

C Overview of Participatory Forest Management in the HKH

Synthesis of key issues from country presentations

The first part of the workshop was designed around presentations from the seven participating countries. Fourteen national and sub-national presentations were made in the plenary sessions: one national study each from Bangladesh, Bhutan, Myanmar, Nepal, and Pakistan; three studies from India, which covered the Western Himalayan states of Jammu and Kashmir, Himachal Pradesh, and the mountainous part of Uttar Pradesh; three studies from China, a national overview and studies from Yunnan province and the Tibetan Autonomous Region; and three further papers, two from India and one from Pakistan.

Eleven of the papers presented were based on a conceptual framework (Annex 3) which was designed and shared with the authors prior to the workshop. Some authors chose not to follow the framework as their countries were at an early stage of implementing participatory forest management and the authors felt that several of the questions in the framework did not apply or that it was too premature to seek answers to them.

A key principle was that all the case studies were performed under the overall guidance of senior policy-makers in the forestry sector from the country concerned. This ensured that the focus remained on the process of reflection by the policy-makers, as much as on the final output.

In the spirit of participation, all these case studies were cross-reviewed by the participants during the workshop. Substantial redrafting has taken place since the workshop, and the final

reports will be published as accompanying volumes to this report. An overview of the comparative status is given in table form at the end of this section.

C.1 The Broad Goals and Objectives of Forest Policies and Laws in the Hindu Kush-Himalayas

The major objectives of the forest policies of Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan are to meet people's needs for forest products, to conserve biodiversity, to maintain good watershed conditions, and to promote economic development through forestry.

C.1.1 Bangladesh

Twelve per cent of Bangladesh's land area is hilly and this land is a part of the Himalayan mountain region. One million tribal people, or 11 per cent of the population of the country, live in these areas. Only 14 per cent of the total land area of Bangladesh is forested. The forest cover in Bangladesh declined by two per cent annually over the 20-year period between 1960 and 1980.

The Bangladesh National Forest Policy of 1994 stressed afforestation activities with the aim of increasing forest cover in the country. These activities will be focussed on village areas, and the denuded unclassified state forest areas of the Chittagong Hill Tracts. The policy aims to increase the forest cover of Bangladesh to 20 per cent of the land area by the year 2015. Denuded and encroached government forest lands

will be identified and brought under afforestation programmes with the participation of the local people.

In order to preserve soil, water, and biodiversity, natural forests in the hills and river catchments will be declared protected areas, game sanctuaries, or national parks. By 2015, the government is planning to manage 10 per cent of the national forests as protected areas. Fragile areas such as steep hill slopes, vulnerable watersheds, and wetlands will also be managed as protected areas. The policy also states that 'state owned hill and sal (*Shorea robusta*) forests, except those declared as protected areas, will be managed as production forests, paying due consideration to the environment'.

The forest policy in Bangladesh puts great emphasis on afforestation and protection of forests. While the commercial use of forests is promoted, the Bangladesh forest policy remains largely oriented towards rehabilitation and conservation.

C.1.2 Bhutan

Almost all of Bhutan's land area is hilly. Forests occupy approximately 72 per cent of the total area. The forestry sector makes a direct contribution of about 11 per cent to the Gross Domestic Product of the country and generates about three per cent of government revenue.

Bhutan's revised Forest Policy of 1991, produced as part of the preparation for the Master Plan for Forestry Development, emphasises the need to balance the nation's conservation and economic development goals. It stipulates that forest resources be managed in a scientific and systematic manner and that this resource base must be expanded through viable investment programmes. It also acknowledges the need to allocate forest resources to several management regimes such as protection forests, production forests, and community forests. The policy stresses the importance of people's participation in the management, use, and expansion of resources and calls for multiple use and management in recognition of the realities of the country. The Forest and

Nature Conservation Act was promulgated in Bhutan in 1995.

Bhutan's policy stresses conservation of the environment, and only thereafter derivation of economic benefits. The policy decrees that up to 60 per cent of the country's geographical area is to be kept under forest cover at all times. To secure this, Bhutan has embarked on a programme of establishing parks, sanctuaries, and reserves, the area of which now totals 970,000 ha or 26 per cent of the country. This is the highest proportion of land area managed as a protected area in any South Asian country. The current policy also emphasises the utilisation of forests on a sustainable basis, plans for multiple-use, improving and strengthening the efficiency of forestry sub-sector institutions, and involving and training local people in the management of forest resource utilisation.

C.1.3 China

Mountainous and hilly areas constitute 69 per cent of the total area of China. About 56 per cent of the country's total population live in hilly or mountainous areas. These areas are relatively deprived compared to the plains. Four hundred and ninety-six of the 592 counties identified as poverty-stricken are in mountainous or hilly regions.

Recognising that forestry can play a major role in the economic development of mountain areas, the Forestry Ministry of China evolved a plan in 1996 which focuses on sustained development of upland areas through development of forestry and appropriate science and technology interventions.

There are two significant themes in the forestry policies of China. Firstly, all forestry policies are "oriented to motivate the enthusiasm of the whole society for afforestation and greening activities", and, secondly, "all forestry policies are oriented to achieve the maximum economic, ecological, and social benefits for the integrated development of the society." The Detailed Operational Regulations of the Forest Law of the People's Republic of China (1986) is a comprehensive national legislation on for-

estry in China. This legislation is supplemented by many other laws that have been developed in different provinces.

Since China adopted the policy of reform and opening up to the outside world in the 1970s, income-sharing mechanisms based on different levels of production, capacity, multiple economic composition, and multiple marketing mechanisms and management models have been endorsed for economic activities. The main focus of forestry income sharing is that income will be shared on the basis of labour contribution, even when production factors like land, capital input, and technical investment are also taken into consideration.

The issue of land use ownership is very important in the involvement of local communities in forestry activities. The policies of forestry land use (mountain land use) in China largely focus on the issues of ownership and tenure of land. In 1981, the Government of China promulgated a forestry policy with a focus on a mountain forest tenure system, mountain land managed by households, and a system of household responsibility for forestry production. Implementation of the policy initiated the break up of the single ownership system (government ownership) and brought about great changes in forestry management. As a result of this policy, forest managers were given more flexibility and power in choosing management strategies, and the units engaged in forestry production became independent commercial entities. The law protects their interests, rights, and liabilities. In particular, the farmers managing the forests own the resources. This policy has provided a strong incentive for people's participation in forest management. The management model has been transformed from one of collective management to one of individual management. The different management models now practised include stakeholder cooperative management, leasing, contracting, cooperative afforestation, and shareholding cooperatives.

The major thrust of current Chinese policies on forestry land use can be summarised as follows.

The ownership of forest land belongs to the state and collectives, but the tenure of this land can be transferred in accordance with the relevant laws and regulations. Forest land can be contracted to individuals, groups of individuals, legal agents, or other economic entities for afforestation. The lessee of the land is responsible for the management of the area and enjoys the income generated. The tenure can be transferred, contributed as shares, rented, or mortgaged.

In 1990, the State Council of China began to implement the Afforestation Plan for the years 1989 to 2000. The plan lays down guidelines for afforestation and forestry management. According to the plan, the total afforested area should reach 57.165 million ha by the year 2000.

In 1995, the National Ministry of Forestry proposed that forest management should be done according to the forest function. This policy has been one of the key measures in changing from traditional to modern forestry practices. The policy divides forest areas according to their economic and ecological benefits and other multiple functions, for example, welfare forests and commercial forests. In an effort to implement this policy, the MOF is experimenting with the following reform strategies.

- Protected forests and forests for special use are categorised as welfare forests and are managed by the government. Timber forests, economic forests (plantations of fruit, nut, oil, and other crop-producing trees excluding timber), and fuelwood forests are classified as commercial forests and are managed by enterprises for market-oriented production.
- As a result of the different nature and purpose of managing welfare and commercial forests, different management mechanisms have been adopted. Welfare forests are managed to maximise ecological benefits and afforestation measures can be different to those for commercial forests. The management objective of commercial for-

ests is to meet market demands, the felling volume is determined on the basis of management plans and priority is given to allocating felling quotas.

