

Chapter 5

Forestry

5.1 Brief History

In order to understand Nepal's forestry policy and its impact on land management, a brief account of the historical context of forest policy and administration from the beginning of the twentieth century is necessary. Hobley (1996) categorises forestry in Nepal into three broad stages: Privatisation (1768-1951), nationalisation (1951-87), and populism (1987 onward).

In this section, it is possible to see a move from the age of privatisation (before 1951), to centralized control (1957-1987), to local control. A variety of national events, influence of the donors, various key field activities and local pressure have contributed to the development of forest policy and administration in Nepal (see Figure in Annex 5). In the figure, the fifty years are divided into three eras of privatisation, nationalisation, and populism. There are five aspects that attempt to capture the key factors contributing to policy change.

It was only in 1925 that 'formal' forestry policy and administration (then known as *Ban Jach*) started in Nepal. The establishment of the first Department of Forests took place in 1942. The forestry tradition in Nepal came to resemble that of India, since the structure and nature of the forest policy and administration were modelled directly on the Indian Forest Service which was established directly by British colonial regime. This model in turn stemmed from the training and ethos of the Imperial Forestry School at Dehradun and Oxford. The forestry policy and administration then were merely about how to export more timber from the *Terai* in British India and to supply wood and wealth to the Rana families. The Rana regime (1846-1951) had distributed almost one-third of the forest to various Rana families and others in the form of *birta* and *jagir* tenure⁶.

There was also the influence of the global post world war era of institutional

⁶ According to Regmi (1978) *birta* was a grant of land given to a noble as a reward for a service rendered to the state. This led to the emergence of *birta* land tenure. It was usually both tax free and heritable, and had no set time limit. It was valid until it was recalled or confiscated. *Jagir* was also a grant of land given to government employees (civil or military) in lieu of salary. This led to the emergence of *jagir* land tenure. The *jagir* land grant was also tax free but remained valid only as long as the person concerned served the government. *Rakam* is a compulsory labour obligation which a farmer rendered to government and later also to the *birta* owners on a regular and inheritable basis.

development of forest services, most of which were designed in a more centralized way and through which foresters were trained as single minded in their aim to protect and exploit forests for commercial purposes (Westoby 1989). Although Nepal had little experience of industrial use of forest, it was not out of touch regarding the whims of industrial forestry. The classic forestry education made the forest service highly technically oriented, and the autocratic political regime made the forest service a highly authoritative and centralized institution.

In the hills, however, during the Rana period there were no specific policies, although there was *de facto* recognition of the *kipat* system⁷, the *talukdari* system⁸ and the 'indigenous forest management system' (Fisher 1989) which were very common in the hills of Nepal.

In 1957 the Private Forest Nationalisation Act was introduced with the aim of ending *birta* and *jagir* tenure instituted by the Ranas. The 1957 act and the subsequent introduction of legal instruments meant that the forestry service began to function simply as a police force and continued to operate against the subsistence needs of the primary users and in favour of the interests of the feudal rulers (Soussan *et al.* 1995).

The Nationalisation Act has led to tremendous controversy amongst academics and practitioners alike on the causes of deforestation. Although one of the main intentions of nationalisation was to prevent the destruction of the forest and to ensure adequate protection, maintenance, and utilisation of privately owned forests (Regmi 1978), this act

merely placed all forest land under the control of the Forest Department turning foresters into policemen and licensing officers acting against the interests of the villagers. Although the state asserted its ownership of natural resources all over the country, there was little effect in many parts of the hills (Bajracharya 1986; Hobley 1990).

Whatever may be the intention of the 1957 Act, the nationalisation of forests that were managed by the local people under traditional systems was adversely effected. Nationalisation was seen then as the cause and not the solution of the forestry problem (Hobley 1985). In this sense, it is necessary to note that there were two fundamental flaws in this Act. First, it gave no recognition to traditional systems of forest management by local people for their own needs. This resulted not only in conflict between local communities and the Forest Department, but also in some places a decline in forest quality. This stemmed mainly from the fact that local people continued to exploit forest resources, but felt no obligation to protect or control their use of forests as they had done previously (Arnold and Campbell 1986; Messerschmidt 1995). Secondly, the Act contained the *a priori* assumption that the Forest Department could take effective control over the forests. Even today, Nepal's Forest Department does not have enough manpower to administer even a fraction of the lands nominally under its control effectively, and in the 1950s it had no more than a handful of trained foresters in the forest service.

In 1959, the first Ministry of Forests to serve the entire country was established. However, at this stage also, altogether there

⁷ An ancient type of communal land tenure, applied to both cultivated and forested land. Under this system a community was granted land by the king in recognition of the land's traditional communal tenure. On *kipat* land, the head men gave individuals the right to till certain areas and to collect forest products from other areas (Regmi 1978).

⁸ A local functionary (usually a hereditary position) of the state for collecting land tax. This position existed until the 1950s.

was an average of less than two dozen staff in each Division (2-3 districts) in the forest service. Out of which trained staff were negligible and thus management of each patch of forest was not possible. Most forests with the exception of a few in the *Terai* remained unmanaged and the forest service was still understaffed and underdeveloped. Despite this, the Forest Act of 1961 was enforced. The focus of this act was mainly administrative; providing for the categorisation, demarcation, and restriction of forests, defining the responsibilities of the Forest Department and laying down offence regulations and penalties.

The 1967 Forest Preservation (Special Arrangement) Act further defined forestry offences and penalties and reinforced the role of the Forest Department including the provision to 'empower District Forest Officers to shoot wrongdoers below the kneecap if they in any way imperilled the life or health of forest officials' (HMGN 1961; Talbott and Khadka 1994). This act together with several other land-related acts such as the *Birta* Abolition Act (1959), the Lands Act (1964), and the Pasture Land Nationalisation Act (1974) increased the power of the forest service. The Forest Department became a powerful institution with both a technical as well as a judicial role, an exclusive body for the control of forests. The focus of the provisions emphasised the traditional policing role of the Forest Department, in particular creating the power to establish Forest Preservation Special Courts to enforce regulations and exact penalties. These arrangements increased dramatically the disaffection of local people from the forest and led to even greater hostility towards the Forest Department.

