financial capacity of the LGUs.
- Watershed areas transcend political boundaries and watershed projects may not be appropriate for implementation by LGUs.

**LGUs' perspectives**

Some politicians openly discussed inadequacies within their units and the hesitation to assume decentralized forestry functions and programs. This was due to a lack of funds. The budgetary constraints were compounded by the new functions added to the already gargantuan tasks that LGUs have to handle. Some devolved functions are also very complex and technical which require special expertise and precision, not necessarily available at each local unit.

**Devolved personnel's perspectives**

Devolved personnel were worried of their tenure security despite the protection accorded to them by civil service regulations. This is largely due to the nature of partisan politics. People also feared the prospect of exercising new tasks totally unrelated to their training and professional background.

**Survey of the Performance of Negros Occidental and Capiz Provinces**

"They differed principally in the passions they expressed..."

By Philippine standards, Capiz is a typical province in terms of ecological, social and economic aspects while Negros Occidental represents a dynamic and progressive society with quite sophisticated concerns.

**The Negros Occidental Experience**

Negros Occidental is considered the Philippines' premier sugar-producing province. Its economy largely depends on its once-solid sugar industry. Vast tracts of forests were long-ago lost due to wanton conversion to sugarcane plantations. The province encompasses ten cities and 22 municipalities served by four ENR offices, strategically located in the province. It has six congressional districts, excluding Bacolod City.

**The provincial leadership**

Negros Occidental Governor Rafael L. Coscuella witnessed how the devolved functions sailed through during his two terms in office. He is a staunch environmentalist, a certified mountaineer, and has a heart for the poor. It was no surprise that he made the environment the centerpiece of his programs. Immediately after becoming governor, he created a potent and well-staffed Provincial Environment Management Office (PEMO) and launched an environmental war in the province, adopting the battlecry "Balik Ilahas" (Bring Back the Wild). The program revolves around four basic concepts: 1) Education, Information and Advocacy; 2) Enforcement and Protection; 3) Reforestation and Rehabilitation; and 4) Alternative Livelihoods.
**Organizational buildup**

The governor expanded and strengthened the province's environmental office. The PEMO grew to 58 staff members from merely 19 in 1992. Three major divisions handle the operational matters of the office: the Ecosystems Research and Development Services (ERDS), Mines and Geo-Sciences Services (MGS) and the Field Research and Special Projects (FRSP) Services.

**Logistical and budgetary support**

Devolution increased the province's annual budget share considerably. Aside from salaries and other benefits, the employees receive monthly traveling funds. Project beneficiaries are also provided with the necessary support services like farm inputs.

**Facilities and equipment**

The PEMO has its own office equipped with computers and ten vehicles for the use of its personnel, four of which are large trucks to transport seedlings and farm inputs for upland farmers and other recipients. This is a far cry from the pre-devolution period when a DENR field office had only one vehicle for the same tasks.

**Scope of devolved functions**

Aside from programs or projects defined under the Code, the provincial government rehabilitated five critical watersheds. Forest cover in the province increased to seven percent from a mere 4.7 percent. The province has also gained ground in providing alternative sources of livelihoods to hinterland residents and mobilized the upland and coastal communities as `soldiers of the environment.'

**The Integrated Social Forestry (IFS) Program**

The ISF program aims to improve the quality of life of upland dwellers by restoring the ecological balance through reforestation, alternative livelihood programs, technology transfer, environmental protection and education.

The community-based forestry program vigorously implemented the social forestry objectives by adapting the strategies to promote soil and water conservation. It also designed a human resource development program for field implementers and project beneficiaries through technical training and cross-farm visits, and provided farm inputs and other benefits to improve and sustain the productivity of agroforestry systems. In 1992, there were only 32 ISF organizations registered by government agencies. By 1998, their numbers had risen to 65, of which 62 are accredited.

**Reforestation projects**

Covering five cities and 14 municipalities, the upland reforestation of Negros went full swing in 1994. With food-for-work support, about 16,148 ha have been planted since 1994. Coastal reforestation began in three cities and 12 municipalities in 1994. The province organized 46 coastal people's organizations. By the end of 1997 about six million surviving mangrove seedlings were counted throughout the province.
Other areas of concern
Alliance-building/strategies/initiatives

"Balik Ilahas" is expected to build a broader and vibrant constituency advocating ecological enhancement. In waging its ‘environmental war’, the province has enlisted the support of schools, volunteers, NGOs, people's organizations, the Church and other groups. Building alliance was the main strategy to generate popular support for its activities.

The Kahoy Ko, Kabuhi Ko (My Tree, My Life) Program is the brainchild of the governor and was effected through an MOA between the education department (DECS) and the DENR in 1996. It solicits the province-wide participation of students in establishing school nurseries and planting trees.

Prior to the creation of the PEMO in 1992, the Food-for-Work Program assisted DENR personnel in the ISF program. Between 1992 and 1995, it provided food for 16,577 beneficiaries. It also provided funds for the purchase of seeds, tools and other agricultural inputs to support the reforestation project.

