

Community Forestry in Nepal: A Comparison of Management Systems between Indigenous Forestry and Modern Community Forestry

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Abstract

This is a review of forest management in Nepal that focuses on the differences between indigenous systems and those introduced by the government and international non-governmental organisations (NGOs) under community forestry programmes. It includes an analysis of which system is more feasible for implementing sustainable forest management by comparing an indigenous forest management system with community forestry. As well, the evolution of forest management implementation in Nepal through the populist paradigm of community-based forest management will be discussed. First, it will examine how forest management systems have shifted, by defining the differences between the traditional indigenous forest management system and community forestry. Subsequently, the features of community forestry as a political intervention, and its dynamic characteristics and evolutionary processes, will be examined. A key factor of this study is the study of institutional arrangements, including property rights, and the role of the state and its interactions with local users in both the indigenous forest management system and community forestry. It aims to analyse how effective forest management is carried out, in terms of the improvement of livelihoods and the regeneration of forest cover, arguing that the presence of such institutions is vital to achieving the goals of sustainable forest use. The research detailed in this report, primarily from secondary resources, is used and analysed in the context of community forestry and the indigenous forest management system in Nepal.

Keywords: Indigenous forestry, Community forestry, Self-organised institution, Property rights, Relations with the state.

1. Introduction

1.1 Forest management systems and local communities in Nepal

1.1.1 Characteristics of forests and local community

In Nepal there are different ethnic and religious groups with their own social structures, such as the caste system and hierarchical income groups, which vary according to geographical location (Varughese and Ostrom 2001). As a result, there is a diversity of community management systems relating to forest use, which are constructed by the social nature of property embedded in the cultural and moral frameworks of each community (Messerschmidt 1985; Li 1996).

Due to the beneficial functions that forests provide, however, forest lands have attracted various actors and stakeholders, including the state and private enterprises as well as local forest users. They have had different interests and have built up distinct interactions with the forest in order to satisfy their needs in economic, political, and social terms. Consequently, the Nepali people have faced an increasing loss of forest areas, and contested usufruct rights for forest uses with a large number of various stakeholders, as the values of timber and other natural resources have risen (Hobley and Malla 1996).

1.1.2 Changes of forest policy and management system

As forest losses and degradation are recognised and perceived by the state and local communities, forest policies have been changed. Along with the revision of forest policy, local communities have been also forced to change their familiar management systems or relationships with other social actors.

The nationalisation of Nepal's forests in 1957 ignored the diversity of existing management systems and took over the responsibility and autonomy of local people to manage the lands, converting community lands into state lands. There were limitations, however, on the state's efforts to enact the nationalisation policy as originally intended. Consequently, it failed to effectively manage the country's forests and to ensure the livelihoods of local communities.

Therefore, in the 1970s, the importance of local users' participation in forest management was reconsidered by the government after recognising the effectiveness and benefits of common property management (Brown et al. 2002). At first it decided to devolve the power and authority over resource use to the community level as part of the decentralisation process, returning property rights to communities.¹ Community forestry

¹ Decentralisation is a process whereby responsibility and power, initially under the central authority, is increasingly shared or taken over by one or more sub-units with the capacity and capability to efficiently and effectively deliver the agreed upon services.

programmes were initiated on an experimental basis in the 1980s. Projects were established by policymakers, field staff in the Forest Department, and project staff of the National Community Forestry workshop. Eventually, community forestry was legally implemented with the 1993 Forest Act and the 1995 Forest Rules.

The modern community forestry approach is based upon aspects of indigenous forest management systems that were practised until the advent of nationalisation. The study of the era when indigenous forestry was carried out as a form of privatisation proceeded; as a result, it was found that forest lands did not have clearly defined owners under the land grant system. Therefore, in community forestry—although forest ownership still remains with the government—the authority and control of forest products and resource management has shifted back to the hands of communities.

1.2 Aims and framework of this report

At present, forest users in Nepal have the responsibility of managing communal forests and property granted by the government, and thus they also have de facto use rights and rights to control the land (Hobley and Malla 1996; Gilmour and Fisher 1998). There are several problems, however, that need to be dealt with in order to achieve the goals of setting up a community forestry project plan:

- Establishing self-organised institutions in order to effectively manage communal forests (see Section 4 below).
- Excluding beneficiaries from access and use of forest by providing property rights to the local community (Section 5).
- Establishing effective relations among the state and local community so that the government and local people collectively implement sustainable forest management (Section 6).

It is therefore necessary to determine whether there are further aspects of indigenous management systems that should be applied to solving contemporary difficulties that the paradigm of community forestry does not currently address. Both systems must be critically appraised to determine their suitability in providing the needs listed above.

Therefore, as the main discussion of this report, it will assess how the features of both systems have changed. First, it will be necessary to provide definitions of the following concepts: (1) indigenous forest management systems and (2) community forestry.

2. Mechanism of community-based forest management in Nepal

Throughout the history of forest policy, from privatisation to nationalisation and finally to populism, the transition of forest management systems can be viewed through categories of indigenous forestry and community forestry (Gautam 1991). This is essential to understanding how forest use is viewed by both state and local actors. The following statement describes the historical

transition of forest policy and local management system in Nepal:

The production of the First Five-year Development Plan by HMG Nepal in 1957 is the clearest evidence of the impact of international thought on Nepalese policy, and since that date Nepal has been increasingly influenced by world trends in economics and in development theory and practice. Before 1957, Nepalese policy, and especially forest policy, was dominated by concerns and attitudes arising from within the country itself, and the years before 1957 therefore provide the best evidence of forest policy and management indigenous to Nepal (Gautam 1991, 4).