Despite all these powerful Forest Acts, the forest service remained ineffective. It was neither able to protect the existing forests nor was it able to place the forest into active management.

The global wind of modernisation based on green revolution technology led to the conversion of forest land for agriculture (e. g., supported by government incentives to hill migrants to carry out this conversion). There was a massive policy in the 1950s to shift populations from the hills to the *Terai* (Bajracharya 1983). In the early 1970s the government established large- and medium-scale forest-based industries, such as the Timber Corporation, of Nepal (TCN) and Nepal Fuelwood Corporation were established with a grant from the FAO/UNDP. The major forestry activities of the forest service then became inventory control, the marking and licensing of forest products, all of which were concentrated in the *Terai*, while hill forests remained relatively neglected and unmanaged. Wherever the impact of the forest act and the forest service was less and the indigenous forest management system (Fisher 1989) was strongly established, the community continued to preserve their local forest through communal arrangements. While in other places, where local systems were not well established, people felt their forest was taken over by the Forest Department, and they converted local forest into open access regimes. Although the Forest Act of 1961 had a provision for handing over national forests for local control and some *Panchayat*(s) took advantage of this Act and took control over *Panchayat* forest (see for example, Hobley 1990), it was not until the early 1980s that provision of such local control was put into widespread practice.

It was becoming clear that the legislation and the expansion of the Forest Department were not achieving the intended goal of preserving forests. It was the concern of a group of community-oriented foresters within the forest service that something had to be done. The Ninth Forestry Conference of 1974 in Kathmandu reviewed the previous policies, structure,

and legislation and recognised that the Forest Department had been ignoring the forests in the hills, and this has led to the deterioration of the watersheds that were now in poor condition (HMGN 1976). This formed the basis of the 1976 National Forestry Plan. This was the first time in its history that the forest service had voiced its opinion in favour of people's rights.

The government also admitted in the National Forestry Plan 1976, for the first time, that protection, management, and development of forests scattered all over the kingdom were not possible through government efforts alone. Although the Forest Department was nominally responsible for the management of all forest resources, it did not have the capacity to undertake anything more than a token policing role in most areas.

In 1977, the First Amendment to the Forest Act of 1961 was passed. This act placed forests into six categories, namely: *Panchayat Forest (PF)*, *Panchayat Protected Forest (PPF)*, Religious Forest, Leased Forest, Private Forest, and Government Forest. The *Panchayat* and *Panchayat Protected Forest Regulations* were promulgated in 1978. A village *Panchayat* could have up to 125 ha of degraded forest designated as PF for plantation and protection. Similarly, up to 500 ha of existing forested area could be designated as a PPF (HMGN 1978). An arrangement had to be made between the DFO and the *panchayat* to plant and protect an area. The DFO had to supply seedlings for planting and fencing materials and the *panchayat* had to provide voluntary labour for the work. The benefits were to be shared between the *panchayat* and the DFO in a ratio of 1:3.

Despite clear recognition of the need to develop such a partnership between the Forest Department and the *panchayat*, there was little success. For example, until

1987, only 36,376 ha of forest land were transferred to the *panchayat(s)* of the target of 1.83 million hectares (Karmacharya 1987). Some of the causes of failure were the bureaucratic nature of the procedures for handing over forest; the provision of only severely degraded forest to be designated as PF; the wrong assumption that *Panchayat* was synonymous with community; control of forest being given to a committee constituted of powerful elites. The real users of the forest, such as the poor and women, were unaware of the whole process. Communication between the forest service and the *Panchayat* was only between local politicians and the officer in-charge of the DFO whose real interest was in the production and sale of commercially important timber rather than sustainable management to meet local needs. Such commercial interests could not be met by these forests, since all the forests designated as PF were much too degraded to be able to give any immediate benefit.

In the Sixth Five-Year Plan (1981-85), the Forest Sector Policy, which emphasised people's participation in the management, conservation, and utilisation of forest resources was introduced (NPC 1992). The Decentralization Act of 1987 introduced the concept of 'user groups' for local control and administration of policies. The preparation of the Master Plan for the Forestry Sector Nepal (MPFS), which started in 1986 and finished in 1988 and was later revised in 1990, provided the policy context for community forestry (see Box 1), declaring that all accessible forest in the hills should be handed over to community control (HMGN 1990). Unlike the past policies, which concentrated forestry activities in the Terai and urban areas, the new policy document puts the emphasis on the basic needs of forest users and production of forest products in the hills. In 1989 a proposal for forestry legislation reform in Nepal was prepared and enacted in 1993. The Forest Act 1993 superseded the existing Forest Act

Box 5.1

OBJECTIVES OF THE FOREST POLICY

Long-term Objectives

- To meet the basic needs of the people for fuelwood, fodder, timber, and other forest products, and to contribute to food production through effective interaction between forestry and farming practices
- To protect the land against degradation by soil erosion, floods, landslides, desertification, and other effects of ecological imbalance
- To conserve the ecosystems and genetic resources
- To contribute to the growth of local and national economies by developing forest management and forest-based industries and creating opportunities for income generation and employment

Medium-term Objectives

- To promote people's participation in forestry resource development, management, and conservation
- To develop the legal framework needed to enhance the contribution of individuals, communities, and institutions
- To strengthen the organizational framework and develop the institutions of the forestry sector to enable them to carry out their allocated tasks

Short-term Objectives

- To support decentralization and promote people's participation in forest resource development, management, and conservation
- To develop the legal framework needed to enhance the contribution of individuals, communities, and institutions to forest resource development, management, and conservation
- To strengthen the organizational framework and develop the institutions of the forestry sector to enable them to carry out their missions

Source: MPFSP (1988a, 4).