In 1995, the governor created the "Task Force Ilahas" to strengthen enforcement and prosecution. Task Force Ilahas is a multi-agency body composed of members from the Office of the Governor, DENR, Philippine National Police (Provincial Command, Criminal Investigation Command and the Regional Mobile Forces) and, perhaps more significantly, volunteers from the private sector, especially upland communities.

After two and a half years, Task Force Ilahas has been able to curb timber poaching and kaingin (swidden agriculture) activities, which have been the leading cause of deforestation in the province. The volume of forest products seized by the Task Force during the first half of 1996 was the highest in the country. For these achievements, the Task Force Ilahas received the prestigious 1997 Presidential "Galing Pook" Award for Best Environment Project among LGUs in the country.

Creation of other special bodies

The North Negros Forest Reserve (NNFR) Management Council was created in 1996 by Executive Order 96-14 to plan, initiate and coordinate development efforts for the protection and rehabilitation of the NNFR. It is composed of local chief executives from various municipalities, representatives of national government agencies, NGOs, socio-civic and religious organizations.

The Southern Negros Coastal Management Council was created under Executive Order 96-20 as a policy-making body to conserve and rehabilitate the interconnected ecosystems of coral reefs, seagrass beds and mangrove areas, as well as the shorelines, mudflats and estuaries found within the coastal strips and wetlands in southern Negros.

The Bantay Dagat (Sea Watch), Bantay Katunggan (Mangrove Watch), Kanlaon Green Brigades (KGBs) and other similar community-based groups were organized to protect Negros’ natural resources. All these groups closely coordinate with concerned agencies to conduct patrolling, surveillance and intelligence-gathering activities in line with the program's goals.
The Capiz Experience

Capiz Province is endowed with vast natural resources from which most of its income has been derived. It has very rich fishing grounds and almost 25 percent of the fishpond areas of the region. It shares the billing as the "Rice Granary" and "Sugarlandia of Panay" with Iloilo Province. It has strategic importance as the bread basket of the country.

The province is covered by only one CENRO Office that performs all the functions and responsibilities mandated by law. The province is divided into two congressional districts consisting of 16 municipalities.

The provincial leadership

Dr. Esteban Contreras, a physician by training, was at the helm of the province's leadership when devolution was initiated. His professional background influenced his priorities and program thrusts. Therefore, his projects were confined to health, sanitation and infrastructure.

Organizational buildup

In Capiz, the devolved personnel - only five employees - of DENR were placed under the Provincial Planning and Development Office (PPDO), Economic Development Division. The five staff have to coordinate efforts in the monitoring, evaluation and providing technical assistance in 55 ISF projects province-wide.

Logistical and budgetary support

Only the personal services allotment and other benefits are provided by the provincial government to the devolved ISF personnel. Unlike in Negros Occidental, which experienced considerable budget increases with devolution, Capiz province's budget increased only modestly.

Scope of devolved functions implemented by the province

Devolved personnel were assigned only to major ISF functions and activities such as monitoring and evaluation, provision of technical assistance and processing of cutting permits. There was no record of inputs provided by the province for support to farm households. Certain regulatory functions on mining, such as licensing or permitting, were also performed by the province, although not by the PPDO.

The new governor: Capiz' second wind?

With a new governor in the office the province is now in a transition period and there is hope that the ISF projects will receive more attention. The new Capiz Governor had made environment a focus of his campaign. He plans to create a separate environment office as promulgated in his Environment Master Plan. Besides many other functions, the new office will handle the rehabilitation of degraded mountain areas perceived to be the cause of lowland floods.

Comparative Assessment of the Performance of the Two Provinces: a Dichotomy

The differences between the two provinces are obvious (Table 1). To some extent, the differences reflect the local chief executives' commitment in the implementation of devolved ENR functions.
### Table 1:
Comparative assessment of accomplishments on decentralized forestry functions Provinces of Capiz and Negros Occidental

