

Advances in Participatory Forest Management in South Asia

Learning from Field Experience in
Bhutan, India and Nepal



Jochen Statz, Rajan Kotru,
Hans Beukeboom, Golam Rasul,
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About the Organisations

The International Centre for Integrated Mountain Development (ICIMOD) is an independent 'Mountain Learning and Knowledge Centre' serving the eight countries of the Hindu Kush-Himalayas – Afghanistan , Bangladesh , Bhutan , China , India , Myanmar , Nepal , and Pakistan  – and the global mountain community. Founded in 1983, ICIMOD is based in Kathmandu, Nepal, and brings together a partnership of regional member countries, partner institutions, and donors with a commitment for development action to secure a better future for the people and environment of the extended Himalayan region. ICIMOD's activities are supported by its core programme donors: the governments of Austria, Denmark, Germany, Netherlands, Norway, Switzerland, and its regional member countries, along with over thirty project co-financing donors. The primary objective of the Centre is to promote the development of an economically and environmentally sound mountain ecosystem and to improve the living standards of mountain populations.

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Foreword

Community participation in natural resource management and ecosystem conservation has been widely practised during the last two decades in countries of the Himalayan region, particularly in Nepal, India, and Bhutan, and significant progress has been made both in terms of millions of hectares covered and thousands of communities engaged. Widespread support for the programme has led to these accomplishments and has shown that community-based forest management can reverse forest degradation trends and provide significant benefits to local communities, especially the mountain poor, women, and other marginalised groups.

However, success and growth has brought with it new issues of governance, forest management, marketing, and equity. While contributing significantly to forest conservation and sustainability in production of goods and services, the approach has shown that continuing achievement depends on accelerating and internalising learning and good practices in the highly varied social and natural circumstances in which it has been applied. Better understanding is needed of the micro and macro issues concerning how households participate in forest management, the types of constraints and opportunities they face, the consequences of technology choices adopted, the types and distribution of benefits, and the effects of different policy and institutional arrangements.

Both ICIMOD and the German development agency, GTZ have been deeply engaged in promoting participatory natural resources management in Asia. ICIMOD's two decades of experience together with partners like GTZ, has shown that meaningful involvement and participation of local communities in forestry, watershed, and rangeland resources management projects and programmes can lead to real improvements in the livelihoods of mountain people. Sustained participation fosters their improved socioeconomic conditions. It also creates a sense of ownership for community-based resources, and strengthens the capacity of individuals and community organisations to mobilise local resources thus minimising dependence on government resources.

Recently, GTZ, in collaboration with national partners, completed participatory natural resources management projects in Bhutan, India, and Nepal: the Bhutan-German Sustainable Renewable Natural Resources Development Project in Bhutan, the Indo-German Changar Eco-Development Project in India, and the Churia Forest Development Project in Nepal. This publication presents the results of a joint undertaking carried out to study these projects, identify lessons learned, and thus contribute to continuing learning on community-based forest management not only for ICIMOD and GTZ but also for others involved in forest resource management.

A joint team of staff from GTZ and ICIMOD focused on three country case studies to examine how the GTZ supported community-based forest management (CBFM) projects have linked people, institutions, sectors, disciplines, activities, and programmes together in a dynamic system of community forest resource management. The learning

approach recognised that management and use of any one component of a natural resource inevitably affects other resources. It also underscored the dynamic nature of participation, consultation before action, cooperation, communication, coordination, and shared decision-making.

The papers included in this volume represent the state-of-the-art in the field of CBFM. The multidisciplinary team comprising foresters, sociologists, economists, and rural development specialists that carried out these studies found results that affirm the capacity of community-based management to succeed in a variety of circumstances. The studies also identified a number of issues that need to be addressed to improve both positive and negative factors that could influence participatory natural resource management. Factors that have led to successful innovations include: (a) an effective institutional framework developed to embrace a multi-sectoral approach to decision-making, (b) enabling policies, legislation, and implementation arrangements at both national and local levels, (c) a high degree of awareness among the people and communities involved, and (d) provision of economic and institutional incentives for meaningful people's participation. On the other hand, factors that have had slowed progress include: (a) existence of vested interests (b) lack of facilitating and enabling institutional mechanisms, (c) lack of a regular policy review and reform mechanisms to address emerging issues like marketing and enterprise development, and (d) neglect of issues related to gender and social equity in planning and implementation.

The projects represented three different methodologies being used for natural resource management and tested varied institutional arrangements and approaches. The Churia Project in Nepal tested the feasibility of a community forestry framework involving distant users in the Himalayan foothills. Although community forestry was successful in the middle hills of Nepal, there were doubts whether the model would work in the completely different conditions of the Churia (or Siwaliks) Hills. The Changar Eco-Development Project in the Dhauladhar range of Himachal Pradesh, India, introduced and tested micro-planning in joint forest management with the active involvement of the panchyati raj institutions - the grassroots level local government institution in India. The Bhutan-German project dealt with the question of whether participatory forest management could be successful in conditions where forest resources are relatively abundant.

The authors also identified key challenges and opportunities. As the paradigms for sustainable mountain development are continuously evolving and new innovations keep emerging, CBNRM strategies and approaches will need to be revisited on a continuing basis, updated, readjusted, and refined. The papers describe methodologies and approaches that have been reassessed, and strategies that have been reformulated in the context of the dynamic nature of the mountain imperatives of forest and watershed management, biodiversity conservation, livelihoods improvement, and use of non-timber forest products for income generation. Forest resources are valuable and have competing uses. Wise and creative compromises and trade-offs may have to be made by policy makers and resource managers through careful planning and implementation of projects that balance between the ideology of conservation and the imperatives of development, always focusing on local peoples' needs and popular participation – as local people are the principal stakeholders of the natural resources.

As resources become scarcer and as populations increase, it will require foresight and vision as well as creative imagination on the part of political and organisational leaders, researchers, and forest resource managers, to deliver sustainable development programmes and activities to people effectively. ICIMOD, working together with its regional member country partners and donors like the German Government (BMZ) and GTZ, is committed to continuously learning from experience and adding value to the initiatives of the communities who depend on forest, rangeland, and watershed resources for their livelihoods. The lessons learned from these projects will guide our joint community-based work in future.

I congratulate the learning and writing team for their keen interest, dedication, and enthusiasm and laud GTZ for the initiative to put their projects to scrutiny and use them as a basis for continuing learning. This is an initiative worthy of wider emulation. I hope this collaborative exercise will help to enhance our understanding of and provide further insights in better addressing emerging challenges in participatory forest management in HKH region.

Madhav Karki
Deputy Director General - Programmes
ICIMOD

Message from GTZ

Community participated forest management has been advancing over the years in South Asia, particularly in Nepal, India, and Bhutan, and significant progress has been made. GTZ is pleased to have been associated with this important initiative from the very beginning as one of the important partners. Our major support to the promotion of participatory forest management in Bhutan, India, and Nepal has been through three major projects: the Bhutan-German Sustainable Renewable Natural Resources Development Project, the Indo-German Changar Eco-Development Project, and the Churia Forest Development Project.

All three projects are very interesting, each represents a different approach to forest resource management with different institutional arrangements and policy orientation. In order to draw key lessons from these pioneering projects, and with a view to sharing the findings and lessons learned at a regional level as a contribution to taking forward the community forestry movement, ICIMOD and GTZ jointly undertook an initiative to document the experiences gained. The joint learning mission that was formed adopted a novel approach by forming a multi-disciplinary team comprising the project implementing officials and local officers to gather relevant facts and figures. The team jointly gathered the lessons learned through field visits, participant observation, and key informant interviews. The information was shared and discussed with relevant stakeholders and changes made based on the feedback. These experiences are now being shared with a wider public in this publication.

The experiences gained through these projects indicate that using appropriate technical and financial support it is possible to achieve the twin goals of conservation of forests and reduction of poverty. Moreover, communities, given opportunities and incentives, can improve degraded forests, as shown, for example, by the Nepal Churia project. The learning team worked together for almost two years to complete the project in a systematic manner. I am very glad to see this document published, which succinctly documents the key lessons learned for use by the partners in their future work.

I congratulate the team for their success in translating the ground perspectives into key policy messages. The publication has also documented a list of good practices in community-based natural resource management which will be a useful reference not only for GTZ and ICIMOD but also for other stakeholders involved in community forest management. I hope that this collaborative exercise will stimulate interest and dialogue in further developing community forest management and contributing to the well-being of poor people in the HKH region.

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Executive Summary

The development of community-based natural resource management (CBNRM) is more advanced in the Hindu Kush-Himalayan region, where natural resources are heavily linked to people's livelihoods, social ethos, economic underpinning, and environmental security, than in most other parts of the world. Nepal has over two decades of very successful experience in community forestry (CF); India has a similar amount of experience in joint forest management (JFM); while Bhutan initiated social forestry (SF) (which embraces community and private forestry principles and practices) in the mid-nineties.

German Technical Cooperation (GTZ) and the International Centre for Integrated Mountain Development (ICIMOD) have been actively supporting the adoption of participatory practices in natural resource management. GTZ has been supporting projects that promote participatory natural resource management (PNRM) in all three countries: the Bhutan-German Sustainable Renewable Natural Resources Development Project (BG-SRDP) in Lobeysa, Bhutan; the Indo-German Changar Eco-Development Project (IGCEDP) in Himachal Pradesh, India; and the Nepal-German Churia Forest Development Project (ChFDP) in Lahan, Nepal. Some of these projects have been operational for more than ten years, spanning several project phases. ICIMOD through its natural resources management, advocacy capacity building, and policy support programmes is supporting community-based and participatory resource management in its eight member countries, which adds a complementarity and synergy to the GTZ supported work.

A joint learning exercise (Joint Learning Mission) was carried out by the GTZ supported project teams in Bhutan, India, and Nepal, together with ICIMOD. The objectives of the Mission were to (i) document the experiences gained through the implementation of the GTZ projects; (ii) assess the overall social, economic, and environmental impacts of the projects; (iii) identify the factors responsible for the success or failure of the projects and draw lessons; and (iv) disseminate the joint learning experiences to relevant stakeholders. The Joint Learning Mission took the unique approach of not simply evaluating the projects critically from an outside perspective, but also adopting an appreciative and empathetic attitude towards the projects in order to document good practices and the most valuable lessons learned. It is highly desirable for such learning to take place at least 20 months before the project completion date so that recommendations can be accommodated to improve the project. Dynamic leadership in the team and an active facilitator was duly recognised as necessary to enable better synthesis of knowledge and information and ensure wider dissemination and impact.

The three projects devoted much of their efforts to devising and introducing a variety of technological innovations. These pioneering initiatives have contributed to enhancing rural livelihoods and rural economies at the local level, as well as identifying policy and institutional factors that will pave the way for a shift from mere subsistence to a more commercial use of forest products at the policy level.

In Bhutan, a forest resource potential assessment was made using GIS and other participatory tools, along with documentation and capacity building, to enable the effective planning and management of forest resources. In Nepal, the project supported

the development of a participatory forest inventory, including non-timber forest products (NTFPs) and biodiversity, and launched demonstration programmes with pro-poor and livelihood-focused programmes within the community forestry framework. These programmes encompassed the use of NTFPs, fodder, and fruit trees to support poverty reduction efforts by the forest users. This model also employed the distant user group approach in community forestry, integrated natural resource management, and capacity building aspects. In India, the project institutionalised the development of village forest development societies, participatory forest planning and implementation processes, and the participatory integrated watershed management approach.

In relation to the livelihood enhancement of communities, the projects supported processing, value addition, and the marketing of forest products for micro-enterprise development – promoting employment and income at the community level, while conserving natural resources. For example, the establishment of a bael juice plant in Nepal helped to transform the livelihoods of people in the Churia hills and has opened up an array of possibilities for further expansion and diversification. Similarly, Vasundhara, a micro-enterprise body set up to capture local value addition in a range of NTFPs in Himachal Pradesh, India, has opened up a new dimension for income and employment generation for livelihood enhancement, while conserving forest resources. In Bhutan, the project promoted livestock farming and dairy processing in the rangelands for income and employment generation. These initiatives were successful, but such activities do need extensive research support, development inputs, credit and marketing networks, private sector participation, and training and capacity building, along with enabling policy and legal support.

Appropriate ‘institutions’ are a pre-requisite for the successful implementation of participatory natural resource management, the scaling up of best practices, and to maximise impacts. In all three projects, local institutions comprised of local forest users were developed into participatory or joint structures and their skills, knowledge, and capacity were developed through training and formal and informal interactions. This enabled local forest users to interact properly with other stakeholders and manage forest resources in a sustainable way. In Nepal, 346 community forest user groups (CFUGs) have been formed and nearly 60,000 households are involved in the use and management of about 60,000 hectares of forest land. Similarly, in India, IGCEDP is working in 593 villages covering an area of 439 square kilometres. This in itself is an innovation, as IGCEDP was implemented by HPEDS, and facilitating the society to maintain its existence after project completion is a new idea. In Bhutan, more than 20 community forests (as of December 2005) are managed by the local people following a cautious community forestry approach which hands over responsibility and ownership to local users. However, the challenge is the sustainability of these institutions. It is important that these social institutions are legalised, empowered, and capacitated so that they can make wise decisions on natural resource management. Public institutions and civil society needs to bridge the gaps and facilitate their initiatives with technical and funding support, and with reduced administrative costs.

Although participatory forest management has contributed significantly to improving forest conditions in Bhutan, India, and Nepal, its contribution towards alleviating persistent poverty, reducing inequalities, and bringing about gender equality has remained limited in most cases. The projects have ventured into addressing these issues

through the inclusion of poor and disadvantaged groups and women in forest planning processes and decision-making and benefit-sharing mechanisms. Special avenues and programmes were developed for these marginalised groups, like fodder planting, managing NTFPs, and fruit collection for livelihood support, and they were trained and empowered to participate in forest management, decision making, and advocacy. However, enabling policies are required to promote these initiatives through positive discrimination, equitable benefit sharing, proper representation, capacity building, and empowerment of these marginalised groups in natural resources management, while also enhancing their livelihood opportunities.

It is increasingly being realised that the core problems of unsustainable resource use are often linked to poor governance, including unclear rights and responsibilities, centralised planning and management, and inadequate participation of local resource users in decision making. It is largely recognised that the state, as the major stakeholder and custodian of natural resources, has not delivered effectively in relation to sustainable NRM. The continued degradation of natural ecosystems and the continuation of issues related to poverty and inequity are real indicators of ineffective governance. The major factors are the legal sanctity of the long-term role of communities in the management of natural resources (to plan, manage, and use), benefit sharing therefrom, and the continued control of forest and related resources by government agencies. The three projects have addressed some of these issues through sensitisation and capacity building, and by formulating new rules and approaches (village forest development society, participatory forest management guidelines, the inclusion of Dalits and marginalised groups in natural resources management and micro-planning) with some success. However, frequent changes in rules and priorities, lack of back-up support after project termination, inadequate linking of micro-plans to the Millennium Development Goals (MDGs) (which were not included in the original fixed logframes developed in the mid 1990s) and national plans, delays in the amendment of old policies and regulations, and the exertion of indirect control by line agencies have hindered the anticipated gains and potential scale ups.

Policy changes must be backed up by the provision of enabling and effective governance structures and instruments by the state. Government policies should set priorities and milestones, work with a clear impact orientation, and have transparent indicators. Feedback mechanisms must be in place to facilitate policy updates. The issue of 'good governance' should be included in all working manuals, (government) guidelines, and training packages. Mass campaigns need to be organised to create awareness about good governance.

The key to the success of all strategies will be the socioeconomic empowerment of poor, vulnerable, and socially excluded groups through a rights-based approach to enable them to implement good resource governance that taps the full potential of the forests. To this end, GOs, CBOs, NGOs, and service providers need to be sensitised, informed, and capacitated on good governance and devolution issues. While the good practices need to be formalised and scaled up by strengthening enabling policies and programmes, community participation and decentralisation in other sectors of natural resource management (water, land, biodiversity, environment) and other development initiatives can contribute equally to addressing gender and social exclusion, poverty, and livelihood issues in the region.

