

# Community Forestry in Bhutan: Experiences and the Way Forward

**Chado Tshering**

Head, Social Forestry Division, Department of Forests, Bhutan

## Abstract

*This paper provides a brief history of the evolution of forest policy in Bhutan, particularly in relation to the development of social forestry, and then presents the findings of a nationwide study\* on community forestry (CF)<sup>20</sup>. Forestry in Bhutan has a long history of communal management. However, modern concepts of CF are a recent introduction with the establishment of the first CF in 1997. Despite this slow beginning, today there are 23 approved CFs in various stages of operation. The CF study involved visits to 15 CFs in the country. Some of the main findings of the study are as follow.*

- a) The prevailing government policies and legislation are conducive to promotion of CF programmes in Bhutan.*
- b) The community forestry management groups (CFMGs) are managing the forests in a responsible and conservative manner and in general they are following the prescriptions of the approved management plan.*
- c) The capacity of stakeholders, including the communities and forestry extension staff in various fields, needs improving, particularly in forest management planning, operational aspects, and community mobilisation skills.*
- d) Community forestry has the potential to contribute towards environmental conservation, livelihood improvement, and complementing the government's efforts towards decentralisation and to ensure people's participation.*
- e) The principles and approaches of CF should be applied to manage forest resources other than trees: resources that are important for increasing rural incomes and sustaining rural livelihoods.*
- f) Strategies and mechanisms should be put in place to address potential issues concerning inequities – among the CFMG members, between CFMGs and non-members, and between resource rich and poor villages.*

## Introduction to Bhutan

### Geography and socioeconomic background

The Kingdom of Bhutan is located in the eastern Himalayan region between the Tibet Autonomous Region of China in the north and north-west and India in the south and east. Bhutan is a landlocked country amidst some of the most formidable mountainous terrain in the world, rising from 160 metres above sea level (masl) in the south to above 7,550 masl in the north. Flat areas are scarce and are limited to the deep river valleys. Geophysically, Bhutan can be divided into three distinct zones – the lower southern foothills adjoining the Indian plains; the central belt in the inner Himalayas; and the northern uplands within the Great Himalayas.

---

\* This case study was prepared by the Social Forestry Division with assistance from the Participatory Forest Management Project (SDC-financed) and the Bhutan-German Sustainable Resources' Development Project (financed through GTZ).

Bhutan is largely an agrarian society. An estimated 79% of the population still live in rural areas. The renewable natural resource (RNR) sector – which represents agriculture, livestock, and forestry – remains one of the most important sectors, contributing almost 35.9% of the gross domestic product in 2000. Since the mid-1980s the power sector, which largely relies on hydropower production, became the highest contributor to Bhutan's annual revenue with a total contribution estimated at 45% of the total revenue.

### **Administrative and political scenario**

Although the official, recorded history of Bhutan dates back to the 17<sup>th</sup> century, the present-day administrative and political institutions of Bhutan were conceived in 1907 with the institution of a hereditary monarchy. Since then, the Bhutanese political system has undergone a series of reforms. The reform process is being undertaken with the core objective of establishing an appropriate decentralised political and administrative framework that will enable people at the grassroots' level to participate in decision-making processes and promote development that is 'sensitive to people's needs'. Administratively, Bhutan is divided into 20 dzongkhags or districts which are further sub-divided into 201 geogs or blocks. At both these levels, there are political institutions, namely the dzongkhag yargye tshogdue in each district and geog yargye tshogchung in each of the blocks, and these are given legal recognition and authority through the respective chathrims or acts. The highest legislative body in the country is the Gyalyong Tshogdue Chhenmo – the National Assembly. The National Assembly is constituted of members from the Executive Body (government ministers and royal advisory councillors), representatives from the monastic order and armed forces, and people's representatives – who are members of the dzongkhag yargye tshogdue. In another significant development, the Kingdom is in the final stages of drafting a constitution.

## **Forests and forestry in Bhutan**

### **The socioeconomic role of forests in Bhutan**

Forests are an integral part of the life of traditional Bhutanese farming communities. The practice of subsistence farming relies heavily on keeping a balance between agriculture, livestock, and forestry. Farmers and farm communities rely on the forests for various services and products: grazing for domestic animals; timber and fuelwood for local households; organic manure in the form of leaf litter; and making agricultural implements. Forests play a vital role in sustaining rural livelihoods. Non-wood forest products are an invaluable source of rural food supplies. In some regions, medicinal and food crops from the forests form a major source of people's incomes.

Forests in Bhutan are also valued for their many ecological services. They are vital for maintaining the geologically fragile mountain ecosystems. The sustainability of hydropower as the primary source of national revenue is critically pinned on the management of water catchments and their forest ecosystems. Bhutan's rich biodiversity and spectacular landscapes have also made it one of the premier tourist destinations in the world. Earnings from the tourism industry accounted for almost 15 to 20% of the total foreign currency earnings in 1999. Despite the ban on commercial timber exports\*, the forest industry accounts for almost 26% of the total gross domestic product contribution from the agricultural sector. This is mainly as a result of

\* In January 1999, the government introduced a new timber marketing and pricing policy which effectively banned the export of logs and sawn timber in a bid to relieve pressure on forests from commercial (export) demands and encourage local wood-processing industries.

increasing demand for timber in the domestic construction industry; as well as an increasing demand for firewood and non-wood forest products such as bamboo, mushrooms, and cane in the domestic market.