1961 and the Forest Protection (Special Arrangement) Act 1967 and attempts to bring conformity with the new Forestry Sector Policy of HMGN. The Forest Act 1993 recognises the Forest User Group as an independent, autonomous non-government institution and the Forest Regulations 1995 give clear guidelines about how to create and recognise user groups' rights and responsibilities to manage forests and use forest products (HMGN 1995).

The implications for the forest service of these changes in policy and administration in 70 years (i.e., 1925-1995) (see Table 5.1

and also the Figure in Annex 5) were staggering. Instead of a centralized cadre of foresters trained in classical forestry and charged with policing the forests, the forest service was to reinvent itself as a rural development agency capable of working with the poor villagers. The forestry institutions would have to drastically alter their courses and training styles; as students continued to be trained as Forest Officers who displayed little empathy towards villagers and their problems. The task of reversing this situation and creating a cadre of people with a new 'world view' is a generational change (King *et al.* 1990).

Table 5.1: A Brief History of Forest Policy and Administration in Nepal

1925	<i>Ban Jach</i>
1942	Establishment of the Dept. of Forests
1957	Private Forests' Nationalisation Act
1959	<i>Birta</i> Abolition Act
1961	The Forest Act
1964	Land Reform Act
1976	National Forestry Plan
1978	<i>Panchayat and Panchayat</i> Protected Forest Rules
1982	Decentralization Act
1988	Master Plan for the Forestry Sector
1993	The Forest Act
1995	Forest Rules

Source: Adapted from Pokharel (1998)

5.2 Current Policy

The Master Plan for the Forestry Sector 1988 (MPFS) is the only Forestry Sector Policy document approved by HMGN in 1989. In this document a strategic forestry plan for 25 years has been formulated. The Master Plan is further elaborated upon in the Eighth (1992-97) and Ninth Five Year Plan (1998-2003).

Some of the key policies on Forest and Rangelands' management, as described in the Nepal Environmental Policy and Action Plan are reproduced in Table 5.2. These policies and plans essentially reflect the objectives, components, and priorities spelled out in the MPFS.

As in other sectors, all projects to be implemented in the forestry sector are required to undergo an initial environmental examination/environmental impact assessment (IEE/EIA). These requirements are made mandatory by the Environmental Protection Act 1997 and EIA Guidelines for the Forestry Sector 1995. However, these requirements are fulfilled very cursorily in a routinised action, without much attention to the complex analysis usually expected in a standard EIA.

The MPFS spells out the short- and long-term objectives for 25 years (see Box 5.1).

5.3 Forest Resources and Forestry Institutions

5.3.1 Forest Resources

The forest area of Nepal is estimated to be 5.5 million ha which comes to about 37.4 per cent of the total area of the country. Out of this, conifer, hardwood, and mixed species constitute about 17, 59, and 24 per cent of the area, respectively. More than a quarter of the forests have less than 40 per cent crown cover. Shrublands, grasslands, and uncultivated land constitute about 15.7 per cent area which is a potential area for development into forest or pasture (FAO 1997). The distribution of natural forests generally follows altitudinal zones. Below 1,000 m there are tropical forest, predominantly of *Shorea robusta*. Sub-tropical forests occur between 1,000-2,000m which include *Pinus roxburghii*, *Alnus nepalensis*, *Schima wallichii*, and *Castanopsis spp.* Lower temperate forests are distributed between 2,000-2,700 m. The major species in this zone are *Pinus wallichina* and *Quercus spp.* Upper temperate forests occur between 2,700-3,000 m and the major species found in

Table 5.2: Policies and Action Plans Related to Forest and Rangeland Management

Policies	Action plan	Responsible Agencies*
Improve forest management by implementing the findings of the Master Plan for the Forestry Sector (MPFS)	Finalise the bye-laws for the implementation of the Forest Act 1993, ensuring they are consistent with HMGN forest policies stated in the MPFS and Eighth Five Year Plan (1992-97)	MFSC
Encourage community participation in forest management	Continue to promote community forestry schemes in the hills	MFSC
Improve rangeland management	Undertake strategic assessments of Nepal's rangelands to improve the knowledge base	MFSC, MOA
Encourage greater private sector involvement in managing national forests	Clarify institutional responsibilities for rangeland management	MFSC, MOA
	Develop an appropriate system of incentives and regulations governing private sector management of forests	MFSC
Reorient forestry research	Review the present system of open-ended subsidies (provided for the purchase of wood by the District Forest Products' Supply Boards) which prevents the proper valuation of forests and undermines private sector involvement	MFSC
Raise awareness of the importance of forest conservation	Develop programmes to provide information (including utilisation of so far lesser known forest species) for users' groups, forest industries, and private individuals	MFSC
Improve the basis on which land use is decided	Develop the forest extension agents' role based on promotion and persuasion rather than enforcement and coercion	MFSC
Minimise adverse environmental impacts of forest-related projects	Adopt a national land-use policy classifying areas by their suitability for alternative uses	NPC, MFSC, MOA
Promote research and development of alternative energy sources to reduce dependence on biomass sources	Finalise EIA guidelines for the forestry sector	NPC, MFSC
	Finalise the energy sector strategy study and incorporate alternative energy development and promotion as an integral part of this strategy	NPC, WECS

* See the inventory of various donor-assisted projects in Annex 4.

Source: EPC (1993,18)

this zone are *Quercus semecarpifolia*, *Rhododendron arboreum* and *Acer spp.* Sub-alpine forests are found at around 3,000 up to 4,200 m. *Abies spectabilis*, *Betula utilis*, *Rhododendron*, and *Juniperus indica* are the major species in this zone.