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Capiz</th>
<th>Negros Occidental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Organizational Support and Development</strong></td>
<td>Devolved five DENR personnel and forestry function subsumed under PPDO</td>
<td>Created the Provincial Environment Coordinated Council (PECC) to directly supervise 19 devolved personnel</td>
</tr>
<tr>
<td></td>
<td>No additional staff hired</td>
<td>In 1993, established a Provincial Environment Management Office (PEMO) to handle ENR devolved functions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hired 29 additional staff for the PEMO’s 3 major divisions</td>
</tr>
<tr>
<td><strong>B. Logistical Support</strong></td>
<td>Provided devolved staff with office space and tables</td>
<td>PEMO has its own office with typewriters and computers</td>
</tr>
<tr>
<td>1. Facilities and Equipment</td>
<td>Provided basic personal services and benefits</td>
<td>Maintains 10 vehicles, 4 of which are trucks</td>
</tr>
<tr>
<td></td>
<td>No record available for farm inputs and other interventions</td>
<td>Funds for operating expenses in addition to the personnel services and benefits Annual budgetary allocation averages P13,000,000</td>
</tr>
<tr>
<td>2. Budgetary Support</td>
<td></td>
<td>Sufficient support for forest protection; purchase of firearms, mountaineering gear and paraphernalia; and provision of subsistence and travel allowances</td>
</tr>
<tr>
<td><strong>C. Scope of Devolved Functions and Areas of Service</strong></td>
<td>Monitoring and provision of technical assistance to upland farmer-beneficiaries</td>
<td>Forest Management/ISF</td>
</tr>
<tr>
<td></td>
<td>Processing of cutting permits</td>
<td>Upland reforestation</td>
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<td></td>
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<td>Strengthening and empowerment of beneficiaries</td>
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<td></td>
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<td>Cross-farm visits</td>
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<tr>
<td></td>
<td></td>
<td>Staff development</td>
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<tr>
<td></td>
<td></td>
<td>Livelihoods projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Animal dispersal and provision of farm inputs and implements</td>
</tr>
<tr>
<td><strong>D. Linkages and Alliance Building</strong></td>
<td>Task Force Tinagong Dagat</td>
<td>*Kahoy Ko, Kabuhi Ko Program; Task Force Ilahas; North Negros Forest Reserve Management Council; Southern Negros Coastal Management Council; Bantay Dagat; Bantay Katunggan; Kanlaon Green Brigades</td>
</tr>
<tr>
<td><strong>E. Strategies and Initiatives</strong></td>
<td>No record available</td>
<td>Creation of PEMO</td>
</tr>
<tr>
<td></td>
<td>New Governor initiated the formulation of Environment Master Plan for 1999</td>
<td>Food-for-Work Program to harness volunteer labor for reforestation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alliance-building and linkage with other institutions and agencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creation of councils to develop and protect forest reserves and coastal areas</td>
</tr>
</tbody>
</table>

### Constraints affecting the level of decentralization

Although LGUs professed a concern for the environment and initiated environmental activities, the devolution process has had limited success. Several devolved functions or projects were defined ambiguously. As a result some were never devolved to the LGU level. Among the few and remarkable exceptions is the ISF Program, where component activities and functions to be devolved were clearly spelled out. This program is implemented by the national government (Sabban 1993).

After almost five years, several issues - both administrative and operational in nature - are prominently surfacing and explain the effectiveness of devolving various functions:
LGU leadership priorities

Priorities of LGU officials are not based solely on environmental concerns and necessities. Local officials have at times a different understanding, appreciation and interpretation of the ENR functions, programs and activities. New laws, rules and regulations are dictated by their program priorities, experiences and political management style. For example, the governor of Negros Occidental, implemented the environment and natural resources programs with the savvy of a corporate manager, who treats the components with minute details and all systems as functional. On the other hand, the governor of Capiz focused on health and fishery issues. The former focused on the dynamics of implementing policies, rules and regulations while the latter visited personally the remotest areas of the province to promote health care and sanitation programs or initiate infrastructure projects.

As LGU officials are elected every three years, it is rather likely that their efforts reflect their ambitions to get re-elected. It is inevitable that partisan politics spoil noble environmental endeavors. Politicians know that popularity cannot be gained by enforcing rigid forestry regulations. Historically, the forestry industry is a haven for the richest of the rich and the poorest of the poor, both significant players in an election game.

Nonetheless, Governor Coscolluela did not compromise regulations, but strengthened devolution through the right policies. On the other hand, Governor Contreras was far more hesitant on environmental matters and often settled for minimum compliance.

In a preliminary study on the priorities of LGUs, environmental concerns did not rank uppermost in the local officials' list (Metin and Bacalla citing Brillantes 1992). This observation seems to describe the decentralization experience in Capiz.

If the budgetary allocations for the various programs are used as an assessment indicator then Negros Occidental is far ahead of Cadiz in the devolution process.

"Lucrative turf"

Some DENR functions, programs and activities were not substantially devolved because of vested interests and personal preferences. This is the case in those programs and projects endowed with considerable funding. Further, concerned agencies hesitate to let go some of the advanced reforestation and other community-based projects. This is a case of bad habits dying hard.

Many employees at the technical level feel that the devolution process is a power play, vulnerable to abuse and jeopardizing past developmental efforts. Still others believe that some activities such as watershed projects transcend political boundaries and may not be appropriate for implementation by highly localized government units like a municipality.

DENR's passivity

Devolution within the DENR has generally been met with passive or lukewarm reception. Many of its old hands believe that environmental and natural resources projects should remain the domain of the DENR. A common view is that administration by LGUs, which undergo constant succession and are affected by internal animosities due to political squabbles, is inappropriate to sustain long-term projects.
Technical capability

Only few staff members are capable of handling special development areas. Thus, general capacity building and providing technical expertise are crucial. Some devolved ENR functions, unarguably, demand highly specialized skills and complex supervision. Currently, many LGUs lack personnel, experience and know-how, and efforts in skill development are virtually non-existent.

In Capiz, all devolved staff members had previous experience only in ISF. They were not trained to handle ENR activities in other sectors. In Negros Occidental, despite the generous budget allocations, the province failed to survey all ENR projects and other environmental concerns within its domain.

If professional local surveyors and engineers are available, they are unlikely to conduct forest inventories due to unfamiliarity with the terrain, inaccessibility and the harshness of the working conditions. Others shun from being identified with the reigning political block or are disqualified for having supported political rivals.