The wide elevation range results in a diverse range of forest types, including tropical, subtropical, warm temperate, cool temperate, sub-alpine, and alpine. Approximately 72% of the country is forested, and 26% of the country has been protected as a network of national parks and nature reserves. The national parks and reserves are connected with biological corridors which account for about 9% of the forest area. The long-term goal of the forestry sector in Bhutan is to bring the whole forest area under some form of scientific management. Three forest management strategies are currently being implemented in Bhutan: forest management units – primarily for production and afforestation activities; protected areas – for conservation purposes; and social forestry – for community-based forest management. Very recently the Department of Forests has also proposed to bring other areas of the government reserve forest, which are primarily used for supply of subsidised rural timber, under some form of scientific management (Annex 1).

Forests also have a significant place in Bhutanese culture. Spiritually, the forests are a revered repository of traditional beliefs and customs and a rich source of myth, legend, and folklore. Nature is not only respected but also understood as a living mysticism in Buddhist belief systems. Many well-known mountains, lakes, rivers, forests, gorges, and wild animals are believed to be sacred. In some instances, these natural objects are thought to represent different spirits and deities, or sacred sites. These traditional Bhutanese cultural beliefs and practices, seeded in Buddhists beliefs and values, place great emphasis on reverence towards the natural environment and consequently on the conservation and wise use of its many resources.

### **Evolution of forest policy and practices in Bhutan**

In retrospect, development of the forestry sector in Bhutan largely mirrors the global trends in forestry, albeit in different timeframes. Three major phases can be identified in the national development process each of which have had significant influence in shaping Bhutanese forest regimes.

#### *Forestry prior to 1961*

The first phase represents the era prior to 1961, before the introduction of planned development in Bhutan. Until then, there was no formal policy or legislation governing forest use and management. Local people managed forests and held traditional rights to use local forest resources. For instance, access to timber for house construction, collection of firewood, and grazing cattle in the forests were seen as an inalienable right of the people. Even today, rural households are eligible for subsidised firewood annually and for house construction timber once in every 25 years. Customary rules giving communities and households rights to access and use of designated government reserved forests, such as sokshing and tsamdro, are still being practised in Bhutan.

Forest management was governed by various, locally-established institutions which were highly influenced by Buddhist values and belief systems. Forest land-use practices were not only determined by the subsistence needs of communities, but were also based on a sound understanding of the local social, ecological, and physical capabilities of the land. They engendered a high degree of communal responsibility towards sustainable management of local forest resources, enforced through a complex integration of social values and the religious belief system.

The combined effect of versatile traditional resource management institutions, the inherently rugged terrain which hindered accessibility, the low population density, and the limitations of forest use at a subsistence level contributed to the conservation and judicious use of forest resources during the period.

#### *Forestry in the era of planned development: post 1961*

In 1961, Bhutan embarked on the process of planned economic development and launched its first Five-Year Plan\*. The advent of modern development planning and subsequent changes that it brought to the sociopolitical and economic aspects of Bhutan had profound implications for forests and forestry. The period from the 1960s to the mid-1980s saw significant changes in the purpose of forests and their management strategies. Many of these changes resemble the notion of industrial forestry, propagated during the post-World War II era in the developed countries, and later in many developing countries under post-colonial regimes. The first significant change involved the shift in the purpose and legal status of the country's relatively rich forest resource base – from an inherently subsistence-oriented and communally-managed resource to a commercially-oriented and centrally-managed resource.

This change in the perception of forests to a potential source of national revenue was pursued with the enactment of the Bhutan Forest Act 1969. The Act legitimised government ownership and control over much of the forest land. Later the National Forest Policy 1974 underscored the role of forests in supplying raw materials for industries and generating income. The Act explicitly stated that:

“...a major share of the contribution to the national exchequer will have to be from forest...Therefore, the starting premise of this policy [National Forest Policy 1974] should be that the entire forests belong to the State and there should not be any private right to any part of them.”

Even in Bhutan, a country with a tradition of tolerance, this shift in forest management paradigm did not fare well. The period witnessed a gradual diminution of customary laws and local forest management institutions. The period witnessed a rise in forest degradation problems, and this was primarily due to the undermining of communal responsibility towards sustainable management of local resources and a rapid increase in demand for forest resources as a result of increases in both traditional and commercial usage.

#### *Sustainable forest management and people's participation: recent developments*

Sensing the approaching threat of rapid forest degradation, the government sought to redefine more systematic plans, policies, and legislation that would ensure the long-term sustainability of the forest resources in Bhutan. This led to the development of the new Bhutan Forest Policy of 1991 and the Forest and Nature Conservation Act of 1995. The primary goal envisaged in the new Forest Policy was to ensure that forest resources would be used according to sustainability principles and it gave conservation an overriding priority over other uses. Hence, it restated the goal of maintaining at least 60% of the country's area under forest cover in perpetuity.

However, the most significant contribution of the new Forest Policy of 1991 and the Act of 1995 is their emphasis on the need to reinvigorate traditional forestry institutions

---

\* The launching of the first Five Year Plan in 1961 marks the beginning of development planning in Bhutan. The Plan provides the broad macroeconomic framework, key national and sectoral guideline objectives, as well as the objectives strategies and financial outlays for each sector over a period of five years. Bhutan is currently in the process of implementing the ninth Five Year Plan (2002-2007).

and engage local communities in the management of local forests. It retracts the centralisation approach to forest management and commoditisation of forest resources promoted by the previous Forest Policy and Act. To this end, the Forest Act of 1995 clearly spells out the user rights of communities and individuals with regards to forest areas managed as sokshing and tsamdros, although it still maintains government ownership over such categories of forest. Further, to facilitate implementation of participatory forest management, a set of rules with regards to social and community forestry was also incorporated in the Forest and Nature Conservation Rules of 2003.