A total of 103,968 ha of forests in the Siwaliks and *Terai* were cleared under the government's settlement programme from the mid 1980s (MPFS 1988). A more recent study conducted by FORESC, which compares the 1978/79 maps with the Landsat data of 1990/91, shows that the annual deforestation rate is 1.3 per cent for the *Terai* (FORESC 1994). This is a less pessimistic figure than the figure of 3.9 per cent given in MPFS (1988). It is, however, interesting to note that the current annual rate of afforestation is 5,260 ha which is far less than the annual deforestation rate which comes to about 71,500 ha. Villagers have been steadily increasing the tree cover on their farm land during at least the last 20 years, although there is a lack of reliable figures for private planting. *Dalbergia sissoo* is the most common plantation species on both private and government lands in the *Terai*. On government land the commonly planted species in the mountain region are *Pinus roxburghii*. It is important to note that, although the government afforestation

rate is far less than the rate of deforestation, the crisis dimensions⁸, are undoubtedly much less than are often portrayed in a frequently quoted 1980 World Bank document. Nepal's forests can be managed under various management regimes. Table 5.3 shows the potential forest area under community forest, protected areas, state-managed forests, leasehold forests, religious forests, private forests, and forestry on riverine land.

5.3.2 Forestry Institutions

The Ministry of Forest and Soil Conservation (MFSC) and the four departments and four parastatals (see Box 5.2) under it are the major government forestry institutions. The MFSC in close collaboration with National Planning Commission is responsible for policy formulation, and for preparing plans and programmes, and the Ministry of Finance is responsible for budget.

The Timber Corporation of Nepal (TCN) under the Ministry of Supplies is involved in the marketing of logs collected from the government forests.

The Forest User Groups (FUGs), 6,730 in total, also comprise a prominent institution

Table 5.3: Potential Forest Area Available for Various Forestry Management Regimes

Forest Categories ('000 ha)	Hills	<i>Terai</i>	Total
Potential community forests	3,344	217	3,561
National parks and conservation area	347	238	585
Potential state-managed forest	309	271	580
Potential leasehold forest	NA	1,042	1,042
Potential religious forest	NA	NA	NA
Private forestry on farm	NA	140	140
Private forestry on riverine land	NA	150	150

Source: LRMP (1986); CFPD (1991); Sowerwine (1994); DOF (1995)

⁸ The World Bank (1980) document calculated that, if the present rate of deforestation continues, all accessible forests in the hills of Nepal would disappear in 15 years (i.e., by 1995) and in the *Terai* within 15 years (i.e., by 2005). We are already in 1998 and quite close to 2005, but the projected vision of no forests in the hills has been proven to be false. In the *Terai* region also, it is less likely that in another 7 years there will be no forests.

Box 5.2

VARIOUS DEPARTMENTS UNDER THE MINISTRY OF FORESTS AND SOIL CONSERVATION

Departments

- Department of Forests
- Department of Soil Conservation
- Department of National Parks and Wildlife Conservation
- Department of Plant Resources

Parastatals and Development Boards

- Nepal Rosin and Turpentine Industry
- Herb Production and Processing Company
- Forest Products Development Board
- Forest Research and Survey Centre

Source: MFSC

in the use and management of the forest resource.

A large number of bilateral and multi-lateral donors, national and international NGOs, about 68 in total, is also involved in many forestry activities and provide technical and financial support to Nepal. The major bilateral donors are: DFID, USAID, Australia, DANIDA, FINNIDA, GTZ, SDC, JICA, and SNV. Similarly, the major multi-lateral donor agencies are - World Bank, FAO, EU, IFAD, ADB, and UNDP. International NGOs, such as CARE/Nepal, ActionAid Nepal and UMN, are also actively involved in Nepal's forestry sector.

Many other institutions, such as the Institute of Forestry (IOF), professional societies like Nepal Foresters' Association, Nepal Rangers' Association, Association of Forest-based Industrialists, Ministry of Population and Environment and many environmental forums are also closely associated with the forestry sector in Nepal.

5.4 Policy Implementation

As described earlier contemporary forest policy in Nepal combines an environmental objective to protect against land degradation and deforestation with social and economic objectives. The social and economic objectives are to meet the people's basic needs for firewood, timber, fodder, and other forest products on a

sustainable basis; and to contribute to food production through an effective interaction between forestry and farming practices (HMGN 1988). To this end, all accessible forest areas in the middle hills of Nepal are to be handed over by the DOF to the local people under the objective of development, management, and conservation by people themselves.

Forests near villages will be managed with the people's participation. The primary task of the government field staff will be to assist and advise people in their efforts to manage and utilise the forests on a sustained yield basis (MPFSP 1988a, 5).

While contemporary policy is lauded as timely, progressive, deemed to be well intentioned, desirable, and appropriate (CPFD 1991; DOF 1995), there remains a lack of appropriate institutions and mechanisms for their implementation (Fisher 1990a; Gilmour and Fisher 1991).

Many forest and conservation policies in developing countries are initiated, financed and staffed by foreign aid donors (Blaikie 1985) and contemporary forest policy is no exception. The current forest policy document is financed and prepared by foreign donors (in this case FINNIDA and ADB). In the plan, a huge plan of 1.74 billion US dollars for the 21-year period

from the year 1987 is proposed. From the very beginning there has been heavy involvement by foreign aid agencies in plan formulation ensuring their further involvement and 'need' for external resources for years to come. It is shown that at least 30.2 per cent of the total cost is necessary from the 'external assistance to finance the proposed programmes' (MPFSP 1988b, 32).

In MPFS there are altogether 12 programmes. Out of which the Community and Private Forestry Programme is the priority programme which focusses on shifting the management responsibility of any part of accessible national forest from the government to the local communities. This programme is designed to put the policy objectives into practice under the principle of decentralization. The plan aims to invest about 46.6 per cent of the total forestry sector budget in the implementation of the Community and Private Forestry Programme (see Table 5.4).