Acronyms and Abbreviations

BCN	Bird Conservation of Nepal
BG-SRDP	Bhutan-German Sustainable Renewable Natural Resources Development Project
CBNRM	community-based natural resource management
CBO	community-based organisation
CFMDP	Community Forestry Management Demonstration Programme
CFUG	community forest user group
ChFDP	Churia Forest Development Project
DFO	district forest office
DSCO	district soil conservation office
FECOFUN	Federation of Community Forest Users, Nepal
FMU	forest management unit
FRPA	forest resources potential assessment
GIS	geographic information system
GPS	global positioning system
GTZ	German Technical Cooperation
HP	Himachal Pradesh
HPEDS	Himachal Pradesh Eco-Development Society
IC	Indian currency
ICIMOD	International Centre for Integrated Mountain Development
IGCEDP	Indo-German Changar Eco-Development Project
INRM	integrated natural resources management
JFM	joint forest management
NGO	non-government organisation
NRM	natural resource management
NRs	Nepali rupees
NTFP	non-timber forest product
Nu	ngultrum (currency of Bhutan)
PNRM	participatory natural resource management
PRI	panchayati raj institution
RNR	renewable natural resource
SF	social forestry
VFDS	village forest development society



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The Joint Learning Mission: Overview

Introduction

During the last three decades, the management of forests has been undergoing an intensive transformation process, based on the notion that local communities have a critical role to play in the management of forests and other natural resources. Currently, about 300 million hectares of forest land in Asia are under some form of community management. In Nepal, about a quarter of the forests are managed by 14,000 forest user groups, involving more than one million households. In India, about 14 million hectares of forest land are managed by different types of joint forest management communities in collaboration with the Forest Department, involving about 75 million people (Nurse and Malla 2006). In Bhutan, different approaches to community-based forest management are on trial, and more than 20 community forests are now being managed by the local people.

The papers presented here are the result of Joint Learning Mission by German Technical Cooperation (GTZ) and the International Centre for Integrated Mountain Development (ICIMOD), which took place in 2005. The Mission was undertaken in an effort to learn common lessons and draw key generalisations related to community forest management in general from the overall experiences in three GTZ supported projects in Bhutan, India, and Nepal.

One of the reasons why the study topic and the areas are so appropriate and rewarding for this type of exercise is that the development of community-based natural resource management (CBNRM) is more advanced in these Hindu Kush-Himalayan countries than in most other parts of the world. Nepal has over two decades of very successful experience in community forestry (CF); India has a similar number of years of experience in joint forest management (JFM); and Bhutan started social forestry (SF), which embraces community and private forestry, in the mid-nineties.

GTZ and ICIMOD have been active supporters of this movement and advocates for the adoption of participatory practices in natural resource management (NRM). GTZ has projects promoting participatory natural resource management (PNRM) in all three countries: the Bhutan-German Sustainable Renewable Natural Resources Development Project (BG-SRDP) in Lobetsa, Bhutan; the Indo-German Changar Eco-Development Project (IGCEDP) in Himachal Pradesh, India; and the Churia Forest Development Project (ChFDP) in Lahan, Nepal. Some of these projects have been operational for more than ten years, spanning several project phases.

Common lessons can certainly be extracted from the experiences of the three projects, although not without reflecting certain aspects of the varying forestry institutional settings and sociopolitical scenarios in the three countries. These common lessons have influenced the project approaches and focus in each of the three project countries. They include lessons on forest quality and cover, population pressure and forest availability, and the policy and institutional framework, as well as levels of poverty and human development. The lessons learned in the three projects are manifold and can serve as a platform for promoting more informed forest/NRM policy making in the region. The experiences and lessons learned from these projects will be useful for governments, GTZ, ICIMOD, and other research and development agencies for scaling up at national and regional levels.

Purpose of Joint Learning Mission

The Joint Learning Mission had the following aims:

1. To document the experience gained through the implementation of GTZ projects in Bhutan, India, and Nepal
2. To assess the overall social, economic, and environmental impacts of the projects such as their contribution to poverty alleviation, women's empowerment, and resource conservation, and their relevance to global and emerging issues
3. To identify the factors responsible for the success or failure of the projects and draw lessons from them in order to apply them in other projects and programmes in natural resource management in the region
4. To disseminate the joint learning experiences to relevant stakeholders

The study was not meant to be a detailed review of the projects. Rather, it aimed to learn common lessons from project experiences based on field visits and discussions with relevant stakeholders, including implementing agencies, target groups, and government officials.

Overview of the Projects

Bhutan-German Sustainable Renewable Natural Resources Development Project (BG-SRDP) in Bhutan

Project setting

Over 70% of Bhutan is under forest and about 70% of the population derive their livelihood from rural areas (including forests). By law, rural communities are provided with timber for house construction and maintenance, as well as a yearly firewood allowance. The population density is low (about 650,000 people on approximately 47,000 square kilometres). Most rural communities in Bhutan live at least several hours (sometimes up to three days) away from a roadhead and have little opportunity for economic development. Generally, people depend heavily on forests for grazing, food products, and timber. Of the total forest area, about 35% is protected under national parks and biological corridors. Besides the management plans of national parks and forest management units, no formal management plans existed in Bhutan until a few years ago.

The GTZ-supported Bhutan-German Sustainable Renewable Natural Resources Development Project (BG-SRDP) worked in two districts in Bhutan (Punakha and Wangdue Phodrang) covering an area of 5,000 square kilometres and a population of about 40,000. The project was jointly implemented by the Ministry of Agriculture, Royal Government of Bhutan, and GTZ. It started in 1994, had three implementation phases, and was phased out in December 2005. At this time, more than 20 community forests were being managed by local people in Bhutan, following a cautious approach to handover of responsibility and ownership to local users. The project worked through the District Natural Resources Sector with extension agents who, in turn, worked with farmers and the Territorial Forest Office and its rangers. The project was active in the three key sectors of renewable natural resource management – agriculture, livestock, and forestry – thus following an integrated approach.

Population growth and improved opportunities for economic development have brought about a growing pressure on natural resources in Bhutan in recent years. Rural communities in Bhutan can, in principle, use forests for timber for house construction and maintenance and for fuelwood. Also, extensive rights have been given to individuals for fodder collection and grazing. The goal of the BG-SRDP was to uplift the socioeconomic well-being of the people, while conserving the environment. Its purpose was for farm families (men and women) in the Punakha and Wangdue Phodrang dzongkhags to manage the renewable natural resources (RNR) in a profitable and sustainable way.



Karma Jigme Temphe

Forest around villages in Bhutan can be transformed into community forest

Key achievements

The BG-SRDP's programmes and activities encompassed several key areas: 1) inter-sectoral planning and co-ordination, 2) RNR extension services, 3) management plans for community and private forests, 4) improved forest management plans for national forests, 5) support for the improvement of agriculture and livestock production, and 6) infrastructure to support the RNR concept. Programmes were implemented in collaboration with government line-agencies/departments, district forest offices (DFOs), and district extension services for agriculture, livestock, and forestry. By the end of the project, several policies had been developed and integrated in the field of forestry, farmers' groups had been formed, and local economic initiatives undertaken. The focus of the Joint Learning Mission was mainly on forestry within the wider watershed context.

Project interventions, especially in forestry, showed an increase in forest cover, but it is too early to conclude if the project has contributed to overall biodiversity conservation. In general, the project encouraged livestock/cattle farmers and forest managers to promote indigenous species. Traditional management practices still exist, but are not always functioning. The traditional boundaries, however, are still known and respected. Management rights for communities that build on these traditional use rights inspire a high level of commitment on behalf of local users to improve forest conditions.

Refined approaches

The project has contributed to holistic forest management in Bhutan. With the support of the project, all the forest areas in Bhutan have come under management plans. The project has contributed to the development of the concepts of community forestry, forest management units (FMUs), and forest areas outside FMUs (national parks were not covered by the project). As a consequence, Bhutan now has a management planning concept that will cover all of its forests in due time.

By starting local economic and improvement oriented initiatives, the project contributed to the development of the concepts of feasibility studies and marketing approaches, as well as the formation of farmers' groups. Through infrastructure support, the project contributed to the 'green road' construction concept.

The project's systematic capacity building approach has contributed to a general improvement in in-service training. The project has stimulated local officials and community leaders to work closely with other similar projects to increase efficiency, as well as to strengthen the green road concepts further. Capacity building has been done at all levels (with a focus on the extension level) to ensure a common understanding of new approaches.

Indo-German Changar Eco-Development Project (IGCEDP) in India

Project setting

The Indo-German Changar Eco-Development Project (IGCEDP) is located in the Kangra district of the Indian state of Himachal Pradesh. The project area (called 'Changar') is known for its remoteness, rugged terrain, and water scarcity. The area belongs to the lower Himalayas or Siwaliks and is characterised by a fragile landscape with climatic

vagaries, poor soils, and potentially erosion prone slopes. These features make the area similar to the Churia range in Nepal, which is part of the same geological formation. The area is degraded due to inappropriate use (e.g., open grazing, fires, and deforestation). The main objective of the project is to ensure that village users and their institutions self-manage their natural resources in a sustainable way.

The project focuses on the promotion of self-help groups, and the capacity building of government and non-government organisations. For implementation, the project has adopted a watershed approach. NRM-based micro-planning schemes and panchayats (local governance bodies) have been important in the implementation of this approach.

The Himachal Pradesh Eco-Development Society (HPEDS) facilitated implementation of the IGCEDP project since 1994. The mandate of the Society is to facilitate the management of natural resources sustainably, thus contributing to mountain development. Operating in an area of 439 square kilometres (in 593 villages in 110 gram panchayats), the Society has progressively developed a unique approach using participatory planning, decentralised implementation, management through local communities, livelihoods based on local natural resources, and participatory impact monitoring. Under the project, 3,000 hectares of forest land are managed by communities in collaboration with the Forest Department. There are 71 village forest development societies, 16 of which have signed MoAs on joint management with the Forest Department. In essence, the experience is the outcome of intensive collaboration with grassroots communities, gram panchayats, and all major supporting implementing agencies (line departments, non-government organisations, and research and development institutions).



Constructing a 'green road'

The project is based on the conviction that the catalyst for sustainable development is sustainable livelihood options designed by the multi-stakeholders themselves. Following the principles of watershed management, the major working areas are:

- capacity building of village groups/panchayats to enable them to plan and implement programmes for sustainable natural resource management;
- promotion of locally adapted natural resource management programmes;
- rehabilitation of degraded areas;
- improvement of existing farming systems;
- water resource development;
- improvement of local livelihoods based on eco-income generation;
- promotion of local technical and social expertise in the sustainable use of natural resources and their linkages with various stakeholders;
- development and improvement of the micro-planning process and panchayat micro-plans; and
- development of HPEDS as a knowledge centre.

Key achievements

Work in the above-mentioned thematic areas has resulted in two major innovations whose findings and experiences have been disseminated in the project areas. These works focus on

- the process and methodology required to facilitate a natural resource management oriented panchayat micro-plan with a clear focus on resource poor people, women, and local livelihoods; and
- the water resource development concept, which is based on planning, implementation, and management through water-user groups; the experience is not only based on the revival of local drinking water resources, but also promotes innovations in minor-irrigation techniques adapted to local conditions.

Refined approaches

The participatory methodology adopted by the projects is applicable not only to local user groups, but also to local governance units like the panchayat and their micro-planning process guidelines. The eco-income generation approach, which is oriented towards women and resource poor people, has a clear linkage to participatory planning processes and ensures inclusive growth at the local level.

The package, an integrated approach to watershed management which integrates all NRM components spatially and temporally, will ensure that project activities have the maximum impact in the mountain context.

Churia Forest Development Project (ChFDP) in Nepal

Project setting

The goal of the Churia Forest Development Project (ChFDP) is to rehabilitate degraded forest and restore the ecological balance in the Churia hills for the benefit of the local population. The project aims to develop approaches and strategies for the protection and sustainable management of forest resources in this area. The project started in July 1992 and has recently completed its third implementation phase. It covers the Terai

(plains) and Churia (foothills) regions of Siraha, Saptari, and Udayapur districts in Nepal's Eastern Development Region, including 268 village development committees and many people of different castes and economic classes.

The forest resources in this region are under high population pressure and degrading rapidly. While the settlements are concentrated in the southern plains, the degraded forest resources are to the north (in the Churia hills and foothills). The total geographical area of the project is 461,900 hectares with 42% forest cover. The area is home to more than 1.4 million people who, for the most part, are very dependent on natural resources, including forests. Farming is the backbone of the local economy. More than 80% of the population are either farmers or agricultural wage labourers.

Communities in the project area are comprised of people from diverse caste and ethnic groups, cultures, and religions ranging from high caste groups to Dalits (low caste), from Hindu to Muslim, from mountain tribes and Terai indigenous people to in-migrants from other parts of Nepal and India. Siraha and Saptari are among the districts with the highest concentration of Dalits (about one-third of the population) and landless people in Nepal. The majority of the people in the project area are not only poor, but also illiterate. Caste, class, gender, and other social inequalities are strong, and as a result, Dalits and women have traditionally been only minimally involved in community forest management, although they depend heavily on forest resources for their livelihoods.

Traditional technologies, and approaches to and institutions of forest management, are virtually insignificant in the project area. To a large extent, this is due to the pressure and dominance of the recent in-migrants. Prior to the project, local people used to consider the forest resources as belonging not to them, but to the Government of Nepal. As a result, they did not practise forest management and were overexploiting forest resources. The forest shrunk rapidly towards the more remote Churia hills.

Key achievements

The ChFDP's programmes and activities encompass several key areas, namely afforestation and the regeneration of forest land, sustainable forest management (with a community forestry focus), alternative fuel sources, poverty reduction and economic promotion, soil erosion control, integrated planning, and strengthening of local institutions.

Project activities have been implemented in collaboration with government departments, such as district forest offices (DFOs) and district soil conservation offices (DSCOs),



Income generation from NTFPs

without being embedded in them. In addition, new partners have been non-government organisations (NGOs), community-based organisations (CBOs), and user groups.

ChFDP has tackled three main challenges:

1. **To bring all forests under protection and (later) management** – More than 60,000 hectares of forest area are now under protection and management by about 400 community forest user groups (CFUGs). The target is to bring the maximum area of remaining forests under active management by local users in the near future.
2. **To shift from a protection oriented management system to an active forest management** – This will help to increase the production capacity of the forest and thus meet the increasing demand for forest products. It will also provide some intermediate forest products to local users.
3. **To contribute to local development** – The management of the forests is to be organised so that it effectively contributes to the economic and social development of the community.

The project has provided benefits to more than 60,000 households, who are members of the 346 CFUGs formed (and handed over) already and involved in the use and management of about 60,000 hectares of forest land. Ultimately, 70,168 hectares (36% of the total forest area in the project districts) will be in the hands of local communities as



Hans Beukeboom

Handing over management of a community forest to the local community

a result of the technical, financial, and institutional inputs and facilitation provided by the project.

Refined approaches

The ChFDP highlights three of its approaches as refined.

1. **Community Forestry Management Demonstration Programme (CFMDP)**
– The CFMDP works with 10 selected user groups to facilitate active forest management by promoting governance and capacity building, eventually increasing livelihood support activities. The programme is a process-oriented action research, which addresses the second generation issues of community forestry, such as decentralisation, social inclusion, and the institutionalisation of community participation.
2. **Integrated natural resources management (INRM)** – The INRM concept of the ChFDP addresses upland-lowland inter-dependence and mutual flows of resources. It produces the integrated and holistic action plans needed for the sustainable management of resources by facilitating dialogue among stakeholders extending beyond the limits of districts and village boundaries. The first INRM pilot area in Rampur Toksila covers three village development committee areas, and another pilot area in the Sartre Khola (stream) watershed covers all stakeholders in the catchment area, including the eight VDCs that are direct users of Sartre Khola.
3. **Distant user group approach** – The distant user group approach addresses the issue of spatial distance between users (in the south) and forest resources (in the north), which are roughly divided by the East-West Highway. Community forests were handed over to eight user groups comprised of traditional users of national forests residing at a distance of four to nine kilometres away from the forests. Some distant users have also benefited from joining the existing user groups as secondary users.