Emphasis on people's participation and the subsequent decentralisation of government administrative and political structures has had significant influence in shaping the present-day forest administration and management regimes in Bhutan. Primarily, it led to the establishment of a Forestry Extension Division within the Department of Forests in 1993 and the creation of Forestry Extension Offices in each of the dzongkhags (dzongkhag forest offices) and geogs (geog forestry extension offices), along with the existing divisional (territorial) forest offices (DFO). Following the creation of these forestry institutions at the dzongkhag and geog level, the Department of Forests developed a 'Framework for Implementation of Decentralised Forestry Activities' in 1997, whereby several forestry activities, perceived to be of a local nature and to have direct relevance to the sustenance of rural communities, were decentralized to the local dzongkhag administration, namely the dzongkhag yargye tshogdue. One of the key components of the decentralized forestry activities was the promotion of social forestry programmes. Social forestry in Bhutan is now pursued through two broad sub-programmes, as given below.

- Private forest involves promotion of plantation activities on individually-owned agricultural land (agroforestry) and other private land (woodlots). The Forest and Nature Conservation Rules of 2003 gives legal rights to landowners to harvest the trees after the landowner registers the land as a private forest.
- Community forest (CF) is defined as 'any area of Government Reserved Forest designated for management by a local community in accordance with the provisions of the Forest and Nature Conservation Rules 2003'.

## Social forestry in Bhutan

The initial success of social forestry in Bhutan was supported by various policy and legal frameworks and with support from various national and international development partners.

### Policy and legal frameworks

There is a strong legal basis in Bhutan supporting the shift towards greater community participation in the management of forest resources. The most important policy documents include the following.

- Royal Command on Social Forestry (1979)
- Social Forestry Day (1985): The Department of Forests declared Coronation Day, 2 June, Social Forestry Day, primarily aimed at promoting tree planting and creating environmental awareness among the Bhutanese youth.
- The Forest and Nature Conservation Act (1995) which provided the first legal basis for the new community and private forestry programmes, and through which communities can apply for legal rights to manage blocks of national forests in accordance with approved management plans and individual landowners can apply to manage private forests on their private land.

- The Forestry Sub-Sector Plan for the Ninth Plan Period (2002-2007) which included a substantially increased budget for participatory forest management (PFM) activities. The plan includes the following two new priorities for the plan period.
  - Encourage more sustainable management of forests by local communities through private and community forestry; and also through greater involvement in the management of forest management units and other national forests.
  - Strengthen the capability of the district extension staff to implement the recently decentralised forestry activities (RGoB 2002b).
- The Dzongkhag and Geog Development Committee Act of 2002 which authorised local authorities to play a greater role in the management of forest resources.
- The Forest and Nature Conservation Rules 2003 which further endorsed and refined the procedures for community and private forestry programmes.

## Community forestry development partners

### *National partners*

Communities and individual farmers – The Social Forestry Division is strengthening the capacity of local communities to use forestry resources on a sustainable basis, so that the key stakeholders are rural communities and individual farmers. It is recognised that rural communities are often mixed, comprising of different and overlapping interest groups (e.g., migratory herders, farmers, bamboo collectors) with different access to and control over resources. Care is taken to work with all interest groups, promoting the equitable distribution of benefits. Communities and individual farmers are the key stakeholders of the Division.

Local authorities – The planning of development activities is increasingly being decentralised to the local level – both at the dzongkhag and the geog levels. The Social Forestry Division attempts to strengthen the capability of local institutions to implement participatory forest management (PFM) activities.

Dzongkhag extension staff – The dzongkhag forestry extension workers are responsible for supporting local communities and local authorities in the implementation of PFM activities at the field level. The Social Forestry Division provides technical assistance and training to the extension staff, as well as financial support for the implementation of PFM activities.

Natural Resources' Training Institute – The Natural Resources' Training Institute is responsible for training all extension staff working with renewable natural resources, including forestry extension workers. The Natural Resources' Training Institute also has the mandate to conduct in-service training for forestry extension workers. The Social Forestry Division provides technical support to the Institute in the development of an in-service training programme.

Divisional forest officer – The DFO is responsible for assessing, identifying, and demarcating designated CFs from the government reserve forest. They are also responsible for providing assistance in the operational aspects of CF management and monitoring CF activities on behalf of the Department of Forests.

Forest Management Information Systems' Unit – The newly-established Forest Management Information Systems' Unit is responsible for establishing a computerised information management system to provide detailed information on the status of all PFM activities throughout the country. The Social Forestry Division assists the Unit in

operationalising forest management information systems for PFM activities and seeks to make this information ‘user friendly’ so that it can be readily used by personnel at district and geog level, as well as by national-level planners.

#### *International partners*

The DoF is currently receiving support for the community forestry programme from three donors: Swiss Agency for Development and Cooperation (SDC), which is supporting the Participatory Forest Management Project; German Technical Cooperation (GTZ), which is supporting the Bhutan-German Sustainable Renewable Natural Resources’ Development Project; and the European Union (EU), which is supporting the Wang Watershed Management Project. In the past support was also received from the Food and Agriculture Organization (FAO) and the World Bank.

The Social Forestry Division has been able to promote close coordination between the SDC, EU, and GTZ projects and the Ministry of Agriculture, which has led all three projects to be more efficient and productive. The three projects and the Division have collaborated in the organisation of in-service training programmes and the development of a series of community forestry manuals. The Third Forestry Development Project (1994-2000) supported by the World Bank had carried out the pioneering work on developing procedures for community forestry management planning, but a comprehensive manual was needed to provide more guidance to forestry extension staff. Each project and the Department of Forests concentrated on different aspects of the manual, and then shared the task of reviewing and publishing it.