Tamrakar and Nelson (1991) estimate that about 3.56 million ha (i.e., about 61 per cent of the total national forest) of national

forest land is a potential area for community forest that can be handed over to the community.

Although policy has been made more attractive through the use of words such as 'equity' and the highlighting of the benefits for the weakest, the more vulnerable, least resourceful and rural people. However, policy was formulated in the *Panchayat* period according to the interests, balance of power, and tactics of competing classes and groups within and outside the institutions of state.

Following the enactment of the Master Plan for the Forestry Sector 1988, the international donor community, including the main bi-lateral and multi-lateral agencies (see Table 5.5) invested millions of dollars in supporting the government in implementing the forest policy. Apart from the main funding agencies mentioned in the Table 5.5, there are many other donor countries, international agencies, religious missions, and voluntary organizations which assist community forestry programmes. They are: UNDP; FAO; Netherlands Government; International Development Research Centre, Canada;

Table 5.4: Forestry Programmes and Cost Allocations

Forestry programmes	Per Cent of the Cost
Primary Programmes	
(i) Community and Private forestry	46.6
(ii) National and Leasehold forestry	20.2
(iii) Wood-based Industries' Development	4.7
(iv) Medicinal Plants and Minor Forest Products' Development	4.6
(v) Conservation of Ecosystems and Genetic Resources	6.7
(vi) Soil Conservation and Watershed Management	9.0
Supportive Programmes	
(vii) Policy and Legal Reform	0.2
(viii) Institutional Reform	-
(ix) Human Resources' Development	4.7
(x) Forestry Research and Extension	2.1
(xi) Resources' Information and Planning	0.9
(xii) Monitoring and Evaluation	0.3

Source: MPFSP (1988b, 32)

Table 5.5: Various Forestry Projects and Current Progress

Donor Agencies	Name of the project	Districts	FUGs	Number of Users	Area (ha)
World Bank (IDA)	Hill Community Forestry Development Project	38	4,031	424,826	281,620
UK (ODA)	Nepal-UK Community Forestry Project	7	1,191	110,561	72,351
USA (USAID)	Rapti Integrated Rural Development Project	5	433	53,950	35,768
Australia (AIDAB)	Nepal Australia Community Forestry Project	2	463	51,534	21,552
Switzerland (SDC)	Dolahka Ramechhap Community Forestry Project	2	147	13,430	17,571
Germany (GTZ)	Churia Forestry Project	3	125	10,486	4,044
Canada (CIDA)	Palpa Development Project	1			
Asian Dev. Bank (ADB)	Kamali-Bheri Rural Development Project	1	NA	NA	NA
Finland (FINNIDA)	National and Leasehold Forestry Development Project	NA	NA	NA	NA
Denmark (DANIDA)	Forest Management and Utilisation Project	5	NA	NA	NA
HMGN	Community Forestry Training Project Tree Improvement Programme	NA	NA	NA	NA
	10 Terai districts and Palpa	11	340	45,505	17,617
Total			6,730	710,292	450,523

Source: DOF (1994); CPFD (1996); CPFD FUG Database (1998)

United Mission to Nepal (funded by SIDA, Sweden); Action Aid-Nepal (UK and Spain); Ford Foundation; World Neighbours; CARE Nepal; OXFAM; Plan International and so on. Of the 68 different international agencies supporting the forestry programme, over half have a community forestry component (Tinker 1994). HMGN's commitment towards 'decentralization' and 'participation' have become the key preconditions for donor support.

However, despite the heavy assistance of donor organizations over a 10-year period, only 450,523 ha of national forest, which come to only 8.1 per cent of the total forest area, has been handed over to 6,730 Forest User Groups (see Table 5.5). Similarly, only 1,936 ha of national forest are placed under

active management, only 0.3 per cent of the potential state-managed forest and only negligible area (299 ha) is handed over as a leasehold forest (CPFD 1996).

This figure clearly shows that the real implementation of community forestry policies is restricted to relatively small areas in which large investments of donor funds have been made.

Donors do not operate in vacuum. They are influenced by development approaches, these have already been discussed in section 2.2 (also see Table 2.1) and carry out their mission according to the policy of their respective home office. These donor agencies are certainly aware of the very real problems facing the poorer segments of society in developing

countries, and some of them are genuinely trying to solve them. But the style or approach of development, the rhetoric, and the fads all bear the cultural imprint of the West (Stone 1989).

It is evident that community forestry policy is a donor-driven policy. Donor agencies have pursued the government to institute changes that go far beyond the capacity of national government using internally generated resources for programme implementation, and that exceed the ability and will of individuals within the organization to change. In other words, the initiative for community forestry policy has not come from the government itself. It is therefore doubtful that this will continue once donors withdraw their financial and technical support. One of the reasons why community forestry in the *Terai* is not a priority for a DFO is because of the fact that there is no donor funding.

It appears that policy is formulated in such a way that there will always be a need for donors to implement it. Changes at the government organization and the local level are being attempted without realising that change is first needed in the wider context within which social organizations, such as government and community organizations, operate.

Rural Nepalese society operates through principles of hierarchy, action through personal relationships, and social networks. It is through personal, hierarchical, interdependent linkages that goods and services are negotiated and exchanged. The problem is that 'development' is perceived to stem from 'outside', from an external world of power and resources within which disadvantaged groups of people have no meaningful personal connections. The vast majority of villagers, and particularly those lower in caste, wealth, and education, perceive that they lack the ability to establish meaningful connections with this external world. In contrast, some powerful groups

of people and individuals see the opportunity in community forestry and other donor funded projects to forge new connections with the outside world for their personal benefit.