As people's participation in forest management has become more institutionalised, and therefore, stronger, forest conditions have improved with natural regeneration occurring. Eventually, this will contribute to increased biodiversity, as proven by participatory assessment and biodiversity monitoring and evaluation.

The ChFDP employed a decentralisation approach and had a 'rights-based' and 'people-centred' management policy. This means that capacity building can be seen at three different levels: the grassroots level, the district level, and the regional level. First and foremost is to build the capacity of local people at the grassroots level. Therefore, a lot of attention has been given to building the managerial and technical capacities of CFUGs and CBOs. Participatory and democratic practices have been applied at the grassroots level including awareness raising, training, exposure visits, and action research. At the district level, capacity building of line agencies such as the district forest offices and district soil conservation offices, NGOs, the district development committee, and the Federation of CFUGs has been given priority.

Joint Learning Process: Learning-by-experiencing

The Joint Learning Mission team was made up of professionals from the three participating projects and ICIMOD. This multi-disciplinary team (including foresters, sociologists, economists, and community development specialists) adopted a unique and innovative approach to participatory learning, ‘learning-by-experiencing’, to find the relevant lessons for policy making from field visits and project materials. This approach, rather than following a rigid blueprint for information collection, allowed for flexibility and in-depth understanding. The best way to move forward was devised as the team went along with the mission approach. The main steps taken by the team and the key questions encountered are depicted and described in Figure 1.

Information collection

Information was collected in field visits, focus group discussions, key informant interviews, discussions with project implementing authorities, and by studying available secondary information including project documents. The project visits lasted two to four days and were organised by the project country teams who pre-selected the sites for the field visits. The information and feedback from participating communities reflected each project’s most significant activities and achievements, and other developments in the area. While mornings were used to visit relevant field sites, afternoons were devoted to project presentations, meetings with key stakeholders other than users in the field, and discussions about the observations of the day.

The team members collected all remarks and observations in the form of bullet points. In the first step (Step 1 in Figure 1) the main framework was outlined for documenting the lessons learned. The lessons were clustered under the headings: social, environmental, institutional, economic, technical, and political. These bullet points summed up impressions (good or bad), lessons learned, new findings, best practices, and also glorious failures, information gaps, emerging issues, and any unfinished business.

In the second step, some group members prepared a list of focus topics (Step 2) for which more in depth and focused information was required. To prepare the actual analysis, the raw bullet points were provided with contextual observations and additional background information. They were further explained, prioritised, and clubbed together where possible for later use (Step 3). In Step 4, representatives of the projects were again asked to provide additional information and explanations of the reason or motivation for the project to deal with a given issue, and the regional context, the environment, culture, politics, surrounding or related policies, and any underlying assumptions.

Wrap-up workshop and lessons for influencing policy

In Step 5 it was decided to prepare briefing papers on selected key topics with experiences from the select projects as concrete outputs from the joint learning exercise. The thematic topics were selected during the wrap-up workshop by comparing the bullet points from each of the three country visits. Another round of discussions (Step 6) led to the development of a tentative list of five topics. Later it became clear that the information would be more valuable if presented together in a single book. The outcome is the present publication.

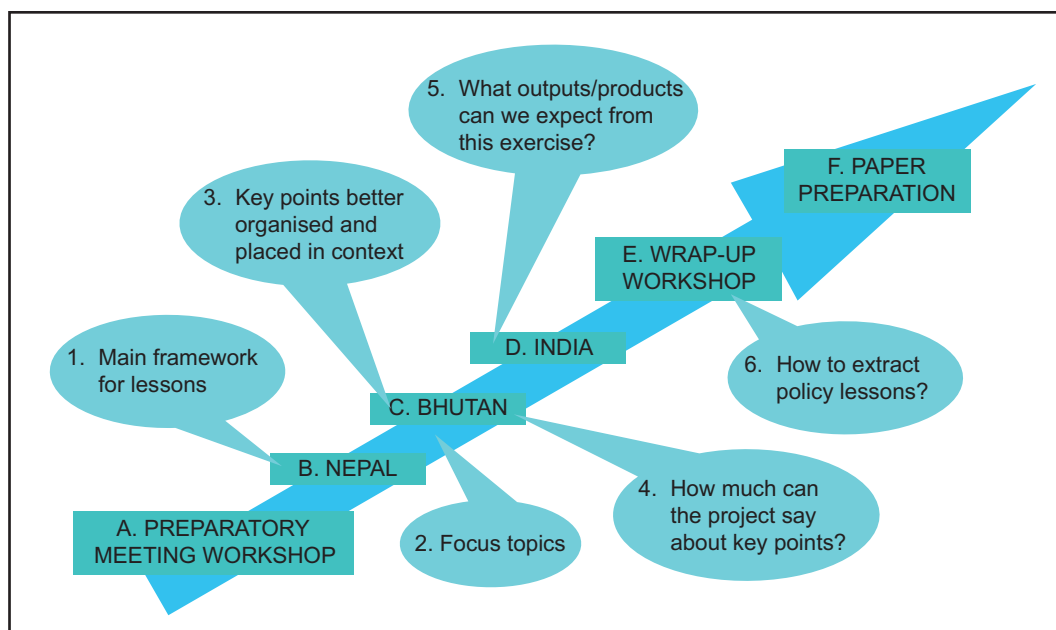
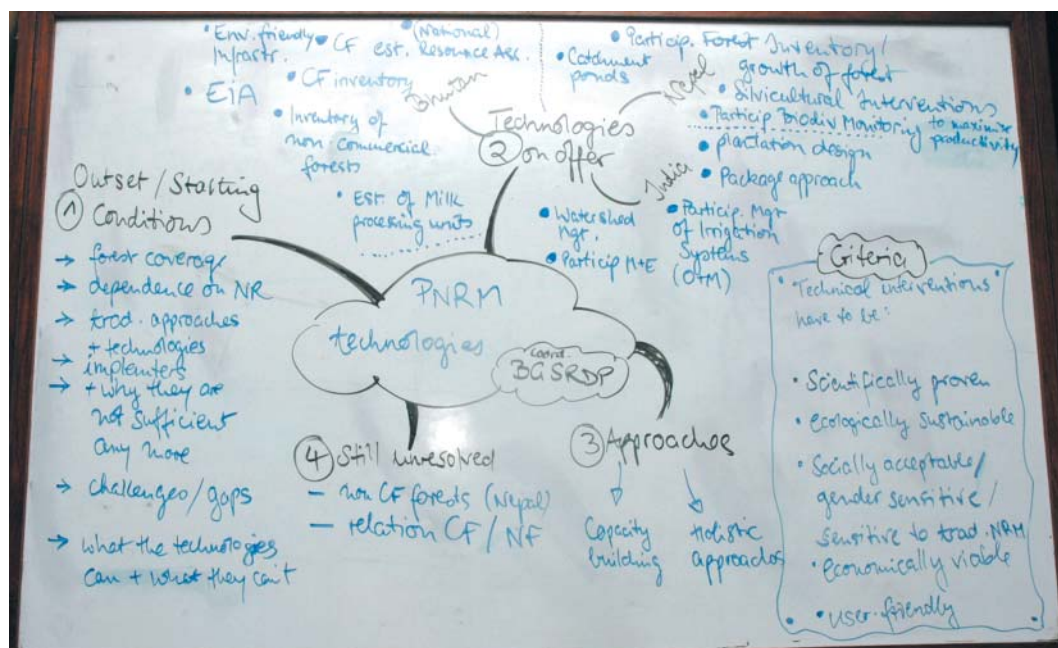


Figure 1: Steps and questions shaping the joint learning process



Joint learning process developed in the workshop

Reflection on the process

For a fruitful learning process to take place, certain basic arrangements should be in place with provision for good facilitation:

- **Facilitation by a knowledgeable outsider** – A facilitator is needed to provide guidance on the learning-process. He/she can ask the right questions at the right time, and guide the participants through the process. The facilitator helps the group to define commonly agreed expectations. There has to be one contact person in each of the participating projects and institutions.
- **Make it targeted** – The aim of the learning process should be well defined from the start, matching means, expertise, methodology, and expected outputs. The path from field observations to papers that are useful to the potential target group should be clearly mapped out. The expertise required includes an in-depth knowledge of the projects visited, experience with other similar projects, and expertise in the existing policy environment and currently relevant issues.
- **Choose a leader** – Identify one person who will lead and coordinate the process throughout, including the final documentation.

Conclusion and Reflections

The GTZ/ICIMOD Joint Learning Mission took a unique approach by not evaluating the projects critically from the outside, but instead adopting an appreciative and empathetic attitude towards the projects to document best practices and the most valuable lessons learned. For this approach, the views of outsiders who take an inside view are critical and valuable.

The mission opened the eyes of the participants to the relevance of the activities of the projects (their own and others) in the regional and global context. The members were able to immediately use these new insights in their day-to-day activities and in organising the phasing out of their own projects. For this reason, such events should be initiated at least 20 months before the actual end of a project, so that the recommendations of the review teams can be accommodated during the implementation phase.

To make maximum use of the approach's potential, good leadership and a good facilitator are required, that is a resource person guiding the process throughout, serving as a reference point, and motivating people to solicit contributions from the participants, and also to help in the documentation of knowledge and information, thus making the learning accessible to a wider audience.



Bakay

Joint learning with community members



Narendra Bajracharya

Exchange among joint learning team



2

Participatory Tools and Technologies in the Service of Community-based Natural Resource Management

Introduction

Community involvement has been a leading theme in natural resource management (NRM) in the Himalayas since the early 1990s. The sustainable management of forests has been an area of especially intense support by researchers and development initiatives alike. Much of the attention in NRM development in the region has been geared towards securing the institutional sustainability of community-based natural resource management (CBNRM), setting up appropriate legislative frameworks, shaping the organisational landscape, and building the managerial capacities of civil society bodies in charge of forest management. This intense preoccupation with the political, social, and legal aspects of CBNRM has sometimes led to the neglect of the technical aspects of forest management.

GTZ has made the issue a key area of its involvement in the region. The three GTZ supported projects have devoted much of their efforts to devising and introducing a plethora of technological innovations. These pioneering initiatives have contributed to enhancing rural livelihoods and rural economies at the local level, as well as identifying policy and institutional factors that can pave the way for a shift from mere subsistence to more commercial use of forest products.

In this section, selective packages from each project/country are described briefly, taking into account the framework conditions (project setting) under which they have been developed. Some of the technologies presented here have already had an impact beyond the local level. Other approaches have yet to reach the 'scaling up' phase.

Readers are invited to scrutinise the approaches presented, to test them, to evaluate them critically, and to contribute to their further refinement.

Advanced Technologies Offered by the GTZ Projects

BG-SRDP in Bhutan

Forest resources potential assessment

The forest resources potential assessment (FRPA) is a combined policy and planning tool. Its dual aims are:

- to identify and assess the present potential of forest resources in Bhutan for sustainable commercial and rural timber use with special consideration of technical and economical feasibility; and

- to evaluate whether the forests of Bhutan can supply the country's wood demand in a sustainable manner.

The FRPA focuses on the present wood production capacity; it does not identify and assess the overall potential of the forest resources for forest management in the long run. As such, the results of the FRPA may not be very reliable in terms of absolute figures. Nevertheless, it provides sufficient information on the overall situation of the country's wood production potential and its relationship to overall wood demand, and makes such information available digitally, which is a major requirement for decision making related to forest policy. The assessment is based on a pre-defined land use classification, which specifies forest cover by forest type and density class. The assessment comprises five planning steps:

1. GIS analysis
2. Ground truthing
3. Calculation of production potential
4. Estimate of wood demand
5. Final analysis

The assessment covers the technical, legal, and economic potential of forest resources. It provides the basis for producing a wide selection of maps depending on the specific planning needs.

Forest function mapping

Forest function mapping defines the ecological, environmental, and social functions of all forests within a particular area and, as such, allows the balancing of diverging interests of commercial logging, local forest use, and nature conservation. The mapping is based on existing information, such as land use data and other GIS (geographic information system) based information, base aerial photos, and topographic maps. For further micro-planning this information needs to be checked.

Forest functions and sub-functions need to be defined (based on legal framework conditions) as, for example, protected areas (nature, wildlife, biodiversity, watershed, and others), religious areas, areas used for social functions, and local use areas. Each area has its own management restrictions on commercial and local use, which can overlap. This mapping exercise yields a map indicating the important functions and is used by planners to make rough calculations for things like commercial production areas.

Forest management planning system

The forest management planning system developed in Bhutan has the objective of managing the rural allocation of timber in a sustainable way. The system is simple and practical enough to be implemented with minimal equipment and human resources. As such, it can be implemented immediately with existing human and technical resources after some training.

The key aspects of the management planning system include:

- simple and practical;
- can be adjusted to the capacity and technical knowledge of the field staff and therefore requires low training inputs;
- minimal time required for management planning;
- only information that is actually required at the implementation level is collected; and
- the approach is participatory (from rural supply to participatory forest management).

The approach used in the forest management planning system can be summarised in four parts:

1. **Compartmentalisation** – Identification of village intervention zones, protection zones, and manageable units
2. **Forest resources assessment** – Assessment of the resource condition, current use(s) of the resource, and its production potential
3. **Forest management planning** – Assessment of supply and demand, checking sustainability, and decisions on management options
4. **Forest management plan** – Compartment register, forest management map, and monitoring sheets

Community forestry manual

A community forestry planning manual has been prepared in Bhutan for use by forest rangers. A Microsoft Excel-based program is available for data analysis and templates have been designed for the forest management plan. In collaboration with the Social Forestry Division, the Wang Watershed Management Project of the European Union, and the Participatory Forest Management Project (Helvetas/Swiss Development Cooperation), BG-SRDP has contributed significantly to Bhutan's community forestry manual with the four parts on

- Initiating Community Forestry,
- Community Forest Management Planning,
- Silvicultural Options for Community Forestry, and
- Record Keeping and Institutional Strengthening for Community Forestry Management Groups.

This manual guides extension agents step-by-step through the processes needed to establish community forestry.

Forest management unit planning

In collaboration with the Forest Resources Development Division and the Wang Watershed Management Project, BG-SRDP has significantly contributed to the Forest Management Planning Code of Bhutan. The project took the lead in forest function mapping (see above) and also in conducting a socioeconomic study and environmental impact assessment for the forest management unit.

IGCEDP in India

The community forest package

IGCEDP has proactively contributed to the shaping of state forest sector reform in Himachal Pradesh, India through introducing and testing new innovations and ideas. The key lessons from IGCEDP's involvement in the promotion of community forestry in Changar are as follows:

- Only if there is general consensus in a village can community forest areas be declared.
- The selection of areas and plant species for afforestation must be done according to the site characteristics. It is equally important to involve local users in the design of plantations after assessing the demands and requirements of the community.
- Village forest communities need to be fully registered as village forest development societies (VFDSs) under the Indian Societies Act, 1860; a Memorandum of Agreement with the Forest Department is required.
- Institutional sustainability is high if usufruct related benefit-sharing mechanisms, rules, and regulations are designed by the community itself.
- A VFDS has first to demonstrate its willingness to protect and manage the forest. Only then can it sign a Memorandum of Agreement with the local Forest Department, according to the Himachal Pradesh Participatory Forest Management Guidelines 2001.

Community forest technical management

The IGCEDP does not see community forestry as a one-off activity. Rather, it incorporates community forestry into the overall watershed management approach based on delivering goods and services to the local watershed community. Technical packages are set out in each community forest management plan (as a component of the holistic watershed plan) with a few attached documents (e.g., a plantation journal containing elaborate details of interventions based on participatory monitoring and treatment/use applied to plantations) and future tasks.