- Whoever manages the forest must provide the necessary input. Input may be provided through government financing. Social compensation and fees for compensating ecological imbalances will be collected. Management units engaged in forests are encouraged to create alternative income, compensation will be drawn from a part of the income generated.

The basic forestry policy in China aims to “combine the efforts of the central government, collective entities, and individuals in forest development for greening, coexistence of multiple management systems, and developing multiple economic elements on the basis of public ownership.”

Yunnan Province and the Tibetan Autonomous Region are the two important regions of China that fall within the Hindu Kush-Himalayan region. Brief accounts of their forestry policies and programmes are provided below.

Yunnan Province has a total area of 394,000 sq. km., 94 per cent of which is hilly and mountainous. Ninety-eight per cent of the counties, cities, and townships are located in the mountainous region. About 25 per cent of the area, or 9.41 million ha, is forested, and of this 29 per cent is state forest, owned by the state and managed by state entities and 71 per cent is collective forest, owned and managed by communities and villages.

Yunnan's basic forest policies are in accordance with the Forestry Law ratified by the Standing Committee of the National People's Congress. The focus of the Forestry Law is to address equally the two issues of forest conservation and sustainable forest resource management and utilisation. In 1983, the Provincial Government of Yunnan and the Standing Committee of the National People's Congress of Yunnan Province enacted a policy on *liangshan* management responsibility for forests. Under this policy, collective forest areas in different parts

of Yunnan were contracted out and allocated to individual households for management. When the *liangshan* policy was implemented, local people had no confidence in the sustainability of the policy and were unwilling to invest their capital and labour in reforestation and greening. Furthermore, there was no technical support or cash investment. The result was that the resources were idle for long periods.

In 1993, Yunnan promulgated legislation titled 'Provisions for the Auction of Tenure of Barren Mountain Areas' to promote the leasing of the users' rights to barren mountains (*sihuang*) suitable for afforestation. The tenure lease for *sihuang* separates the land-use rights from the land property rights. The property rights remain state-owned, but the land tenure may be transferred, contracted, or leased under agreed terms or prices to potential developers.

The *sihuang* policy builds on the *liangshan* policy and aims to motivate local communities to participate in the rehabilitation and management of degraded barren mountain lands. The ultimate goal of this policy is to achieve overall economic, ecological, and social benefits. The price for the tenure lease of the *sihuang* is determined on the basis of the locality, accessibility, land quality, management premise, and economic capacity of the local community. The land-use rights can be auctioned and sold to legal units, entities, or individuals. In general, development activities are required to start within three to five years of procurement of the lease. This policy aims to create entities with multiple land-use management systems and to encourage local communities to participate in the utilisation and development of barren land.

Thirty of the 74 counties in the Tibetan Autonomous Region are forested, and these counties contain 30 per cent of the total population. Protected areas cover 27 per cent of the total land area, or 325,330 sq. km. Forest-based industries, such as log and fuelwood producing industries, wood processing industries, resin production industries, and medicinal herb exploitation industries, contribute about 10 per cent of the gross output volume of agriculture

and industry and about eight per cent of the GNP of the region.

The Tentative Regulations for the Forest Policy of Tibet, formulated by the Autonomous Regional People's Government in 1985, removed restrictions on the protection and management of forests by communities and individual households. The policy encouraged the involvement of local communities and individual households in resource management. Measures were introduced so that parts of state-owned forests could be allocated to a community or a village for management, although ownership still belonged to the state. Local populations living in protection responsibility areas were given permission to market fuelwood, charcoal, thinning wood, raw wood materials, and bamboo products. They were also allowed to collect other products, produce timber, and hunt non-protected animals.

In order to meet demands, wood allocation and fixed prices were removed in 1993 and management rights were given to enterprises. Enterprises were allowed to produce according to market needs and the prices of products to fluctuate in line with market conditions. In order to avoid illegal cutting and forest damage, production of wood was managed according to an indicative plan method. Two certificates, a Cutting Certificate and a Transportation Certificate, had to be verified.

Later, forest policies were further changed to motivate voluntary cooperation by local communities in planting trees and grasses on bare lands and wetlands. Trees planted thus were owned by the persons who planted them, and their children had the right to inherit the use of the land. State-owned forest land could be contracted to individual households or managed by an association of households. All income generated could be retained by the contractor.

In 1994, the formulation of a new forest policy in Tibet further encouraged and supported local communities to utilise barren lands. Whoever managed such lands was allowed to retain the produce and benefits from the land. The land use right could be inherited or trans-

ferred. This policy also included provisions for the utilisation by local communities of forest products such as wild edible mushrooms and herbs for herbal medicine. At the same time it promoted foreign investment to achieve rational utilisation of forest resources and comprehensive use of wood, to undertake scientific surveys, and to develop private nurseries and fruit orchards.

Since 1997, afforestation activities have been implemented by communities and individuals on the principle that the person or group that plants trees owns them. Policies and regulations, such as the Forest Laws, Forest Fire Control Provisions, Forest Protection Provisions, and Wildlife Protection Laws, have been put in place to further raise public awareness about the significance of forest protection and forest fire control.

In **China** generally, and in Yunnan and Tibet in particular, the focus of forestry policies is on the protection of forest resources from overuse and the maximising of economic returns from forestry. In this respect, China probably has the most 'market-oriented' policies, whereby degraded lands are auctioned for plantation of economic products.

C.1.4 India

Ninety-five districts in twelve Indian states fall within the Himalayan region. India's National Forest Policy of 1988 stipulates that, in such fragile mountainous regions, two-thirds of the area should be under forest cover in order to prevent erosion and land degradation and to ensure the stability of the fragile ecosystems. Thirty of the Himalayan districts have more than 66 per cent forest cover, but the average value is only 37 per cent, far below the intended goal.

The current forest policy of India places more emphasis on forest conservation, a shift in focus from earlier policies in which the major objective of forest management was revenue generation for the government. Preservation, maintenance, sustainable utilisation, restoration, and enhancement of the natural environ-

ment are the major concepts adopted in the current forest policy.

In 1990, the Government of India issued a Government Order to all the Indian States to involve village communities and voluntary agencies in the regeneration and management of degraded forests. This Government Order for Joint Forest Management was an important milestone for participatory forest management in India.

In line with the National Forest Policy of India, the **Jammu and Kashmir** Forest Policy of 1990 stresses conservation of forests. The policy clearly articulates that environmental stability and maintenance of ecological balance must be given more emphasis than generating direct economic benefits. The policy emphasises rehabilitation of degraded forests, expansion of forest areas by converting available wasteland to forest, and sustainable provision of fuelwood and fodder to the local people.

Uttarkhand lies in the State of Uttar Pradesh in the western Himalayas. The Uttar Pradesh State Forestry Action Programme of 1995 places great emphasis on participatory forest management. In Uttarkhand, local communities have been involved in forest management since 1931 through the formation of *Van Panchayat(s)*. The *Van Panchayat* Rules of 1931 were introduced under the District Scheduled Act of 1874. A *Van Panchayat* can be formed on any government land, including Civil Forest and Class-I and Class-II Reserve Forest land. A more powerful Act was introduced in 1972 invoking Section 28 (Village Forest Formation) of the Indian Forest Act of 1927. This was modified in 1976 and is the Act under which *Van Panchayat(s)* are currently managed. The Uttar Pradesh Joint Forest Management Rules of 1997 were promulgated under Section 28 of the Indian Forest Act of 1927. This Act allows those who manage the forest to obtain direct economic benefit, in contrast to the *Van Panchayat* rules that state that any economic benefit must go to the *Van Panchayat* body which can use the funds for the growth and upkeep of the jointly managed forests. The Draft *Van Panchayat* Rule of 1997, which was

prepared to replace the 1976 Rules, is under consideration by the State Government.