### **Community forestry development in Bhutan**

Beginning from the mid-1990s the Department of Forests, in collaboration with many key local organisations and international development partners, promoted CF as one of the major forest management regimes in the country. CF can best be described as forest management based on an agreement (the CF management plan) between an organised group of forest users, the CF management group (CFMG), and the Department of Forests whereby the group is given legitimate rights (CF certificates) to manage and use a designated area of government reserve forest as per the approved management plan.

The development of CF, which is also referred to as participatory forest management (PFM) in Bhutan, is given further impetus in the ongoing 9<sup>th</sup> Five Year Plan for the forestry sector. The 9<sup>th</sup> Plan defines PFM as “a broad development strategy or concept that can embrace diverse forms of local decision-making in all sorts of forestry matters that affect people’s lives,” (Buffum and Schaltenbrand 2002). PFM focuses on community forestry and community participation in the management of government forests, including forest management units which are primarily for commercial timber production. As envisaged in the ‘Guidelines for Community Forestry Development in Bhutan, 1996’, CF programmes are pursued with the long-term goals of contributing towards protection of forests, increasing the efficiency of production, and ensuring equitable access and distribution of forest resources. The immediate goals are to devolve the responsibility and authority of forest management from the state to the local communities and enhance their knowledge and skills to manage the forest on a sustainable basis.

Today there are 23 CFs for which the management plans have been approved and are at various stages of implementation. It is important to keep in mind that the scale of

the community forestry programme is relatively small in relation to the nearly three million ha of forests in the country. The 23 approved CFs cover an estimated 2,101 ha of government reserved forest and include about 1,141 households.

A comprehensive Manual for Community Forestry (Parts I, II, III & IV) was also developed. The manual describes the nine-step procedure for establishing and operationalising a CF: initiation of the CF process; application; review of application; acceptance of application; CF management plan preparation; submission of management plan and bye-laws; approval; implementation; and monitoring. Further, with the assistance of the national and international partners, most of the forestry extension staff and CFMGs were trained on various aspects of CF such as planning, administration, financial management, and silvicultural operations.

Thus, it is apparent that while the history of CF development in Bhutan is very recent, with the first CF in the country established only in 1997, implementation of CF activities in the field has taken place rapidly, particularly in the last few years.

## **Community forestry: reviews and studies**

### **Past reviews and studies**

When the Social Forestry Division for CF was established in July 2002, there was no available information to address the concerns. There were no systems in place to monitor the activities of the active CFs, and both positive and negative views about the community forestry programme were based on anecdotal evidence. The Third Forestry Development Project and the Food and Agriculture Organization (FAO) had carried out studies of the potential for community forestry, but these studies took place before the approval of the Forest and Nature Conservation Rules of 2000 and before the approval and handover of any community forests.

In April 2003, the Social Forestry Division supported an initial review of forest management by communities in Bhutan. This was the first study of its kind in Bhutan. A four-person study team from the Department of Forest and Participatory Forest Management Project staff visited six CFs in four districts in April 2003. Special attention was given to the two CFs that had already started harvesting timber. The team was favourably impressed by the initial experience with timber harvesting and reported that the management plans provided good guidance to the CFMGs. The CFMGs had followed a cautious approach to harvesting and had developed effective permit systems for controlling harvesting. At present, the CFMGs are harvesting below the levels in the management plans, and there does not appear to be any danger of over-harvesting.

The main weakness was in record keeping. The CFMGs were not maintaining adequate records, and many CF members were not aware of the status of the CFMG fund. The team strongly endorsed the efforts of the Social Forestry Division to provide increased guidance and support to the CFMGs in record keeping. In addition, the team identified a strong need for training in silviculture, both for the CFMGs and the dzongkhag forestry extension staff (Oberholzer et al. 2003). Based on this study, the Social Forestry Division expanded its efforts to develop record-keeping procedures for community forests and produced the 'Manual for Record Keeping by Community Forest Management Groups' in May 2003, and this was subsequently incorporated into the CF Manual Part 4.

A second initiative was to organise the first national workshop on the management of community forests, focusing on appropriate silvicultural approaches. The workshop

was attended by staff representing the dzongkhag forestry sectors and territorial forest divisions. The workshop covered a wide range of technical and social issues related to the management of community forests. Emphasis was given to developing practical means of applying silvicultural options in community forests. The workshop included field exercises in two community forests where the CFMG had been harvesting timber and other forest products for two years. The workshop evaluation was very favourable, and the training team and the participants concluded that the training should be repeated for other forestry field staff.

## **Community forestry study (2004/05)**

### *Rationale for the study*

Bhutanese foresters have strongly supported the CF programme. However, given that the programme is still in its infancy, it is only appropriate that a cautious pace of development be adopted in order to avoid any potential pitfalls. Some of the key concerns and issues are as follows.

- The conduciveness of the current policy and legal frameworks in expanding and strengthening the CF programmes (the views are contradictory – some feel it is too relaxed while others feel it is restrictive)
- The level of skills and motivation of CFMGs to manage the forests on a sustainable basis and prevent over-harvesting and degradation of the CFs
- The risk of increasing pressure on government reserved forests (forests outside CFs) as a result of strong protection of CFs by the CFMGs, and users sourcing their requirements from the government reserved forest (in view of the traditional rights of access by rural communities including the CFMGs), possibilities of disparities between resource rich and poor geogs and villages, and inequities between CFMG members and non-members
- The possibility of disparities arising amongst the CFMG members as a result of elite domination in the decision-making processes and marginalisation of poorer members, which could lead to inequities among members

### *Study methodology*

The 2004/05 Community Forestry Study covered 15 CFs in all regions of the country and was carried out by a team of four staff from the Department of Forestry/Council for Renewable Natural Resources, Research of Bhutan (CoRRB), with inputs at some sites from the staff of the three projects supporting CF. Funding and technical inputs for the study were provided by the Participatory Forest Management Project and Bhutan-German Sustainable Renewable Natural Resource Project. The study team visited 14 CFs that were in operation and one which was still in the planning phase. At each site the team carried out a strengths, weaknesses, opportunities, threats analysis, based on discussions with the CFMG and dzongkhag forest officer and a field visit to the CF, and prepared a set of recommendations.

