

Participatory Forest Management in South Asia

A Comparative Analysis of
Policies, Institutions and Approaches



Golam Rasul
Madhav Karki

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International Centre for Integrated Mountain Development

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Golam Rasul and Madhav Karki

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Preface

Forests and related natural resources provide multiple benefits to society and are crucial to the livelihoods of millions of people in South Asia, particularly those living in rural mountain and hill areas. In India alone, about 300 million people in rural areas depend directly or indirectly on forests for food, fodder, small timber, and cash income. Forest and rangelands are also the predominant land uses in hills and mountains in other HKH countries. In addition to their diverse economic utility, forests provide many other ecosystem services including watershed protection, carbon sequestration, biodiversity conservation, climate regulation, and ecosystem balance, and support agriculture by enriching soil fertility. However, forests have been degraded extensively in many countries due to overly bureaucratic, timber-oriented, and centralised systems and frameworks of administration and management.

Realising the importance of local communities in forest management, several participatory management models such as social forestry, community forestry, joint forest management, leasehold forestry, and collaborative forest management have evolved in different countries in the region. Community forestry occupies a central place in forest management in Nepal. In India, joint forest management has emerged as an effective tool to conserve, manage, and regenerate forest alongside traditional systems such as van panchayat arrangements and shifting cultivation-based agroforestry. Other models have been developed in Bhutan and Bangladesh. These different approaches have different features, characteristics, and degrees of participation by local forest users, and thus different implications for the management of forest resources and the livelihoods of forest-dependent people.

In order to promote a truly participatory forest management model, it is important to understand the scope, limitations, and requirements of the different models now in use, and their relative strengths and weaknesses. This paper attempts to trace the evolution of participatory forest management in South Asia, with particular reference to the Hindu Kush-Himalayan region and specifically from a mountain perspective. Using secondary information and the authors' own experiences, four different participatory forestry models are examined and their relative strengths and weaknesses identified. The models are compared and contrasted using specific criteria such as level of institutionalisation, tenurial security, degree and quality of local participation, decision-making authority, rights and obligations of stakeholders, benefit sharing arrangements, and actual practices, considering the variation in types and quality of forest, population size and resources, and socioeconomic needs, all of which impact on the implementation of a particular model. Measures to overcome weaknesses and to promote participatory forest management are suggested.

I believe that this is the first attempt to examine the evolution of participatory forestry from a specifically mountain perspective at a regional level. Participatory forest management is a topic that is critical to improve the lives of poor rural people, as well as to the sustainable conservation of forest resources. I hope that the information and analysis contained in this book will help to enhance our understanding, stimulate further study, research and dialogue, and provide valuable insights into promotion of participatory forest management in the Hindu Kush-Himalayan region.

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Executive Summary

In an effort to develop an effective institutional framework and mechanisms for the management of forest resources, several participatory forest management approaches (PFM), such as community forestry (CF), joint forest management (JFM), and social forestry (SF), have emerged in different countries in South Asia. These approaches vary considerably in many respects, including level and quality of institutionalisation, tenurial arrangement, degree of participation, decision-making authority, rights and obligations, and benefit sharing. Although there is an expressed desire to promote participatory forest management across the region, little effort has been made to understand the nature of the different approaches, their strengths and weaknesses, and their implications for resource governance and livelihoods. This paper makes an attempt to analyse the four institutional approaches of PFM adopted in Bangladesh, Bhutan, India, and Nepal on the basis of primary and secondary information.

The analysis reveals that, although all four countries are gradually moving from centralised to participatory forest management, the magnitude and pace of the movement varies significantly. While in Nepal and India participatory forest management has become a major thrust in forest management, in Bangladesh and Bhutan it has been progressing cautiously. Except for JFM, all PFM mechanisms are supported by state legislation; the degree of institutionalisation varies considerably, however. While forest user groups (FUGs) in Nepal have full decision-making authority, CFMGs (community forest management groups) in Bhutan and joint forest management committees (JFMCs) in India have limited authority. Considerable variation also exists in the degree of participation of local people in PFM units. While in Nepal local participation is very high, in Bangladesh it is very low; and Bhutan and India fall in between. Despite the emphasis on participatory management, the inclination and practice is still towards regulated participation. However, it is fair to say that the outcomes of PFM activities depend on a number of factors including the size of the population, quality and quantity of resources, and the quality of leadership available in local organisations. The implications of different approaches have been analysed in terms of their policy and legal framework, institutional arrangements, level of decentralisation and devolution, and degree of participation. Policy recommendations for the promotion of participatory forest management have been put forward.

Acronyms and Abbreviations

CF	community forestry
CFMG	community forest management group
DFO	District Forest Office
DoF	Department of Forest(s)
FD	Forest Department
FECOFUN	Federation of Community Forestry Users of Nepal
FUG	forest user group
ICIMOD	International Centre for Integrated Mountain Development
JFM	joint forest management
JFMC	joint forest management committee
NGO	non-government organisation
NTFPs	non-timber forest product
PFM	participatory forest management
SF	social forestry
SFMC	social forestry management committee
VFI	village forest institution
VFPC	village forest protection committee

One Introduction

Forests provide multiple benefits to society and are crucial to the livelihoods of millions of people in South Asia, particularly those living in rural and mountain areas. In India alone, 270 million people in rural areas depend directly and indirectly on forests for food and fodder, as well as cash income through collecting, processing, and selling varieties of timber and non-timber forest products like medicinal and aromatic plants and honey (Talwar 2006, p. 72). In addition to their diverse economic uses, forests serve as protectors of watersheds, conservers of biological diversity, carbon sequesters, and stabilisers of climate. They also play an important role in balancing the ecosystem and supporting agriculture by maintaining and enriching soil fertility (Myers 1996). Until the late 1970s, forests in South Asia were managed by bureaucratic government organisations using a top-down, centralised approach (Poffenberger 2000). This traditional custodian approach, however, could neither maintain the extent and quality of forest resources, nor meet the needs of local communities (Sarker and Das 2006, p.270).

Forests have been degraded extensively in many countries in South Asia (FAO 1999; Tole 1998, p.21). According to an estimate made during the 1980s, over half of the official total forest area of 35 million hectares was degraded (Poffenberger 2000). Officially, 23% of India's area is recorded as forest, but only about 12% has dense forest cover (FSI 2002). In Nepal, two million hectares of forests were destroyed in just 11 years from 1964 to 1975 (Wallace 1981, p.19). In Pakistan, forest cover has been reduced from 25% to 2% over the last few decades (Nizamani and Shah 2004). In Bangladesh, deforestation is continuing at an alarming rate. In 28 of the 64 districts of Bangladesh, there is no natural forest left and the growing stock in all major forests is declining (Khan 1998, p.1); the percentage of land officially under forest is about 14%, but the area under actual tree cover is only 8-9% (FMP 1993). According to an estimate made in 1980, the annual rate of deforestation in South Asian countries between 1981 and 1990 ranged from 0.6% to 3.3%. The lowest was in Bhutan and India (0.6%) and the highest in Bangladesh (3.3%). Nepal and Pakistan experienced deforestation at rates of 1.0% and 2.9%, respectively (Tole 1998, p.21). In recent years, although the rate of deforestation has declined, the trend remains the same.