The key issues for forestry development in **Himachal Pradesh** have been identified as the sustainable management of forestry resources, strengthened community participation at all levels, the active involvement of women, and the re-orientation of the attitude and role of forestry department personnel, in particular the role of the Forest Guard from one of protection to one of enabler and agent of change. The State formulated a State Forest Policy in 1980 in accordance with the National Forest Policy of 1952. Himachal Pradesh is one of the few Indian States with its own forest policy. The policy promoted the transfer to the Forest Department of all areas of forest or potential forest land acquired by the government under the Land Ceiling Act of 1972 and the Village Common Land (Vesting and Utilisation) Act of 1974. It also supported an afforestation programme to increase the fully stocked forest area to 60 per cent of the land area, and directed that forestry programmes be oriented to encourage people's participation.

In pursuance of the Government of India's 1990 Order, Himachal Pradesh decided to constitute Village Forest Development Committees for Joint Forest Management for the planning, protection, afforestation, and judicious use of forests. It also aimed to bring 50 per cent of the feasible areas under forest cover by 2000 AD.

Himachal Pradesh has various forestry-related pieces of legislation, starting from the first forest policy in 1894. In 1970, Himachal Pradesh promulgated a grazing policy. The policy had several recommendations, including restrictions on any increase in the number of cattle, control of migratory and nomadic herds and flocks, registration and enumeration of flocks, fixing of routes to be followed by nomadic herds, levy of a uniform grazing fee, closure of not less than a third of the grazing area allotted to a particular grazer at a given time, levy of a tax on goats and buffalo, and reduction of the number of goats and buffalo in a phased manner.

In order to allot land to landless people and people owning less than one acre, the Himachal

Pradesh government took control over all the *shamilats*, or common lands, by introducing the Village Common Land Vesting and Utilisation Act of 1974. The government prepared rules and a utilisation scheme in 1975 for the lands acquired under this Act. Under the Act, part of the land was set aside for common purposes like grazing, to be managed under the Punjab Village Common Lands' (Regulation) Act of 1961, and the remainder was to be distributed to the landless and poorer households in the community. The acquired *shamilat* lands were divided into two categories: allottable and non-allotable. The allottable lands were to be distributed amongst the landless, and the non-allotable to be transferred to the Department of Forests. In 1995 Himachal Pradesh began to formulate the Himachal Pradesh Forest Bill. This is intended to be the new Forest Act for the State, it is still in the draft stages.

In India, during the time of British colonial rule, forest policies were largely geared towards generating revenue for the government. This policy continued long after India gained independence in 1947. More recently, the government has become concerned about the state of forests and has promulgated policies and programmes for the rehabilitation of degraded forests. The joint forestry management programme in India is largely derived from such concerns.

C.1.5 Myanmar

Over 78 per cent of Myanmar's population is rural and relies greatly on forests for subsistence needs. The country recognises the fact that long-term utilisation and stability of the forest resources with minimal environmental degradation is of paramount importance for the nation's economy and its people's livelihood. However, the resources have been dwindling at a rapid pace as a result of ecologically unstable farming practices, increasing population, and an ever-rising demand for forest land and products. It has been accepted that the participatory and integrated forest resource management approach has significant potential in addressing the problems and issues related to natural resources' depletion, and strategies

have been evolved for people-centred participatory management of resources.

Myanmar's Forest Law of 1992 laid down the basic principles for forest management. The law promotes public cooperation in implementing forest policy and environmental policy. One of the principles is 'to develop the economy of the State, to contribute towards the food, clothing and shelter needs of the public, and to ensure perpetual enjoyment of benefits by conservation and protection of forest'. Further, the principles stress conservation of forests and biodiversity and promotion of plantations and the contribution of forests to meeting fuelwood needs.

The Forestry Policy of 1995 has identified six imperatives with the highest priority for forestry. These are: protection of soil, water, biodiversity and the environment; sustainability of forest resources; meeting the basic needs of people; efficiency in harnessing the economic potential of forests; participation of people in conservation and utilisation of forest resources; and increasing public awareness of the vital role of forests. The Community Forestry Instructions of 1995 emphasise enhancing the nation's economy through forestry, achieving environmental stability, and meeting the needs of rural people for forestry products.

C.1.6 Nepal

According to the Master Plan for the country, the objectives for the forestry sector in Nepal are: to meet people's basic needs for fuelwood, timber, fodder, and other forest products on a sustainable basis; to protect land against degradation by soil erosion, floods, landslides, desertification, and other effects of ecological disturbances; to conserve the ecosystem and genetic resources; to contribute to the growth of the local and the national economy by managing forest resources; and to develop forest-based industries to create opportunities for income generation and employment. While the Plan covered all aspects of forestry, it strongly emphasised community forestry and allocated 47 per cent of total forestry sector investment to community forestry programmes. The For-

estry Policy Document, which is a part of the Master Plan, contains a series of statements re-emphasising the implementation of community forestry activities in the country.

The Forest Act of 1993 endorsed the objectives set out in the Master Plan for the Forestry Sector. The Forest Act classifies forests into community forests, leasehold forests, religious forests, private forests, and national forests. It is now possible to hand over a particular forest to a forest user group for management and utilisation. The District Forest Officer can form and register forest user groups, and can hand over management and use rights for a particular forest to the user group. The process of handing over forests to user groups is continuing all over the country, especially in the mountains.

C.1.7 Pakistan

In Pakistan, 19 per cent of the country's population live in hill areas. The Forestry Sector Master Plan for Pakistan of 1992 reports that only five per cent of the total area of the country is forested. The natural distribution of forests, which mostly consist of conifers, is influenced largely by the monsoon rainfall. Eighty per cent of the forests are located in the Himalayan, Karakoram, and Hindu-Kush mountain ranges.

Pakistan's National Forests, Rangelands and Wildlife Policy of 1991 has set the objectives for forestry to meet the country's requirements for timber, fuelwood, fodder, and other products and to fulfill environmental needs. The forest area is planned to increase from five to 10 per cent of the total area of the country in a fifteen year period. Existing forests, watersheds, rangeland, and wildlife resources are to be conserved by sustainable utilisation and developed to meet the ever-increasing demands. The Forest Policy of 1991 identified hill forests as a management category. It mentions that the conifer forests in the public sector will be managed intensively. Multiple and integrated use is envisaged, with reliance placed on artificial restocking by seedlings of known provenance. The policy recommended changes in jurisdiction to make the different units more manage-

able. The draft Forestry Sector Policy of 1998 also emphasised forest conservation, sustainable use, meeting basic needs, maximising domestic production to minimise imports, participation, education, research, and institutional strengthening. While most of Pakistan's legal instruments continue to remain regulatory in character, steps are currently underway to change the laws and regulations.

C.2 Policy Framework for Participatory Forest Management

The **Bangladesh** Forest Policy of 1994 was the first policy guideline in the country to clearly incorporate the concept of participatory forestry management. It also opened up the avenue for cooperation between non-government organizations and government agencies in promoting social forestry programmes.

In 1991, the Royal Government of **Bhutan** formulated a revised Forest Policy Statement that emphasised balancing the nation's conservation and economic development goals. It acknowledged the need to allocate forests to one of several different management regimes such as protection forests, production forests, and community forests. Bhutan's Social Forestry Rules were approved in 1996, under the Forest and Nature Conservation Act of 1995, and gave impetus to participatory forest management.

Various provinces in **China** have policies that allow for the participation of individual households in forestry promotion. In 1993, **Yunnan** promulgated the 'Provisions for the Auction of the Tenure of Barren Mountain Areas' to promote the leasing of the users' rights to barren mountain land (*sihuang*) suitable for afforestation. The tenure lease for *sihuang* separates the land-use rights from the land property rights. The property rights remain state-owned, but the land tenure may be transferred, contracted, or leased under agreed terms or prices to potential developers. In 1994, the formulation of forest policies in **Tibet** further encouraged and supported the local population in the use of barren lands. Whoever managed such land was allowed to retain the products or whatever was

obtained from the land. The land-use right may be inherited or transferred.