Policy Shortcomings

The optional ENR office

While the Code states that ENR officers may be appointed for towns, cities and provinces, such provision is optional, not mandatory. This provision became the proverbial 'Achilles heel' in the enforcement of ENR programs and policies. When local government executives regarded environmental protection and management as minor issues, they can hide behind that provision, which is a convenient excuse to save on the high operational costs of an additional office.

This happened in Capiz, where the ENR functions were subsumed under the Planning and Policy Development Office (PPDO), a branch within the provincial government's office. As a result, it has no full-time ENR officer, only a token designation of a caretaker official.

The interim oversight mechanism

The DENR has also been quite fickle in the execution of its devolved functions. In its haste, it failed to support and assist LGUs during the 'weaning' years of devolution. Unfortunately, the DENR has failed to institutionalize oversight measures or functions to address the complexity of devolution. This weakness has disrupted the smooth functioning of many LGUs. Despite an earlier provision for a mandatory review of decentralization every five years, no concrete action was taken by the DENR. Presumably, the tricky issue of who should take the lead is a problem in itself. It may create rancor among politicians. Also, the review process may be a remote possibility in the face of a constantly changing political landscape.

Funding problems

One of the major barriers to taking over DENR functions by LGUs is their capacity to pay the salaries of devolved personnel and cover field-operating expenses. In addition, the local executives' prefer their employees to stay in the office and make field visits only when absolutely necessary. Devolution changed this set up because many employees are now sent to the field on a regular basis, which requires substantial funds to cover traveling expenses, supplies and materials.
The DENR employees assigned to Capiz were witnesses to this reality. They have yet to receive their fully standardized salaries. Chances are they will have to wait for quite some time, until the LGU can find enough funds.

Another woe of devolution is the fact that not all ENR devolved functions, programs and activities are adequately funded and prioritized by LGUs. LGUs can hardly allocate funds for ENR programs given the limited internal revenue allotment (IRA) or development funds from the central government. In a nutshell, the objective of rehabilitating natural resources and empowering the people to become self-reliant communities appears unattainable.

Too Much, Too Soon

"It is very high; it is a little difficult. Better to begin slowly".

The limited period allowed for instituting devolution has caused confusion among local government officials, notwithstanding the sincerity of the national government to effectuate local autonomy. Although the government promulgated many new policies, LGUs have not been adequately consulted. Some sectors feel that devolution is a "political blunder" because government units are slow to learn the ways of effective governance.

Some Final Words

This paper has analyzed typical decentralization scenarios in two provinces of Western Visayas region. The purpose of the comparison is not to point out which of the two provinces did a "better" job, but rather to illustrate the gaps in the process of devolution. Negros Occidental and Capiz were simply chosen to stress how the provinces, given their available resources, mandate and leadership styles, influenced the effectiveness of devolving functions and responsibilities, a reality they have to undertake not by choice but by design. The discussion has delved on the realities and possibilities, strengths and weaknesses, and constraints and opportunities. Negros Occidental has passed the test with flying colors. For Capiz it appears that the time allowed for change to take place and for strengthening its commitment to the environment was insufficient. The tale of the two provinces is typical in the country. So is the fate experienced by other provinces still struggling with their new tasks and responsibilities brought about by devolution. The following could have been considered to enable them to adapt to their devolved environment, namely:

1. **The mandatory creation of ENROs in all towns, cities and provinces:** The creation of ENROs makes it obligatory for local government units to take over the devolved functions.
2. **Formulation of a national policy prescribing local budgetary allocations for ENR purposes:** A policy, similar to the IRA ensures that substantial financial allocations are used to operationalize the ENROs.
3. **The adoption of oversight mechanisms for monitoring, support, training and supervision of compliance:** This facilitates smooth and coordinated efforts to guarantee that functions are devolved.
4. **Formulation of clear and measurable indicators for assessing compliance and impacts of decentralization:** A legislative act is needed to realize this commitment.
5. **Return of the highly technical functions, in which LGUs lack technical capacity - not just in forest management but in other areas too - to central offices.** The idea of returning some functions and projects to the DENR where LGUs admittedly are at a disadvantage gives justice to the principle of devolution.
6. **Amendment of the Local Government Code:** Policy analysis should be initiated with the objective of updating and amending the Local Government Code by integrating lessons learned in national and local government offices.

7. "(T)he great magician who majestically works out the appointed order of the Creator, never reverses his transformations. 'If thou be changed into this shape by the will of God,' then remain so..."

**References**


Experiences and Challenges of Local Government Units in Co-managing Forest Resources: The Case of Lower Magat Forest Reserve

Virgilio A. Tiongson
Nueva Vizcaya Provincial Government
Nueva Vizcaya, Philippines

Introduction

In the Philippines, the passage of Republic Act 7160 in 1991, better known as the Local Government Code, was hailed as a historic moment in the long and gradual progress of the Philippine quest for genuine local autonomy. With more powers and functions devolved by central government under the new law, many people looked expectantly to more effective, responsive, and more self-reliant local governments.

However, in the area of environmental management, the Department of Environment and Natural Resources (DENR) devolved very limited powers, functions and responsibilities to local government units (LGUs). At the provincial level, the DENR devolved the enforcement of forestry laws in community-based projects only, while at the municipal level it devolved management and control of communal forests with an area not exceeding 5,000 ha.