Technical management packages are prepared and provided for the following tasks:

- Establishment of a village forest development society
- Identification of potential community forest areas and selection of species, jointly with on-site users, which are categorised according to the pedo-ecological status of the area (e.g., soil type, and vegetation/degradation status)
- Identification of livelihood-based activities linked to forestry; and selection of the package of species and areas accordingly (group formation and training is a separate task)
- Participation (in kind or cash) of the VFDS in plantation work and management
- Technical treatment beginning in year three, including pruning and tending of natural regeneration
- Training of local communities and Forest Department staff in all aspects of forest management

The details governing the implementation of technical management packages are clarified in the Memorandum of Agreement between the Forest Department and the VFDS. This document also provides details of technical backstopping and other facilitative tasks that are part of forest management packages.

Village forest development societies

Through its involvement in establishing village forest development societies, IGCEDP has learnt that the formation of a group and the training of its members are two separate tasks.

It was also learned that the identification of areas for reforestation and the selection of species have to be done jointly with users on-site. Species have to be chosen according to the soil type and the extent of degradation.

Other important lessons include the following:

- The VFDS must make substantial contributions to plantation work and the management of sites. Depending on the capacity of the specific society, these contributions can be made in cash or in kind.
- Technical treatment such as pruning and tending of natural regeneration must be done by the VFDS starting in year three after establishment.
- Local communities and Forest Department staff need to be trained in all aspects of forest management.
- A Memorandum of Agreement has to be negotiated between the Forest Department and each VFDS and must detail the technical backstopping and other facilitative tasks to be performed by each side.
- To ensure effective impact monitoring, sample sites need to be established in plantations and the staff and local communities (VFDSs) must undergo participatory monitoring training. Annual monitoring should cover the growth of trees, biodiversity (e.g., number of new species) grass production, recharging of water in spring heads, and water flow and silt load of rivers and the damage they cause. To compile data, updates can be taken from the plantation journals. Monitoring has to be endorsed in meetings with the users concerned.

Evolving the concept of participatory integrated watershed management adapted to mountain scenarios

Mobilisers and local technical innovators play a decisive role when it comes to the evolution of the concept of participatory integrated watershed management as adapted to Himachal Pradesh's mountain scenario.

Working on sustainable natural resource management with grass roots people, panchayats (as units of local governance), and development agencies, can effect improvements in community forest management, farming, and water resource development and management, as well as eco-income generation based on the improvement of local livelihoods.

Harmonisation of the panchayat micro-plan with all other watershed development related components has, for the first time, brought natural resource management under the decentralised planning done by panchayats. Forestry and natural resource-based livelihoods form an integral part of such plans. Moreover, it was established that holistic plans can be developed through participatory approaches, and replicated and scaled up by other implementing agencies.

ChFDP in Nepal

Participatory forest inventory

Participatory forest inventories are carried out in community forests by members of forest user groups in order to assess the quantity and quality of their forest resources. Such assessments are an essential step in forest management plan preparation and/or revision. The methodology for the inventory has been developed applying both forest sciences and local knowledge. It also includes the participatory use of a global positioning system (GPS) for boundary surveys.

The application of GPS has helped to increase the transparency of forest management planning and implementation. The volume, dimensions, and species of both timber and non-timber forest products (NTFP) are assessed jointly with the villagers. The inventory includes regeneration and biodiversity status. The project's experience in the application of participatory forest inventories (together with other forestry projects) is being shared with experts at the Department of Forest; this contributed to the revision of the inventory guidelines in April 2004.

Participatory forest inventories help local communities and facilitators to prepare a sustainable management plan. This plan includes protection, tending, and a utilisation scheme for the forest. In a strict statistical sense, the approach and the estimates it yields are not fully sound. But it is a simple, quick, and participatory procedure with results that are sufficiently accurate for the rough-and-tumble of forest management in the Churia hills.

Community forest management demonstration programme:

The ChFDP initiated the Community Forest Management Demonstration Programme (CFMDP) in 2002 to address typical second-generation issues of community forestry: sustainable livelihoods, good resource governance, and active local participation in forest management in community forests. Designed as a participatory action research programme, CFMDP aims to develop and promote forest management practices that are socially just, economically sustainable, and ecologically sound. A total of 11 representative CFUGs in the project area were selected for this scheme for intensive post-handover support.

Special attention is given, not only to active forest management, but also to group management for institutional development. There are several benefits:

- The active participation of users helps preserve the forest and increases its production rate.

- Permanent sampling plots are established for a dynamic inventory, which helps to determine the forest growth rate.
- By improving group management, users receive the optimum benefit from forest products.
- Forest users and the staff of other stakeholders (such as district forest offices and NGOs) increase their practical experience in forest management.

While the approach is intensive and time consuming, it has increased the sense of ownership by the local people in forest management.

Individual plot distribution in community forestry

Under this wholly new approach to the management of common resources, relatively open forest land is distributed as individual plots to comparatively poor members of the community.

Both common and individual resource management principles are applied. For example, in the case of tree resources, ownership and decision-making power remains with the whole group. However, in the case of non-timber forest products, such as grass, fodder, bamboo, medicinal plants, fruit trees, and saba grass, plot owners can decide as per their individual interests or needs. The former supports community bonding, whereas the latter serves the freedom of individuals in forest management and thus increases motivation.

The scheme is designed to benefit the poorer members of forest user groups who have less access to natural resources (forests) to support their livelihoods. However, attention is needed to monitor possible imbalances between individual and common resource management regimes. The scheme has proven highly effective for poverty reduction by producing more grass, fodder, and other forest products, thus improving animal husbandry. The scheme has also brought neglected, often barren, land back into an active protection and management, thus securing its preservation as forest land.

Participatory assessment of biodiversity monitoring

The contribution to biodiversity conservation in Nepal has often been praised. But how much does community forestry really contribute to biodiversity protection? Local users can now directly monitor the nexus between forest conservation and management, and biodiversity in their forests.

Using participatory assessment of biodiversity monitoring, selected and specially trained local forest users are monitoring indicator bird species to assess their community forest's health, and thus evaluate the biodiversity of the forest. This bird watching makes the concept of biodiversity tangible, a concept that otherwise often remains little understood by local users.

Forest users apply this methodology on their own. The accuracy and reliability of information produced is remarkable, as users visit their forests frequently and detect even small changes. Participatory biodiversity monitoring is also very cost effective because it builds on the participation of local users to collect the information required to

assess the status of biodiversity. For the analysis of information, however, an experienced person is required.

ChFDP has carried out this programme in collaboration with local users, the Central Committee of the Federation of Community Forest Users, Nepal (FECOFUN), Bird Conservation of Nepal (BCN), and the Livelihoods and Forestry Programme of the UK Department for International Development.

Conservation ponds

This technology consists of collecting and storing surface run-off water from upstream in an artificial pond for a variety of uses. For the system to work, a gentle slope is required. A dam is raised at the converging point (lower part) of a catchment area with a concrete structure as an overflow, which also serves as a regulatory outlet.

Conservation ponds have a number of benefits: they reduce soil erosion by controlling surface run-off and floods (hence the term 'conservation pond'), they store water for irrigation, provide ponds for rearing fish, and constitute a source of drinking water for wildlife.

A major constraint is that the ponds can only be established in specific geographical settings. Furthermore, continuous maintenance is required to prevent silt from filling the ponds.

Distant user group approach

The distant user group approach is a specific form of community forestry that has been applied in the ChFDP project area to address the imbalance in the distribution of (forest) resources.

Generally, user groups living in the vicinity of forests have the easiest access to forest use, and are thus at an advantage. Under the distant user group approach, people living up to 10-12 kilometres away from the forest edge form user groups to take management responsibility for the inner Churia forest.

Distant users clearly benefit from this. To further expand the approach, more users (those living even further away from the forest) need to be brought on board. For this, appropriate mechanisms have to be devised to secure a fair balance between inputs and the benefits received by far distant users from the forests.

This approach can be applied in all parts of the Terai, the Terai/Churia interface, and even in higher altitude forests where forest is not evenly distributed over the area.

Integrated natural resource management approach

The integrated planning process of natural resource stakeholders applied by ChFDP since 2000 covers geographical areas that stretch well beyond the forest lands and their immediate vicinities. As such, the approach goes beyond the traditional approach

of foresters who see themselves as confined to those stretches of land registered as 'forest'. Integrated natural resource management (INRM) takes a wider perspective.

This framework for planning brings together upstream and downstream dwellers and helps them to devise a joint agreement for the use of forest resources based on the individual inputs and benefits provided by each of the stakeholders. The agreements are laid down in land use plans covering the totality of the watershed. Forest management is only one element of these plans, but it serves as a focal point for problem analysis and the resulting joint planning. This approach has been applied in the four model watershed areas of Rampur Toksila, Sarre Valley, Hadiya, and the Khando river catchment.

With INRM, local users have learned to clearly spell out their claims and expectations regarding the benefits of natural resources. The intensive work with stakeholders has not only helped to reduce conflicts between groups of regional stakeholders, but has often led to the resolution of inner group conflicts too.

A Glance at Some Unresolved Issues

Despite the successes, there are still some unresolved issues.

Bhutan

Initially, many activities carried out by the BG-SRDP project and its partners were heavily subsidised. These activities now need to be scaled up. In doing so, the following issues will require specific attention.

- The integration of community forestry and the management of rural wood supply areas
- The management, processing, and marketing of NTFPs
- The role of women in decision-making bodies at the rural level

India

Community forestry has proven instrumental in improving conservation and even livelihood options at the village level. But slow policy reforms and programme development, and control barriers in the Forest Department, are hindrances. The linkage of natural resource based plans to the overall panchayat micro-plans promises a faster reform process when it comes to decentralised resource governance.

Similarly, the problems of fire, grazing, and wildlife will have to be settled to ensure that the best use is made of the potential of community forestry. In the long run the Forest Department must promote the enabling regulatory framework for co-management; otherwise, it might discourage the enthusiasm of local users for economic activity.

Nepal

The district level coordination of forest-related planning and implementation is a touchstone of the sustainability of the participatory management of natural resources and its successful technical implementation.

Of no lesser importance are the financial mechanisms that have to be in place to fund forest management planning and to secure economic sustainability by balancing regional differences in perceptions, needs, and commitments. The difference is particularly in physical wealth and forest resource availability. The north has rainfed farming, poor economic status, and low food security, but more access to forest; and the south has good quality land, food security, relatively higher income, but negligible access to forest land.

By integrating forest management and its planning into the formal systems of regional development planning, the effectiveness of technological solutions can be increased considerably.

Policy Implications and Recommendations

All the above policy impacts through good tools and technologies could only be achieved through intensive field experience and ground work. The implications and recommendations are summarised here.

1. **Beyond the research intervention divide** – Rather than conforming to conventional development aid projects of either a ‘research’ or ‘interventionist’ nature, both approaches should be combined in research-action programmes. Successful systems for technological innovations are those that have scope for adaptation in response to changing social, economic, and political circumstances.
2. **Technological packages are not durable in themselves; but the ability to learn and improve is there to last** – Continuous change in institutions and in natural and economic environments is a reality. Continuous learning is, therefore, a necessity and provides a more durable output than technological fixes. Inbuilt information and knowledge management systems with appropriate (i.e., widely accessible) forums for dissemination have been found to be a vital base for the scaling up and extension of communal forest management.
3. **Developing inter-agency and inter-sectoral linkages** – Linkages between the forestry sector (including community forestry, joint forest management, and sustainable forest management) and enterprise development agencies are still poor. Consequently, skills necessary for managing commercial forest-based enterprises are not yet well developed. Capacity building is an ongoing task that needs intensive institutional backup. Furthermore, a stronger integration is required between the forestry sector and other sectors to promote forest-based enterprises.
4. **Formalising and promoting partnerships** – Viable cooperation between governments, community forest user groups, and the private sector has yet to be formalised and built up through public-private partnerships.

All of these approaches need to be made inclusive so that resource poor people and women can proactively join in, and benefit from, such ventures.

3

Enhancing Rural Livelihoods and Economies through Participatory Natural Resource Management

Background

In the beginning, community forestry (CF) in Nepal, joint forest management (JFM) in India, and social forestry (SF) in Bhutan were conceptualised as subsistence oriented forest-based activities to fulfil the fuelwood, fodder, leaf litter, timber, and other subsistence requirements of local communities. While meeting subsistence requirements is important, local people also need cash income to improve their quality of life. With the active participation of local communities, many degraded forests have now been converted into secondary forests, which are not only able to fulfil the subsistence requirements of local people but also produce surplus products.

Despite the great potential of community forestry, joint forest management, and social forestry to enhance the livelihood options of local people and alleviate poverty using locally available forest raw materials (Neuman and Hirsch 2000; Roe 2004), little attention has been given to the development of local enterprises based on surplus forest products to improve the local economy and livelihoods of rural people. As a result, participatory forest management practices in the region have failed to have a significant impact on employment generation, livelihood enhancement, and poverty alleviation as there has been little economic incentive.

The three GTZ projects initiated forest-based enterprise development in all three countries in which they were active. The pioneering initiatives have contributed to enhancing rural livelihoods and rural economies, as well as identifying policy and institutional factors that facilitate the shift from subsistence use to more commercial uses of forest products, while maintaining the ecology and sustainability. This section gives a brief background to the promotion of forest-based rural enterprises, together with a discussion of the strategies and approaches adopted by the three projects; documents the lessons that have emerged from these projects; identifies policy implications; and makes recommendations.

Case Studies: Innovations in Natural Resource Management beyond Subsistence

Sha Gogona Milk Processing Unit in Bhutan: From pasture to pasteurised cheese

Sha Gogona is a beautiful valley in Bhutan with vast open meadowland situated at an altitude of 3,200 masl. The valley is about three hours walk from the nearest roadhead and has no electricity. The valley has good pastureland and supports animal husbandry.

The farmers in the valley practise subsistence farming and raise livestock. At the request of the local farmers, and after conducting a feasibility study, the Model Rural Dairy Enterprise in Sha Gogona was (re-)established in 2004. The BG-SRDP played an instrumental role in the process with provision of technical and financial support. Project activities started with the formation of a farmers' saving group consisting of 66 members. From this group, a management committee with 33 members was established to manage the processing unit. The pastureland attracted farmers to become involved in animal husbandry for milk production on a commercial scale, which, in turn, provided them with a good source of income. With further development of the pastureland, free grazing in the forests was reduced, enhancing natural regeneration (Box 1). To promote the milk processing unit, several aspects were simultaneously developed and implemented, including improved livestock/pasture breeding, pasture development, and marketing.

Box 1: The Sha Gogona Milk Processing Unit

The Model Rural Dairy Enterprise in Sha Gogona was originally established with support from the Swiss Government. It was renovated through GTZ's BG-SRDP, after being closed for about a decade. Now, the member households deliver milk daily to the enterprise and are paid Nu15 per litre. The average milk collection is 300 litres per day and cheese production is about 300 to 400 kg per month. Milk collection and cheese production are expected to increase gradually. The milk is tested for quality and fat content. Cheese processing, as per market demand, is done strictly according to the guidelines on clean milk production. The management team initially delivered cheese to the main market outlets by itself, but this is now done by a company that specialises in the sale of organic products. A breed and pasture improvement programme was started simultaneously. So far, the milk processing unit is a success, converting pasture into pasteurised milk products, and serves as a model for other economic activities



Local people employed in cheese products and quality cheese, Gogona Milk Processing Unit, Bhutan

BG-SRDP

Himachal Pradesh: Adding value to forest products

The IGCEDP initiated commercial enterprises based on local non-timber forest products in order to enhance the livelihoods of local people, particularly women and poor groups, using local NGOs to mobilise user groups. The idea was to empower women and marginalised groups by developing additional livelihood options through commercial enterprises based on locally available resources. However, forests take time to grow so there was no immediate incentive for user groups to undertake afforestation. Hence, the project came up with the innovative idea to 'value-add' to existing domestic surpluses and/or easily available forest products. Once the user groups realised the benefits of using existing forest products, they were motivated and their attitude changed towards planting, protecting, and managing new forests. As a result, a total of 29 women groups with a total of 192 members were formed across the Changar area.