5.5. Policy Impact

The official claim is that the forestry policy in Nepal is timely, self-initiated, and that the current donor-sponsored programme is a success (CPFD 1991; DOF officials, personal communication). This is borne out by improvements in the quality of community forests following their hand over to the users' groups. The following brief review of evaluation reports of some of Nepal's forestry sector projects implemented thus far provides some insights into the socio-environmental impact of HMGN's forest related policies.

5.5.1 Nepal-Australia Community Forestry Project (NACFP)

The NACFP, started in 1978, covers the two districts of Sindhupalchok and Kabhre Palanchok in central Nepal, immediately to the east and north-east of the Kathmandu Valley. The primary objective of the project has been to provide assistance to the Nepalese Government in the Forestry Sector in order to promote physical development, including plantation and nursery establishment, erosion control works, and management of natural forest resources and to provide significant social and economic benefits through employment and institutional strengthening in the Forestry Sector.

The overall conclusion of the review of environmental issues associated with the activities of the NACFP carried out by a consultancy, EDAAW (Aust) Pty Ltd, in 1994 was that the NACFP has resulted in substantial environmental benefits by playing a major role in reversing the process of forest degradation over a substantial

proportion of the Central Region of Nepal (EDAW 1994).

EDAW report states that “in addition to establishing 17,600 ha of plantations (mainly indigenous pine species) since 1978 and 1,200 ha before 1978, the Project has also facilitated the introduction of sustainable forest management over an additional 13,000 ha of native forest and shrubland. Equally important has been the Project’s principal role in the development and implementation of user-based community forestry through technical and institutional development assistance as well as training DOF staff and advising User Groups” (*ibid*, 3).

In the project area, many significant changes in land use pattern, soil resources, water resources, vegetable resources, wildlife resources, and scenic resources have occurred between 1978 and 1992, most of the changes have resulted directly from the NACFP activities (*ibid*, 8).

The report gives a comparison of land-use patterns in eight sample areas using aerial photo interpretation and ground checking. This revealed that there are significant changes in land uses between 1978 and 1992. For example, there was a large reduction in the area of grassland and degraded shrubland, which has been converted to plantation, native forest or dense shrubland. In most situations pine plantations act as a nurse crop that allows native broadleaved species to regenerate on highly degraded sites. The diversity of plant species has increased after the establishment of protection and regeneration of native forests. Wildlife habitat resources have been substantially increased in more than 13,000 ha of native forest and shrubland managed under User-based Community Management Systems, and have improved scenic resources particularly significant in those areas visible from the main trekking route into Langtang National Park and from the Arniko

Highway running from Kathmandu to the border with Tibet. Effective management of areas of shrublands, implemented through the NACFP, has greatly increased the productivity of fodder and firewood species. In addition, there is extensive planting and natural regeneration of trees (particularly fodder trees) on private land.

In Nepal, surface erosion and localised land slips are strongly dependent on land use and vegetation cover. The report claims that the establishment of 17,600 ha of plantation since 1978 on previously degraded and generally eroding areas, combined with erosion control works and improved management of 13,000 ha of forest and shrubland, have been estimated to have reduced the annual volume of top-soil lost due to surface erosion by an amount which is equivalent to the topsoil resources of about 2,000 ha of agricultural land in central Nepal (*ibid*, 5). Similarly, harvesting of green leaves (fodder) and ground litter from forests is transferring a large proportion of the nutrient and organic resources from forests to cultivated agricultural land. The long-term impact on forest soil nutrient levels and associated productivity is unknown, therefore needs a field-based empirical research.

Establishment of plantations on degraded land and regeneration of native forests shrublands generally reduces the volume of surface runoff (Carson 1985). It is reported that, in NACFP area, erosion and local flooding in plantation area have been reduced while at the same time increasing groundwater resources and dry weather flows in adjoining streams. Similarly, establishment of water supply network to plant nurseries has provided drinking water supplies to more than 100 villages throughout the project area.

5.5.2 Community Forestry Development Project (CFDP)

The World Bank/FAO/UNDP-funded Community Forestry Development Project

(CFDP) was started in 1980 with the main purpose to provide technical assistance to HMG. The project was implemented during a five-year period in 29 hill districts with the establishment of 12,000 ha PF, the management of 40,000 ha PPF and the distribution of 900,000 seedlings for private planting. In addition, research and development of more efficient wood-fuel using stoves was expected to lead to the introduction of 15,000 improved stoves (CFDP 1983). The project envisaged spending US\$ 17 million over the five years (1980-85). Since then, the project has continued over the remaining years till now in three phases. In the beginning the project focussed on establishing nurseries in the hills and later to the maximisation of biomass output from plantations. In the first phase, for example, the project focussed on rapid reforestation of the denuded hills, with priority given to close collaboration between the forest service and the local population. The focus of phase III, however, was to mobilise people and resources in the hill districts to establish a forest management system that would conserve and expand the forest resources needed to sustain traditional farming systems and livelihoods in the hills (CFDP 1995, 20).

Officially, it was claimed that the project's progress at the end of the first two years and in the following year throughout was very successful. A rosy picture presented in mid-term Project Evaluation Report, for example, stated that:

“overall progress of the project towards meeting its objectives has been highly satisfactory. The principal field activities of establishing community plantations and distributing free tree seedlings has gone extremely well. Targets for the number of nurseries constructed and numbers of Panchayats involved have met. Survival counts of previous year's plantations show

a reasonable 70 per cent rate of survival. People are interested in the programme throughout the country and their knowledge of its components has considerably increased in project Panchayats. ... low-cost stoves, saving one-third of the wood fuel used have been developed and successfully introduced ...” (CFDP 1983, 20).