Since 1992, after handing over to the province of Nueva Vizcaya some Integrated Social Forestry Projects (ISF), no other community-based projects have been devolved or identified for LGU management. The same is true for municipalities where communal forests have not been delineated on the ground.

As no formal rules have been issued to define the arrangements between the DENR and LGUs, devolution has not progressed. In a sense, it cannot be said that devolution does not work because the truth of the matter is it has not yet been tried.

Since this is the fate of devolution, then it would seem to be uninspiring to local governments. However after seven years, there are a number of LGUs that do not feel constrained by the slow progress devolution made, but rather challenged by the opportunities it offers. Certainly, many are interested to know more about innovative breakthroughs made by LGUs in the management of natural resources. Some studies on the progress of decentralization are very critical of the attitude of the DENR towards devolution. They indicate that handing over functions to LGUs was deliberately limited to enforcing forestry laws because the DENR did not consider LGUs ready and capable of taking greater and broader responsibilities. This probably implies a lack of knowledge or belief by DENR officials in the dynamics of decentralization, and its ability to excite creativity or innovation as proponents of local autonomy publicly extol.

Whatever the fact is, the attitude of DENR officials has to be viewed in light of the "transition blues" or simple birth pains of devolution. Having been comfortable for many decades with a centralized system, the idea of suddenly sharing powers with LGUs was understandably met with reluctance and misgivings.

Owing to the tentativeness and ambiguity of the term 'devolution' itself, the DENR and the provincial LGUs have been consequently locked in an impasse. But breaking the stalemate was just a matter of time. The LGUs, inspired by the momentum and gains in other decentralized responsibilities and functions, have gradually applied pressure on the local DENR to move and
respond to resource management issues, securing at times the support of DENR regional officials.

The story of the decentralization and devolution journey of the province of Nueva Vizcaya is captured in the anecdotes of its many attempts to challenge the status quo. This has produced many inspiring results of local initiatives which will hopefully enrich the annals of political change in the Philippines.

**Experiences and Small Victories: Our Building Blocks Planting the "Tree For a Legacy"**

For many years it was the common practice of LGUs to go through the motions of tree planting programs. However, communities have grown tired of such activities because of the lack of real incentives and tangible benefits. In 1993, when the provincial government sensed the diminishing public interest in tree planting, the Provincial Governor challenged the local DENR officers to respond to the popular demand of ownership of the trees planted.

The "Tree For Legacy" Program was designed and launched to provide ownership certificates as an incentive to tree planters on private and public lands. The program was a test case to invalidate the well-entrenched policy against issuing harvesting permits in declared watershed reserves. Nueva Vizcaya has been declared a watershed by virtue of a Presidential Proclamation.

The creativity and exercise of political will by the provincial administration has attracted legions of stakeholders who have long taken a 'wait and see' stance to call for reforestation. The homegrown program elicited initiatives to plant trees in backyards, and even in erstwhile kaingin (shifting cultivation) areas. The harvesting rights have brought a different perspective to reforestation.

**Facilitating Local Social Mobilization: Fusion and Fruition**

Having breached the rigid armor of the DENR and discovered the latent responsiveness of the people, the provincial government negotiated with a local college for the management of a 50 ha, hilly plot under a Memorandum of Agreement (MOA). The area was divided into 1 ha lots and distributed to NGOs, POs and civic groups providing certificates of ownership similar to the "Tree for a Legacy" Program.

The LGU supplied mango seedlings to participants who regularly maintained the trees. Mango was the species of choice of the former shifting cultivators. Unfortunately, the assumption that fires would not damage the seedlings did not hold because three successive fires destroyed the plantation year after year. Whether the fires were accidental or deliberate could not be established.

The amazing lesson here is the collective resolve of both the LGU and the participants to replant after each fire. After the third fire, the LGU decided to invite the people living around the project area, to participate in the project with the same privileges enjoyed by the original participants. People also agreed to act as fire suppressers. They received training and equipment from the LGU. The community has been referred to as a "social fence" of the project and since then the word has been added to the vocabulary of the local government as a reminder of the lesson learned in local dynamics. The LGU is very hopeful that fires belong to the past because it can count on the "social fence" to protect the plantation.
Catalyzing Conflict Resolution: The Watershed Deal

A 439 ha watershed critical for supplying potable water to two municipalities and irrigation water to six barangays has been plagued by land use conflicts for many years. The watershed provides space for the settlement of about 100 households. It became the principal source for their living, but their activities led to further watershed degradation. For downstream users, it is a critical water source for irrigation. For many years, attempts by the government to intervene or offer its assistance in finding a mutually agreeable solution was turned down. Instead, villagers gave resounding negative vote to the incumbent Provincial Governor during one of the provincial elections.

The provincial government finally realized that the lack of tenure security was behind the anxiety of the settlers regarding the watershed. Therefore, it proposed an MOA, with the concurrence of the DENR, providing for a 25-year tenure (renewable by another 25 years), which was met with unanimous approval. However, lowland farmers expressed their concern over possible adverse impacts the permanent occupation of the watershed might have on the already limited supply of irrigation water. When the members of the irrigation association staged a protest at the Provincial Capitol, the government realized that the preparatory activities in the watershed focused only on equipping occupants with skills and knowledge but had neglected the downstream users.