To promote this venture, the project adopted an integrated approach to provide a complete package, including social mobilisation, production, institutional set-up, and research and development. Special attention was given to the marketing of products. The women's groups started collecting, processing, and selling locally available NTFPs with medicinal or nutritional value for which there was good market demand. The important species used were amla (*Emblica officinalis*), harar (*Terminalia chebula*), bahera (*Terminalia belerica*), aampapad (mango product), aam-maakri (raw dried mango chips), aamchoor (raw mango pulp powder), and tejpatta leaves (*Cinamomum tamala*). The women's groups then joined into a federation as a microenterprise organisation named Vasundhara (registered as Vasundhara Van Utpaad Producers Company Ltd) to market their products. The organisation now has an operational unit, which includes a processing, packaging, and pulverising unit. This forest-based entrepreneurship provides employment and income for the rural poor (Box 2). Scaling up of such successful innovations was an inbuilt part of the programme and two new organisations have already come up after seeing the success of the project.

Box 2: Vasundhara – Exemplary value addition to surplus eco-products

A survey conducted by IGCEDP explored the huge amount of underutilised NTFPs in the locality with high potential for value addition. In 2001/02 to 2003/04, the Vasundhara women's group initially collected and sold deseeded dry amla through agents at the local market in Amritsar and the Khari Bawali market in Delhi. Building on this experience, they gradually added a number of processed NTFPs, which they sold in the market. In 2004/05, they produced 7.5 tonnes of dry, deseeded amla and 0.4 tonnes of other dry materials and plant species valued at IC 250,000 (approx. US \$5,400). Vasundhara is now convinced that it can survive on its own and is planning to diversify its range of products, and set a total turnover target of IC400,000 (US\$ 8,639) for 2006/07.

Vasundhara is a good example of the enterprising use of underutilised NTFPs through value addition to produce finished marketable products that involves women not only in the collection, but also in the processing and marketing of the finished goods, to provide a good source of additional income. This venture also elevated the social status of women in Changar in their own families, as well as in society at large, as self-employed women. (For details see Newsletter Changar Charcha No. 5 and Approaches to Participatory Natural Resource Management, Technical Paper Series No. 2, 12, 13).



Barakay

Collecting NTFPs for value addition



Bael juice in Siraha, Nepal: Using surplus forest products

In the Churia Forest Development Project (ChFDP), the protection of forests with the active participation of forest user groups led to an abundance of bael (*Aegle marmelos*) trees. Bael cannot be used for timber, fuelwood, or fodder, and is one of the least preferred species in forest management. No animal or bird eats its fruit, which is found abundantly in the forest. The extracted juice, however, is a marketable product (Box 3), and this can be used to generate employment and income for the local poor people. This community-based entrepreneurship has also encouraged the exploration of the potential of other forest products.

E. Kerkhoff

Bael tree with fruits

Box 3: Bael juice processing – entrepreneurship with unused forest products

An assessment of community forests in the ecozone of the Churia Forest Development Project found that unused bael fruit could provide enough raw material to prepare a refreshing and healthy juice. In the initial stages, it was not possible to gather enough raw material from one CFUG. Hence, a network of 17 CFUGs was established to pool resources. A processing plant was established at Dhodna, about 5 kilometres north of Lahan, which is the largest market centre in Siraha district and located on the East-West Highway. With the help of local NGOs, the CFUGs improved processing methods and increased their annual output from 2,000 to 30,000 bottles, enough to operate a viable and profitable venture with retailers as far away as Kathmandu. The community in which the processing unit is based has formed an NGO to manage the business and coordinate the network of CFUGs to collect the bael fruit. Two processing machines are currently operating and the unit employs 20 people. All the juice products in 2004 were sold, netting the community a profit of over NRs1 million (US \$13,500); more than enough to clear all loans incurred in the development of the processing unit. Encouraged by this success, several other enterprises have sprung up in other parts of the Terai, Nepal.

Lessons Learned

The three case studies show that community forestry in Nepal, joint forest management in India, and social forestry in Bhutan are gradually moving from subsistence to small-scale forest-based enterprises. These case studies illustrate some important policy lessons:

1. Local enterprises based on raw forest materials can be developed with appropriate support.
2. A shift from subsistence to commercial use of forest products can improve the livelihoods of local people and enhance local economies through employment generation and other multiplier effects.
3. The shift to the commercial use of forest products can also help to alleviate poverty, achieve the millennium development goals (MDGs), and manage forest resources in a sustainable way.
4. To achieve the twin goals of conservation and income generation, proper attention needs to be given to institutional development, capacity building of local enterprises to enable them to deal with complex managerial issues, and the provision of support services, including marketing, credit, technology and infrastructure, and research and development.
5. The supporting role of NGOs and government agencies is crucial, particularly at the formative stage. The bael juice factory in Nepal; Vasundhara in India; and the Sha Gogona Milk Processing Unit in Bhutan would not have developed and been successful without the technical, marketing, advisory, and other support provided by the three GTZ projects.
6. Attention also needs to be paid to policy and legal support, and the institutional framework, and post project backstopping mechanisms need to be in place. Many good initiatives for forest-based and rural enterprise development are frustrated due to lack of an enabling policy and institutional environment. For example, a few CFUGs were unable to establish a cooperative or company to manage income generating activities in Nepal due to existing policies that restrict the expansion of enterprises to include new members and limit their diversification into new products.

Policy Implications and Recommendations

The lessons that emerged from the three projects have many policy implications. It is evident that there are great opportunities to enhance rural livelihoods, contribute to achieving the MDGs, empower women, and improve the local economy, while still conserving the natural resource base, through value addition and the commercial use of forest resources. To tap these opportunities, governments should facilitate the process of value addition and the commercial use of forest resources.

Transforming subsistence-based forest management to commercial forest management based on market demand is, however, a challenging task. It requires a change in people's attitudes and behaviour, and an improvement in their skills levels and managerial capacity to deal with new technologies, to work through and within a new institution, to market products, and to deal with other uncertainties. To facilitate this transformation, appropriate policies, programmes, and projects are necessary. The experiences gained from the implementation of the three GTZ projects suggest that, unless enabling policies and programmes are put in place that support forest-based enterprise development, the initiatives taken by such projects will remain localised, or even wither away over time.

To facilitate the value addition of forest resources and the promotion of the commercial use of forest resources, the respective governments may wish to consider following recommendations.

Entrepreneurship-oriented policy development: An appropriate policy should be put in place to provide a proper framework for the development and promotion of the value addition of locally available forest resources and their commercial use through enterprise development. Government policies should also encourage formal linkages with entrepreneurship agencies including government, semi-government, I/NGOs, the private sector, and cooperative societies. Policies also need to be flexible enough to collaborate with the private sector in order to tap private sector expertise in forest-based enterprise development.

Enabling programmes: To shift from subsistence to commercial enterprises, local people need new knowledge, skills, information, and technology. Due to a lack of such support facilities, forest users are often compelled to sell their surplus forest products to outsiders in a raw form at very low prices. Unless necessary support is provided, initiatives taken by local people will remain localised or wither away over time. It is, therefore, important to develop appropriate programmes and projects in order to provide the necessary support to local enterprises so that they can sustain themselves on their own. However, such support should be based on market analysis and feasibility studies to minimise risks and uncertainties.

Institutional development and capacity building: The forestry sector should focus on institutional development and capacity building for enterprise development at all levels, including credit, marketing, cooperatives, and the development of transportation facilities. Forest-based enterprises should also be linked to research and development institutions. The capacity building of supporting resource agencies/staff is important and must be part and parcel of the package.

Developing inter-agency linkages: Due to the lack of linkages between the forestry sector (including community-based approaches) and enterprise development agencies, the skills necessary for managing commercial forest-based enterprises are not well developed. More integration is required between the forestry sector and other sectoral policies to promote forest-based enterprises. The lack of partnership policies between governments, community forestry, and the private sector has hindered collaboration between these potential partners. This lack also constrains the private sector from investing in forest-based enterprises, other than traditional ones like saw-milling, furniture, and plywood. Therefore, partnerships should be encouraged between agencies working in production, marketing, research, and extension to work hand-in-hand in order to identify new economic avenues such as bio-fuels, floriculture, and other options. Focus should be given to the development of public-private partnerships.

Making regulatory measures simple and easy: Complicated regulatory and administrative procedures discourage investment in forest-based enterprise development. To promote forest-based enterprise development, existing regulatory bottlenecks need to be removed and necessary incentives should be given to attract investment in enterprise development in the forestry sector. A federation or establishment of regional hubs for forest-based enterprises may be helpful to generate synergy and capacity for collective bargaining and negotiation. Attention also needs to be paid to the sustainable use of resources, and appropriate mechanisms (e.g., certification of sustainable management) need to be developed to this end.

Inclusion of resource poor and sustainable use: Ways and means need to be developed to make sure that the resource poor can proactively join and benefit from such ventures.



4

Social Equity through Participatory Forest Management

Introduction

Participatory forest management (PFM) has contributed significantly to improving the forest condition in Bhutan, India, and Nepal, and has increased forest stock. However, its contribution towards alleviating poverty, reducing inequalities, and bringing about gender equality has remained limited in most cases (Pokharel and Nurse 2004; Nurse and Malla 2006). Growing evidence suggests that the benefits of PFM are largely captured by the rich and elite groups, while families from lower caste groups and the poor are not benefiting equally, even though they have to rely more on forest resources for livelihood than the rich. While women do most of the forestry work (collecting fuelwood and fodder), they are under-represented in the decision-making process, and as a result their needs and priorities are not reflected in management decisions. To achieve the broad objectives of PFM, special attention needs to be given to disadvantaged groups to ensure their active participation in decision-making processes.

This section discusses the experiences of the three GTZ participatory forest management projects in Bhutan, India, and Nepal in relation to social equity, which refers to fairness and justice (Fisher and Malla 1987). Although opinions about what is fair and just vary according to culture and societal value systems, “ideally everyone should have a fair opportunity to participate in decision-making processes and thus access resources with their full potential” (Whitehead 2000). But the challenge is how to ensure that everyone has a fair opportunity. The following questions summarise a few of the key challenges faced by policy makers and development practitioners:

- How can we design and implement policies and strategies to reduce poverty and inequalities in participatory forest management such as joint forest management and community forestry?
- How can we enhance the involvement of women, members of lower castes, and the poorest of the poor in decision-making, and improve their capacity to organise themselves and manage resources for their own and for the national benefit?

The lessons learned from these projects’ experiences in social equity are very valuable in the design of appropriate strategies and policies. This section presents several processes and mechanisms through which social equity is addressed by the three GTZ projects and analyses these mechanisms to extract lessons for future project implementation and for policy development. Finally, policy implications are highlighted and recommendations outlined to address equity issues in participatory natural resources management.

Social Equity in Participatory Forest Management in Bhutan, India and Nepal

Experience from BG-SRDP in Bhutan

By tradition, and according to the forest rules, access to forest resources is equal for all households in Bhutan. However, in practice, resource rich households use forest resources more than resource poor households. The resource rich have access to more labour, more cattle, and more cash to buy permits and, as a result, their use of forest resources tends to be greater than that of poorer households. Villagers feared that under village or community management of forests, the wealthier households would deplete forest resources leaving little for the less wealthy households. The project, in collaboration with others, ensured that equity issues were addressed in the Community Forestry Manual and that realities in the field were monitored.

So far, the equity aspect is not a major issue in Bhutan as, in general, all households in a community are members of the relevant community forestry group. Resources are shared equally (with a few examples where poorer households receive more forest products). The equity issue is also a concern for the Forest Department and is being closely studied. The representation of woman in community forest management groups is still very weak. Although many women are members of community forestry groups; women are still under-represented at the decision-making level. This issue is also being studied, awareness is being raised, and some improvements have been made.

Experience from IGCEDP in India

In comparison with the community forestry areas of Churia and in Bhutan, the project area of Changar is fairly accessible and economically well off. Despite this, baseline data showed that a substantial number of households are below the Indian poverty line and an overwhelming majority of these are landless and belong to lower caste groups. To address their specific needs, the IGCEDP primarily focuses on resource poor and lower caste groups, and women. A process-approach was adopted to ensure the active involvement of disadvantaged groups. This participatory process resulted in three distinct outputs:

- The development of a natural resource based village/panchayat micro-plan with a clear focus on enhancing livelihood opportunities for the resource poor and women
- Micro-plans that follow the watershed approach, comprised of technical packages of practice, community participation, and participatory monitoring converging at the bottom level, and dealing with the treatment of degraded land for the benefit of the resource poor
- A methodology for the revival and promotion of livelihood avenues based on value addition of local natural resources and human skills – this was evolved on the basis of ‘eco-income generation’ done more or less exclusively with women and the resource poor

Moreover, to include disadvantaged user groups in the overall planning and implementation, the project relied on general consensus in the village/panchayat. This helped to sensitise more advantaged people to the need to identify marginal groups and

their needs, which facilitated participation of these groups in the subsequent stages of the project. This strategy provided space for disadvantaged groups in planning, and their articulated demands were included in the resource management plans. At the same time, specific provisions were made to ensure the participation of women and members of lower caste groups in village institutions. For example, 50% of the village development executive committee members should be women, and representatives from lower caste groups must be included as well. This was supported by programmes such as the promotion of mahila mandals (local women's clubs) and capacity building for women leaders.

Experiences from ChFDP in Nepal

Realising the importance of involving lower caste groups and women in community forest management, the ChFDP adopted several strategies, including poor-focused initiatives. Most important of these are the Community Forestry Management Demonstration Programme (CFMDP) and the Forest Rights Programme. Under these programmes Dalits (so-called lower caste people) and women were trained to raise awareness about their rights, to develop their knowledge and skills, and to boost their morale and courage to participate in development work. As a result, the involvement of Dalits and women in community forestry, and their participation in CFUGs and decision-making increased considerably (Boxes 4 and 5).

The geography of the area is such that all the forests are in the hills to the north, while the most populated areas are towards the south. This leaves a large proportion of the population without immediate access to the forest resources they need, as only people in the vicinity of the community forest tend to be included in forest user groups. Box 6 describes how the ChFDP project has included distant users (who live too far away to be directly involved in forest management and protection) in user groups, giving them equitable access.



Dhandol

Woman use forests and must participate in planning

Box 4: Addressing the specific needs of Dalits

First, an effort was made to provide intensive support to a small number of CFUGs through the ChFDP. Under this programme, Dalits within CFUGs were empowered to form their own sub-group to bring their specific needs, concerns, and priorities before the committee. The second approach employed by the project was the launching of a Forest Rights Programme through a partner NGO. This programme raised awareness of the importance of the active involvement of Dalits in CFUGs through campaigns in Dalit villages. Third, to address the needs of Dalits living far away from the forest, communal plantations were supported in several areas, particularly in Dalit majority areas, to involve them in CFUGs and to enable them to fulfil their subsistence requirements.

Box 5: Involving women in forestry decision-making

In order to improve the participation of women in decision-making, the project concentrated on raising awareness and capacity building of women through the CFMDP and the Forest Rights Programme. This produced significant successes, including the formation of women-only CFUGs, one of which has also won a national prize for community forest management. Households are registered in CFUGs in the names of both male and female members, against prevailing social norms.

Box 6: Providing equitable access to distant forest users

To ensure that distant users benefit, distant forest user groups were created, 14 since 2001 involving about 2,000 households. These groups were allocated forest areas that had not previously been handed over. An integrated planning process, including a series of workshops and consultations with all relevant stakeholders, was followed to reach agreement on the forest management plan. However, the scarcity of public land needed for plantations and their scattered location has limited the progress of this initiative. Many of the areas have remained without intervention due to disputes over tenure between local authorities, one or more wealthy landowners, and the local communities.