It has now been realised that forest resources cannot be managed sustainably without the meaningful involvement of local communities. Thus emphasis has been placed on participatory or community-based forest management (PFM, used here as an umbrella term) which includes several participatory management models such as social forestry (SF), community forestry (CF), joint forest management (JFM), and collaborative forest management (CFM) which have evolved in different countries in the region. Community forestry (CF) occupies a central place in forest management in Nepal. In CF the community takes the lead and manages resources, while the government plays the role

of supporter or facilitator; forest management is a community effort and entails little financial or other involvement on the part of the government. In India and Pakistan, JFM has emerged as an effective approach to conserve, manage, and regenerate forest through state and community partnership arrangements. In JFM the owner (the government) and the user (communities) manage forest resources and share both the costs and the benefits. In theory, JFM represents a partnership between the Forest Department (FD) and local village organisations for the joint protection of local forests. These partnerships should entitle village organisations to a specified share of forest product benefits if they honour the multiple responsibilities assigned to them.

These different approaches may have similar goals, but they have slightly different objectives, structures, organisational functions, and characteristics, as well as different implications for the management of forest resources and the livelihoods of forest dependent people.

In order to identify the most appropriate management model for genuine participatory forest management (both conceptually and in practice), it is imperative to know the evolutionary background, key characteristics, and relative strengths and weaknesses of the different systems. Despite a strong desire by many organisations and groups to promote participatory forest management, little effort has been made until now to understand the nature and consequences of the different approaches, and their relative strengths and weaknesses and outcomes. In view of this knowledge gap, this paper attempts to examine critically the different types of participatory forest management approaches that have emerged in South Asia in terms of their policy and legal framework, level of decentralisation and devolution, degree and quality of participation, and rights and responsibilities of local participants. This paper first traces the evolution of participatory forest management in South Asia, followed by a comparative analysis of the different systems. Finally, lessons are drawn from the different approaches, in terms of their relative strengths and weaknesses, and recommendations are made to facilitate and argue for participatory forest management. As a result of the shortage of information and knowledge on participatory forest management in other countries in South Asia, this paper focuses on SF in Bangladesh, CF in Bhutan, JFM in India, and CF in Nepal in hill and mountain areas. It relies to a great part on information drawn from various secondary sources, including government documents, books, reports, and journal articles, as well as the authors' own learning, impressions, and reflections. Secondary information was validated during field visits to selected participatory forest management initiatives in Bangladesh, Bhutan, India, and Nepal and in discussions with key informants. Even though a particular participatory forest management model may be implemented differently in each country (due to local conditions and the nature of local peoples' participation in planning and implementation), at the risk of generalising, this paper identifies the common characteristics of each management model in order to compare them with each other.

Two

Evolving Patterns in Forest Management in South Asia

Looking at the forestry scene in different countries, it can be argued that a major shift has been occurring in the way forest management work is being pursued in most of the countries in South Asia. The evolving patterns in participatory forest management (PFM) in Bangladesh, Bhutan, India, and Nepal are summarised in the following.

Social Forestry in Bangladesh

Participatory forestry management (PFM) began in Bangladesh in the early 1980s under the name social forestry (SF). The aim was to develop and manage forests in a sustainable way by involving local communities and to reduce poverty by generating additional income through planting of trees on marginal lands, riverbanks, road strips, hill slopes, wetlands, and in degraded sal (*Shorea robusta*) forests. Participating farmers, who protected existing trees effectively and planted trees in surrounding areas received a share of the revenue from the sale of any final products produced by the trees. They also received benefits from twigs and fuelwood resulting from thinning and pruning of the trees and were able to consume or sell the fruit from fruit bearing trees (SFR 2004). Social forestry also involves non-government organisations (NGOs) who act as intermediaries between the Forest Department (FD) and local people to facilitate participatory management.

The first SF project in Bangladesh was implemented in the north western districts with financial support from the Asian Development Bank (ADB) and United Nations Development Programme (UNDP). After completion of this project in 1987, the FD initiated another project in the degraded sal forests of Mymensing and Tangail districts. More than 23,000 households have benefited from the revenue generated by the final felling of different social forestry plantations (Muhammed et al. 2005). By 2005, more than 40,000 hectares of land was being managed under SF and was covered with a variety of trees and agroforestry. In addition, 50,000km of strip plantations were created alongside roads, railway lines, and canal embankments (Muhammed et al. 2005). Social forestry has now become an integral part of official forest management in Bangladesh (Khan and Begum 1997), and the government has recently codified the rules and regulations regarding social forestry under the Social Forestry Rules, 2004.

Community Forestry in Bhutan

PFM started in Bhutan in 1979. In Bhutan, PFM encompass both SF and community forestry (CF). SF involves the promotion of plantation activities on individually owned agricultural land (agroforestry) and other private land (woodlots). Community forest is defined as “any area of Government Reserved Forest designated for management by a local community in accordance with the provisions of the Forest and Nature



Pema Gyamtsho

Social forestry has great potential for success in Bhutan: a typical village in Bumthang

Conservation Rules 2003". At present, 31 community forest groups are managing about 2,700 hectares of forest benefiting more than 1,500 households. Another 20 community forests are at different stages of preparation and approval (Tempel and Beukeboom 2006, p.1). Although the PFM process has been progressing slowly in Bhutan since 1979, in the 9th Five Year Plan (2002-2007) PFM has become a broad development strategy and there is a growing interest in participatory forest management (Phuntsho, K., former head of Social Forestry Division, Ministry of Agriculture, Royal Government of Bhutan, pers. comm. in May 2007).

Joint Forest Management in India

PFM began in India in the late 1970s following the 1976 report of the National Commission on Agriculture. In its report, the Commission recommended growing trees on land accessible to village people in order to reduce the pressure on production forests caused by mounting rural demands for fuel, grazing land, and other forest products. As a result of this report, different social forestry projects were introduced in different states using various institutional arrangements. One of the arrangements was to establish woodlots on non-arable communal land to be managed collectively by the user community through the panchayat system. Most of the states implemented the projects in the 1980s under different bilateral and multilateral funding agreements. In the light of the success achieved by this project in terms of greening the countryside, the 1988 Forest Policy was developed and provided strong support to the social forestry project. The Forest Policy also recommended the involvement of the private sector in providing market linkages.

PFM in India gained momentum after the implementation of the joint forest management programme (JFM) by different states, pursuant to the national policy introduced in 1988. However, the rationale for and evidence supporting the 1988 Forest Policy was the experimental JFM informally initiated in the early 1970s in the state of West Bengal. The JFM programme gained impetus and official endorsement when the Government of India announced that JFM would be the bedrock of the Central Government's Forest Policy, which would emphasise the need for the meaningful involvement of local people in forest management. Following the spirit of the new Forest Policy, the Government of India issued a circular in June 1990 asking for the involvement of local people in forest conservation and management through village level organisations (GOI 1990). The Forest Policy also provided guidelines for the sharing of usufruct and the net proceeds from their sale. It was a major shift in the management of forest resources in India – a change from the state-owned, state-managed, and state-appropriated forest management regime founded by the British Colonial rulers, to a state-owned but largely community-managed forest regime (Singh 2006, p.4-5). Institutional arrangements such as village forest protection committees (VFPCs) were created for the protection and rehabilitation of degraded forests through benefit-sharing mechanisms. In different states, VFPCs are called different names, such as joint forest management committees, village forest management committees, and village forest development committees. In this paper, joint forest management committee (JFMC) is used as a generic term to describe all of these.