Subsequently, information to downstream farmers was disseminated, which indicated that watershed protection, development and management are mutually beneficial to all stakeholders. This defused the tensions and downstream farmers even openly expressed their sympathy for the plight of the watershed occupants.

The role of the government as an accomplished facilitator, a skill acquired through expert external technical assistance, was highly instrumental in settling resource disputes and redirecting the users towards collaborative activities which broadened the ownership base of the watershed. Eventually, the watershed development framework designed by the community through participatory processes, guided by the local environmental and natural resource office (ENRO) staff and supported by external technical assistance, became the common platform for concerted action by all stakeholders.

Co-Management and Our Determined Path

The small victories by the LGU were not only satisfying but also confidence-building blocks that improved the relationship between the DENR and the provincial government. This time, the LGU's aim is to scale greater heights in natural resource management while skirting the maze of rigid and conflicting policies, rules and regulations derived from various pronouncements of DENR.

Painstakingly long legal and technical research, and relentless experimentation with untested management models in consultation with environmental specialist, finally paid a huge dividend. The provincial government successfully brokered the first co-management agreement between the DENR and a Municipal Government, transferring to the latter the management, protection and development of a 2000 ha portion of a defunct reforestation project.

The implication of this important point in local devolution initiatives is far reaching. The DENR by virtue of this precedent-setting agreement has finally recognized the capacity and potential of the LGU to spearhead natural resource development and environmental management. On the other hand, it has shattered the LGU perception or bias that the DENR is living in the past, is
rigid and unabashedly indifferent. It has set the stage for the signing of the co-management agreement for the Lower Magat Reserve, the crown jewel of decentralization-devolution initiatives of the provincial government. It predates the latest Joint Memorandum Circular, MC 98-01, signed between DILG and DENR, and provides for, amongst others, the devolution of forest management functions to LGUs.

The (Lower) Magat Forest Reserve: Crucible for the Co-Management Paradigm

The Magat Forest Reserve, which encompasses the entire province, has an aggregate area of 245,440 ha. It is of considerable strategic value to the provincial and regional development. In the overall framework for regional development, Nueva Vizcaya has been designated a watershed haven of Region 2. It hosts the Magat Dam, the biggest hydroelectric dam in the country with a rated capacity of 350 MW and presently irrigating about 150,000 ha of farmland for growing rice.

The (Lower) Magat Forest Reserve, the downstream part of the Magat Forest Reserve, comprises 24,000 ha of forestland that until 1989 was managed through a regular reforestation project. It straddles two municipalities with 19,000 people in 21 barangays. The reserve poses a formidable challenge to the new LGU-DENR alliance.

Until 1998, foreign funds were pumped by the DENR into activities to contain erosion that threatens to shorten the life-span of the Magat Hydroelectric and Irrigation System. Various reforestation projects, however, have failed to reduce the high sedimentation rates of rivers and reservoirs including in the Magat Dam where millions of tons of silt have been deposited.

The Lower Magat Forest Reserve represents an ambitious attempt to resolve the combined assault on the watershed by illegal logging, rampant firewood gathering and charcoal making, unregulated commercial ranching, frequent forest fires, an influx of landless people engaged in destructive mixed land uses and an increasing population pressure.

The MOA articulates the arduous task of redeeming one of the most prized natural assets of the province couched in simplified operational terms but legally consistent with basic national policies, although ingenuously remodeled to suit and effectively respond to realities on the ground, and environmental imperatives in the forest reserve. A customized feature and centerpiece of the agreement is the facilitative processing of sub-agreements with legitimate occupants for stewardship of any portion of the Magat Forest Reserve through an MOA to be signed by the Provincial Governor as head of the Steering Committee with the DENR acting as co-chair. Although not to be interpreted as a permanent substitute for permits/licenses issued by the DENR, it nevertheless provides order and stability to former ‘open access' areas constituting the largest portion of the reserve and the main source of land and resource use conflicts.

It also opens new windows of opportunities to the private sector, cooperatives and even government agencies for the protection, development and management of any portion of the area under a similar sub-agreement for a period of 25 years, renewable for another 25 years. The novelty of the agreement is the flexibility and autonomy shared between the DENR and LGUs in co-managing the Forest Reserve in accordance with the Annual Work Plan. The unique arrangement also bypasses rigid bureaucratic processes, and promotes more effective and responsive management.

Attached to the agreement is the Magat Indicative Plan that was formulated following community consultations, interviews with key informants, roundtable discussion among and between DENR and LGU officials, and based on the analysis of secondary and primary data. It
serves as the overall framework for the protection, development and management of the Lower Magat Forest Reserve. The plan proposes land uses, a major land classification and appropriate management scheme for each land category. To protect and enhance a 1000 ha forested portion, an eco-tourism park has also been proposed.