Lessons Learned

Several lessons have emerged from the three participatory forest management projects in Bhutan, India, and Nepal:

1. The participatory forest management process has increased awareness within and outside the community about social equity issues, particularly the inclusion of women, lower caste groups, and other marginalised groups in forest management in project areas and beyond. As a result, participatory forest management has developed a process of holistic social development in the communities.
2. The participation of women, lower caste groups, and other disadvantaged groups has increased in all three projects in Bhutan, India, and Nepal. Their involvement in decision making has also increased considerably.
3. The participatory forest management process has increased the exchange of information within the communities through continuous interaction. This has

increased social cohesion and enhanced social capital in the weaker sections of society. As a result, power and positions are being negotiated and redefined.

4. The needs of the poor, women, and lower caste groups are not automatically reflected in management and operational decisions, as they have little voice and capacity to negotiate with the elite class.
5. The involvement of disadvantaged groups in the planning process has several inherent constraints. Members of disadvantaged groups are generally busy with daily-wage work and, therefore, need to receive immediate benefit from their investment of time in community activities such as tree planting. Enhancing social equity, therefore, is a non-linear process and requires long-term commitment to support the process of maturation.
6. The experiences gained through the projects suggest that equity in PFM does not come for granted. To bring about social equality and enhance social inclusion, pro-poor targeted initiatives are required to empower disadvantaged groups and to channel increased benefits to them. For example, Dalits could not have participated actively in CFUGs in the Churia hills in Nepal without the active support given by the ChFDP. Likewise, women and Dalits could not have been involved in forest-based enterprises for income generation without the support of the IGCEDP. This exemplifies the fact that external support and facilitation can empower forest-dependent disadvantaged groups to have a voice in community decisions by providing training, raising awareness, developing options, and supporting advocacy.

Policy Implications and Recommendations

The lessons that emerged from the three projects have many (policy) implications in relation to addressing the critical issue of social equity. The experiences gained by the projects suggest that well-planned and well-focused programmes that provide a package of diverse support can ensure the active participation of women, poorer people, and lower caste groups in the management of forest resources. With proper support, disadvantaged groups can become active managers of forest resources instead of just passive beneficiaries. The process of participation can also reduce inequalities by affecting the existing social power structure through enhancing skills, knowledge, and social capital. However, given the social inequalities, skewed distribution of resources, and unequal power structure, where poor and lower caste groups and women have a limited voice in decision-making, strong commitment and bold actions are required to bring about changes in social, cultural, economic, political, legal, and institutional structures in favour of marginalised and disadvantaged groups. The following recommendations may be useful in developing a strategy to bring about such changes:

- **Introducing a policy for positive discrimination** – Clear policy guidelines need to be developed through a consultative process with vertical and lateral linkages and put in place to ensure the inclusion of disadvantaged sections of society in PFM. Policies for positive discrimination, e.g., the allocation of a certain percentage of forest area to poor and disadvantaged groups, may also be designed to create more opportunities for disadvantaged groups.

- **Developing and implementing an equitable benefit sharing mechanism** – To support poverty reduction through participatory natural resource management, due attention must be given to benefit distribution between different stakeholders, especially poor and disadvantaged groups, to meet their varying demands. Appropriate mechanisms may be developed and institutionalised to ensure the equitable distribution of benefits from forest management.
- **Creating an enabling environment for proper representation** – There is a need to create an enabling environment to ensure the participation of disadvantaged groups, their proper representation on committees, and reflection of their issues in the agenda and in management and operational decisions. For example, the provision of equal rights for women (at least 50% representation) and the proportional representation of lower caste groups in management committees must be made obligatory. In India representation of disadvantaged groups has already been enshrined in some programmes and regulations. The representation of disadvantaged groups in federations such as FECOFUN should also be ensured.
- **Building capacity** – Building the capacity of the poor, women, lower caste groups, and other disadvantaged groups through training, skills development, exchange visits, and other formal and informal approaches is essential to raise their awareness and confidence to demand their rights.
- **Developing inter-sectoral linkages and strategic alliances** – It is important to develop inter-sectoral linkages for PFM to make a significant contribution to poverty reduction and in order to maximise the potential benefits. Strategic alliances are also required between the government, projects and NGOs, and the private sector to build synergies and strengthen support.

Scaling up – Appropriate policies, programmes, and institutions need to be developed to scale up the best practices and experiences gained in the pilot projects, as pro-poor activities in these projects are currently only on a limited scale. The participatory techniques applied in the three projects, such as micro-plans, can be leveraged by local administrations and organisations such as panchayats, geogs, and CFUGs to create livelihood opportunities for the resource poor.

5

Building Resilient Institutions for Participatory Natural Resource Management

In addition to other interventions, the three GTZ projects built local institutions to promote community-based natural resource management (CBNRM). This part describes a part of the process and the lessons that emerged in terms of building sustainable institutions for participatory natural resource management (PNRM).

Political and Legal Contexts

Bhutan

The development philosophy of Bhutan focuses on five developmental aspirations: (i) human resource development, (ii) conservation and promotion of culture and heritage, (iii) sustainable and equitable socioeconomic development, (iv) good governance, and (v) environmental conservation. In its 5th Plan (1981-1986), the Royal Government of Bhutan initiated the process of decentralisation by devolving responsibility for planning and implementation to dzongkhags (districts). This was underlined by a focus on geog (block) based planning in the 9th Plan (2002-7), providing the legal basis for the involvement of local communities in their own development affairs. Self-reliance, sustainability, and accountability are to be increased, in addition to the strengthening of local institutions. This is accompanied by the promotion of community forestry and farmers' groups facilitating improved resource governance.

India

The decentralisation of forest management in India was initiated by the announcement of the Forest Policy 1988. This was followed by the Ministry of Environment and Forest Order of 1990 directing states to start the implementation of joint forest management. The decade of community-participated watershed management was initiated simultaneously in the 1990s. All of these policies and Acts are based on the premise that participatory approaches are key to integrating effective natural resource management.

In the state of Himachal Pradesh, the government issued guidelines for participatory forest management in 1993, in conformity with the National Forest Policy of 1988. The government also promulgated the Himachal Pradesh Participatory Forest Management Guidelines in 2001, entrusting the management of natural resources, including forests, to village communities (known as village forest development societies or VFDSs) and outlining short and long-term incentives for them in order to raise their interest and commitment towards better resource governance.

In addition, the 73rd Constitutional Amendment in India (1993) revived panchayati raj institutions (PRIs) and gave them more authority and responsibility for natural resource

management. Three 'Fs' (funds, functions, and functionaries) were entrusted to the panchayats so that they could gradually become the vehicle for decentralised forest management. If this system is made operational, this will have far reaching implications for resource governance as over 70% of the Indian population is still rural and largely dependent on natural resource management for their livelihoods.

Nepal

A progressive approach to decentralised natural resource management has made Nepal a regional role-model. The promotion of community forest user groups (CFUGs) and their federating into FECOFUN (Federation of Community Forest Users, Nepal) has provided a basis for the effective networking of institutions for sustainable forest development and the management of forests by communities.

The Master Plan for the Forestry Sector 1989 designated forest user groups as the principal vehicle for local collective action and stipulated that forest officials adopt new roles as advisors and extension agents. The Forest Act of 1993 and Forest Regulations of 1995 legitimised community-based forest management, gave community forest user groups rights as legal entities, and provided mechanisms for their administration and registration.

Scope and Rationale

There is a trend around the world towards increased decentralisation of natural resource management from central to local authorities, including local communities. Community-based forest management seeks to devolve authority and responsibility from the state to the local community. Like other regions of the world, there is a significant shift in natural resource management in the Hindu Kush-Himalayan region; a move from state control to community controlled management regimes.

Appropriate institutions are a pre-requisite for successful implementation of PNRM. Both the formal and informal rules of institutions (North 1990) not only guide human behaviour by defining access to and control over resource use and management, but also provide a framework under which different actors interact and act to achieve collective goals. Many problems of unsustainable resource use such as unclear property rights, top-down centralised implementation, inadequate short-term benefit-sharing mechanisms, and the alienation of resource users in management decisions, result from weak institutions. Realising the paramount importance of institutions in natural resource management, GTZ placed considerable emphasis on the building of sustainable institutions at the local level in natural resource management in the projects in Bhutan, India, and Nepal.

Sustainable Institutions: Project Experience

In all three projects, local institutions comprised of local forest users were built into participatory or joint structures and their skills, knowledge, and capacity were developed through training and formal and informal interactions to enable them to interact properly with other stakeholders and manage forest resources in a sustainable way.

Experiences from BG-SRDP in Bhutan

NGOs are almost non-existent in Bhutan. The government is in the process of drafting a law to involve NGOs in natural resource management. BG-SRDP is working mainly through government organisations and forums. The project coordinates with donors in the natural resource sector and, quite often, a common approach is adopted for collaboration. The project has been very supportive of the establishment of farmers' groups and community forest management groups.

The process of establishing a farmers' group in Bhutan receives much attention. It involves raising awareness and carrying out social mobilisation and trust building. The development of savings groups with saving schemes and other activities of common interest follow. Although this process takes time, it creates understanding and ensures the full participation of communities, with the assistance of extension services. Issues like equity, gender, and feasibility studies are also addressed, although not yet adequately.

As forest user groups are still new in Bhutan, due attention is needed in relation to issues, such as financial auditing and the integration of groups into cooperatives, among others. Many rural people are still illiterate and, hence, it is difficult to ensure transparency and accountability.

Experiences from IGCEDP in India

IGCEDP is working exclusively in the lower Himalayas (Changar) in Kangra district, Himachal Pradesh (HP), India. The project follows watershed management principles and has community forestry as a major component. Forestry initiatives are channelled through locally formed village development committees, which can register formally as village forest development societies (VFDSs) under the Indian Societies Act 1860. Registration provides them with formal access to lands on which plantations can be raised, as per the community's choice. Local communities and the Forest Department are fully involved in the implementation of such ventures (Kotru 2002).

The building and strengthening of local institutions – both formal, such as the panchayati raj institutions (PRI), and informal, such as village development committees, VFDSs, and user groups – is vital to sustainable forest management. For this, it is necessary to mobilise and sensitise local actors, for which IGCEDP has developed and tested guidelines for wider application. Moreover, the role of PRIs in facilitating good service delivery requires a consolidated link between forest resources and their use and local governance.

Experiences from ChFDP in Nepal

Nepal's Forest Act 1993, together with the Forest Regulations 1995, and the Operational Guidelines 1995, sees community forest user groups (CFUGs) as independent, autonomous, and self-governing institutions, responsible for the protection, management, and use of any area of national forest with a defined forest boundary and user group members. CFUGs are formed democratically and registered at the District Forest Office (DFO). The CFUG's constitution defines the rights of users to a particular forest.

Community members and their participation Community members participate in preparation of the CFUG constitution and operational plan. The level of support that various agencies such as DFO, FECOFUN, NGOs, civil society organisations, local government, and concerned stakeholders provide, and the relationship among them in supporting CFUGs (Pokharel 2002), are clarified during the process. There is a fair chance that community forest user groups will be sustainable after the termination of external support. They have a sound policy and legal framework, are synthesised into village culture, fulfil the basic forest product needs of rural people, and satisfy many community development needs, with decisions made by local people at the grassroots level. Furthermore, CFUGs have been federated at the district, regional, and national levels, providing back-up and advocacy support.

In relation to benefit sharing, two of the main mechanisms observed were 'needs-based' and 'equal' sharing. The two are not mutually exclusive and were found to co-exist in many of the cases studied.

Community forestry is a regular programme of the Government of Nepal. The DFO is expected to deliver technical services and back-up support through its field level rangers and forest guards. However, the DFO has limited resources and the number of user groups is more than a forest ranger can visit in a month. Assessing the comparative performance of CFUGs, it is clear that institutionally and financially weaker CFUGs might become non-functional and ultimately disappear. They require capacity building to boost their managerial capacities through post-handover back-up support.

Lessons Learned

Key lessons from Bhutan

Although Bhutan has developed rules, regulations, and a Community Forestry Manual for participatory and decentralised forest management, more is still needed. Community forest user groups and an apex-level body (like FECOFUN in Nepal) could be instrumental in promoting participatory forest management in the country.

Key lessons from India

VFDSs are parallel bodies within villages created by the Forest Department. They have their own development oriented micro-plans. There is, so far, no functional link with formal village institutions such as the panchayat, which is the official village-based institution responsible for the planning of development activities and their implementation.

Forest Department support is inadequate to sustain village forest committees or VFDSs in the long term after management is handed over. Promotion of short-term benefits is important to encourage the genuine interest of communities, the lack of which may affect the rehabilitation of degraded lands. In the long term (when major yields are returned by the forests) a distinction will have to be made between rights-holders and users. Registered forest societies include a limited number of users and many traditional users

Table 1: Institutional Development

GTZ Project	Implementing Agency	Intensity of Involvement of State Organisations	Development of Local Institutions	Institutions to Secure Long-Term Sustainability
BG-SRDP Bhutan –	Ministry of Agriculture with Department of Livestock, Agriculture and Forestry	High; implemented in close coordination with government agencies	Emerging priority	Community forest management groups
IGCEDP India	Mainly the Forest Department of Himachal Pradesh through the autonomous/ semi-governmental Himachal Pradesh Eco-Development Society (HPEDS)	Government line departments and the Forest Department in particular work closely with society	All community assets including the plantations handed over to the communities for joint management with the Forest Department	Village forest development societies (71), the Forest Department and gram panchayats work together as governmental NGOs through HPEDS in post project era
ChFDP Nepal	Government line agencies, local NGOs, local governments supported by the ChFDP Project Support Unit	Low; a) technical assistance b) securing handover of community forests as per rules and regulations	309 community forests handed over (+45 in the hand-over process)	350 CFUGs together with local governments, assisted by local service providers

are left out, creating ownership conflicts over land. It is important that the Memorandum of Agreement between the VFDS and the Forest Department is of long-term nature (i.e., at least up to the culmination of final yields) and includes all users, as well as rights-holders, and provides legal security. The current timeframes given in Memorandum of Agreement are not precise enough to ensure the confidence of local communities. In order to keep local people committed to participatory forest management, it is necessary to ensure that they are confident that they will receive benefits from their collective action.

So far, decentralised NRM in India is still evolving. Changes need to be made to the roles and organisational structure of the Forest Department, as they still reflect structures made under colonial rule for totally different conditions. These roles and structures have to be adjusted to the changing socioeconomic and institutional conditions. For this, a broader consultative forum is needed and should be based on regular networking between institutions, communities, and other stakeholders in the locality. This forum should work as a pressure group to affect changes at the policy and implementation levels.

In order to significantly increase the access of the rural poor to natural resources more reforms are required. Decentralisation in the NRM sector has, however, created a lever in political negotiations at the district level, providing space for more strategic local political mobilisation through NRM.

Key lessons from Nepal

The joint learning team's visit to the Churia Forest Development Project and community level discussions and collective learning yielded a rich collection of observations, knowledge, and recommendations on the institutional capacity of user groups, their financial management, and required technical know-how. The most important lessons were the following:

1. Institutional capacity of forest user groups
 - Increase the institutional capacity of forest user groups and encourage democratic functioning and a local decision-making process to promote democratic norms in order to run forest user groups in a sustainable way without external support
 - Enhance the capacity of forest user groups to depend on their own resources and access rather than tied/untied external funds (whether from the state or other outside sources)
 - Reduce the dependency of forest user groups on DFO staff, NGOs, and donors and develop local resource persons and their technological capacities to address local conflicts and other critical issues
 - Devolve authority for monitoring and capacity building activities at the local level
2. Financial and management capacity of forest user groups
 - Explore sustainable financial sources for forest user groups; diversify and increase own sources of income in each group
 - Promote the idea of revolving and/or security funds at the individual group level, or at the district level, that can be used in difficult situations
 - Develop a spirit of entrepreneurship in forest user groups to promote economic viability
 - Create indicators of sustainability for different stages of the development of forest user groups and classify forest user groups according to these stages; government support should be provided to the neediest groups first, thus reducing conflict within and between groups
 - Reduce the administrative costs of both DFO structures and forest user groups and keep external financial inputs to a minimum
3. Technical know-how and/or services to be received
 - Avoid being overly conservative in the harvesting or removal of forest products. Harvesting operations have to be backed-up by continuous resource monitoring, in which local users participate
 - Train and build the capacity of local resource persons to reduce the dependency of forest user groups on DFO staff, donors, and NGOs

A strong feeling of ownership of the forest and the forest user group is paramount and a key to the successful implementation of all of the above mentioned measures. In addition, a strong collective feeling of ownership increases the likelihood of sustaining institutional arrangements for collective forest management.

