1. Introduction

Research studies on forest resources and their protection and management have made it clear that indigenous systems of forest management are widely distributed throughout Nepal (Budhathoki 1987; Campbell et al. 1987; Chand and Wilson 1987; Fisher 1989, 1990, 1991; Furer-Haimendorf 1964, 1984; Gautam and Roche 1987; Molnar 1981; Messerschmidt 1984, 1990; and Tamang 1990). It is commonly recognised today that the indigenous systems¹ of forest protection and management have:

- · effectively arrested the process of deforestation in many areas;
- been existing as sustainable institutions;
- been successful in their efforts towards ensuring a sustainable supply of forest resources; and
- operated within the local environmental context and have been better than the scientific community has heretofore known or recognised (Gilmour and Fisher 1991).

Hence, it is essential that we acquire a more systematic understanding of the indigenous systems of forest protection and management in different parts of Nepal.

Most of the studies on indigenous systems of forest resource management provide information on Central and Western Nepal, thereby leaving a knowledge gap in the context of the rest of the country (however, compare Baral 1991; Budhathoki 1987; and Chand and Wilson 1987). The Mid-western, the Far-western, and the Eastern regions of Nepal are

As Fisher argues, the concept of indigenous management systems is a heuristic device and does not mean a "local community living in a vacuum" but rather "...something which is largely community based to be distinguished from something which is deliberately established by a government or other agency beyond the community" (1991:7).

under-represented in forestry research to date (Fisher 1991). Besides, little attempt has been made to develop a common frame of reference (i.e., a model) for such studies which could facilitate comparative analyses of forest protection and management practices in different parts of the country (Arnold and Campbell 1986; Fisher 1991; Gilmour 1990; Gilmour and Fisher 1991; and Messerschmidt 1990). Studies from various regions of Nepal are, therefore, needed to identify the commonalities and variations among user groups and their forests which can further the development of a typology, a model, or a theoretical framework.

Some important features of the present study are: first, this is a study of user group forestry in the Far-western Development Region (FWDR) of Nepal. It presents case studies of indigenous protection and management systems for forests from Baitadi and Achham districts. The Community Forestry Development Programme (CFDP) of the Government of Nepal has been launched in both these districts. The selection of the FWDR was made with the intention of filling the knowledge gap in the area of forestry research for this particular region.

Second, this study focusses on case studies concerning the indigenous protection and management of forests and includes, for comparison, a case of an open access system (defined as a forest wherein there are no effective protection and management regulations). Such a strategy is crucial for a better understanding of the success or failure of local level attempts at protecting and managing forest resources.

Indigenous protection and management systems of common property resources, such as forests, have existed in Nepal for a long time (Baral 1991; Fisher 1989, 1991; Furer-Haimendorf 1964; Molnar 1981; and Messerschmidt 1984, 1986, 1987). Groups using such resources, of course, are diverse in their organisation, structure, and function. This diversity reflects a general pattern found among all cultures and human populations. This paper presents case studies to bolster these points.

Third, it looks at the cases as they exist today along with their historical development. Such a strategy is useful for identifying the strengths and weaknesses of protection and management practices of local societies and external agencies, over the years, in relation to forests. A historical approach also makes it possible to identify actions and interactions-good and bad-so that an appropriate course for the present and future can be ascertained.

Fourth, it argues that peoples' participation is a solution to effective protection and management of common property resources such as forests. However, the rhetoric of

peoples' participation should incorporate a cultural and contextual perspective. That is, peoples' participation needs to be understood within the context of local cultural norms and values as well as local peoples' knowledge and perceptions about their environment.

Finally, the study aims to contribute to the development of a typology or a model for forest resource user groups. There have been attempts in recent years to classify types of forest resource protection and management systems (Gilmour 1987, 1990; Fisher 1991; and Campbell et al. 1987). However, "there has been no attempt to provide a detailed geographic inventory of the systems which exist or to develop a typology which might be a useful basis for interventions by the Forest Department or other agencies" (Fisher 1991:2). The commonalities and variations among cases discussed in this study can contribute towards developing such a typology.