An underpinning strategy is to improve the watershed value of the different areas without negatively affecting the various livelihood activities of present occupants. For further ground verification, community mapping has been employed which also provides an opportunity to heighten environmental awareness in the communities. The mapping activity helps the occupants to adopt a global perspective of their community and puts a human face to the complex issues and problems of the reserve.

By the end of 1998, all 21 barangays had been covered, and a prototype community settlement plan was underway in coordination with municipal officials. The community maps generated will now harmonize the forestland use with ground realities. The entire forest reserve should reverberate with sustained clustered community action planning. Organized in a highly participatory environment, it raises the level of motivation and collective aspirations of the watershed occupants to embrace the Magat vision.

The activities will be designed to elicit valuable local insights from all stakeholders. They should become a virtual bank of systems, indigenous practices, and relevant management models to form the backbone of the Magat Forest Reserve Protection and Development.

The range and magnitude of operationalizing the plans, programs, and strategies are staggering to an LGU still learning the ropes of partnering for environmental management. To cope with the enormity of the challenge, there should be a common effort of the DENR and LGU to improve and nurture their strategic management alliance.

The stakes for the partnership are indeed very high but so are the rewards.

From a slow but rocky start, the provincial government was able to pierce the veil of vagueness of the DENR devolution of powers, functions and responsibilities to LGUs and pioneered co-management of natural resources as a new paradigm in the theater of devolution. The tenacity of a local government to demonstrate convincingly that devolution works, and its success in making it work, illustrate the inherent power of decentralization to transform or to create. This is a vindication of the faith and foresight of those who believe in the inevitability of local autonomy as the 'wave of the future' in Philippine government and administration.
Experiences and Challenges of the Indigenous People in Co-managing Forest Resources: The Lake Sebu Ancestral Domain Community Association

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Introduction

Our tribes, the Tboli and Ubo tribes, have been the dwellers of a large tract of land in Lake Sebu, South Cotabato, Philippines. Since time immemorial, we have considered this area our home, our ancestral domain. Since the area was classified as forestland, the government assumed the responsibility in managing the natural resources.

With the issuance of Department Administrative Order (DAO) No. 2, Series of 1993, the Department of Environment and Natural Resources (DENR) identified, delineated, and recognized our claim to our ancestral domain. We are aware that the Certificate of Ancestral Domain Claim (CADC) given to our tribes is not a land title. However, it provides for some sort of tenurial security to our dwelling place. With the issuance of CADC to the Tboli and Ubo tribes, the government officially acknowledged our right to manage the natural resources within our ancestral lands. We are required, however, to submit an Ancestral Domain Management Plan (ADMP) anchored to our Indigenous Knowledge Systems and Practices (IKSP).

When the CADC was issued to the tribal elders, we recognized the need to form an Interim Consultative Body (ICB) composed of tribal leaders and barangay captains of 18 barangays which covered two CADCs. The two CADCs (CADC 003 for the Ubo tribes and CADC 004 for the Tboli tribes) have a total land area of 19,377 and 20,475 ha respectively. The ICB drafted guiding principles governing the formulation of ADMPs. Consistent with the principles of participatory planning, we formed an ADMP Local Planning Committee (LPC) composed of able community members. During the planning stage, the ICB agreed to develop one ADMP for both CADCs since most of the forest resources are concentrated in the Ubo tribe's area. The Ubo tribe agreed to share these resources with their brothers, the Tboli tribe.

After several months of planning and consultations, the LPC produced the ADMP representing the sentiments, dreams and aspirations of our tribes. The plan passed through a series of presentations and reviews from the municipal to national levels. More than a year after its presentation to the national level, the plan was approved by the DENR Secretary.

Prior to the approval of our plan, our tribes recognized the need to have a legal identity. Eventually, the Lake Sebu Ancestral Domain Community Association (LASADCA) was founded and formally recognized by the Philippine Government. The association represents both the Tboli and Ubo tribes including migrants who are considered members of the tribal communities by virtue of their long association with the tribes.

In all the activities described above, the DENR through the USAID-assisted Natural Resources Management Program (NRMP), with technical assistance from Development Alternatives Inc. (DAI), and the Local Government Units had a significant input. Without them, our dream to manage our own environment would not be possible.

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25 A barangay is the smallest political unit in the Philippines
The Ancestral Domain Management Plan (ADMP)

Agriculture on arable lands

With regard to our traditional food sources, we have considered in our plan the need to improve the production of rice and corn. The production volumes of our main traditional crops have not risen beyond subsistence levels. Rice yields are only 50 cavans/ha on average and about 70 cavans/ha for irrigated areas. Low yields are caused by insufficient farm inputs and technology support systems and near absence of farm machinery. To address these problems, the following activities will be implemented within the next five years:

- Conduct farm management training once a year incorporating traditional and modern farming techniques in one training program;
- Promote the use of organic fertilizers to complement commercial or inorganic ones;
- Encourage the application of indigenous pest control measures;
- Make farm equipment and tools available such as plows and harrows for individual use and light tractors for common use;
- Install rice threshers, corn shellers, rice and corn millers, power tillers, and solar dryers to facilitate harvest and post-harvest activities in the uplands; and
- Introduce the use of Sloping Agricultural Land Technology (SALT) in appropriate areas.