Although initially JFM was implemented only in degraded forest classified as having a crown canopy of 40% or less, the Government of India's recent circular (GOI 2000) recommends that joint forest management should also include standing forests (crown canopy above 40%), but not the protected area network (national parks and wildlife sanctuaries). The 2000 circular also makes the representation of women on JFM executive committees mandatory (at least 33%). In addition, the benefit-sharing arrangement has been extended from non-timber forest products only, to timber in cases where the committee has 'satisfactorily' protected the forest for a minimum period of ten years (GOI 2000). All the states have issued resolutions setting ground rules for placing degraded forests under the JFM system and for sharing usufruct and net sale proceeds between the FD and the local people through village forest protection committees (Mukerji 2006, p.21).

The JFM system has now spread to 28 states in India. By March 2005, some 99,868 VFPCs had been formed managing 21.44 million hectares of forest (Mukerji 2006, p.21). About 14 million families (some 75 million people) are involved in this forest management system (Mukerji 2006, p.21). JFM is passing through the phases of experimentation, evolution, and expansion. Based on experience gained and challenges faced during implementation, most state governments have modified their government orders to address specific issues such as access and benefit sharing for non-timber forest products (NTFPs) and other forest products, both in reserve and protected forests (Roy 2006, p.291).

Community Forestry in Nepal

The most remarkable changes have taken place in forest management systems in Nepal. New policy and actions towards the decentralisation of forest control began in



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The author with members of Kabhre FUG, Nepal

the late 1970s and since then CF has become a major thrust in forest management. The forerunners of the current community forestry programme were the Panchayat Forest Rules of 1978 and the Community Forestry Programme of 1980. The Master Plan for the Forestry Sector prepared in 1989, the Forest Act of 1993, the Forest Regulations of 1995, and the Forestry Sector Policy of 2000 were developed and implemented to support the community forestry programme.

Since 1980, about 14,000 forest user groups (FUGs) have been formed and are managing more than one million hectares of forest (about one-third of the total forest area), benefiting around 1.2 million households (about one-third of households in the country) (Nurse and Malla 2006). About one-fourth of Nepal's national forest is now managed by more than 35% of the total population. Forest user groups develop their own operational plans, set harvesting rules, set rates and prices for products, and determine how surplus income will be distributed or spent. There is evidence of a marked improvement in the conservation of forests (both increased area and improved density) and enhanced soil and water management (Karki 2003). Communities are playing a major role in forest management and the government has been regulating activities and facilitating the process. Both the area of forests managed by local user groups and the number of these groups have been increasing rapidly. Forest user groups are being established at an increasing rate and are building steadily on the authority they have acquired through legal control over forest resources. CF is now active in 74 of the 75 districts in Nepal.

Comparative Analysis of Participatory Forest Management Systems

The four participatory forest management systems discussed in the previous section have certain common features although they differ in many respects. In the following section the similarities and differences are described in terms of policy and legal frameworks, institutional arrangements, level of decentralisation, and degree of participation.

Policy and Legal Framework

With the growing emphasis on the devolution of responsibility for management of forest resources to local communities, there is increasing realisation of the importance of an appropriate policy and legal framework (Lindsay 1999). Forest resources are also becoming a source of conflict around the world, again underlining the need for appropriate legal frameworks. State policy and law play a critical role in shaping community-based initiatives by defining the rules by which community-based institutions interact with outsiders and by delineating the limits of state power. These policies and laws protect both individual rights and societal interests as the environment changes (Ostrom 1990; Lindsay 1998). Ostrom (1990) argues that, for community-based forest management groups to organise and devise their own institutions, they need to be legally recognised. Moreover, in order for community-based institutions to function successfully, the local community should be given legitimate rights of withdrawal, management, exclusion, and alienation (Schlager and Ostrom 1992; Ribot 2002; Larson and Ribot 2004). Withdrawal rights refer to rights over a defined physical area and resource (e.g., the right to extract timber and NTFPs from a particular area). Management rights refer to the right to regulate internal use patterns and transform the resource by making improvements (e.g., the right to plant seedlings and thin trees). Exclusion rights refer to the right to determine who will have access and how that right may be transferred. Alienation rights refer to the right to sell or lease management and exclusion rights (Schlager and Ostrom 1992).

There are considerable differences among the four PFM approaches in terms of their policy and legal frameworks (see Table 1).

Social forestry in Bangladesh is supported by the Forest Policy of 1994 and Social Forestry Rules of 2004. Local people who participate in the social forestry programme are called beneficiaries. The rights and responsibilities of beneficiaries are clearly defined in the Social Forestry Rules. A management committee elected by the beneficiaries manages tree plantation and protection. However, social forestry management committees (SFMCs) have no decision-making authority. The Forest

Table 1: Characteristics of participatory forest management approaches in South Asia

Characteristic	SF (Bangladesh)	CF (Bhutan)	JFM ^a (India)	CF (Nepal)
Policy/Legal Framework	Forest Policy, 1994; Social Forestry Rules, 2004	Forest and Nature Conservation Act of Bhutan, 1995; Forest and Nature Conservation Rules, 2003	Federal Government letters of 1 June 1990 and 21 February 2000; State Government Resolutions (so far all states have passed JFM resolutions)	Master Plan for the Forestry Sector, 1989; Forest Act, 1993; and Forest Regulations, 1995
Institutional Arrangements	Social forestry management committee (SFMC) formed from participants; social forestry advisory committee comprising FD, NGOs, and participants.	Community forestry management group (CFMG); a minimum of ten households can form a CFMG and elect its management committee.	Forest management committee at the village level called forest protection committee (FPC), village forest committee (VFC), village forest protection committee (VFPC), etc	Forest user group (FUG) develops its own constitution which governs the organisational and financial management of the FUG and the duties of the executive committee and general members.
Land Tenure	No explicit tenure arrangements; participants have no rights over land they have only usufruct rights over the trees they protect.	No explicit tenure arrangements	State government land or common private land	State owns the land but usufruct rights are handed over to FUGs, initially for five years with a provision to further renew. There is no limit to the number of times the agreement can be renewed.
Management Authority	Government retains primary authority and management control and allows local people limited usufruct rights.	Government shares management authority with local people under specific rules and regulations.	Government retains main authority but shares certain responsibilities with local communities under state-specific arrangements.	Authority to protect, manage, and utilise forest and non-forest products is handed over to FUGs. Government plays the role of regulator and facilitator.
Management Unit	Nine member executive committee	The size of the committee is not prescribed; normally 7-9 persons	Village forest development/ protection committee; 10-15 persons	Executive committee of forest user groups; 7-11 people
Benefit Sharing	Benefit sharing mechanism gives 45% of final yield to participants, rest to the government and other participating organisations.	Benefit sharing mechanism is not defined clearly.	Generally, free access to NTFPs except a few NTFPs of high commercial value and sharing of net revenue 25% to 50% of sale of final harvest (varies state to state)	For mid-hills and mountains, FUGs are entitled to keep all products and income. However, 15% of the revenue needs to be given to the government if sal timber is sold to non-user groups in the Terai, Inner Terai, or Churia Hills.