### *Study findings*

The preliminary findings of the study revealed that the CFMGs were continuing to manage their CFs in a cautious and sustainable manner. Record keeping and knowledge of silviculture had greatly increased since the 2003 study, mostly as the result of intensive training of extension staff. The CF programme was supporting the decentralisation process, and the existence of enabling policies provided positive support to the CF programme.

Nevertheless, the team reported that the CFMGs still required increased training and support from the dzongkhag staff. Frequent revisions of Forest and Nature

Conservation Rules were undermining the confidence of forestry staff at the field level, and more importantly leading to mistrust by communities. The CFMG expectations regarding the future cash benefits from the CF were sometimes unrealistic, which might have caused them to ignore other income generation opportunities. Finally, the CF planning process appeared to have been strongly driven by the forestry staff rather than the communities taking the initiative.

The team offered a number of recommendations which focused on strengthening the capability of the extension staff to provide more effective training to the CFMGs and increasing the role of women in the CFMG committees. A summary of the analyses and recommendations for the study sites is provided in Annexes 2 and 3.

## Analysis

### *Achievements*

The Social Forestry Division expects that the community forestry programme will achieve impact in terms of environmental conditions, livelihood security, and empowerment of stakeholders. Unfortunately the Division has not yet been able to fully document the impact in this regard, even though this type of documentation is an important objective for the next two years. Nevertheless, there are some positive indications that impact in these areas is indeed possible.

### *Environmental conditions*

One of the fundamental assumptions of the community forestry programme is that the condition of the forests will improve if local communities are given legal management rights, because they will have an incentive to invest in the long-term management of the forests. Improvements in the condition of forests after handing them over to community management have already been well documented in Nepal and other countries. Since community forestry is relatively new in Bhutan, there is no empirical evidence as yet to support or refute this assumption. However, the initial indications seem to be that the communities are in fact managing their community forests sustainably and that the forest condition of several forests has indeed improved since handing over the management responsibility to the communities.

- The studies on harvesting in CFs concluded that CFs have the potential for increased long-term production, and it appears that the standing volume of CFs will increase over time.
- The first CF in Bhutan, which was handed over in 1997, is located in an area that is regularly affected by forest fires which are purposefully lit by the communities to promote the growth of lemon grass and pasture grasses. There has not been a single instance of fire set inside the CF since the CFMG was given authority and responsibility to fine persons caught lighting fires.
- Many foresters have reported a visible increase in forest cover in the initial CFs.
- The CFMG members report that the forest condition has improved since they have started to regulate harvesting of forest products and grazing in the CFs.
- Foresters report that the CFs follow much stricter rules and cautiously mark trees inside the CFs.

### *Livelihood security*

Interviews with CFMG members have revealed three major ways in which the communities benefit from the community forestry programme.

- They have easy access to timber and forest products. All Bhutanese citizens have the right to request timber and forest products from national forests, but they have

to follow a long approval process that involves visits to several forestry offices and can take weeks or even months to complete. If they are members of an approved CF, they can meet their needs from the community forest following a much simpler approval process.

- They can ensure that the forest near their village will be able to meet their future needs for forest products. Many forests located near roads are being over-harvested by outsiders, and the communities have already come to know that their local forests will become degraded. Once the CF is handed over, the CFMG assumes legal rights to exclude outsiders from harvesting in the CF which greatly increases the chances of maintaining the long-term productivity of the forest.
- Some CFMGs will have the opportunity to generate income by selling timber outside the CFMG. The Department of Forests will only allow this if the CFMG can demonstrate that the CF can meet all local demands for forest products.

#### *Empowerment of stakeholders*

The Royal Government of Bhutan has embarked on a major decentralisation programme which involves the reorganisation of government administrative responsibilities based on the district administrations. The stated objective is to reduce dependence upon the central government and return more autonomy and responsibilities to the local levels. A continuing and cautious decentralisation of forestry programmes to the districts is an important part of the 9<sup>th</sup> Five Year Plan strategy. In addition, the geogs now have responsibility for preparing their own development Plans for the 9<sup>th</sup> Plan period, many of which include decentralised forestry activities such as the establishment of community forests.

The community forestry programme is an excellent example of decentralisation at work. It involves a totally new relationship between the Department of Forests and the local communities, whereby the communities have direct responsibility for managing a valuable national asset and the Department plays a facilitation and extension role. Of course the Department still maintains the right to monitor the activities of the CFMG, and even to cancel the community forest management plan if the CFMG does not follow the management prescriptions in the approved management plan. Nevertheless, the community forestry programme is a marked departure from the former approach of central management of all national forests, and the initial impression of many observers is that the CFMGs have indeed been feeling significantly empowered since they have been given responsibility for managing their community forests.

#### *Challenges and strategies*

The Social Forestry Division is striving to ensure that the community forestry programme can be replicated outside the project-supported districts. The Participatory Forest Management Project is supporting seven of Bhutan's 20 districts and the EU and GTZ projects are supporting four and two districts respectively, leaving seven districts without any project support. The Social Forestry Division has requested the projects to support the participation of forestry extension staff from these seven 'non-project' districts in all major training courses, and has also been supplying them with manuals, training materials, and basic technical equipment. Several well-motivated extension staff in the non-project districts have already started community forestry activities.