The Problem

The Master Plan for the Forestry Sector (1988) notes that there was a decline in the area under natural forest cover in Nepal by 5.7 per cent from 1964/65 to 1978/79 and by 3.4 per cent from 1978/79 to 1985/86. The decreasing forest cover is often attributed to the stress on the environment exerted by the growing population and the need for an increased supply of forest resources and more land for farming or other uses (Bajracharya 1983; Eckholm 1976; and Macfarlane 1976).

The attitudes of the Government and the people and their behaviour, practices, and patterns of resource use or exploitation are equally important in influencing the process of depletion as well as of sustainable use of the resources in question. We get an impression, for instance, that the Government in Nepal was at one time treating forest resources as if they existed only for exploitation. In an attempt to depict the economic conditions in Nepal during the mid-eighteenth century, Regmi notes that "Nepal's extensive forest resources encouraged the export of timber and other forest products to India in large quantities" (1978:16). The Government itself promoted the export of forest products, including wildlife, to earn revenue (Regmi 1978:69-70) and encouraged land reclamation by making Birta² grants to its citizens. Regmi writes that "In 1798, landowners in some eastern Terai districts were awarded by the government with Birta lands if they undertook to reclaim virgin forest lands" (1978:39).

Birta is defined as land grants made by the State to individuals, usually on a tax-free and inheritable basis. This was common in Nepal until about three decades ago when the Birta Abolition Act (1959) was passed (see Regmi 1978).

Thus, the Government turned the nation's forest resources into open access resources by encouraging maximum exploitation until the beginning of the 1950s. In order to control the degradation of forest resources in the country, the Government introduced the Private Forest Nationalisation Act of 1957, according to which the tasks of protection and of management of the forests fell on the Government. We believe that this move was faulty. It restricted the local people from using forest resources and overlooked the long established protection and management systems used by people in different parts of Nepal to ensure the sustainable use of forest resources. In reality, deforestation is said to have been aggravated "by the government legislation of 1957..., and the cadastral survey..., since local people were encouraged to clear land in order to register it under private ownership" (Chand and Wilson 1987:20). This act also estranged the people from the Government. Bajracharya (1983) aptly notes that the policy overlooked the existing indigenous and communal systems of resource management, thereby creating distrust and suspicion among the people towards the Government.

In the 1970s, the Community Forestry Development Programme (CFDP) introduced the concepts of *Panchayat* Forest (PF) and *Panchayat* Protected Forest (PPF) with the purpose of handing back the protection and management of the forests to the people. In the 1980s, decentralisation regulations were introduced in the forestry sector to further establish and foster local peoples' and local organisations' participation in the management and development of PF and PPF³. In 1990, the end of Nepal's *Panchayat* System of government brought a change in the status of PF and PPF. Today, the term 'community forestry' is used to refer to any forest under user group protection and management.

The discussion above suggests that the interventions by His Majesty's Government of Nepal and other agencies have been less successful in the task of protection, management, and sustainable use of the nation's forest resources. The questions before us are: what went wrong? and what is the best future course of action? The research objectives and questions in this study deal with these straightforward but relevant issues.

Research Objectives and Questions

The broader objective of this study is to examine the variations in the structure and function of forest resource user groups according to social, cultural, ecological, and

PF and PPF have ceased to exist -- that is, these names are no more in use. Samudayik ban or community forestry is a common term in use today.

economic factors (e.g., production systems and market factors). In short, this is an exercise aiming to contribute towards the design of models of forest resource user groups.

The specific objectives are given below.

- Identify traditional user groups protecting and managing forest resources in the selected districts of Far-western Nepal (i.e., Baitadi and Achham). This is in line with the need to recognise user groups as micro-scale forest management systems.
- Explore conditions for the emergence, existence, and persistence of user groups and their indigenous systems of forest protection and management.
- Examine variations in the structures and functions of user groups and factors responsible for their effectiveness.
- Contribute towards the development of models of forest resource user groups.

It should be noted that forest user groups (UGs) are well defined in some places but not in others. There are places where forests exist (notwithstanding the condition of the forests) and where people use forest products but yet do not have a defined user group in the strict sense of the term. We can, therefore, speak of a continuum of local forest user groups with strictly-defined rights and obligations for their members (i.e., with a clear protection and management system), at one end, to a situation where it is hard to define or identify UG members under conditions of open access to the forest, at the other (i.e., with no protection and management practices but with indiscriminate use of products by people who live close to the forest in question).

Given this reality, some basic questions need to be answered.