Table 1: cont...

Characteristic	SF (Bangladesh)	CF (Bhutan)	JFM ^a (India)	CF (Nepal)
Rights of Communities	FD prepares all rules and regulations; participants are obliged to obey them.	Rules and regulations are jointly prepared by the FD and CFMG.	All rules have to be framed in consultation with the FD.	FUGs prepare their own rules and regulations with technical support from the DoF.
Degree of Participation	Very low	Low	Low	High
Level of Institutionalization	Projects	Pilot sites	Projects	National programmes supported by various donors.
Contribution to Governance, Access Relation and Social Development	Very low	Low	Average	High; FUGs are now empowered with greater influence over decision making through participation in planning and management, and are able to speak out on issues of forest management through their federation, FECOFUN.
^a JFM practices vary from state to state. Here the most common practices are reported.				

Department (FD) selects the beneficiaries and makes all other major decisions, while the SFMC assists the FD in implementing decisions (Khan and Begum 1997, p.263).

Community forestry in Bhutan, also called participatory forest management (PFM) or community-based natural resources management (CBNRM), is supported by the Forest and Nature Conservation Act of Bhutan, 1995 and the Forest and Nature Conservation Rules, 2003. The Act and the Rules define forest management and its related concepts, and outline the basic principles of forest management, institutional mechanisms, and the distribution of power and authority among the different government departments and the community forest management groups (CFMG). The CFMG is approved by the government and given legitimate rights (certificates) to manage and use designated areas of government reserve forest as per an approved management plan. A comprehensive manual for community forestry has also been developed which describes the steps and procedures for establishing and operating the community forest. The manual contains detailed procedures and sets out the roles and responsibilities of the different stakeholders involved in community forest management. The Forest and Nature Conservation Rules were updated in 2006; they suggest that community forest should be within the proximity of village settlements.

Joint forest management in India is based on Government Administrative Orders of 1990 and 2000. Although the National Forest Policy of 1988 realised the need for people's involvement, no common policy guidelines or legal framework was

developed to actualise the spirit of the National Forest Policy across the states. In 1990, the Ministry of Environment and Forests provided guidelines for the first time. These guidelines remain the main basis for joint forest management in India. State governments have subsequently formulated and approved resolutions laying down procedures for JFM. As a result, the policy framework for JFM varies considerably among the states. Despite this, the legal basis for JFM remains unclear to many states (Khare et al. 2000). Generally, JFMCs are not legal bodies and “barely have any legal sanctity to claim any right over the share of the benefit or produce. Even the MoUs [memoranda of understanding] are not provided due credit” (Roy 2006, p.292). JFM rules only become formally binding when the JFMC is registered under the Societies Act or Co-operatives Act (Behera and Engel 2006). Such registration is only mandatory in six states and is optional in two states (Ravindranath et al. 2000). As a result, the legal status of JFMCs also differs between states, in contrast to FUGs in Nepal which are recognised as local independent institutions and prepare their own constitutions which govern their day-to-day functioning and management (Ribot et al. 2006).

In Nepal, community forestry is supported by an appropriate policy and legal framework. The Forestry Master Plan 1989 provides the policy and planning framework. The Master Plan envisages that “...all accessible hill forests of Nepal should be handed over to user groups to the extent that they are willing and capable of managing them, and the role of the forestry staff should be changed to that of extension and advisory services”. The Forest Act 1993, and the Forest Regulations 1995, provide the legal basis for the implementation of community forestry and recognise FUGs as ‘self-governing autonomous corporate bodies for managing and using community forests’ (Kanel and Kandel 2004, p.59).

Institutional Arrangements

As institutional conditions largely shape and determine the ability of users to manage resources (Ostrom 1990), building a strong and self-sustaining community institution or organisation¹ is a prerequisite for successful PFM. It is now argued that for community-based resource management, the capacity of communities to create and enforce rules needs to be enhanced (Agrawal and Gibson 1999, p.638). There are significant differences among the four PFM systems in terms of their institutional arrangements, which specify the rules, regulations, norms, and practices related to access, use, and control of forest resources and decision-making process.

Social Forestry in Bangladesh

In social forestry in Bangladesh, institutional arrangements have been made at three levels: national, district/sub-district, and community. At the national level, the Ministry of Environment and Forest and the FD are involved in setting rules and regulations, as well as supervising and monitoring the implementation of SF. To facilitate the implementation of SF, the government announced the Social Forestry

¹ There is a difference between ‘organisation’ and ‘institution’. Institutions are defined by Leach et al. (1997) as “regularized patterns of behavior between individuals and groups in society” (p.5), whereas “organizations may be thought of as the players, or ‘groups of individuals bound together by some common purpose to achieve objectives’ ” (p. 24, quoting North 1990, p.5). The term ‘institutional arrangement’ is used here in an inclusive sense and embraces organisations involved in participatory forest management, as well as the way they behave, their norms, and culture.



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Social forestry woodlot plantation in Sripur Forest Range of Dhaka Forest Division, Bangladesh

Rules, 2004, which define and specify the roles of concerned parties, including the Forest Department, participants in SF, and NGOs involved in SF. The FD is the main implementing agency of SF and the Social Forestry Wing of the FD has been established to implement the SF programme. The divisional forest officer/sub-district forest officer is mainly responsible for implementing the programme. A provision has been made to form a three-member advisory committee at the district/sub-district level, comprising the local head of the FD, a representative of an NGO involved in the SF programme, and a representative of the SFMC, to provide the necessary support to SFMCs. At the village and community level, there is a provision for a nine-member management committee to assist the FD to prepare a management plan and to protect and manage trees (SFR 2004).

Community Forestry in Bhutan

In community forestry in Bhutan, institutional arrangements have been made at four levels: national, district, block, and community. At the national level, the Department of Forests (DoF) under the Ministry of Agriculture is responsible for developing policy frameworks and for the supervision and monitoring of the CF programme. A comprehensive manual has been developed for managing community forests (Parts I, II, III, & IV) and distributed for use by field staff. The manual describes the nine steps for establishing and operationalising a CF: the initiation of the CF process, application, review of application, acceptance of application, CF management plan preparation, submission of plan and by-laws, approval, implementation, and monitoring. Further, with the assistance of national and international partners, most of the forestry extension staff and CFMGs have been trained in various aspects of CF including planning, administration, financial management, and silviculture (Tshering 2006). A Forestry Extension Division has been established under the DoF to provide support for

decentralised forestry activities. Forestry extension offices have also been established in each dzongkhag (district) and geog (sub-district) to provide the necessary technical and financial support to local communities/authorities in the implementation of PFM activities at the field level.

At the community level, CFMGs are formed to manage and conserve forests according to their approved management plan. CFMGs take part in assessing resources, deciding the objectives of CF, formulating a management plan, and evaluating that plan. CFMGs also fix the responsibilities of group members and carry out group management.