Common lessons learned

Forest resources are more likely to be utilised sustainably if there is an effective structure of institutional arrangements. Such arrangements give rise to a meaningful authority system at the local level. A government forest reserve (state property) or a private forest (private property) can be as degraded (or as good) as a communal forest (common property). What matters are effective institutional arrangements and associated organisational mechanisms to monitor and enforce rules in order to prevent wanton harvesting of the resources. The common lessons learned were as follows:

1. Experience indicates that the following five features characterise well-functioning groups: (i) the group addresses a felt-need and a common interest, (ii) the benefits to the group of working together outweigh the costs, (iii) the group is embedded in the existing social organisation, (iv) the group has the capacity, leadership, knowledge, and skills to manage the tasks, and (v) the group owns and enforces its rules and regulations.
2. Furthermore, there are often important asymmetries of power and information among the various actors in natural resource management. Those with better information and more influence have a strong incentive to maximise their own short-term self interests at the expense of the group objectives. Hence, to be effective, natural resource management organisations must be able to structure social relationships internally so that participants overcome these temptations and become motivated to cooperate to achieve collective objectives.
3. Forest user groups that have a sound institutional setup, maturity in group dynamics (democratic interactions, a system of rule of law, quality of leadership, a regular source of income, and transparent financial management), and fulfil the basic forest product needs of their members in managing the forest, will have more chance of being sustainable in the long term. This is further proof that sustainability is directly related to the institution, forest management, and the fulfilment of at least basic forest product needs.
4. Social institutions are the backbone of community forestry, especially forest user groups. Thus, it is high time to revisit not only new group formation and forest management, but also the group dynamics of weaker forest user groups and apex-level bodies to ensure the long-term sustainability of community forestry. The role of FECOFUN and other apex-level bodies, and NGOs and CBOs will be vital in providing backup support to weaker user groups.

Policies Implications and Recommendations

Enhancing the sustainability of institutions

Experience from the three projects suggests that the following conditions are necessary to sustain the local institutions involved in participatory forest management:

- An **organised social institution** based on a traditionally organised social group
- The institution (user group) must be a **legal entity** or legally recognised
- **Clear decision-making mechanisms**
- **Defined boundaries** for user groups or social institutions and defined forest area
- A **regular source of income** to run the institution

A sound exit or phase-out strategy should be designed at the beginning of a project during the project formulation and appraisal.

Managing group dynamics

The following conditions are necessary in relation to managing group dynamics:

- Develop an **appropriate policy and legal environment** that ensures the real participation of the users
- Raise **awareness on the rights and responsibilities** of members of institutions, including the initiation of forest management (protection, plantation, harvesting, and distribution of products)

Most of the necessary conditions have been fulfilled in Nepal's community forestry but are still questionable in the Indian context. Bhutan is in the initial stages of working with community organisations and NGOs. Thus, Nepal could be a good learning ground for sustainable community-based institutions involved in NRM in the region.

Strengthening support services

The following are needed to strengthen support services:

- **Bridge the institutional gap for the delivery of services** – Inter-sectoral agencies have to be increasingly linked to ensure synergised service delivery and technical backstopping for the smooth delivery of services to the forest user groups.
- **Develop a reserve fund for each forest user group** – In order to meet unforeseen crises, about 5-10% of the annual income of forest user groups should be deposited in a reserve fund which will serve as a safety net for the group.
- **Develop a mechanism to support weaker groups** – Criteria should be developed to classify forest user groups as weaker, medium, or self-sustained, and strategies and guidelines should be developed/adopted to direct enhanced or value-added support to the weaker groups. These criteria may be used to provide services to weaker groups and for capacity building.
- **Allocate more resources to the forestry sector** – At present, support for the forestry sector is scarce. In the allocation of scarce resources by governments, the forestry sector must receive a higher priority.
- **Developing local resource persons** – Due to a shortage of manpower and logistic facilities, the Forest Department is unable to provide the necessary services required by communities. Developing local resource persons to deliver technical and other services may help to cover the gap.
- **Minimise administrative costs** – In order to give more focus to development and forest management, the administrative costs of user groups need to be reduced.

6

Resource Governance and Sustainable Natural Resource Management

Introduction

Initiatives promoting sustainable development through natural resource management (NRM) in the Hindu Kush-Himalayas have shifted in focus from top-down centralised management to participatory and community-based decentralised management. It is now increasingly realised that the core problems causing unsustainable resource use are often linked to poor governance such as unclear rights and responsibilities, centralised planning and management, and inadequate participation of local resource users in decision making. As a result, since the 1990s the issue of resource governance has received growing attention in natural resource management. Awareness and experiences have been growing which suggest that the non-involvement of local communities and an exclusive focus on technical solutions to resource management are woefully inadequate in promoting the sustainable management of resources. The changing approach has also been reflected in NRM policies in Bhutan, India, and Nepal. New policies and regulations have been framed and put in place to promote sustainable resource management.

Although the importance of resource governance is increasingly being recognised, different people view the term 'governance' in different ways. According to GTZ, governance is a set of rules, enforcement mechanisms, and corresponding interactive processes that coordinate the activities of the stakeholders involved in NRM with regard to a common outcome. Governance is, therefore, not a single actor's activity. It comprises institutions, mechanisms, and processes through which different actors and groups articulate their interests, exercise their rights, meet their obligations, and mediate their differences (Sharma and Acharya 2004, based on a definition by GTZ). Governance is understood here in a broad sense as a mode of planning, and decision making that allows the interaction of a multitude of actors, including local institutions, civil society, and state agencies, to regulate and govern the mode of resource use. As good governance is a prerequisite for sustainable natural resources management, GTZ took the initiative to improve resource governance in Bhutan, India, and Nepal. This section documents the process and lesson that emerged from the three pioneering GTZ projects in relation to improving resource governance at the micro level.

Emerging Resource Governance: from State to Community Management

Experiences from Bhutan

Community forestry in Bhutan, also called participatory forest management, is supported by the Forest and Nature Conservation Act of Bhutan 1995 and the Forest and Nature

Conservation Rules 2003. The community forest management groups approved by the government are given legitimate rights (certificates) to manage and use designated areas of government reserve forests as per an approved management plan. A comprehensive Manual for Community Forestry has also been developed and defines the rights and responsibilities of the different stakeholders in community forestry management, as well as describing the steps and procedures for establishing and operationalising community forestry.

Experiences from India

The governance of forest resources in India has been moving from state management to participatory management. The process of participatory forest management in India is facilitated by the development of joint forest management (JFM), which is based on the National Forest Policy 1988. This policy emphasises the involvement of village communities living close to forests in the protection and development of forests. The Government of India subsequently notified state governments in 1990 and 2000 to involve local communities in the management of forests. Joint forest management needs a village level organisation, through which local people participate in forest management. Such an organisation may be the existing village panchayati or an organisation newly formed for the purpose, such as a cooperative society, a village forest development society, or a village forest protection committee. Most village level organisations involved in JFM are in the form of village forest protection committees.

The JFM initiative first started in West Bengal as a part of the pilot community forestry project and has now spread to 28 states in India. By March 2005, about 100,000 village forest protection committees had been formed and were managing more than 21 million hectares of forest land (Mukerji 2006, p.21). About 14 million families (75 million people) are involved in this forest management system (Mukerji 2006, p.21).

Entrusting the management of natural resources, including forests, to village communities known as village forest development societies (VFDSs), and outlining the short- and long-term incentives to them, is designed to generate their interest and commitment towards better resource governance. The focus of the policy guidelines is access to resources, the active involvement of resource poor and women in local decision making, and the accountability of state institutions while implementing and supporting such processes.

Experiences from Nepal

In the Hindu Kush-Himalayan region, remarkable changes have taken place in resource governance, particularly in forest management in Nepal. Community forestry has become a major thrust in forest management in Nepal, representing a major shift in the distribution of power between the state and communities. Forest users are able to exercise a considerable degree of control in forest management. The executive committees of community forest user groups (CFUGs) are entitled to make their own rules and regulations, and to implement them. Rules and regulations regarding the governance of community forests are made in the general assembly and implemented by the decision of the executive committee and sub-committee. Forest users are also actively involved in

planning, decision making in relation to resource use, and management, including benefit sharing.

The Forest Act and Forest Regulations promulgated in 1993 and 1995, respectively, provide the legal basis for the community participated decentralised forest resource governance system in Nepal. Under this legal framework, CFUGs at the lowest level, and their apex body – the Federation of Community Forest User Groups, Nepal (FECOFUN) – at the centre, have been given legitimacy to become actively involved in national and local decision-making processes on matters related to forest management.

The Situation in 2005

When it comes to translating the policies summarised above into field-level activities, there are three distinctly different scenarios in the three countries (and the three projects).

Bhutan

The situation in Bhutan is entirely different from that in either Nepal or India. Due to its thinly distributed population and rich forest cover, conflicts and problems related to the management of natural resources are rare and less complex. For the Bhutanese, entitlements are guaranteed by law and timber/wood is either provided free of cost or (in the case of construction materials) at a minimal rate. Moreover, there is no immediate or foreseeable shortage of forest products (BG-SRDP Doc. 76).

This has resulted in a situation where local communities are not motivated to play an active part in the rehabilitation of forests. It has been necessary to make them conscious of the need to proactively prevent forest degradation and to give economic incentives to generate community participation and support for the protection and development of forest resources.

Bhutan is gradually shifting towards a constitutional monarchy and democracy. The pace of change in resource governance cannot overtake the speed of the political change process. Therefore, Bhutan has adopted a cautious approach to the implementation of community forestry schemes. As a result, Bhutan has only a modest amount of experience in relation to the handing over of forests to local communities.

Examples where forest and farm products have been linked to a long-term livelihoods programme are rare. Hence, continuous interest of local communities in participating in management has yet to become apparent. At the same time, a purely subsidised system of planning and implementation has been hampering the pace of decentralisation as the state still remains the biggest caretaker of forests.

India

Policy changes are an indication that a need for change is felt at the macro-level. Reframed policies, enacted laws, and new regulations in India were clearly meant to promote resource governance. However, in Himachal Pradesh (HP), despite the

enactment of the HP - Panchayati Raj Institutions (PRI) Act and the HP-Participatory Forest Management Guidelines 2001, the ground realities are still far from changed. Similarly, the decision on the three 'Fs' (funds, functions, and functionaries to be entrusted to panchayats) has not really been converted into common practice. Decisions about local development are still taken at the macro-level and major works in NRM are done by government line departments according to their own budget planning. Likewise, progress in entrusting forest management to local communities is still far from satisfactory. Several VFDSs are not even aware of the Guidelines, and virtually no appreciable final yield has been observed.

Dense forest cover has further degraded, which indicates that the favourable and supportive policy changes have not been matched by implementation on the ground. The implementation of these policies was intended to have an impact on poverty, equity, women, the ecology, and the overall management of natural resources. However, the policies have had only limited success. The current decentralisation policies have not actually changed the structure or the distribution of benefit streams from natural resources. The basic political settlement over natural resources remains unchallenged (Baumann and Farrington 2003), despite the building of momentum for decentralisation.

Nepal

In Nepal, the nationalisation of forests in 1957, which had aimed to demolish the network of private forest concessions, led to the rapid degradation of the forest resources and destruction of forest cover? It also resulted in the alienation of local communities from traditional values to and affinities with the forest resources, as well as denying their usufruct rights and destroying indigenous management systems.

The lack of tenure, steady increase in population, use of steeply sloping land for farming, and insufficient human and capital resources for the protection of forests, all led to rapid degradation. Although there has been significant progress since the introduction of community-based forest management in the 1970s, conflicting programmes such as community and leasehold forestry alienated the resource poor as often the most degraded areas were given to them. Similarly, the preferential access of underprivileged groups could not be ensured. As a result of social exclusion, the impact of use by the resource poor and subsistence farmers on forests and productive farmland led to further degradation. The innovative efforts in decentralised community forest management have been affected by insufficient management skills, lack of long-term and genuine commitment, and lack of suitable actions to solve forestry problems by government agencies and political representatives. The existence of a large number of landless households in the forest fringe areas and unchecked encroachment add further problems to community-based resource governance.

The absence of land reform has further complicated the issue of good resource governance, and the situation has been exacerbated by the overall volatile political situation in Nepal. Similarly, the orientation of state programmes towards subsidies has not necessarily improved the willingness of local people to proactively contribute to better governance.

The process of decentralised resource governance may have begun but several pointers speak for the need for a review and for enhanced efforts:

- Better governance is crucial for poverty alleviation, to achieve the MDGs, and for sustainable development; for this, a renewed focus is needed.
- Frequently changing rules, regulations, and policies for better resource governance have not been matched by the committed devolution of powers and/or rights or a progressively designed decentralisation process.
- Gaps in policies and practices are evident. Accountability, transparency, and better decision making and benefit-sharing have yet to be achieved.

It is in the above context and the importance of realising better resource governance, that the three projects took the initiative to improve resource governance in their respective project areas.

Project Initiatives

All three projects started working on these important issues in their respective areas in the early 1990s and initiated processes, innovations, and physical/technical interventions that could be replicated and improved upon to transform resource governance. All three projects were justified, keeping in mind the fact that the issues pertaining to resource governance were not settled. Hence, the main focus of the projects was on addressing advanced and early landscape degradation, the fostering of participatory techniques to involve and gain commitment from local communities and their institutions, the need for innovative tools (e.g., planning guidelines, forest management guidelines), the linking of locally enhanced livelihoods to natural resource management and markets, and the capacity building of stakeholders (including government organisations, NGOs, CBOs, and federations). The cumulative aim of all the projects was to have an impact on policy.

The three GTZ projects were long-term projects and had a relatively stable setup in terms of time period, staff, resources, and an integrated approach. Thus all three projects focused on issues of empowerment, technical management, tenure security, equity, poverty alleviation, women, livelihoods, and essentially how grassroots resource users, formal and non-formal village institutions, and intermediate authorities (e.g. geog, panchayat/block, frontline staff of line departments) reach the various levels of decision making so that policies and their implementation can be synchronised at various levels of governance.

Given the overall situation it was generally felt that the state, as the major stakeholder and custodian of natural resources (owning most of the forest land while local communities are the de facto users and managers), has not delivered as it should have. The continued degradation of natural ecosystems can be taken as an indicator. Similarly, the issue of poverty and inequity in terms of using resources remains obvious. The global reform processes of the past decade have strengthened the resolve of all three countries in which the projects were based to devolve power over resource governance to local communities and their formal bodies (e.g., panchyati raj institutions in India, the geog in Bhutan, and CFUGs in Nepal) through the handing over of state forests to local

communities for management. This devolution of power (or people-centric paradigm shift) is often quoted as the landmark-step in sealing the decentralisation trend. Nevertheless, despite the devolution of power, several planning and implementation approaches are still operating simultaneously:

1. The usual state-geared planning and implementation.
2. Project/programme mode of planning and implementation with community groups (this is usually donor oriented involving government organisations and I/NGOs).
3. Planning and implementation through local/resource governance bodies.

The three projects clearly belong to category two above. The different projects also had an innovative role in developing concepts and strategies to ensure that resource governance issues are addressed and project recommendations on resource governance are not being done in isolation and in a non-replicable way.

All the projects studied have in common that, within their given political, legislative, and legal framework, their focus was on achievements in resource governance, sustainable forest resource management, and participatory institutions.