The replicability of the community forestry activities can be best seen in the districts that already have approved community forests. Initially the communities were sceptical about whether the Department of Forests would actually hand over (partly) well-stocked forests along with degraded for community management, as the initial community forests were very degraded and did not have any potential for timber harvesting during

the initial management plan period. However, after the Department started to approve the hand-over of well-stocked forests, the interest of other communities increased dramatically and now the forestry extension people are receiving many more applications for community forests than they can respond to.

The experience to date indicates that increasing participation in local governance related to forest management will indeed translate directly into both improved livelihood security and better environmental management. But this can only happen in the proper enabling environment. A few critical elements of the proper enabling environment are listed below.

First of all, the community has to be given clear legal rights to manage the resource. This is not a problem in Bhutan, as the government has issued clear guidelines for the implementation of the community forestry programme.

The forest resources handed over to the community must have a perceived value that justifies the required investment of time and labour by the community. The Forest and Nature Conservation Rules of 2003 specify that a community forest should be within proximity of the village settlements.

The community must be given adequate technical support during the initial years of the implementation of their plan. Bhutanese villagers know their forests well, and in many cases they continued to practise the indigenous forest management approaches used before the nationalisation of the forests in 1969. But villagers are often weak in record keeping and financial management, and many CFMGs will not be able to function effectively without strong support from the dzongkhag extension services.

The CFMGs in Bhutan will need strong technical support, particularly in the area of record keeping and silviculture. CFMGs with relatively well-stocked forests should be financially self-sustaining after even a short period of time. The first two CFMGs that started harvesting timber are already generating revenue from the issuance of timber permits to members and from donations from visitors. This income should be adequate to cover their forest improvement activities and, if they start selling excess timber to non-members, the CFMG should be able to pay cash dividends to the members. However, not all CFMGs are fortunate enough for them to have such productive CFs. Many communities are not surrounded by forests stocked well enough for them to benefit from the timber resources immediately, but they can get other benefits as described above. Many early CFs were established with the objective of protecting drinking water sources or improving the condition of a highly degraded forest. These CFs will require financial support for a number of years.

The Ministry of Agriculture of the Royal Government of Bhutan is very concerned about equity issues related to community forestry. Although villages tend to be much more ethnically homogenous than in other Asian countries, it is not uncommon for village elites to dominate local decision-making. The Department of Forests has been carefully observing the second generation equity problems that have emerged in neighbouring countries and is determined to avoid similar problems in Bhutan.

During the early years of the community forestry programme, it is important for the Social Forestry Division to carefully monitor the experience of the first CFMGs and document them in order to quickly respond to any emerging problems. But over time, as the number of CFs increases, the government will not be able to devote as much

time and financial resources to each CF. Therefore, it is important for the Division to look for ways to support flexible and responsive processes within the CFMGs that enable social learning and adaptive management in environmental decision-making. Eventually, the CFMGs will have to rely on their own resources.

Government reserve forests have multiple uses. For example, they are used for supplying rural construction timber and fuelwood, and timber for government projects, and at the same time they are also used for establishment of community forests. Given the overlapping and often complementary nature of these land uses and access rights, there is a potential for applying an integrated planning process in the sustainable management of such forests, taking into consideration the different uses and rights.

## Bibliography

- Branney; Rinzin; Temphe; Oberholzer; Aeberhard (2004) *PFMP Mid-Term Evaluation Report*, December 20<sup>th</sup> 2004. Thimphu: SDC, Participatory Forest Management Project
- Buffum; Schaltenbrand (2002) *Forestry Institutional Development Initiative: Final Report*. Thimphu: SDC, Participatory Forest Management Project
- Oberholzer; Buffum; Kinley; Dhono (2003) *Forest Management by Bhutanese Villagers: Experience to Date of the Community Forestry Programme Report 3*, 29 April 2003. Thimphu: SDC, Participatory Forest Management Project
- RGoB (1974) *Bhutan Forest Policy*. Thimphu (Bhutan): Ministry of Trade, Industry and Forests, DoF
- RGoB (1993) *Guidelines for Decentralized Forestry Activities* Thimphu (Bhutan): MoA, DoF
- RGoB (1995) *Forest and Nature Conservation Act of Bhutan*. Thimphu (Bhutan): MoA, DoF
- RGoB (1996) *Community Forestry Guidelines for Bhutan*. Thimphu (Bhutan): MoA, DoF, Social Forestry Division
- RGoB (1998) *National Environment Strategy: The Middle Path*, Thimphu (Bhutan): National Environment Commission
- RGoB (1999) *Bhutan 2020: A Vision for Peace, Prosperity and Happiness*. Thimphu (Bhutan): Planning Commission Secretariat
- RGoB (2000) *Social Forestry in Eastern Bhutan: A Study of the TFDP, 1994-2000*, Third Forestry Development Project (TFDP). Thimphu (Bhutan): RGoS, Ministry of Agriculture
- RGoB (2000) *Development Towards Gross National Happiness*, Seventh Round Table Meeting, 7-9 November 2000. Thimphu (Bhutan): RGoB
- RGoB (2001) *Statistical Yearbook 2001*. Thimphu (Bhutan): RGoB, Central Statistical Organisation
- RGoB (2002a) *Biodiversity Action Plan for Bhutan 2002*. Thimphu (Bhutan): MoA
- RGoB (2002b) *Forestry Sub-sector Plan – Ninth FYP (2002-2007)*. Thimphu (Bhutan): MoA, DoF
- RGoB (2003) *Forest and Nature Conservation Rules of Bhutan*. Thimphu (Bhutan): Ministry of Agriculture (MoA), Department of Forests (DoF)
- SFD/DoF (2004). *Community Forestry Manual, Parts 1, 2, 3, 4*. Thimphu (Bhutan): SFD, DoF
- Wangchuk, S. (1998) 'Local Perceptions and Indigenous Institutions as Forms of Social Performance for Sustainable Forest Management in Bhutan'. PhD dissertation, Swiss Federal Institute of Technology, Zurich, Switzerland
- Westoby, J. (1987) *The Purpose of Forests: Follies of Development*. Oxford (UK): Basil Blackwell

## Annex 1: Management of Forests outside Forest Management Units, Protected Areas and Community Forests

In Bhutan there are four different types of forest management.