Joint Forest Management in India

Although there is considerable variation, institutional arrangements for joint forest management in India are generally at four levels: central, state, district, and community/village. Overall policy guidelines are provided at the central level through policy and administrative orders. There is also an Expert Group at the national level to advise the government on JFM issues (SPWD 1998). In order to implement the central government's policy direction, all of the state governments in India have issued state resolutions specifying rules, regulations, and benefit-sharing mechanisms (see Box 1). These resolutions provide the institutional basis for the support of the JFM systems. West Bengal issued the first government order followed by the other states, the last being Meghalaya in 2003 (Roy 2006, p.292). Government orders specify the structure and functions of the JFMCs. As JFM is still at an experimental stage, most state governments have modified their government orders from time-to-time based on experience gained during implementation (Roy 2006, p.291). In several states, there is a state level coordination/steering/working group. Within the Ministry of Environment and Forests (MoEF) there is a JFM cell assigned the task of promoting the nationwide JFM network and coordinating the implementation process with the states.

At the community level, JFMCs (called by different names in different states) are the main institutions primarily responsible for protecting and managing forests. The legal status of JFMCs differs between states. However, in general, JFMCs are not legal bodies unless they are registered under the Societies Act or Co-operatives Act. There is regional variation in how JFMCs are formed. In the Northern, Southern, and Central regions, excepting Chhattisgarh, nearly all JFMCs are formed by the FD; whereas in West Bengal and Orissa in the Eastern region and in Gujarat in the Western region, more than 30% of the JFMCs have been formed through community initiative (Roy 2006, p.291).

Community Forestry in Nepal

In Nepal, institutions working at three levels (national, district, and community/village level) are involved in community forestry management. At the national level, the Ministry of Forest and Soil Conservation (MFSC) and the Department of Forest (DoF) are involved in setting rules and regulations, as well as supervising and monitoring the implementation of the CF programme at the national level. The District Forest Office (DFO) provides support to FUGs in implementing the CF programme. FUG executive committees (elected representatives of forest users) implement CF with the support of the various DFOs. The Forest Act of 1993 and the Forest Regulations of 1995 recognise FUGs as self-sustained independent entities (Kanel 2006, p.44). The legislation gives

Box 1: Key features of joint forest management in India

- The FD agrees to provide conditional access to specified forest products to members of an existing or specially constituted village forest institution (VFI), subject to the VFI honouring the responsibilities assigned to it by the FD.
- The terms of the (JFM) agreement unilaterally specified by the FD may, or may not, be accompanied by a written agreement or memorandum of understanding signed by both parties.
- Members of the partner VFI are expected to collectively protect their JFM forest from grazing, encroachment, poaching, fire, and timber smugglers, however they are not delegated any authority to enforce protection (only the new draft of the JFM rules of Himachal Pradesh proposes delegating the powers of a forest officer to the VFI President).
- If, in the view of the 'competent forest officer' (usually the district forest officer), the VFI members honour their protection responsibilities satisfactorily, they are entitled to free access to non-nationalised NTFPs from the forest area. However, most commercially valuable NTFPs remain nationalised in most states, which effectively implies free access only to fodder grasses, lops and tops of branches, and a few other NTFPs with low commercial value.
- After successful forest protection for a minimum of 5 to 10 years, the VFI (or its individual members) gain entitlement to 25% to 100% of the benefits (this differs from state to state).
- The organisational structure and membership norms of the VFI are prescribed by each state JFM order. Only two states (Haryana and Gujarat) permit the VFI to be an autonomous entity registered as a co-operative or a society. In all other states, the VFI is only registered with the FD and must have an FD field officer as its member secretary who is responsible for convening and recording the minutes of all VFI meetings. As a result, the accountability of VFI secretaries is to the FD and not to the general body of members of the VFI.
- Most state JFM orders also list some responsibilities of the FD under JFM. These normally include information, training, and capacity building support to partner VFIs.
- However, in practically every case, the FD retains the power of judge and jury to unilaterally cancel a JFM agreement if a VFI is considered to have violated any of its terms. In such a situation, the villagers are not entitled to any compensation for years of forest protection. In contrast, if the FD violates any of the terms of the agreement, the villagers have no power to demand accountability. Thus, JFM does not confer any rights to VFIs, either in relation to forest produce or the forest land itself.

Adapted from Khare et al. 2000, p 72.

Box 2: Key features of community forestry in Nepal under the Forest Act and Forest Rules

- Any part of a government forest can be handed over by the district forest office (DFO) to a community of traditional users of the resource. Only the right of forest management and use is transferred from the Forest Department to the users, not ownership of the land itself.
- Part of a national forest can be handed over to a forest user group, irrespective of the size of the forest or number of households in a FUG.
- The handing over of national forests to communities as community forest has priority over the handing over of such forests as leasehold forest.
- FUGs must manage the community forest as per their constitution and operational plan, which are approved by the DFO.
- FUGs are recognised as independent and self-governing entities with perpetual succession.
- FUGs are allowed to plant short-term cash crops like non-timber forest products, for example bamboo, rattan, and medicinal and aromatic plants.
- FUGs can fix prices for forest products under their jurisdiction and sell such forest products. (At present sales income is subject to 15% tax in some areas).
- FUGs can transport forest products under their jurisdiction anywhere in the county.
- FUGs can accumulate funds from grants received from the Government of Nepal and other local institutions, from the sale of CF products, and from other sources, such as fines. FUGs can use their funds for any community development work and as per their decision.
- FUGs can amend their operational plan by informing the DFO.
- In the case of forest offences, FUGs can punish members according to their constitution and operational plan.
- If forest operations deviate from the operational plan resulting in damage to the forest, then the DFO can withdraw the community forest from the users. However, the DFO must give the forest back to the FUG, once the committee is reconstituted.

Adapted from Kanel 2006, p.39-40.

full authority to user groups to manage the community forest as per the operational plan approved by the DFO (see Box 2). Other important organisations that have emerged on the community forestry scene in Nepal include the nationwide Federation of Community Forestry Users, Nepal (FECOFUN) and the Nepalese Federation of Forest Resource User Groups (NEFUG). FECOFUN has the largest network and articulates the interests of forest users. It works as a pressure group to promote good governance in CF, lobbies the government on behalf of its members, and has been instrumental in defending CF users' rights (Britt 2002).



Golam Rasul

Members of Kabhre Forest User Group, Nepal

Level of Decentralisation

Decentralisation² has been seen as a means of promoting increased participation and the improved management of natural resources based on secure tenure and incentives for conservation. In PFM, the aim of decentralisation policies is to decentralise decision making and devolve powers to lower levels so that local people, particularly user groups, can exercise a certain degree of autonomy in management decisions including designing rules and regulations to control access to and use of resources. The overall goal is to develop governing institutions and mobilise required resources for the sustained use and management of common property forest resources (Ostrom 1990). Decentralisation is the process by which local people are given the opportunity and responsibility to manage the forest resources, define their needs, goals, and aspirations, and make decisions affecting their well-being.