In addition, the accomplishment of the project was measured in terms of money spent and physical target achieved, and it was said that the project was a real success. For example, the Project Annual Report stated that *“almost all of the money allotted for field activities was spent and most of the percentage rates of target achievement were satisfactory”* (CFDP 1984, 42). *“In sum, the progress achieved during 1983-84 demonstrates that the project is able to successfully expand its activities with improved achievement rates”* (CPFD 1985, 39).

Another rosy picture of the overall performance of the project was shown in the Annual Report of the fiscal year 1984/85, the last year of phase I, in this way: *“Community forestry is now being carried out in 494 Panchayats in 29 districts in the hills of Nepal. This represents 145 per cent of the originally set target. Over 12,000 ha have been planted during these five years which is 77 per cent of the original target. In total 2,447,465 seedlings have been distributed for private plantings: 271 per cent of the original target for five years of operation”* (CPFD 1986, 42).

In contrary to this success story, Karmacharya (1987), however, found that, until 1987, only 36,376 ha of forest land was transferred to the Panchayat of the target of 1.83 million ha. It was shown that although more people were taking more seedlings, they were not getting better at looking after them. More PF and PPF

planting took place each year but plantation surveys show that many improvements were still needed. Stove surveys show that the rate of use after one year was not improving as the programme expanded. The factors, mostly the same 'escape routes', such as old stories of administrative incapability: late budget release, untimely transfers and late replacements, manpower shortage, insufficient planning and supervision, and difficult transport and communication, were shown as the project's bottlenecks.

Eventually, the project had to shift its attention from a purely technical towards a more social one. In theory, Rangers were supposed to be reoriented towards their social role and to *advise* (not to control or dictate) forest users in the preparation of groups' forest management plan commonly known as the Operational Plan (OP). However, in practice, the OP were often written by forest rangers to reflect their own perceptions of local needs and then merely presented for endorsement to the committees – which are often dominated by local political leaders. In public meetings the actual forest users, the majority of them women, did not voice their needs. The tree selected for reforestation was often pine, which is hardly and useful for timber but does not meet local fodder needs (Hausler 1993). Many forest committees which had been formed by the CFDP in top down fashion were inactive because they were dominated by local political leaders, not actual forest users. In some cases alliances between forest rangers and local leaders hampered the flow of information and funds to the forest users (*ibid*, 89).

5.5.3 Dolakha Ramechhap Community Forestry Development Project (DRCFDP)

The DRCFDP was an extension of a 15-year Integrated Hill Development Project

(IHDP) and was operating during the period of 1991-96. Its aim was "to improve the access to and availability of forest products for local people on a sustainable basis."

The project had expected that the trend of decreasing forest productivity would be reversed as a result of the process of community forestry. In terms of positive externalities the project document mentions improved watershed conditions, improved farm productivity, reduced rate of decrease in soil productivity, more income generation from harvesting and sale of forest products, reduced timber imports, and perhaps even export of timber products from the district. It was also expected that project activities would make more disposable time available to the local population for other activities. These developments would contribute to a reduced financial and material dependency of the local population to remittances and support from outside the project districts.

Biological and social sustainability are seen as essential for improved access to and availability of forest products which the local population could market regionally or nationally. Such sustainability was to be promoted through the improvement of the institutional capability of the local population and by developing the capacity of the District Forest Offices (SDC 1996, 5).

The project aims at the development of forest resources through plantations, natural regeneration, and shrubland management.

The project claims that it has made considerable efforts and some progress in the direction of biological and social sustainability. For example, the activities of the project have led to the protection of natural forests under FUGs leading to improved natural regeneration of tree species, and there is a trend of increasing

interest of FUGs in diversifying the species' composition of their forests. This has contributed to an improvement in the biodiversity of the area (SDC 1996, 11). However, there is very little information on the degree of change in soil productivity or on the commercial utilisation of forest products. In addition, the Project Evaluation Report states that there are not enough CFUGs that are presently being reached to harvest forest products for commercial purposes and that the group formation, group strengthening, and forest development activities at the community level are not being promoted sufficiently intensively nor with sufficient commitment to make the average CFUG sustainable without project support - in the long run.

The project, however, has been able to make satisfactory progress in relation to some of the quantitative targets set out in the project document in terms of the number of user groups formed, area of forest handed over, and the number of households covered. However there are questions about quality of the user groups because of numerous shortcomings such as in empowering women and the poor to build and sustain their confidence, so that they can participate effectively in decision-making and raising awareness of people to assert their legal rights (SDC 1996, 6).

The impact of the project on socioeconomic disparities appears to be ambiguous. Most CFUGs are controlled by elite groups that do not give adequate consideration to the needs of members of the socioeconomically deprived sections of the community (SDC 1996, 36).

The project, however, has made a good start in rectifying the situation of gender inequality by immediately starting the implementation of some of the recommendations of the Gender Analysis (see SDC 1995).

The Project Document envisages support for biological stabilisation of unstable slopes where the local population voices a need for it and where the population agrees through an improved management plan to restrict use of the affected areas as far as possible. However, the project has not initiated any practical action at the field level in this component (SDC 1996, 10).

The project aims at the development of forest resources through plantations, natural regeneration, and shrubland management. Most of the forest development activities are supposed to be undertaken by the users themselves. This should be undertaken with full participation of the community under the technical guidance and facilitation of a member of the District Forest Office, mostly the Ranger. The project had set plantation and enrichment plantation targets of 2,000 and 2,700 ha respectively. A total of 1,128 ha has been planted, and about 133 FUGs were formed, 12,500 ha of forest land were handed over to 15,700 households (CPFD 1996; SDC 1996, 8), which comes about 10 per cent of the total forest area in two districts. The average forest holding per household is only 0.8 ha which may not be enough to make the group self-sufficient in forest products unless the forest is actively managed and the productivity can be optimised. However no such forest management activities in natural forests were applied, and productive potential of the forest is not utilised. This will have a direct adverse effect on the condition of forest and on the fulfillment of users' basic needs for forest products in a sustainable way.