1. Management of forest management units on a commercial basis
2. Management of community/private forests
3. National parks and conservation areas
4. (Rural) supply of wood from unmanaged forests

While for the first three categories the forests are managed on a sustainable basis according to a well-developed forest management planning and implementation system (including management plans for the national parks), no such system is in place for management of the wood needed by rural people.

The Forest Resources' Potential Assessment, which is currently undertaken by the Forest Resources' Development Division with technical and financial support from GTZ, shows that an estimated 250,000 ha are currently used for rural wood supply, an area which is almost 1.6 times as high as the total area of all forest management units together. The overall amount of wood supplied from these areas is estimated at about 250 to 300 thousand m<sup>3</sup> per year (twice as much as the current output of forest management units).

The allocation of wood from areas outside forest management units is managed on an ad hoc basis. Manual wood extraction in mountainous areas is very tedious, therefore forests close to the settlements are heavily overused. As there is no monitoring system in place, it is not known which areas have already been exploited and to what extent. Wood is supplied on a quota system for firewood and construction timber. As such, wood allocation is mainly driven by the needs and requirements (and entitlements) of the people rather than by the resource's potential and capacity. As the quotas are too low, especially for firewood in areas located at higher altitudes, a considerable amount of wood is extracted by self-collection in an uncontrolled manner. Finally, the condition and production potential of the forest areas used for local supply is unknown. It is a common experience that forests in the immediate vicinity of settlements are heavily degraded, due to over-exploitation and intensive cattle browsing. This has already led in some cases to the destruction of the forest, especially of mature and over-mature fir forests.

The problem of forest degradation because of rural wood supplies is well known in Bhutan. However, the only attempts made so far to solve the problem have been by reducing the local demand for wood; among others, by encouraging the use of gas for cooking and of electric heaters. Up to now, no sustainable management system has been developed which enables the sustainable use of the forest. It has to be pointed out here that the use of wood is an indispensable requirement for the rural household and it would be an illusion to assume that the demand for it can be reduced considerably in future. On the other hand, the question may be raised concerning whether this is desirable at all? Wood is a regenerative resource for construction material and energy supplies and can be produced in a sustainable way in perpetuity without negative impacts on the environment if done in a proper way. The estimated wood demand of about 1-1.3 m<sup>3</sup>/ha is far below the potential average increment (which may be as high as 4-6 m<sup>3</sup>/ha depending on the forest type). As such, the problem is not the demand for wood, but the way the wood is produced and harvested. What is

needed now is a proper forest management system that regulates and allocates the rural supply of wood in a sustainable way based on the prevailing forest function and the production potential and capacity of the forest resources.

Within the scope of developing a participatory forest management plan for Lingmuteychhu watershed, a simple management system has been developed which could be easily modified and adapted for rural supply. The system developed is very simple and could be easily integrated into the current administrative system and working responsibilities of the territorial forestry service. It would require very little investment in terms of training in the beginning, but once integrated into the curricula of the Natural Resources Training Institute and Bhutan Forest Institute it would become part of the general education of future forestry staff. The cost of equipment and materials would be negligible.

The concept of the proposed management system was introduced during a presentation by SDC on management planning to the Department of Forests, Ministry of Agriculture (chaired by the Director General of Forests). The issue was intensively discussed and the audience concluded that the concept proposed would be feasible and bring about a considerable improvement in the sustainable management of the forest resources of Bhutan. It was proposed that the system should be modified for rural supply and introduced as a test into one watershed area in a territorial division (in the Bhutan-German Sustainable Renewable Natural Resource project area). If the test is successful, then the system will be introduced throughout the country.

What steps are required next are adaptation of the concept for rural supply on a watershed basis, modification of forest function mapping (simplified systems without using geographic information systems), training of key staff from one selected territorial division, testing of feasibility and practicability, preparation of training materials, and introduction into the curricula of foresters training at the Natural Resources Training Institute and Bhutan Forest Institute.

### **Characteristics of the management system**

- Watershed based
- Identification of protection areas (modified function mapping)
- Compartmentalisation of forests according to forest types and current use (i.e., village forests, management objectives) based on a simple rapid rural appraisal
- Compartment-wise resource assessment to identify the forest resource condition, the current use, and the future production potential for various wood and non-wood products. To be done by beat officers as an integral part of their normal work.
- Preparation of a simple 10-year management plan by compiling compartment information using pocket calculators or Excel spreadsheets
- Establishment of a monitoring system for resource use