There are considerable differences between the four PFM systems in terms of decentralisation (Table 1). In Nepal, the government has devolved a large group of powers to local community-based institutions (FUGs), whereas in SF in Bangladesh most of the decision-making authority is retained by the FD and very little power and authority has been transferred to local beneficiaries. Decisions regarding "... the selection of beneficiaries, choice of species, choice of sites, and the silvicultural technology are prescribed by the professional foresters" (Khan and Begum 1997, p.263).

² Decentralisation refers to the delegation of power and authority to lower level institutions in a political-administrative and territorial hierarchy by central government (Ribot 2004). Devolution of resource management generally refers to the delegation of power and authority at the local level to user groups (Tarrow 1998). Devolving powers to lower levels involves the creation of a realm of decision making in which a variety of lower-level actors can exercise a certain degree of autonomy (Booth 1985; Smoke 1993).

The role of the SFMC is only to assist the FD in implementing their decisions (SFR 2004). CF in Bhutan and JFM in India are between these two ends of the spectrum. Although the FD shares certain responsibilities and authority with local forest user groups, it retains a large degree of control over the decision-making process.

In JFM, Forest Department staff serve as member secretaries on JFMCs and are responsible for convening meetings of their executive committees. The constitution of the JFMC, including the executive committee, must be approved by the divisional forest officer concerned. In many states, working plans are prepared by the FD and harvesting decisions are also made by the FD (Ballabh et al. 2002, p.2165). In a few cases, the FD even decides the tree species to be planted (Khare et al. 2000). In most states, the FD retains the right to determine disposal procedures for commercially valuable products, including NTFPs. Above all, the FD can terminate JFMCs and dissolve executive committees without giving reasons. The beat officer from the FD is either an ex-officio member of the executive committee or, in some states, a member secretary (as in West Bengal).

The extent of centralisation of decision making in JFM can be judged from the following quotation.

“Even silvicultural decisions relating to the treatment of particular forest patches, the scheduling and harvesting are still quite centralised. Working plans are prepared by a special divisional forest officer, distinct from the territorial officer who must implement them. These plans must then be approved at regional level. Exceptions and deviations to these plans must be approved at state level” (Ballabh et al. 2002, p.2165).

This kind of highly centralised decision-making structure not only hinders the active participation of local people in management decisions, but also constrains the development of site-specific forest management plans and programmes aimed at improving forest condition, enforcing protection, and using the benefits. Moreover, the communities' ability to enforce access rights and other rules is often limited as it depends on the FD's willingness to provide support in terms of administrative and legal backing and conflict resolution between JFMC members and non-member forest users. For example, an FD official in charge of JFM announced that the committees should allow grazers access to forests. In a few instances, the FD forced committees to accommodate non-members against JFMC wishes. This kind of discretionary authority retained by the FD often violates the rights of exclusion given to communities. Moreover, the administrative nature of JFM constrains the ability of JFMC members to take any legal measures to protect their rights (Behera and Engel 2006, p.359).

Rights and Responsibilities and Decision-Making Authority

The transfer of appropriate rights and responsibilities to local communities is crucial to the promotion of participatory forest management. 'Rights' refers to the right to access and use forest products, and the right to access benefits; whereas 'responsibilities' refers to the responsibility for tasks, implementing decisions on rules, procedures, and beneficiaries, and abiding by such rules (Behera and Engel 2006, p.355). The goal of participatory forest management is to increase the participation of local people in decision making in natural resource management, including resource development and



Nani Ram Subedi

A joint forest management committee meeting in India

use. There are considerable differences in the management rights and decision-making authority under each of the four PFM approaches (Table 1).

In SF in Bangladesh, the decision-making process is top-down. Normally, the FD makes the decision and the local people implement it (Salam and Noguchib 2006). In practice, the Ministry of Environment and Forest and the FD are the sole authorities able to make decisions on PFM. Salam and Noguchib (2006) found that about 85% of farmers participating in the SF programmes for sal forest did not participate in any stage of the decision-making process and 37% of participating farmers did not even know the goals and objectives of the programmes. Participating farmers are responsible for protecting and maintaining planted trees and are given usufruct rights over the forest and agricultural resources. Their share of the benefits is 40% from woodlot forestry, 45% from agroforestry (from final harvesting), and 100% of any benefits from interim products (SFR 2004).

In Bhutan, members have full rights over the products of CF (CFM 2006). Members can obtain wood from community forests by applying for a local permit, which is issued by executive committee members (Wangdi and Tshering 2006, p.6). Members are responsible for tree planting, silvicultural management, and forest protection. In a study of three community forests, it was found that communities had contributed 7,524 person days, worth USD \$16,680, in three community forests. However, a recent study by Wangdi and Tshering (2006, p.5) revealed that CFMG members are concerned about the ownership rights to their CFs.

In Bhutan, local initiative is relatively low. People's subsistence forest requirements can be met from state forests and there is little market for private timber. The capacity of

local communities to design and implement forestry programmes is also low. The FD is proactively pushing and supporting community-based management. As a result, major decisions are taken by FD staff.

In JFM in India, JFMCs are not independent institutions and do not have full decision-making authority. The FD plays a major role in preparing management plans (Behera and Engel 2006). A joint working plan, or micro plan, outlining a detailed management plan is prepared by the FD in consultation with the JFMC. Under JFM, the community plays a limited role in deciding management objectives and formulating a plan to achieve them. Micro plans tend to reflect FD agendas rather than community needs and are drafted in a traditional silvicultural format (Conroy et al. 2002, p.236). A recent study (TERI 2004) found that in 9 out of 22 states, the FD retained the right to frame rules, with communities either having no rights (in five states) or only the right to assist the FD (in four states). In some cases, such as in Andhra Pradesh, the preparation of micro plans is entrusted to the local communities, but the FD must give final approval before the plan can be implemented. The distribution of benefits from the forest is another important management right. However, seven states in India did not transfer this right to communities, and in another six states the communities only had the right to assist the FD (TERI 2004)). Under JFM, members of JFMCs have the right to use several non-timber forest products from their protected forests and to keep a share of the proceeds from the sale of timber once forests are mature. However, withdrawal rights are not granted to communities for all NTFPs. In particular, rights over commercially valuable NTFPs, such as amla, sal, and tendu leaves, have not been fully devolved to communities. For example, in Andhra Pradesh a total of 22 NTFPs are leased to a state government agency called the Girijan Cooperative Corporation (GCC), thereby prohibiting collectors from the villages from selling these products on the open market, despite the fact that tribal people's livelihoods depend on many of them (Behera and Engel 2006). Some state resolutions give JFMCs the authority to punish or fine forest offenders. In a study in 1998, out of 18 states, 5 had passed a resolution to give JFMCs the authority to punish forest offenders (SPWD 1998). In most states, the FD has the unilateral right to dissolve JFMCs and to cancel membership (SPWD 1998). However, there is one important positive aspect to the involvement of the Forest Department in JFM: it ensures that different funding mechanisms available within the central and state schemes (such as funding through the Forest Development Agency) are channelled through JFM, which helps improve forest resources. There is also a better quality of silvicultural and professional management inputs into JFM due to the heavy involvement of the range and beat staff of the FD in managing JFM.