In **India**, the National Forest Policy of 1988 emphasised creating a massive people's movement to achieve its objectives and to minimise human pressures on existing forests. In 1990, the Government of India issued a government order to all the States for the involvement of village communities and voluntary agencies in the regeneration and management of degraded forests.

Different states in India have issued their own Orders to facilitate participatory forest management. State of **Jammu and Kashmir** issued a Government Order on Joint Forest Management in 1992. Participatory forest management in **Uttarkhand** exists in two forms: the Village Panchayat Forests and Joint Forest Management. To allow the formation of village forests, an Act invoking Section 28 (Village Forest Formation) of the Indian Forest Act of 1927 was made in 1972, and re-modified in 1976. A Joint Forest Management (JFM) Order was introduced in **Uttar Pradesh** in 1997, and this also applies to Uttarkhand. In Himachal Pradesh, a similar JFM Order was promulgated in 1993.

Myanmar introduced a new Forest Law in 1992 and a Forestry Policy in 1995, and issued its first Community Forestry Instructions' Notification in 1995. These encourage active participation of people in the conservation and rational utilisation of forests. The Forest Policy of 1995 has suggested policy measures for forest regeneration and afforestation, establishment of plantation cooperatives, and provision of institutional finance for the establishment of man-made forests on degraded and denuded land.

In **Nepal** the Forest Act of 1993 and the Forest Regulations of 1995, building on the recommendations of the Forest Sector Master Plan of 1988, lay down the guiding principles for participatory forest management in the country.

In **Pakistan**, various projects have promoted participatory forest management on private and degraded communal lands and in degraded,

protected, and reserved forests, but there is no specific legislation for PFM.

C.3 Communities and Participatory Forest Management

C.3.1 Participation of Communities and the Organizational Form

In **Bangladesh**, landless people have been involved in reforestation work under benefit sharing arrangements in many Forest Department programmes. The Forest Department forms 'beneficiary groups', and these are generally dominated by men. The Department undertakes all activities and the group members are given the responsibility for guarding plantations against grazing and theft. Thus, the participation of such groups is generally passive.

In **Bhutan**, five or more households can obtain user-rights to an area of partially degraded government forests as long as revegetation is performed and the management plans for the area are followed.

Where participatory forest management is practised, communities living near forest areas are generally eligible. **China** has exceptions in some cases in which people from outside the community may also bid for tenure of barren mountain lands in auctions. In China, degraded forest lands can be leased by individual households, communes, or even enterprises. These households, communes, and enterprises are involved in reforestation activities. In **Tibet**, afforestation activities involving various members of society, such as "Cadre Plantation," "Youth Plantation," "Women Plantation", and "Plantation by Joint Effort of the Army and the People," have become very popular and large areas have been planted in this way.

In **India**, people from villages adjoining degraded forest areas are involved in joint forest management. In **Jammu and Kashmir** there are two types of village committee: the Village (Rehabilitation of Degraded Forests) Committee and the Village Plantation (Protection and Management) Committee. The Village (Reha-

bilitation of Degraded Forests) Committee is largely composed of members of the village, but the Village Plantation (Protection and Management) Committee has only two members representing the village community, the other members include the *Tehsildar*¹ and the Range Officer. The activities of the latter committee are supported financially for the first five years by a government project for planting, maintenance, and protection.

In **Himachal Pradesh**, village forest development committees (VFDCs) are formed for joint forest management. These are non-political bodies representing all families in a *Tikka* or hamlet. The body is registered with the District Forest Officer. The executive committee has 9-12 members, five of them from the *Tikka*. The executive committee has representatives from institutions such as women's groups or youth groups, if they exist, and at least one representative from a disadvantaged group. All households should be represented in the general committee (all users with a 50% quorum for decision-making). The role of women is emphasised, with at least one woman from each household in the general committee and 50 per cent women in the Executive Body.

In **Uttarkhand**, the participation of people in Village Panchayat Forests has not been very high and the situation has been characterised by 'apathy on the part of the people as well as on the part of the authorities'. Village Forest Committees are formed for joint forest management.

In **Myanmar**, plantation cooperatives can be established in villages for reforestation according to the Forest Policy of 1995. The Forest Law of 1992 allows people's participation in the establishment of village firewood plantations.

In **Nepal**, all households that depend on a particular forest are eligible for membership of a Forest User Group for that forest. Member households in such a group can be from a hamlet, a village, or a number of villages or sub-

villages, irrespective of administrative boundaries. Normally, one member from each user household is included in the group. The Forest User Groups can develop their own rules for organizational management and, with support from Department of Forest staff, draw up forest management plans. The FUG and its constitution are registered with the District Forest Office. Normally, an FUG executive committee is formed to oversee the FUG's activities.

In **Pakistan**, different groups of people are involved in participatory forest management depending on the tenure of the land. For example, the Malakand/Dir Social Forestry project is working largely on management of private forest, whereas others are involved with protected, reserved, or communal lands.

C.3.2 Status of Implementation of Participatory Forest Management

Participatory forest management work has started as a cautious learning phase in **Bangladesh**. The 'Afforestation and Settlement in the Unclassed State Forest of Chittagong Hill Tracts' project, July 1995 to June 2000, has adopted a participatory approach. This project has two main components, namely, *juhamia* (shifting cultivators) and rehabilitation and afforestation of degraded lands. The Thana Bonayan and Nursery Development Project (1987-88) also provided opportunities for local people to participate in forestry programmes under benefit-sharing arrangements. In 1997, a new project was launched called the Forestry Sector Project which is basically a social forestry project. This project will be implemented all over the country including the hill districts of Rangamati, Khagrachari, and Bandarban. The project lays greater emphasis on involving NGOs in work with local communities.

As in Bangladesh, **Bhutan** is implementing participatory forest management cautiously. Currently management plans have been formed for four pilot sites: Zhemgang Dzongkhag, Punakha Dzongkhag, Mongar

¹ A *Tehsildar* is the officer in charge of a *Tehsil* – an administrative unit, smaller than a district.

Dzongkhag, and Trashigang Dzongkhag. The management plan for Mongar Dzongkhag is being implemented and the rest are under review. About 1,152 ha are being managed by the four communities and a further 22 ha are being managed in small-scale community forest trial plantations.

In **Jammu and Kashmir**, the Forestry Department is implementing participatory forest management activities in degraded demarcated forests, and the Social Forestry Project is working in demarcated forests, wastelands, community lands, and undemarcated forests. Over 600 sq km., including plantations, are being managed under joint forest management by 1,240 committees.

Van Panchayat(s) have been formed all over **Uttarkhand** by the government. Nearly 5,000 *Van Panchayat(s)* have been formed, managing about 469,326 hectares of land, about 14 per cent of the total forest area. Joint forest management has largely been implemented at project level. At present, a total of 47 villages are managing 16,225 ha under joint forest management and a further 100 ha are being managed to assist natural regeneration of oak. A World Bank financed project is promoting participatory forest management in the Central Himalayan region of Uttarkhand, in the Terai, and in parts of the Vindhyan region. It is estimated that about 1,160 communities will be involved during the four years of the Project, managing and protecting about 210,000 ha of land. It is planned to form 69 teams to promote joint forest management, 50 in the hills. Two-thirds (744) of the micro-plans will also be developed in the hills.

Joint forest management in **Himachal Pradesh** has been assisted since 1994 by a pilot project in Kullu and Mandi districts with UK (ODA) funding support and a project in Kangra district by the GTZ-funded Indo-German Changer Eco-Development Project. There has been no promotion of participatory forest management elsewhere in the state. Even in the two project areas, the approach differs as does the role and quality of development of local institutions. In the Kullu and Mandi dis-

tricts, the approach is very cautious and slow. Formation of only 20 Village Forest Development Committees (VFDCS) in three years has been envisaged, and the project emphasises learning and monitoring. In contrast, by January 1998, the Indo-German Changer Eco-Development Project had formed 216 VFDCS under village action plans, and 1,611 ha of community and degraded undemarcated forest land had been planted. A further 6,005 ha of forest land are managed under joint forest management by 125 village committees.