5.5.4 Nepal-UK Community Forestry Project

In 1977, an integrated rural development project of thirteen sectoral programmes was started which was supported by the ODA in Koshi Hills area in the Eastern Region (four districts - Dhankuta, Bhojpur, Sankhuwasabha and Terhathum) under the

umbrella of the Koshi Hill Area Rural Development Project (KHARDEP). Under different names and phases, community forestry projects in the Koshi Hills ran until July 1993. The project concentrated on the establishment of village nurseries for plantations on common land and some private tree planting and in later years in the establishment of Forest User Groups. In 1993, a new 10 million \$ project began called the Nepal-UK Community Forestry Project (NUKCFP) which embraced both the existing Koshi Hills' Community Forestry Programmes in four districts of Koshi Zone and three districts in the Dhaulagiri Zone. The project supports the government of Nepal's sectoral policy of transferring targeted forest from state to community management and utilisation. This is done through the development of the community forestry capability within the DOF and through reorienting forest staff towards a service role to communities. The main objectives of the project are: (i) to meet the needs of hill communities for tree products on a sustained yield basis (ii) to promote popular participation of women and poor in decision-making. Both of these objectives are to be achieved through transfer of forest usufruct rights from the state to Community User Groups (FDP 1995).

Study on socioenvironmental impact of the NUKCFP shows that "there is a documentable improvement in forest quality within NUKCFP area. It confirms a widely held conviction that such a trend is occurring throughout Nepal (Wysocki 1998, 1). The comparison between the Baseline Forest Resource Assessment data in 1994 and forest inventory in 1997 revealed that there is an improvement in the physical condition of the forests, User Groups have been active in forest management, and the flow of forest products to users has been high. For example, in 1994, only 33 per cent FUGs were involved in active forest management, whereas, in 1997, this has increased to 57 per cent, the community forests are put

under active management. It is also found that no FUGs are actually harvesting any forest product at excessive levels. Instead, FUGs are harvesting conservatively. For example, in NUKCFP area 87 per cent of FUGs harvesting fuelwood, and 43 per cent of FUGs harvesting timber, at a lower level than the productive capacity of the forest (Branney and Yadav 1987).

Although the environmental impact of the NUKCFP project seems positive, there is little data on distribution pattern of forest products. It is a common practice that the distribution of forest products is done on a basis of equality, not on the basis of equity.

5.5.6 Begnas Tal, Rupa Tal (BTRT) Watershed Management Project

The BTRT Project is a CARE/N-funded watershed management project which aims to stabilise the physical environment and increase the productivity of the project area in Kaski district through sustainable community management of its human and natural resources.

It is reported that the project has been successful in meeting its objectives. The project has provided many lasting benefits to communities of project area, and it has been innovative in integrating community forestry, conservation, bio-engineering, community organization, and extension. In an evaluation, it is stated that the project has become a prototype for community-based watershed management, and many aspects of its strategy can be replicated in other watershed management projects (Kayastha *et al.* 1997, i).

5.5.7 The Upper Adhikhola Watershed Management Project

This is the project jointly managed by the Department of Soil Conservation and

CARE/N. The aim of the project is to improve the agricultural productivity and the socioeconomic condition of the inhabitants of the project area through the promotion of sustainable watershed management measures.

The final evaluation report states that the overall performance of the project is satisfactory. A wide array of activities within the natural resource sector are undertaken encompassing production of seedlings, afforestation schemes, private and community plantation, pasture land improvement, natural forest management, planning and implementation, agro-forestry activities, kitchen gardening, and the introduction of improved agricultural varieties. In the project area, active participation of women in user groups and mandatory inclusion of women on the executive committee is found to be effective (Shrestha and Jacobsen 1997).

5.6 Gender Issues

Since the mid-1980s, it has been increasingly recognised at the international and national levels that gender relations internal to development agencies have important impacts on the outcome and achievements of gender development policies and projects (Goetz 1995; Dankleman 1993). Parallel shifts have taken place in the forestry sector, and it has been realised that rural women are the main users of forest products and are usually responsible for collecting fuel, fodder, and water for family survival. Therefore, the gender issue in forestry is high on the agenda and has to be looked at at both community and government organizational level.

Studies on gender issues in community forestry programmes in Nepal have provided some insight into the gender inequality and the exclusion of women in

the decision-making process at the community level (see for example, Hobley 1991; Kharel 1993; Tinker 1994; Bhatia *et al.* 1995; Chhetri and Rana 1995). At government organizational level, however, there are very few studies on the absence of women from public services, particularly in the forestry service. It was a completely 'unaddressed' issue until a few years ago. The Nepal forest service, for example, did not start to employ female foresters until 1985, in 1995, on average, only 1.5 per cent of the forest service employees were women and none came from the 'untouchable' caste. The exclusion of women in public service reflects the reality of gender discrimination and social inequality in Nepali society.

It is reported that one of the reasons of poor participation by women in community forestry is due to the lack of female extension workers in the DOF (Bhatia *et al.* 1995). To address this issue, HMGN has made a provision of a 10 per cent quota for women candidates in the Institute of Forestry for ISc. and BSc. courses. Beyond that government has not been able to develop any practical mechanism to operationalise the commitment made in involving women in forestry at government organizational level.

At the community level, HMGN's forest policy, at least in theory, has made a provision of at least 30 per cent of women members on Forest User Committees. However, the agenda of 'participation' is inadequate to address the gender issue. Instead it has served powerfully to camouflage or suppress women's strategic gender interests and other interrelated wider issues of social inequalities.

Gender inequality cannot be seen independently of persistent inequality in society and should be understood in terms of women's lack of independent economic

entitlement and control over all types of resources which are “associated with a new articulation of production and reproduction” (Elson 1995, 1852).