In CF in Nepal, a large part of the responsibility for the management, development, and use of forest areas has been handed over to FUGs. The forestry laws have given partial autonomy to local FUGs in matters relating to the protection, development, and use of forest resources (Gautam 2002; Kanel 2006). FUGs prepare their own constitutions with technical support from the local staff of the DoF under the broader framework of the Forest Act, 1993. FUGs also prepare forest management plans, which normally receive approval from the District Forest Officer (DFO). FUGs make major decisions on the management, marketing, and distribution of benefits. They have a formal right to forest products from their community forest and are exercising this right (Gautam 2002; Kanel 2006). FUGs also have the right to control the land, as well as to establish cooperation within communities to effectively manage communal forests and property granted by

the government. Community members have the right to share access to community forest resources, and the benefits gained from them under the provision for equal distribution of benefits and costs to a community. FUGs can legally use their forests for subsistence by cultivating non-timber forest products, growing trees, and harvesting forest products for commercial purposes and sale. They are, however, not permitted to clear the forest for agricultural purposes. FUGs also have the authority to impose sanctions on anyone who violates FUG rules (Gautam 2002). All FUG constitutions contain clear provisions for graduated sanctions, including cash fines, for violating FUG rules, although the type of punishment at each level differs widely (Gautam 2002).

Degree of Participation in Decision Making

Participation brings local knowledge into decision making and enhances 'ownership' of decisions, for example decisions about rules for resource use (Ostrom 1990). Where they have ownership, local people provide better information and engage more actively in implementing, monitoring, and enforcing rules. As participation influences outcomes, it is necessary to examine the level of participation in different forest management approaches (Michener 1998). The participation of women in forest management is an important issue as women are directly involved in the use and management of forest resources, but it would be necessary to have a differentiated analysis to understand women's participation clearly. In the following we focus on participation in general. Agarwal (2000) provides a comparative analysis of the participation of women in JFM and CF.

Participation in PFM can be broken into three levels: participation in planning, participation in protection, and participation in decision making. Although local people are involved in forest protection (watching, guarding, and patrolling) in all four systems, either directly or by contributing some payment, there are significant differences in participation in the decision making process.

As described above, participation in decision making is low in SF in Bangladesh. Participating farmers do not enjoy full rights to participation in terms of consultation, negotiation, or decisions (Table 1). The FD is the primary government agency responsible for executing project activities and receiving revenue from forest resources, which is then shared with the participating farmers. In SF in Bangladesh, participants are termed 'beneficiaries' rather than joint managers, and the approach is designed to fulfil the objectives of the FD rather than those of the villagers.

The level of participation in decision making is also very low in JFM in India. In a study in Andhra Pradesh, the entire harvesting activities (from logging to final sale) in 54 out of 55 JFM villages were carried out by the FD with little or no participation by local communities (the exception was one community where timber and bamboo were harvested for sale). The communities had no idea of the rate at which their products were sold or the amount of money received (Behera and Engel 2006, p.359). The lack of transparency in transactions for harvested timber and NTFPs often leaves communities at the mercy of the FD in relation to revenue sharing. Behera and Engel (2006, p.359) noted that "...FDs keep the harvested timber in their timber depots before negotiating with potential buyers, and the negotiation process does not involve JFMC leaders".



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Roadside plantation under the social forestry programme in Bangladesh

Even selection of species, for example, represents government choice rather than local demand (Khaire et al. 2000).

In CF in Nepal, the forestry laws have given partial autonomy to the local FUGs over matters related to the protection, development, and use of forest resources (Gautam 2002; Kanel 2006). This has facilitated the active participation of local people in forest management. The FUG members participate by making their own rules and regulations, and by determining methods of utilisation, including benefit sharing (Gautam 2002; Kanel 2006).

The degree of participation and its outcomes are influenced by many factors including incentive structure, decision-making authority, and the role of the state and the government. Participation fails in SF and JFM because the government transfers inadequate powers to local people to make their own rules and regulations. Participation makes governments more accountable to local populations and makes decision making more open and democratic. From a people-centred perspective, participation is both a means and an end. It is a means to meet locally felt needs and to redistribute scarce resources, but it also has an inherent value as a process that empowers the poor by enhancing local management capacity, increasing confidence in indigenous potential, and raising collective consciousness.

Four Discussion

Forest management in South Asia is undergoing gradual but pronounced change. Various forms of participatory forest management have changed the landscape in many parts of the region. In certain cases, local people have successfully designed and implemented rules and regulations and are managing forests in sustainable ways. Large areas of once degraded land are now regenerating under participatory forest management and different joint-management frameworks. Participatory forest management has also created more space for social mobilisation. In Nepal, for example, the empowerment of local resource users has encouraged them to challenge the traditional forms of authority and to address the problems of unequal access to resources.

There are considerable differences among the four approaches in terms of their policy and legal support, institutional arrangements, level of decentralisation, rights and responsibilities, quality of management outputs and outcomes, decision-making authority, and degree of participation (see Table 1). Although there are similarities among the four systems, they represent differing types of management regime and are at different stages – or levels of transfer of rights and responsibilities – in participatory management.

In SF in Bangladesh, PFM still remains at a basic level. SF is essentially an externally sponsored forest management system, where all physical and financial inputs are supplied by the FD, and the main authority and control remain with the FD (see Table 1). The FD follows a top-down, custodial approach to decision making, and the participation of local people is only sought to achieve the objective of meeting afforestation and tree plantation targets in return for a share of returns. The participants are given very limited authority and control. The FD makes all major decisions and local people's participation in decision making is very low. This model of forest management can be characterised as a limited participatory model.

Joint forest management in India and community forestry in Bhutan are fairly similar and at the same level of development. Local people join with the FD in developing forest management plans, which draw on the knowledge and experience of both local people and the FD (see Table 1). Authority and responsibility are shared, although local people are given only limited (inadequate) authority and power to design and implement forest management and development plans independently. However, the local people in Bhutan and India are gradually taking on greater responsibility. This forest management model can be characterised as a joint management or co-management model.

In community forestry in Nepal, the community (i.e., the forest user group) is primarily responsible for forest management. Local people prepare forest management plans (with technical support from the DoF, make major decisions regarding forest management, and design rules and regulations regarding access to and control of forest resources and in relation to benefit sharing. CF has also contributed to community-building processes (i.e., processes that contribute to the development of community-based forestry) by enhancing the position of collective actors in property, governance, and access relations; improving the nature of collective decision-making; and legitimising customary sources of authority. FUGs have also become important local development institutions at the village level (see Table 1). They provide a forum for villagers to meet and discuss different development issues. In addition to forest management, FUGs carry out various development activities such as supporting schools; constructing local roads, irrigation canals, and drinking water facilities; and other development activities (Timsina 2002). This model of forest management can be characterised as a community control model. However, CF in Nepal is limited to hill forest areas. It is proposed to manage almost one-third of the high forest in the Terai under a different system of PFM called collaborative forest management.