In **Nepal** the community forestry programme has been implemented all over the country. However, forest handover in the lowlands (Terai) has been rather slow, and most activities have concentrated on the mid-hills. There are currently 6,020 Forest User Groups managing 403,688 ha of forest land.

In **Pakistan**, eight projects are implementing various models of participatory forest management in upland areas: the Malakand/Dir Social Forestry Project, the Kalam Integrated Development Project, the Siran Forest Development Project, the Aga Khan Rural Support Programme Northern Areas, the Suketar Watershed Management Project, the Himalayan Wildlife Project, the Himalayan Jungle Project, and the Khunjerab Village Organization. Formation of new village institutions to manage forests and rural development under different projects has led to the formation of Village Development Committees, Village Organizations, and Women's Organizations in Malakand and Aga Khan Rural Support Programme areas. In Kalam, Forest Protection Committees have been formed from among the holders of rights to protected forests. Village organizations have also been formed in Siran.

C.3.3 Benefit Sharing Arrangements

There is as yet no uniform benefit-sharing mechanism under participatory forest management for the whole of **Bangladesh**. Various projects have implemented different sharing arrangements. For example, in the Thana Bonayan and Nursery Development Project the local participant received 40 per cent of the

final yield and all intermediate yields of products. The Railway Authority is entitled to 10 per cent of the final benefit, three per cent goes to the Local Union Council, three per cent to the Local Council, 25 per cent to the Thana Council, and 20 per cent is government revenue. The final income from agroforestry plantations is shared equally between the Forest Department (as government revenue) and the participants. The sharing mechanism under the Afforestation and Rehabilitation of Jhumia Families in the Unclassed State Forest (USF) and Reserved Forest Lands of the Chittagong Hill Tracts (third phase) is as follows. Local participants receive 15 per cent of the final yield, all agricultural and horticultural yields, 100 per cent of the first thinning, and 50 per cent of other thinnings. The headman receives five per cent; the tribal king five per cent, the local council five per cent, and the Forest Department 70 per cent of the final share.

The draft Social Forestry Rules of **Bhutan**, promulgated under the Forest and Nature Conservation Act of 1995, allow trees planted on private land to remain free of royalty. Royalty rates are reduced or rescinded and individuals may apply for leases under the rules with certain terms and conditions. In Bhutan, most rural communities depend on the forest for grazing their cattle and for collection of fodder and litter for livestock. The enactment and adoption of the Bhutan Forest Act 1969 closed the 'commons' and introduced a system of permits to authorise limited rights to the use of government forest. All individuals have the right to use government forest land to graze their cattle. The Land Act of 1979 incorporated the use of forests for collection of firewood and wood for home construction, and this has been traditionally sanctioned as part of customary rights.

In **China**, benefit-sharing arrangements vary according to the province. Income sharing from forestry is mainly based on the labour contribution, other inputs such as land, capital input, and technical investment are taken into account. In Huahua Prefecture in Hunnan Province, for example, 25 per cent of the total income from marketing timber is collected as

tax, the Forestry Development Funds receive 15 per cent, the Township and Village Accumulation Funds 10 per cent, and production costs account for 10 per cent—leaving 40 per cent as income for the forest farmers. Similarly, in Jinping County in Guizhou Province, of the income from marketing timber, 26 per cent of the money is taken as tax, 18 per cent goes to the Forestry Development Fund, 10 per cent to the Township and Village Accumulation Fund, and production costs account for 10 per cent, leaving 25 per cent as income for the forest farmers. The benefits from forestry have also been shared among the local population in **Tibet**. For example, in 1993, the total income of the local population from forestry was increased to 43 million *yuan* or 100 *yuan* per capita. In **Yunnan**, of the revenue generated, five per cent is paid as tax, 10 per cent has to be given to the Silviculture Fund, 20 per cent is income tax, and 65 per cent is paid to the producer as interest.

In **Jammu and Kashmir**, communities are entitled to collect grass, fodder, and dry and fallen wood free of royalty, with the permission of the Department of Forests. The Joint Forest Management Committee, after consultation with all members, can share a maximum of 25 per cent of the proceeds from the sale of produce from the first major harvest of the plantation among members in cash or kind after deducting the costs incurred by the Forest Department. The remaining 75 per cent of income is retained by the Department of Forests, although the Government Notification does not mention this explicitly. If a Village Plantation (Protection and Management) Committee is formed in a village, it can utilise all the funds for replanting an area, for establishing additional woodlots to those already managed, or for financing development works in the area such as construction of water supply systems and village roads.

In **Uttarkhand**, joint forest management committees may distribute 50 per cent of the proceeds of the sale of products (after deducting the cost of investment), to a maximum of Rs. 50,000 per year among their members. Of the remaining 50 per cent, half goes to the village

community and half to community work. The income from Panchayat Forests is distributed as follows. Forty-six per cent goes to the Forest Department, 10 per cent for services such as valuation of trees and marking trees for felling, and 36 per cent for the preparation and execution of development programmes for the *Van Panchayat* forest and for stationery, stamps, *Sarpanch*² expenditure, and other expenses. Eighteen per cent is given to the *Zila Parishad* (District Council) for development of the area. The final 36 per cent is retained by the District Magistrate in the *Van Panchayat* account. The *Van Panchayat* Committee can spend this money, with the prior approval of the District Magistrate, to provide community services and amenities like village roads and schools.

In **Himachal Pradesh**, all the forest products—apart from timber (leaf litter, fuelwood, fodder, and other non-timber forest products) can be distributed to the villagers free of charge under the supervision of the Forest Guard. At least 25 per cent of the net sale proceeds of timber harvests of plantations or coppice is given to the VFDC for the Village Development Fund. This fund can be used for village development work with the approval of the General House of members and in consultation with the District Forest Officer concerned. As in Jammu and Kashmir, the Department of Forests retains the remaining 75 per cent of the fund.

In **Myanmar**, the benefits derived from community managed forests are shared among the members of the users' group, and no royalty is levied on the forest products extracted from the community forest by the users' group for domestic purposes. Communities or communes that establish fuelwood plantations can utilise or market the products from such plantations.

The FUGs in **Nepal** have rights over all products, including timber, from their community forests. All the income generated is retained by the group, and no income is shared with the government. FUG funds can be used for forestry and community development activities.

Benefit sharing arrangements in participatory forest management in **Pakistan** vary according to the projects. Generally, the rights and concessions of communities include a share in such things as royalties (the *Guzara* forests in *Hazara*); trees for construction of houses, household furniture, and agricultural implements (*Hazara*, *Malakand*, *Rawalpindi*, *Murree Hills*, *Azad Kashmir* and *Northern Areas*); timber at concessional rates (*Malakand*, *Azad Kashmir*, and *Northern Areas*); rights to graze domestic animals either free or on payment of a nominal fee; collection of grass; rights of way; and the right to cut dry trees and collect fuelwood, pine cones, and pine needles.

C.3.4 Tenure Arrangements for Participatory Forest Management

In **Bangladesh** and **Bhutan** there are no explicit tenure arrangements for participatory forest management.

In **China**, state-owned degraded forest land is leased for 30 to 50 years for reforestation activities. Similarly, collectively owned *sihuan* land can be leased, through auction, for 50 to 100 years. Whoever buys the land is responsible for the management of these areas and enjoys the income generated. The tenure can be transferred, contributed as shares, rented, or mortgaged. In **Yunnan** Province, farmers from communes that own land may lease barren mountain land for 50 to 70 years. The next generation can inherit the land tenure and the tenure can be transferred after 10-20 years. One third of all forest in **Yunnan** is state forest, one third collective forest, and one third is managed by individual households.

In **Jammu and Kashmir**, there is no provision for handing over any forest area to community or any other groups. Similarly the state forest policies in **Himachal Pradesh** and **Uttarkhand** are silent on the issue of granting rights of tenure to communities, as are the national policies.