Achievements in Resource Governance

The process followed by each of the projects studied can be termed as ‘unique but common’. Sensitisation and capacity building of local communities to plan and facilitate implementation was conducted so that they could be entrusted with the management of NRM-oriented initiatives. With the overall focus on sustainable NRM, the three projects have had an impact on the policy, legislative, institutional, and planning and implementation (e.g., participatory NRM-technical packages) frameworks that existed in the pre-project era.

The projects did their major work through village or community level committees (village development committees, CBOs, or CFUGs). These communities are the actual users and are directly linked with resource management. Village development committees, water users associations, and livelihoods groups are part of village and panchayat-level resource governance groups.

Experience from Bhutan

The BG-SRDP approach in Bhutan was in tandem with the state’s drive for decentralisation across all sectors of government in both management and administration. Subsequently, based on project experience, community forestry has contributed broadly to the decentralisation of resource management in the forestry sector. Similarly, the responsibilities of dzongkhags have increased and they have been made more accountable and responsive to the people and to people’s expectations, which is expressed through their planning. The universal application of a simple methodology for forest management planning (e.g., forest function mapping, forest management for local use, and so on), followed by implementation, has improved decision making in decentralised forest management significantly. Several community

forests have already been handed over to local communities, and their number is increasing rapidly.

Experience from India

All the proactive groups have evolved and further developed the traditional norms and regulations in relation to the various aspects of resource governance, while incorporating necessary changes (e.g., grazing control, grass yield distribution on common land, forest rights, and irrigation water distribution). Geographically viewed, local governance bodies are merely an elected group of representatives that belong to the local resource governance group. Hence, there is a straightforward link between resource governance and local governance.

The promotion of local governance bodies in India presents the challenge of bringing NRM under the purview of these bodies which have no experience in NRM. Similarly, based on experiences in community forestry, the project contributed to the shaping of the HP-Participatory Forest Management Guidelines 2001 and Memorandum of Agreement. With the sensitisation and capacity building of local communities and line department staff, the first ever Memorandum of Agreement was signed between the Forest Department and the local communities on the management of local plantations, establishing a clear-cut legal basis for implementation (assigning roles and responsibilities and timber yield distribution). The signing of this Memorandum can be termed a 'landmark' event, as it was a major progressive step towards implementing decentralised resource management.

Experience from Nepal

The ChFDP has made good use of emerging legislation regarding forests and decentralisation. The project sought the cooperation of the new Forestry Sector Co-ordination Committees. Through various sub-committees and working groups, the project has contributed to the development of forest inventory guidelines.

Most importantly, over 310 registered CFUGs covering 44,000 hectares of forestland, bear ample testimony to the reduced mistrust between the people and the government. Similarly, community forestry uses stakeholder agreements as an effective instrument for conflict resolution and controlling or recovering encroachments. Through its inclusive approach, it has also tackled the issue of equity and women's empowerment.

Post project institutional support has also been ensured through FECOFUN, which, as an institutional back-stopper, has not only accelerated the devolution of forest management but also provided a direct link to the government for changes required in policy and regulations from time to time.

Lessons Learned and Limitations

Learning

1. **Decentralisation** can lead to the empowerment of people and, therefore, better coordination between the bottom levels of governance – if investments in the

capacity building of villages or panchayats and clusters of forest user communities and their representatives are institutionalised, and reform processes linked to decentralisation continue. Decentralisation has become an irreversible trend.

2. While planning and managing local natural resources, **multistakeholdership** is the essence of resource governance. It allows all the village or panchayat households to articulate their individual and combined needs, while line agencies and NGOs provide technical backstopping and facilitative inputs. The micro-planning process ascertains the roles and responsibilities of all the actors involved and hence provides clarity in governance.
3. **Local ownership** and the subsequent empowerment of local communities or governance through forward-looking legislative norms and regulations (e.g., improved forest management guidelines, Memoranda of Agreement between the main stakeholders) have proved to be instrumental in fulfilling the emerging roles in resource governance at the local/state level.
4. **Natural resource management** has entered the purview of holistic development and its requirement for long-term asset building for sustainable livelihoods generation. For example, panchayats have already facilitated the implementation of afforestation and soil and water conservation work directly by individual user groups; CFUGs are conscious of their responsibilities towards managing forest resources and distributing usufructs equitably; and geog plans are increasingly considering local needs. The spirit of self-help by communities (e.g., contribution in the form of labour, materials, or cash) has improved, thus enhancing ownership. In turn, this will activate local management (including conflict management) and generate cooperative support from below.
5. **Transparency and accountability in roles and responsibilities** and, subsequently, in management, fund flows, and work done, have added to the overall positive impact on resource generation and conservation.
6. The adoption of **process steps and strategies** for the inclusion of resource poor people and women in particular (culturally not so important in Bhutan where gender equity is traditional) have been improved as a result of livelihood promoting ventures that benefit disadvantaged groups, and which also stimulate a greater concern for, and initiative to, protect local resources.
7. **The federating of local community representatives** (e.g., committee members, formal representatives, and so on) is a very strong mechanism for communicating and having dialogue on emerging issues in resource governance with multiple stakeholders, including the state. Several facilitative concessions and changed norms can be effected through such forums (e.g., FECOFUN and the three tier system of PRIs in India).

The experience of the three projects has revealed that a well-facilitated participatory approach can be very effective in mobilising local communities towards conservation and developing production-oriented forestry. In turn resource governance overall has improved.

Limitations

Undoubtedly, the three projects have contributed favourably overall towards the resource governance policy framework (including its legal and administrative aspects), and made

solid inroads into the decentralisation process. However, we have yet to experience a synergised impact. With the advent of the local governance era (with geog-planning and panchayat micro-planning), there could be numerous implications for resource governance, as the essence of the devolution of power to local bodies is for the purpose of planning their own development and managing it as well. As all of the project countries are essentially rural and natural resources are the major source of livelihood for the people, resource governance will need to be adjusted. Certainly, the promotion of community forestry and watershed management has provided the fulcrum on which the resource governance scenario of the future has been set, but several limitations remain:

- **Changing policies** – The states frequently change their norms and regulations (especially tenurial norms in HP, India, and community forestry policies in Nepal). As a result, functional links developed earlier for an interface between resource governance and local governance (e.g. through a constitutional provision for NRM sub-committees in the panchayat system) are now insecure and weakened.
- **Lack of participation and inadequate support** – panchayats, CFUGs, and village development committees are not as proactive as desired during the participatory planning process and this is further exacerbated by inadequate support from line agencies, which still manage state budgets and development schemes.
- **Post project support** – FECOFUN, water users associations, and livelihood groups need post project back-up support in advocacy and organisational aspects, research and development, and marketing, and these were only faintly visible in the projects (except in IGCEDP).
- **Only partial inclusion** – The operational link between resource governance and local governance is offered through holistic micro-plans, but due to only partial inclusion of resource poor people, young people, and women in the planning process, development targets such as the MDGs may not be addressed satisfactorily.
- **Micro-plans are not locally driven** – Micro-plan implementation (e.g., funds and financial management) does not always match with local peoples' needs.
- **Insecurity among community groups** – Despite the implementation of an innovative reform process, several rules, regulations, and guidelines on tenurial issues (e.g., the HP Participatory Forest Management Guidelines 2001) need to be amended and the state is still causing insecurity among community-based groups when it comes to accountable and transparent sharing mechanisms by not signing Memoranda of Agreement on things like benefit sharing. As a result, the commitment of local people and groups to forest management is affected.

Line agencies have yet to play an active role for several reasons:

- Resistance to change due to conditioned mindsets
- The ossification of the governance structure (i.e., the state departments have an organisational format that is centuries old and was set up in a different political, social, and environmental situation and under a different global scenario).
- The theory that communities will manage on their own (the associated stagnation of technical practices has exacerbated problems with wildlife, weeds, and others, with government departments taking a back seat)

- A growing existential dilemma (the focus on decentralisation and deregulation has unjustifiably set alarm-bells ringing for line agencies which fear that power and control over resources might be lost)

Questions leading to strategic elements

Despite the progress made in strengthening PNRM and with it resource governance, emerging scenarios – such as the globalisation process and challenges in the marketing of goods and services from forests (for example certification), adaptation to climate change (for example technical management), the link to the MDGs (for example poverty alleviation and environmental conservation), livelihoods promotion-based forestry, and the link with good governance – demand futuristic multi-disciplinary networking. PNRM has to reinvent its role in resource governance so that it can address the issues mentioned above in rural scenarios. It can only be underlined that the legal sanctity of the long-term role of communities in management and sharing, for instance the continuous forest yield, will be crucial in adjusting to emerging paradigms such as PFM.

Answering the following questions will help in addressing the challenges ahead:

- How can the various CBOs and user groups be linked so that they provide viable and constructive support towards strengthening their federations, and local governance in general, from below?
- Most of the NGOs are proactive while project funds are available; however, once project funding is discontinued, much of the momentum is lost. How can civil society become economically self-sustaining?
- How can the institutional structure (i.e., the roles and responsibilities of the government machinery) be redesigned to support decentralised resource governance?
- How can micro-planning with NRM be harmonised, simplified, and made less expensive and less time-bound?
- The capacity building of local governance bodies needs a design and focus. But how can the supportive role of the state be promoted if line departments are not cooperating?
- How can greater inter-sectoral convergence be achieved in planning, implementation, and monitoring and evaluation?

Policy changes will have to be backed up by the state providing an enabling and effective governance atmosphere. Moreover, the state should set priorities and milestones, work with a clear impact orientation, and use transparent indicators. Feedback mechanisms must be in place to facilitate policy updates. The global concern about biodiversity conservation, climate change, freshwater conservation, and desertification needs a holistic approach.

In addition to being people friendly, participatory approaches have to adapt locally to the above-mentioned global concerns. We can no longer ignore the role of the private sector in NRM, and must explore how privatisation can add not only to goods and services generated locally but also to improving resource governance. Moreover, the role of local communities and their formal bodies has not only to be sanctified through official acts and government orders, but also implemented and facilitated in letter and spirit.

Cornerstones of a future strategy

The following will provide the cornerstones of strategies to promote better resource governance in the forest sector:

- **Capacity-building** measures at all levels of resource governance – horizontal and vertical – are a must and should be backed up by in-house working manuals, guidelines, and training packages.
- The **linkages** between different governance actors must be recognised. **Networking** between relevant stakeholders needs to be strengthened to provide a mechanism for regular interactions in relation to experiences, constraints, and best practices.
- An executive order must be made requiring all **line departments to support** the planning, implementation, and technical backstopping of micro-plans. Convergence of different priorities and needs are a must to ensure a micro-plan based programme approach, in the case of India.
- **Holistic planning** is needed that brings different supportive and funding agencies together, not only for planning, and implementation support for such a plan, but also for monitoring and evaluation (i.e., convergence). Cross-sectoral issues must find greater integration in PNRM (e.g., watershed management must find linkages with participatory forestry, and reforms in the demarcation and delimitation of sectoral boundaries are needed to integrate multi-sectoral inputs).
- The **legalisation of benefit sharing** accruing out of community NRM assets (e.g., community forests) is a must for good resource governance in India and can be achieved through the signing of Memoranda of Agreement; the provision of facilitative norms, rules, and regulations; and by focusing on the MDGs.
- The **involvement of young people, the resource poor, and women in local planning and implementation** is a largely neglected issue which should be given a more central role in all resource management activities.
- The role of the **private sector** needs to be reassessed so that it can be (re-) defined and strengthened.
- **Positive spill overs from community forest management** should be used for the development of state forest management in the national forests of Nepal.
- Consistent **feedback** systems (information and communication) have to be in place to speed-up the reform process in good governance.
- The issue of ‘**good governance**’ should be included in all working manuals, (government) guidelines, and training packages. Mass campaigns need to be organised to create awareness of good governance.



7

Policy Recommendations

This collaborative study provided useful insights and lessons that form the basis for certain broad policy recommendations that may help in designing future programmes and projects for promoting participatory forest management in the Himalayan region. The key recommendations are as follow.

Devolve power to local communities – The experience gained through these micro level case studies indicates that although decentralisation in forest management is progressing in all three countries, devolution of power and authority is not being given equal consideration. While the very nature of ‘participatory forestry’ calls for community involvement in the process of planning, implementation, and decision making, experiences gained through the projects show that real devolution of power to local people has yet to happen. It is, therefore, imperative for promoting participatory forest management that power and authority be devolved to local forest user communities.

Develop and strengthen effective community-based institutions – In promoting sustainable and participatory forest management practices, there is a need to develop and strengthen effective community-level institutions, clear rules and regulations, and strong linkages between national, district and community institutions in order to develop appropriate mechanisms for benefit sharing, conflict resolution, and financial incentives. An effective user group federation, such as FECOFUN in Nepal, can play an important role in promoting participatory forest management. It is therefore recommended to develop and strengthen community-based institutions for promoting participatory forest management.

Take positive action for disadvantaged groups – The needs of poor people, women, and disadvantaged groups are not automatically reflected in the management and operational decisions of user groups, as these people have little voice and capacity to negotiate with the elite class. Clear policy guidelines need to be developed and put in place towards the inclusion of disadvantaged sections of society in participatory forest management. Policies for positive discrimination, e.g., allocation of a certain percentage of forest area to poor and disadvantaged groups, are therefore recommended to create more opportunities for disadvantaged groups.

Promote a move from protection to active management, and subsistence to commercial production – Although participatory forest management provides support to livelihoods, its role in improving the quality of life of participants remains limited as the focus so far has remained on subsistence production. Experience from this study suggests that in order to improve the quality of life of rural people, mere forest protection

is not enough. It is necessary to enhance productivity and facilitate the move from subsistence to commercial production of timber and non-timber forest products as well as ecological services. It is necessary to improve silvicultural and resource management practices to increase productivity; for which the technological capacities of user groups must also be improved. Necessary policy and institutional support needs to be put in place, including training, credit, marketing services, and business development services, to facilitate a gradual shift from subsistence to commercial production.

Provide policy and institutional support – Field experience shows that decentralisation and giving responsibility to local people to manage forests is not enough. Local people continuously need new knowledge, improved and technical skills, latest information, and enabling support to manage forest and related natural resources more efficiently. The supporting role of NGOs or government agencies is crucial, particularly at the formative stage. Poor people, women, and other marginalised groups face many constraints to effectively exercising their rights to access the forest. Attention also needs to be paid to policy and legal support and an institutional framework with post project backstopping mechanisms in place. Many good initiatives for forest management and rural enterprise development become frustrated due to lack of enabling policies and institutional environments. Therefore, appropriate policies and institutional support need to be put in place.

Create new economic opportunities and market linkages – Forestry is a livelihood related activity for the mountain poor. In order to sustain participation in forestry related activities, new economic opportunities need to be identified and market linkages harnessed and developed to facilitate the move from subsistence-based activities to commercial enterprise. New and promising areas of activity based on local resources need to be identified and developed. Certification of organic products can also be pursued. The potential for carbon finance as an incentive and instrument for reducing poverty also needs to be explored.

Develop an integrated approach – The pursuit of forest management is consistent with sustainable development as it requires pursuing economic activities to improve the quality of life of the people concerned without affecting the regenerative capacity of the natural resources. Therefore, responsibility for forest management needs to go beyond forest departments. It is necessary to involve the concerned line agencies such as agriculture, livestock, soil, local government, and rural development for promoting sustainable forest management. An integrated approach needs to be taken to promote holistic forest management.

Provide continued international support – In the Himalayan countries, participatory forestry is not only a means of better resource management and regeneration of degraded forest, it is also an end in development activities as people's participation and empowerment are the main development goal of all the countries in the region. This is a daunting task. It is, therefore, imperative that international organisations, development agencies, and donor communities come together and continue their support to produce a more synergistic effect on participatory forest management and strengthen the process.

Empower local forest user communities – In order to manage forest effectively, special consideration needs to be given to empower poor and vulnerable people and socially excluded groups with new knowledge, information, skills, and technologies. It is imperative that the capacity of local organisations, government organisations, CBOs, NGOs, and service providers be built.



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