## Annex 2: Results of the SWOT analysis from the community forestry study

<b>Strengths</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>• Enabling policies are in place and provide positive support for community - based resource management, for example, the 1993 decentralisation of the CF Programme to district level, and the policy framework (Forest and Nature Conservation Act 199 5 and the Forest and Nature Conservation Rules 2003)</li> <li>• The CF Guidelines support the policy of decentralisation of forestry programmes by empowering the CF user groups through the approval of CF management plans.</li> <li>• Initiation of the CF programme has created a n opportunity for CFMGs to develop their skills and knowledge, especially in record -keeping, work planning, and forest management.</li> <li>• The CF process has strengthened community cohesiveness, sense of responsibility, and accountability towards forest management. The CFMGs have formulated effective internal monitoring systems.</li> <li>• Plantation in degraded areas of the CF shares responsibility and investment with the Department of Forests and contributes to forest cover.</li> <li>• CF development has strengthened the links between n forestry officers and communities.</li> <li>• The CF programme supports the traditional management systems that existed for decades before the nationalisation of the forest resources in 1969.</li> <li>• The CF programme recognises the involvement of women in decision -making and resource management.</li> <li>• Protection of local resources and benefit -sharing address some of the equity issues.</li> <li>• CF management by the communities demonstrates a model to neighbouring villages and shows that resource management is crucial for the benefit of future generations.</li> <li>• Formation of CFMGs and use of resources within CFs enhance income generation and improve fund management, contributing to the development of the community.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential proper use and management of forest resources, income generation, and improvement of rural livelihoods</li> <li>• Address gender issues, including the need for women’s inclusion in CFMG management committees.</li> <li>• Potential to resolve other issues and conflicts within the community</li> <li>• Equitable distribution of benefits from the CF</li> <li>• Self-sufficiency in forest produ cts could reduce dependency on government reserve f orests.</li> <li>• CF can offer employment opportunities for school leavers and mitigate rural -urban migration.</li> <li>• The CF programme encourages CFMG; members to commit themselves to sh oulder the management and responsibility of CF activities.</li> <li>• Providing on -the-job training on forestry activities to CFMG s is educative and impact oriented.</li> <li>• Potential to diversify forest management with good experiences gained from CF management.</li> <li>• Creates opportunity for the CFMG to participate in study tours and get exposure to other development activities in the country.</li> </ul> <p style="text-align: right;">cont.</p>

## Annex 2, cont.

<b>Weaknesses (internal constraints )</b>	<b>Threats (external constraints )</b>
<ul style="list-style-type: none"> <li>• Frequent revision of Forest and Nature Conservation Rules undermines the confidence of forestry staff at the field level and leads to mistrust by communities.</li> <li>• Implementation of activities in the CFs is not always consistent with the prescriptions in management plans.</li> <li>• CFMGs lack clear and detailed understanding of Policies, Acts, and Rules.</li> <li>• CFMGs lack capacity in the preparation of CF management plans and in the implementation of certain activities like silviculture and record keeping.</li> <li>• The CF planning process has been strongly driven by forestry staff rather than the community taking the initiative.</li> <li>• The existence of separate district forest and dzongkag forest offices in the field confuses the communities about the supply of forest products from CF forest versus state forest.</li> </ul>	<ul style="list-style-type: none"> <li>• CFMG expectations regarding the cash benefits from the CF may be unrealistic and cause them to ignore other income generation opportunities.</li> <li>• Inconsistent policies and rules pose uncertainty for CFMGs.</li> <li>• If the management plans are not followed closely, there is a danger of over-harvesting forest resources from the CFs.</li> <li>• Existence of two forest offices at the field level (district and dzongkag forest offices) may create confusion in responsibility for monitoring and evaluation of CFs.</li> <li>• Evolving and ambiguous policies trigger uncertainty among CFMG members about the government's intentions regarding CF.</li> <li>• The policy is not clear regarding whether the CFMG can increase the areas of a CF area in response to an increase in population and number of households.</li> <li>• Future conflicts may arise regarding rights to use the resources if all the issues are not made clear during the process of CF planning and approval.</li> </ul>

## Annex 3. Recommendations of the community forest study

1. The community forest programme in Bhutan is in the process of learning and developing. Whilst moving this programme forward as per the needs of the communities, it is very important to find a balance between strengthening the capacity of the communities to manage the forest and setting an appropriate pace for CF development.
2. Regular awareness workshops on recent policy developments affecting CF, such as revision of Acts and Rules, need to be conducted for the CFMGs. Copies of the Forest and Nature Conservation Act and Rules should be provided to geog forestry extension agents and CFMGs.
3. CF Guidelines (such as the CF Manual) need to be translated into the Dzongkha language and provided to the CFMG, so that they can become more aware of the CF planning process and can strengthen their capacities.
4. Capacity building in different fields for different levels, such as silviculture, record keeping, gender, and organisational management, is fundamental for sustainable management of CFs and should be conducted for CFMGs.
5. Forestry staff members at the field level need training on communication skills, global positioning systems (GPS), and training of trainers to deliver services effectively to the communities.

6. CF training modules/materials should be developed and provided to the field offices.
7. Participation of women in CF is very important, as most CF products are harvested and used by them. It is necessary to have more women on CFMG committees.
8. Institutionalisation of coordination mechanisms for CF programmes and activities in the district (dzongkhag), park, and divisional forests is needed through regular coordination workshops.
9. The CF area ceiling of 2.5 ha per household stipulated in the Forest and Nature Conservation Rules (FNCR 2003) should be flexible in response to local conditions.
10. Choice of species for plantation in the CFs should be selected based on the local conditions, and priority should be accorded to native species (excluding horticultural tree species which are not permitted in CF areas) that give multiple and maximum benefits. It is also very important for the geog forestry extension agents to assist the CFMGs in choice of species.
11. CFs should be established within proximity of village settlements to ensure easy access and direct benefits to the communities through sustainable management of forest resources around the settlements.
12. A discussion should be held about the rural wood supply and community forestry programme and how these can be integrated and complemented in the long run.



Anwar Ali

Plantation of fast-growing trees in degraded forests carried out through ICIMOD's PARDYP project (see next paper)