² The *Sarpanch* is the head of the *Panchayat*.

In **Myanmar**, local communities are allotted land for 30 years, the duration can be extended with the approval of the Director General of Forests.

In **Nepal**, the government retains ownership of the land that is handed over to FUGs as community forest. Normally, the operational plans for the community forests, agreed between the government and local communities, are for five years. There is no limit to the number of times the agreement can be renewed. Land can also be leased to local communities or industry, initially for 30 years, under a government leasehold programme.

In **Pakistan**, participatory forest management programmes are being implemented on communal and state lands, including some government forests. The tenure of communal lands, such as *shamilaat*, is vested in local communities or with a group of households, whereas reserved forests and protected forests are government land. Different programmes work on different types of land. The Malakand/Dir Social Forestry Project, for example, is largely working with individually or communally held private land, whereas the Siran Forest Development project is largely working with reserved and *guzara* forest. The Aga Khan Rural Support Programme is working with state, communal, and private land.

C.3.5 Obligations of Communities

In all the countries taking part in the workshop, local communities are expected to participate in the protection of forests and rehabilitation activities. In **Bangladesh**, households that participate in forestry activities must take part in reforestation, protection, and harvesting activities. Similarly, in **Bhutan**, communities participating in forest management are responsible for managing and protecting forest areas.

In **China**, whoever leases the land is responsible for the control and management of the area, and afforestation and protection work are usually undertaken.

In **India**, under joint forest management, the Forest Department and local communities draw

up joint management plans. In **Jammu and Kashmir**, local people are expected to assist the Forest Department in identifying sites for joint forest management and appropriate species for replanting the sites. The Village (Rehabilitation of Degraded Forests) Committee normally assists the Social Forestry Department or Forest Department in regeneration, maintenance, and protection of plantations. In **Uttarkhand**, according to the *Van Panchayat* Rules of 1976, *Van Panchayat*(s) are responsible for protecting and developing the forests falling under their jurisdiction. They may only fell those trees that are marked by the Forest Department and are available as a result of silvicultural plans. They may also demarcate boundaries by building boundary walls, pillars, or similar and must prevent encroachment of the forest land, close 20 per cent of the area to grazing, and protect forests from illegal felling and fire. The Village Forest Committees must prepare five-year micro-plans. The Committee must protect the area under its management and also close at least 20 per cent of the forest to grazing. They must keep appropriate records, documents, and accounts of income and expenditure.

In **Himachal Pradesh**, Forest Department staff and forest users consult and negotiate to draw up management plans, the terms of use of forest lands, an outline of a mechanism for sharing of benefits, and a mutually binding agreement describing participatory forest management activities, and the roles, responsibilities, duties, powers, and rules of both partners. The duties of the VFDC include persuading members to provide areas for plantation and assisting the Forest Department in planning, protection, afforestation, and judicious use of all existing rights, equitable sharing of products/benefits, and eco-development of the area as laid down in the approved management plan. The VFDC is responsible for the just and fair distribution of the products obtained, for ensuring management of the forest as prescribed, for settling disputes between villages, and for honouring all commitments. The VFDC can make its own byelaws with the agreement of the District Forest Officer concerned and can recommend punishment for

offenders – including cancellation of membership.

FUGs in **Nepal** are obliged to follow the operational plan, developed with the support of the Department of Forests, for management of the community forest. For their organizational management, each FUG develops a constitution that lays down the norms for organizational and financial management and the duties of the executive committee and general members.

C.3.6 Rights of Communities

Participatory forest management programmes in **Bangladesh** and **Bhutan** are being implemented on a small scale, and the rights of communities are still being defined.

In **China**, the lessee of forest lands has the right to plant, harvest, and market the products. In **Tibet** forest policies motivate voluntary cooperation of local communities in planting trees or grasses on bare lands and wetlands. The trees planted thus are owned by the person who plants them, and children have the right to inherit the use of the land. The lessee can retain all the income generated from leased land. In 1985 in **Tibet**, people living in protection responsibility areas were given permission to market fuelwood, charcoal, thinning wood, raw wood materials, and bamboo products; to hunt (non-protected animals); to collect and weave products; and to produce sawn timber according to the national plan. In **Yunnan**, the use rights, management rights, and property rights of *sihuang* auctioned by the government resides with the collectives, organizations/entities, or individuals who have bought the 50-70 year tenure rights. The next generation may inherit the land tenure, and the land tenure can be transferred after 10-20 years.

In **Jammu and Kashmir**, the joint forest management committee cannot punish or fine forest offenders and they cannot cancel membership. All rules have to be framed in consultation with the Forest Department. The committee can form an executive committee with representatives from different groups in the community. Any work planned requires an agree-

ment specifying the rights and responsibilities of all parties involved (usually between the local communities and the Department of Forest). If the Department of Forests terminates a person's membership, that person has a right of appeal to the Department.

Theoretically the *Van Panchayat(s)* in **Uttarkhand** enjoy the powers of a Forest Officer. But although the Van Panchayats can form their own byelaws, the Panchayat Rules of 1976 do not give sufficient financial and administrative autonomy to the *Sarpanch* or the committee. For example, Section 17 of the Rules requires the prior approval of the Deputy Commissioner before a watchman or any paid staff can be hired by the Panchayat. The Van Panchayats can sell fallen twigs and grass to the right holders in the village for domestic use, but only with the prior approval of the DFO. The sale must not violate the provisions of the Working Plan, which should be prepared by the Forest Department. The Van Panchayats can levy and realise fines of up to Rs 50, but they may only compound cases up to Rs 500 with the prior approval of the Deputy Commissioner. They can confiscate implements used for illicit harvesting of products, can impound stray cattle, and can seize stolen timber and other stolen forest products. But, permission is required from the Deputy Magistrate before seized goods can be sold or auctioned. Van Panchayats can issue permits for the collection of fuel and fodder and slate and boulders and realise fees. But they are not allowed to extract resin, and approval by the Deputy Commissioner is required for removal or sale of any other kind of forest product. The Deputy Commissioner must seek the opinion of the Forest Department. The *Sarpanch* can, with the approval of the committee, mark one tree and sell it to a right holder for domestic use, but permission is required from both the Collector and the DFO before trees exempted under the Tree Protection Act of 1976 can be sold; and only the DFO can mark and initiate the sale of trees.

The forest protection committees in **Himachal Pradesh** cannot punish or fine people who violate their rules, they may only recommend

to the Department of Forests that they be punished. The committees may, however, frame their own rules on many issues related to forest management and the duties of members.

In **Myanmar**, products from the community-managed forests can be shared among the community members. No royalties are levied for products harvested for domestic consumption. The community groups have the right to establish plantations and market products from them.

In **Nepal**, the FUGs have rights over all forest products (except those specifically banned), and they can make their own rules on such issues as organization and punishments.

C.3.7 Gender

Policy instruments from **Bhutan** make no specific mention of gender related issues.

The 1994 Forest Policy of **Bangladesh** clearly states that more women will be encouraged in programmes such as homestead afforestation, rural tree farming, and participatory forestry.

In **China**, women's participation in compulsory tree planting activities has been significant. For example, in 1991, nearly 120 million women participated in the national compulsory tree-planting campaign and the construction of shelterbelt systems, planted 700 million trees, and established 150,000 green project bases with a total area of 7.05 million *mu*. Women have been participating actively in reforestation programmes in **Yunnan** and **Tibet**, as in the rest of China. Women members of the People's Consultative Conference in Tibet have an important role in formulating policies on participatory forest management. In Tibet, women's participation in the collection and marketing of forest resources such as wild edible mushrooms and medicinal herbs is being promoted as part of the changes in forest policy.

Himachal Pradesh has a clear focus on the role of women in joint forest management. At least one woman from each household is

registered as a member of the general house, and at least 50 per cent of the members of the Executive Body have to be women. In **Jammu and Kashmir**, although different groups are represented in the executive committee, there does not appear to be any focus on gender. In **Uttarkhand**, women have not been given mandatory membership in the *Van Panchayat* committee, despite the fact that they are the important actors in forest product collection. In one of the projects being implemented in the region, the criteria for site selection for joint forest management have been developed to ensure that poor or assetless people and women receive their share of benefits.