Although many hectares of once degraded land in South Asia are now regenerating under various forms of participatory forest management, the analysis revealed that reforms in forest management are still incomplete in many ways (see Table 1). In Bangladesh SF goes back more than 20 years, but it is moving slowly and mostly still confined to roadsides, riverbanks, and degraded sal forest. SF is highly top-down and tree centred and lacks true participation of the local people in planning and management. It is similar to the early social and community forestry approaches in Nepal and plantation forestry in India. JFM in India is mostly confined to degraded forest (although a recent Government of India circulation has opened protected forests with canopies of less than 40 percent to management under the JFM programme, except in West Bengal and Madhya Pradesh) (Sundar 2000, p.267). Moreover, most of the advances have been project driven and have not been institutionalised as government programmes. Therefore, after withdrawal or termination of project support, there is a risk of unsustainability.

Five

Conclusions and Policy Recommendations

Participatory forest management (PFM) in South Asia is undergoing an evolutionary process, yet knowledge on how to design PFM and implement it more effectively is still limited. PFM experiences gained from Bangladesh, Bhutan, India, and Nepal provide some useful lessons and insights. Despite some commonalities (e.g., state owns forest lands, forest department approves forest management plans, and local people protect and maintain forests), the analysis revealed that the four country models of PFM differ considerably from each other and are at different stages of participatory management. The examination of various aspects of the four PFM models revealed three different categories: limited participatory model, joint management model, and community control model. These can be depicted as a continuum from state-controlled to community-controlled forest management regimes. Social forestry (SF) in Bangladesh and community forestry (CF) in Nepal, as currently practised, are at the two opposite ends of the spectrum, with joint forest management (JFM) in India and community forestry (CF) in Bhutan somewhere inbetween.

It is interesting to consider why the CF model in Nepal is relatively more advanced in facilitating PFM than the other models. The authority and autonomy given to local FUGs by the respective policies and acts (Forest Act, 1993 and Forest Regulations, 1995) to design and implement their own rules, regulations, plans, and programmes, and the power to revise them based on learning and experience, made CF in Nepal relatively more participatory and successful. The communities (FUGs) devise and revise their own rules through collective choice, as needed. Unlike SF in Bangladesh and JFM in India, the forests handed over to the FUGs in Nepal are not confined to degraded lands, nor do FUGs have to share benefits with the state, except in the Terai region. FUGs in Nepal also have the right to impose sanctions on those breaking community rules.

Despite the emphasis on participatory management, which requires the involvement of people in decision making, overall the inclination has been towards controlled participation. Participatory management is not simply about forming committees. Genuine participatory management entails the formulation of appropriate management and development strategies based on the analysis made by local people with the assistance of forest experts capable of providing technical advice. In some instances, for example in SF in Bangladesh, the role of the local community has been grossly neglected. As a result, SF is moving slowly and is mostly found along roadsides and riverbanks and in sal forests. SF in Bangladesh is top-down and tree centred, and fails to muster the true participation of local people in planning and management. It is similar to the early social and community forestry approaches in Nepal and plantation forestry in India. Similarly, JFM in India is also mostly confined to degraded forests.

Rights and responsibilities are not distributed in a balanced manner in SF in Bangladesh or JFM in India. Local people have more responsibility, whereas the FD has more authority. Hence, there is a lack of mutual accountability. Communities are more accountable to the FD than the FD is to them. In particular, the FD's right to dissolve the executive committee of forest user groups makes it an unequal partner. On the other hand, the community does not have the right or power in any of the PFM models to take action if it thinks that the FD is not fulfilling its responsibilities satisfactorily.

In CF in Bhutan, the law creates appropriate legal opportunities for community participation, but there are limited opportunities for communities to sell forest products. Moreover, local people can obtain sufficient timber and non-timber forest products (NTFPs) from state forests as per government rules. Therefore, there is little incentive for them to be involved in community-based forest management. Given the low interest and low ability of local people to exercise their power and authority, the FD is trying to promote the community-based approach by providing large amounts of support. However, the way in which the FD is providing this support is as an extension of the Forest Office to the community rather than by supporting the community to manage the forests themselves. Instead of creating a market for community forest products, the FD is developing rules and regulations for better silvicultural management. In many situations, the village forest committees established under CF in Bhutan have become an arm of the FD, rather than being developed as independent organisations that could challenge the authority of the FD.

Policy Recommendations

1. **Recognition of forest user groups as legal entities:** As in Nepal, forest user groups should be recognised as legal entities, particularly in Bangladesh and India. As the PFM model is a reversal of the traditional top-down forest management model, it faces many institutional and structural problems, thus requiring strong political support from the government.
2. **Involvement of forest user groups in decision making:** The involvement of forest user groups is a pre-requisite for the promotion of PFM. It is, therefore, important to design effective institutional mechanisms to ensure their active involvement in planning, implementation, and decision-making processes. User groups should be given more authority and autonomy to design and implement forest management plans, benefit sharing mechanisms, and other rules and regulations for the effective conservation and management of forest resources.
3. **Balanced distribution of power and authority:** As opportunities to manage and control forest resources are influenced by the distribution of power and authority between the forest user groups and the FDs, it is necessary to rationalise the distribution of power and authority between the two parties. It is also important to develop mechanisms to ensure the accountability of FDs. At present, under all the four management models, forest management groups are made accountable to FDs but FDs have only limited accountability to forest management groups.

4. **Provision of new knowledge, skills, information, and support:** As PFM is a new venture, local people need new knowledge (technology, market information, silvicultural options, and others), skills, information, and support to manage forests more effectively. Marginalised groups, especially the women and the poor, often fail to exercise their rights due to inadequate knowledge and information, and resource constraints. To promote PFM, governments should provide the necessary support to local forest user groups and build their management capacities in resolving conflict related to forest management and in dealing effectively with outside partners, including FDs and other regulatory and supporting agencies.
5. **Enhance capacities and coordination of public sector agencies:** The pursuit of forest management is consistent with sustainable development as it requires pursuing economic activities for the improvement of the quality of life of people, without inflicting damage upon natural resources. Forest management cannot be made the exclusive responsibility of the FD; it is necessary to involve concerned line agencies such as agencies involved in agriculture, livestock, soil, local government, and rural development, to promote sustainable forest management. Towards this end, the capacities and coordination of public sector agencies involved in forest management and rural development should be enhanced.
6. **Promotion of economic opportunities:** Efforts to promote PFM cannot succeed if people cannot sell their forest products and gain economic benefit. Formal and informal barriers to selling community forestry products need to be removed. Where markets for products are not available, for example in Bhutan, such markets need to be created and developed to enable the marketing of community forestry products, including timber and non-timber forest products.
7. **Promotion of federations and networks:** Given the tendency of the regulatory authorities to circumvent rules and regulations, it is necessary to establish effective mechanisms to ensure that the commitments made to communities are implemented properly. Federations of forest user groups, like FECOFUN in Nepal, may be established in order to improve the bargaining power of user groups. A regional network of groups practising PFM could be formed to share experiences and information, particularly on markets, technology, and management options.
8. **Creating awareness at appropriate government levels:** Special attention should be paid to re-orientate state forest bureaucracies away from traditional models that emphasise trees and production, towards PFM with a focus on local forest dependent people, their livelihoods, and the overall socioeconomic development of the rural communities living in and around forest areas.

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