- What factors contribute to the emergence of UGs?
- What factors are responsible for the existence, persistence, and effectiveness of some UGs and not of others? Why are some UGs resilient to changes and others not? Is it possible to identify factors that are more widely applicable?
- Who are the primary users of a forest? Who are the secondary users? Who 'owns' the forest in question?
- In what respects are the various forest user groups similar or different from each other?

The first question has received some attention in studies on community forestry in Nepal (Gilmour 1990). The remaining questions, however, have not been systematically answered. We believe that once the conditions or factors for the emergence of indigenous

systems of protection and management of forests and the formation of user groups are identified, it can be stated with relative certainty why user groups exist or persist in some societies and not in others. Answers to the above questions are pertinent to understanding the complex and diverse practices with regard to protection, use, and management of forest resources by societies in different places.

User Groups: Issues in the Literature

We are in agreement with Fisher's (1991) argument that the conservation and management of forest resources by the people themselves have been effective in slowing or reversing the process of deforestation in many areas of Nepal. In addition, the rural population in Nepal behaves with equal rationality (as do other populations elsewhere) in the process of adapting within a given timeframe and given local socioeconomic, cultural, and ecological conditions. Human beings are not totally insensitive to the precarious nature of their relationship with the ecosystem, whether they are living in a metropolis or in a remote village, and whether they are scientists or lay people.

As noted above, there have been indigenous systems of forest protection and management in the rural areas of Nepal much before the community approach to forestry was conceived by His Majesty's Government in the 1970s. Among the Sherpas of the Khumbu region, for example, Furer-Haimendorf (1964) noted the presence of shingo naua or forest guards as a part of village organisation "in charge of the preservation of protected forests" (1964:110). These officials derived their mandate from the village assembly and were "responsible for the protection of the reserved forest close to the village, ...to permit limited fellings in the protected forest for special purposes, such as house-building, ...wood required for funeral pyres" (1964:111).

Furer-Haimendorf (1984) further noted that the *shingo naua* system was no longer in operation, perhaps because of the development of Sagarmatha National Park among other things. However, another more comprehensive study (Stevens 1989) pointed out that Furer-Haimendorf's more recent account missed some important points. According to Stevens, the *shingo naua* system was just one of a number of local systems operating among the *Sherpas* and its non-effectiveness need not necessarily mean a decline in forest protection and management practices. Molnar (1981) in a study of traditional systems of forest management noted that user groups did not necessarily match with the *panchayats* as political units but often included members from more than one *panchayat*. Similarly, a study by the Institute of Forestry recently found that some user groups were much

smaller than panchayats or Village Development Committees (VDCs) (Messerschmidt 1991, personal communication).

Campbell et al. (1987) discussed the socioeconomic factors in traditional forest use and management in 47 communities of Dhading, Kaski, Parbat, and Baglung districts and noted that "There has been reduced usage of the forest, a reduction in livestock per household, an increase in stall feeding, and an increase in private planting such that the average household in this sample now has 42 trees on its land" (1987:52). Their conclusions clearly indicate that people in the hills of Nepal are doing their best to protect the forest cover in their respective localities. They argued that there are grounds for optimism about community forest management and suggested allocating responsibility to specific user group villages, empowering the forest committees with legal authority, with financial support to pay the community forest watchers, and with management based on community harvest controls (1987:52-54).

Chand and Wilson (1987:20-23) pointed out that, in parts of Darchula District, people had to protect and manage forests by forming local forest committees. They also noted, however, that not all forest committees formed in Darchula under the initiatives of CFDP had been effective. They concluded that "most of these committees have not yet devised a clear role for themselves, or where there is a role it duplicates one that is at present the responsibility of the (DFO) District Forest Office" (1987:23) This perhaps supports the viewpoint that there is a need to empower the local forest user groups in promoting community forestry (Ingles and Gilmour 1989).

Budhathoki reported for Jajarkot, where there is a very large area of natural forests and very little actual shortage of forest resources, that there were many areas protected by traditional systems of management (1987:24-29)⁴. The author, a (DFO) District Forest Officer, noted that the forest department staff believed, from experiences in Jajarkot, that "continuing and substantial participation by the local people in forest management is most important" (1987:26).

Budhathoki's report (1987:24-29) apparently challenges the hypothesis put forth by Gilmour (1987).