Nepal's Forestry Act of 1993 does not have any gender-specific policies, although the Master Plan for the Forestry Sector of 1988 did propose a quota for women members of the user group executive committees.

In **Pakistan**, some projects have formed women's organizations to promote women's involvement in natural resource management and community development work. One example of this is the Aga Khan Rural Support Programme. In the Siran Forest Development Project, joint forest management committees have only elected male household heads from the community and Forest Department staff as members.

C.3.8 Equity

Participatory forest management programmes in the Chittagong Hill Tracts of **Bangladesh** identify tribal slash-and-burn agriculturists as the main participants in the programme. Clearly delineated forest land is being set aside for these groups for permanent settlement. In other areas of the country, landless farmers are given priority in the programmes.

The guiding principles of **Bhutan's** Forest Policy include equity issues as a major consideration.

Policies have been formulated by the **Chinese** Government to promote poverty alleviation

and the development of community forestry. At the beginning of the 1980s, 18 regions were identified as national poverty-stricken areas using the average net income as an index. Fifty-eight per cent (73) of the counties in **Yunnan** have been identified as "national-level poverty counties." The Tentative Regulations for Forest Policy, which were formulated by the Autonomous Regional People's Government of **Tibet** in 1985, have stressed that poorer communities and households must be given more attention by the local government and the Forestry Department. In Tibet, poor villages and individual households in forest areas have been given more support by the local government in the management of state-owned forest resources since the middle of the 1980s.

In **Himachal Pradesh** each group of 10-20 disadvantaged households is represented in the executive committee for joint forest management, and this gives some scope for disadvantaged groups to put forward issues of concern in the committee. In **Jammu and Kashmir**, there is no specific reference to equity, although different groups are represented in the executive committee. In **Uttarkhand**, one of the criteria for the selection of villages for implementation of joint forest management projects is a high degree of economic and financial equity. Similarly, preference is given to poorer groups whose livelihoods traditionally depend on forest products (i.e., resource-poor and vulnerable groups). The guidelines also suggest that stakeholders and individual households who could have an adverse effect on the subsistence-based use pattern of poorer and vulnerable groups and/or on the sustainable management and development of forests should not be included.

The needs of various interest groups for special forestry products are recognised in community forestry in **Nepal**, but these have not been effectively implemented in the field. The need for a suitable action plan to enhance the participation of women and disadvantaged groups in decision-making has been identified as a key issue.

C.4 The Role of Government Institutions in Participatory Forest Management

All the government forestry departments at various levels provide technical and financial support for various participatory forest management activities.

The **Bangladesh** Forest Department provides technical and financial support for reforestation activities.

In **Nepal**, the government supports local institutional formation, registration of the forest management committee (of Forest User Groups), and also subsidises reforestation activities and undertakes training of FUGs.

In **Jammu and Kashmir**, the Forest Department can cancel registration of the forest management committee, and the Block Forester or Forest Guard is a member of the forest management committee. The Forest Department has the major decision-making role. It prepares the annual plan, agreements are drawn up with the village committees, and filed work is initiated in consultation with the committee.

In **Uttarkhand** the Forest Department has to mark trees in participatory forest management areas and ensures their disposal through the Forest Corporation. When forest products are to be auctioned, confidential estimates must be prepared by the Forest Department.

C.5 Human Resource Development

In **Bangladesh**, massive awareness raising is being undertaken for afforestation, protection, and utilisation of forests and forest products. There is a clear policy goal of strengthening the Forest Department to achieve the objectives and goals of the Forest Policy, and a Social Forestry Department is being established. Strengthening of the research, education, and training institutions related to forests to achieve the policy targets is also one of the major objectives of the policy. However, as yet, the Bangladesh Forest Department has not implemented

a 'scientific approach to human resource development'.

Bhutan's current policy stresses the need to strengthen the efficiency of forestry sub-sector institutions and to involve and train local people in proper resource utilisation.

Human resource development is an important part of forestry development in **China**. In **Yunnan**, a close relationship has been identified between the educational level of forest managers and their success in forest management. Thus, raising the educational level of those engaged in collective and individual forest management should result in an improvement in forest management and maximise the economic and ecological benefits from forestry. In **Tibet**, a large investment has been made in forestry education to enhance the training of forestry professional staff in forestry research.

In **Himachal Pradesh**, in view of the vision statement 2000 AD and the objectives for the development of training schools in the department, there is a clear emphasis on developing suitable curricula for forest guards and deputy rangers with a focus on social/participatory forest management. Special refresher courses are being designed between 1996 and 2000 AD for Range Officers and IFS Officers, as envisaged in the training agenda plan of the vision. The vision statement for 2000 AD has proposed that the Forestry Training School, Chail, supported by the Sundernagar Forestry Training Centre and the Forestry Training Centre, Kuthar, be established as the best participatory forestry training centre in the Himalayan region.

The Forest Policy of 1990 of **Jammu and Kashmir** has identified strengthening of the communication and extension wings of the Forest Department and the Social Forestry Wing as high priority activities. It has also identified the need to set up a Forest Research Institute to address various forestry-related problems, including social forestry. The State Forestry Action Programme (SFAP) of 1995 in Uttar Pradesh, of which **Uttarkhand** is a part,

emphasises participatory forest management. The broad objectives of this plan involve a change in the Forest Department's activities from a policing/regulatory role to a role in which communities are treated as equal partners in forest management. The plan also aims to change the management system of the Forest Department, so that it becomes client-oriented and adaptable, with decentralization of decision-making and improved planning, monitoring, and evaluation capabilities. Thus the SFAP mentions appropriate human resource development linked to role definition, skill-gap analysis, as well as appropriate human resources' planning and management.

The **Myanmar** Forest Policy of 1992 has clearly identified forest research, forestry planning, intersectoral coordination, and institutional strengthening as major components of forest sector development. Strengthening of educational and training facilities and both quantitative and qualitative human resource development through organizational structure review and the introduction of incentive mechanisms have been articulated in the policy. In recent years, the Central Forestry Development Centre has introduced courses on community forestry for rural communities. However, the syllabuses in other forestry institutions that train foresters are mostly oriented towards basic bio-physical sciences and technical forestry.

Nepal's Master Plan for the Forestry Sector of 1988 identified human resource development as one of the major supportive programmes for the forestry sector. The other four programmes also have an impact on human resource development as they deal with institutional reforms, forestry research and extension, resource information and planning, and monitoring and evaluation.

Both the Action Plan of the Forest Policy of 1991 and the draft Forest Sector Policy of 1988 of **Pakistan** have identified forestry research and education as important components. Strengthening of forest extension and institutional development are also identified by both the policies.

C.5.1 Human Resource Development for Participatory Forest Management

In **Bangladesh**, a number of university and training institutions has started to offer courses on social/participatory forestry. The Institute of Forestry at Chittagong offers an elaborate course on social/participatory forestry. Khulna University offers courses on social/participatory forestry separately from its degree programmes. The Sylhet Forest School also has a very good coverage of social/participatory forestry with subjects like sociology, agroforestry, and social forestry included in the curriculum as compulsory subjects. The Forest Guard training at the Sylhet Forest School has also revised its curriculum to emphasise participatory forestry and extension.

The Forest School at Rajshahi was established under the first Community Forestry Project of **Bangladesh** in 1985 to impart training on social and community forestry to forest extension workers. Courses on social/participatory forestry programmes have also been introduced at the Chittagong Forest School.

In **Bhutan**, the Bhutan Forestry Institute offers a one-year basic forestry course, primarily for forest guards, which includes courses on social forestry. The Natural Resources' Training Institute (NRTI) at Lobesa offers a three-year diploma course in agriculture, animal husbandry, and forestry. For foresters, part of the course also includes social forestry.