Agroforestry on inactive farmlands

As part of our traditional farming practices we allow the farmlands to rest or lay fallow to restore soil fertility. We have incorporated agroforestry systems in our plan for these areas. Fallow areas are utilized for fruit tree production. Other areas are set aside for the propagation of bamboo, abaca and bananas. The agroforestry areas are planted with cassava and sweet potatoes as well as indigenous forest species such as Igem and Tuai (Bischofia javanica).

Setting aside agroforestry areas was primarily a response to growing economic constraints. At the same time, it helps to meet increasing demands for sawlogs. Bamboo production is vital in the expanding furniture industry and for construction purposes. In Lake Sebu and its vicinity, bamboo is extensively used for fish traps and fish cages. To date, some of our members have already planted agroforestry crops after several trips and cross-visits to agroforestry farms sponsored by NRMP.

Forest rehabilitation

Our tribes face the challenge of rehabilitating 16,000 ha of denuded areas in Lake Sebu's six barangays (Upper Maculan, Halilan, Klobe, Lamdalag, Lamlahak and Tasiman). However, we lack the funds to implement this task.

Natural forest management

We have always practiced the indigenous way of taking care of our forests. To hasten the growth of forest trees, we have plans to replace the defective, mature and over-mature trees according to the National Integrated Protected Area System (NIPAS) law. Our plan is to replace one tree with five young trees. We also plan to enforce indigenous laws to prevent forest fires and illegal timber harvesting.

Our tribes desire to utilize non-timber forest products such as rattan, nito and others on a small scale. Along this line, we have prepared a Resource Use Plan for rattan. The plan was affirmed by the DENR.
Sustainable management of existing plantation forests

In the 1980s, our tribes participated in rehabilitation activities of the Allah Valley Watershed Development Project implemented by the DENR. The DENR promised to give us 30 percent of the proceeds of all planted species, mostly *yemane* (*Gmelina arborea*). Over time, we have observed the fast growth of *yemane*. We have proposed to replace *Gmelina* with native species. However, we were not allowed to replace the mature *yemane* because of restrictive policies and legislation.

With the assistance from the local government unit and DENR, grasslands will be delineated on the basis of physical landmarks. These areas will be planted with native tree species and fruit trees. Community members shall be given the prerogative to set aside portions of their areas for multi-cropping.

Establishment of a Community Forest Reserve

Our tribes established a community forest reserve located in Barangay Lamfugon (within the Ubo ancestral domain claim). It is the only existing traditional forest reserve and we intend to continue managing this area according to NIPAS's strict protection zone category laws where only protective activities, research and customary rites are permitted.

Traditionally, hunting grounds encompass all forested areas. In the case of the Tboli and Ubo tribes, hunting grounds will be restricted to the wildlife sanctuaries located in Barangays T’konel, Lamlahak, and Lamfugon with a total area of about 8,000 ha. We plan to revive these hunting grounds to preserve wildlife habitats. To realize this plan, existing forests will be sustainably managed. Hunting will follow traditional practices which are found to be sustainable. Deputized groups will enforce the hunting regulations and patrol the sanctuaries.

Issues and Constraints in Co-management

Lack of skills

Forest management requires skills. We acknowledge that our IKSP are not sufficient to effectively manage our domain. Our people have to learn technical skills necessary to effectively implement the components of our ADMP.

Policy constraints

Upon affirmation of our ADMP, we prepared an Annual Work Plan including a Resource Use Plan. Realizing that our tribes do not have the financial resources to implement our ADMP, we proposed to selectively replace the mature *Gmelina* trees in multiple use zones and utilize the income for the rehabilitation of open and denuded areas of our domain. After more than a year, our plans still have not been approved. Consequently, we are not allowed to harvest trees within our domain because Lake Sebu is covered by a watershed declaration where cutting is prohibited.

We do not understand why our tribes are not allowed to replace the exotic species with our very own native species that are suited for watershed conservation. We do not understand why this cannot be implemented considering that this is part of our endorsed ADMP.
Centralized decision-making

Our Datu System gives our leaders, like me, blanket authority to decide the fate of our tribes. This has been our practice since time immemorial. However, this is not consistent with the standard operating procedures that the outside world requires. To address this issue, we have formed different committees to implement the various components of the ADMP. Most of the time, however, the committee heads still wait for our final decision before initiating any activity. We have to train our people to depart, to some extent, from this behavior.

Lack of funds

As mentioned earlier, our tribes do not have sufficient financial resources to rehabilitate 16,000 ha of open and denuded forestlands. We have to find ways to generate funds to restore the lost species of our very own home. We have to obtain funds to manage and protect our very own dwelling place sprawling over the entire 39,852 ha of lands in Lake Sebu, South Cotabato. We are proud to say, however, that even without any financial assistance our people were able to protect our domain from illegal activities. Noteworthly was our effort to link with agencies like Bread for the World for its Food for Work Program. During the El Niño phenomenon, we were able to access DOLE/Philippines through their Social Development Program for financial assistance, which also included several sacks of rice in exchange for seedlings grown in our nursery. We are proud to mention that we have produced more than 100,000 indigenous seedlings through our "bayanihan" efforts.
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