Forestry education and training institutions in **Himachal Pradesh** are undergoing rapid change to reflect the focus on participatory forest management. A beginning was made when a new participatory forest management oriented training curriculum was developed in a two-week workshop in November 1995 at the Sundernagar Training Centre. However, different institutions are at different stages of curriculum change.

The university and colleges in **Jammu and Kashmir** have not incorporated any curricu-

lum on participatory forest management, nor have any of the training institutions run by the Forest Department. In **Uttarkhand**, the Forestry and Van Panchayat Training Institute at Haldwani has been training Range Officers and Van Panchayat *Sarpanchs*. The course content for both Range Officer and Forest Guard training in the Forest Guard schools in Almora and in Dehradun do not include participatory management of forest or participatory rural/rapid assessment techniques. However, the Uttar Pradesh Forestry Project envisages several job-specific and site-specific training programmes under its human resources' development component during the next four years.

In **Nepal**, appropriate changes have been made in the curriculum of the Institute of Forestry to train students in participatory forest management (PFM), although PFM topics still constitute only 13 per cent of the course. Similarly, the training section of the Ministry of Forest and Soil Conservation also imparts various types of training on PFM, as do various donor-funded community forestry projects. The Department of Forests has five Regional Training Centres. They carry out central level, regional level, and district level training. The Regional Training Centres have been supported by the Community Forestry Training Programme to address the overall needs of community forestry in the country. The Regional Training Centres carry out regular training needs' assessments to make the training more fruitful.

In **Pakistan**, the curricula in forestry courses traditionally included watershed management, range management, logging, engineering, social forestry, and a small course on wildlife, fisheries, countryside recreation, sociology, and public administration. With the shift away from traditional protection forestry to participatory forestry, during 1985-95, forest education at the Pakistan Forestry Institute (PFI) in Peshawar and forestry schools has undergone considerable change. The present syllabi of the B.Sc. Forestry and M.Sc. Forestry courses taught at the PFI reflect this change.

Comparative Overview of Status of Participatory Forest Management in the HKH

Issues	Bangladesh	Bhutan	China		India			Myanmar	Nepal	Pakistan
			Yunnan	Tibet	Himachal	J&K	Uttarakhand			
Forest Policy/ Legislation	National Forest Policy of 1994	1991, Revised Policy and Forest and Nature Conservation Act of 1995	Detailed Operational Regulations of the Forest Law of the People's Republic of China, 1986 the Major National Laws		The India National Forest Policy of 1988			Forest Law of 1992 and Forestry Policy of 1995	The Master Plan for the Forestry Sector 1988, and five year plans, Forest Act of 1993	Draft Forestry Sector Policy of 1998 and five year plans
Policy on Participatory Forest Management	Forest Policy of 1994	Draft Social Forestry Rules of 1996	Provisions for the Auction of the Tenure of Barren Mountain Areas in 1993	Forest Policies of 1994	The Government of India memorandum on 'Involvement of village communities and VAs in the regeneration of degraded forest lands, 1990 to the Forest Secretaries of all States and Union Territories			Forestry Policy of 1995 and Community Forestry Instructions' Notification in 1995	The Forest Act of 1993 and Forest Regulations of 1995.	Pakistan's national draft forestry sector policy 1998 is currently under discussion. NWFP's forest policy draft incorporating PFM, in 1997.
PFM Policy Highlight	Mentions the role of NGOs in promoting social forestry activities		Supports local population to utilise barren lands, particularly for income generation		Involvement of NGOs, communities paid by the Forest Department for raising nurseries, preparing land for planting and protecting the trees after planting.				FUG can be handed over any national forest (not just degraded forests). FUGs keep all income and products from the forest.	
					Focus on gender	Part of the income can be distributed directly to individual members/ households. Gender focus	Part of the income can be distributed directly to individual members/ households. Provision for range and divisional committees			
Policy Level Support	Policy	Policy	Policy		Government Orders			Policy	Policy	
Area under Community Management	Government owned degraded areas, unclassified state forests	Degraded areas	Four categories of degraded sites (<i>Sihuan</i>)	Degraded areas	Degraded areas : any protected forests, or lands vested with the Government under Himachal Pradesh Land Ceiling on Land Act of 1972 and village common lands (vesting and utilisation) under Act of 1974 can be managed under JFM Degraded forest areas in demarcated forests	JK degraded forest areas in demarcated forests Degraded forest areas Civil Forest or in Class-I and Class-II Reserve Forest lands can be managed as Panchayat (village) Forests.	on Civil Forest or in Class-I and Class-II Reserve Forest lands can be managed as Panchayat (village) Forests	Degraded reserved forests, mangrove	Any government owned forest lands	Degraded forests
Level of Institutionalisation	Projects	Pilot Sites	Institutionalised		Projects	Project	Project	In selected watersheds, the dry zone, and mangrove areas as projects	National programme supported by various donor projects.	Projects
Number of community Institutions		4			125 village committees	1240	5000 Van Panchayats 47 JFM		6020 Forest User Groups	
Forest Area under PFM		1152 ha			6005 ha	600 sq km	469362 ha under VP 16225 ha under JFM		403688 ha	
Land Tenure Status under PFM			State owned degraded forest land is leased for 30 to 50 years. Collectively owned <i>sihuan</i> land leased through auction for 50 to 100 years.		State Forest Policies are silent on the issue of granting tenurial rights to the communities	No provision for handing over any forest area to community or any other groups		Land allotted for 30 years	Normally, FUGs have five-year operational plans for forest management. Land ownership still with government	

Comparative Overview of Status of Participatory Forest Management in the HKH (cont'd)

Issues	Bangladesh	Bhutan	China		India			Myanmar	Nepal	Pakistan
			Yunnan	Tibet	Himachal	J&K	Uttarakhand			
Management Unit/ Institutional Arrangement		Five or more households	Individual households, communes or any other legal entity (organisation)		One Village Forest Development Committee in one <i>tikka</i> or a village, registered with the territorial Divisional Officer	Village (Rehabilitation of Degraded Forests) Committee in each forest range, comprised of people residing at the edge of degraded forests. Village Plantation (Protection and Management) Committee	Village Forest Committee	Village/ Cooperatives	All traditional users, irrespective of political boundaries form a Forest User Group	
Executive Committee					Out of 9-12 members, minimum 5 members are to be from the village/ <i>tikka</i> , half of which have to be women, 1 from <i>panchayat antodaya</i> family, 1 from women member. Forest Guard of FD as a rep.	11 (2 women/ 2 SC/ST). Block forester or forest guard as representative of Forest Department in Village (rehabilitation of degraded forests) committee but for the Village Plantation (protection and management) committee, only two represent the village of four member committee	Will be constituted as per sub-section of Section 29 of the United Provinces Panchayat Raj Act of 1947		Decided by the Users	
Tenure of Executive Committee						One year	Micro-plans are made for five years		Decided by FUG	
Gender Representation					At least 50% of committee members have to be women and a female and a male of each household enrolled as a member of the general house.	One adult male and one female of each household as members of village (rehabilitation of degraded forests) committee. Executive committee to have at least two women members				
Benefit Sharing	15- 40% of final yield to participants, rest to government and others				Forest products like grass, firewood, leaf litter free to users. 25% of net sale proceeds of the final harvest to be put in village development fund	Communities are entitled to collect grass, fodder, dry and fallen wood free of royalty with the permission of the Block Forester. The committee, under consultation with all the members can share a minimum of 25% of the proceeds from the first major harvest of the plantation in kind or the sale proceeds of the produce among members after deducting the costs incurred by the Forest department	50% of the proceeds of the sale of forest products to a maximum of Rs 50,000 per year (after deducting cost of investment). Of the remaining 50% produce, 50% is distributed to the village community and 50% to community work	Participants keep the products and can also market them.	No benefit sharing with the government, FUG entitled to keep all the products and income.	

NOTE: The information for this comparative overview has been derived from the national and sub national studies on participatory forest management from Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. Blank columns indicate that specific information was unavailable.