2.1 Indigenous forest management systems

2.1.1 Indigenous forestry

Under indigenous forestry, local knowledge was fully utilised, possessing information about agriculture, agro-forestry, pest management, soil fertilisation, multiple cropping patterns, health care, and food preparation (Agrawal 1995). In addition, as nature is a part of human society, which is constructed by social norms that define people's perspectives towards the environment and relations with others, management and livelihood strategies for survival were adjusted to the social construction of their knowledge and understanding of nature (Alcorn 1993).

According to Gautam (1991), indigenous forestry in Nepal is defined as the management systems that are not significantly affected by Western influences and that are operated as responses to local requests or initiatives through village or villager group meetings. Therefore, it indicates being a product of the time before forests were managed without any technical "inputs from other countries by way of imposition, inducement or extension" (*ibid.*, 4) through seminars, workshops, meetings, plantation activities, and training.

2.1.2 Formation of an indigenous forest management system

According to the indigenous forest management systems surveyed by Arnold and Campbell (1985), forest use was shared amongst adjoining villages. Management was undertaken with strong cohesive bonds amongst households. The use of the forests was controlled with restricted access at certain times of the year, while during the rest of year the areas were protected and regenerated under the rules set up by groups who had their own management systems to deal with forest-related problems. Harvesting was regulated depending on the type of products and species, the condition of products, and the season.

Villagers were willing to participate in co-operative forest management and to exercise rational use in line with the changes in forest condition. They preferred not to collect when they were aware of problems of diminishing resources such as shortages of fuel, fodder, and

composting material (Gautam 1991). In order to exercise effective management and to enforce regulations, a watcher was hired, who was paid in grain gathered from every household except the poorest. The duties of the watchman were to patrol the forest and control access for collection and cutting of firewood and fodder, and for livestock grazing, according to the rules set up by the user group committee (Arnold and Campbell 1985).

For example, among the Sherpas of the Khumbu region, forest guards, who were called *shingo naua* and mandated by the village assembly, were in charge of the protected forest (Khatri-Chhetri 1993). They had the responsibility for preservation by checking the areas regularly and regulating access and forest use. They only provided permission to limited felling for special purposes in line with the needs of the community and rules determined by the assembly. Furthermore, such preservation mechanisms were reinforced through monitoring and patrols by other local individuals.

Indigenous forest management systems combine traditional authority and self-regulation in order to organise informal institutions. Households co-operate in such a way that individuals manage and minimise damage to the resources they rely on in order to meet their long-term needs (Soussan et al. 1995).

2.2 Community forestry

A community forestry programme was initiated with the assumption that local communities will become active participants in forest management, since they understand the problems, are motivated to find the best solutions, and possess knowledge of forest conditions and the changes observed. It is a group of local people who will be able to maintain the conditions sustainably over time due to their vested interests (Adhikari 2002). The original justification of the programme is linked to two basic assumptions:

1. Participatory resource management is the most appropriate solution for reducing resource degradation.
2. Granting property rights over the local commons will meet community needs in terms of equitable and sustainable use of environment resources.

Moreover, two goals were set in order to achieve successful community forestry:

1. Achieve environmental benefits by preserving forests and appealing to conservation practice.
2. Alleviate the poverty of people dependent on the forest by emulating the success of the now-diminished traditional forest management system.

2.2.1 The aims of initiating community forestry

The programmes were initially implemented as a result of the government's recognition that participation in forest management by forest users who customarily hold the de facto user rights should be prioritised (Timsina 2002). This recognition of the importance for forest users to take

responsibility of local forest management is based on experience of past government failures to control forest degradation because of the limited capacity of the Forest Department to handle problems. Substantially, the correlation between the loss of traditional systems and the autonomous functions of local management and the changes in forest condition were observed and then examined (Mosse 1997). Finally, the re-establishment of local users' rights and social organisations has been focused on, including institution building for the use of natural resources. Local users were identified, and then forest user groups (FUGs) were formulated so that they could manage the local forest themselves. Rural communities were empowered in the process of transferring the authority to control and regulate their legitimate user rights (Soussan et al. 1995).

(a) Initial contradiction

The community forestry approach was set up based on the definition and suggestion that "community forest implies 'community-resource' relations, commonly known as [the] 'indigenous system of forest management'" (Fisher 1989). Yet, simultaneously, it was initiated with Western influences through scientifically-trained foresters (Houster 1993). Therefore, indigenous forestry practices that included local knowledge were reconsidered as an essential factor for care of the environment and the development of the community. Such an assumption has helped to empower local people through the study of their relationship with nature and their traditional system of managing natural resources. And, at the same time, political interventions in forest management were introduced by the state, ones that utilised scientific knowledge and methods, including education and training.

(b) Transition

As the programmes have progressed, such state interventions have come to focus more on facilitating the restoration of effective indigenous forestry practices and encouraging local participation in sustainable forest management, by bringing out local interests, identity, and needs using research methods such as participatory research approval (PRA)² (Hobley 1996).

Furthermore, as community forestry programmes in some communities and the study of community-based forest management have advanced, the effectiveness of traditional management systems have come to be better understood by both international and national agencies, as is reflected in the growing volume of literature on local people's capacity to conduct sustainable resource management (Messerschmidt 1985; Gautam 1991; Bartlett and Malla 1992; Bhattachan 2002). The positive

² PRA is a "family of participatory approaches and methods which emphasize *local* knowledge and enable local people to do their *own* appraisal, analysis and planning. PRA uses group animation and exercises to facilitate information sharing, analysis and action among stakeholders." (World Bank 1995:175)

effects on local people of giving attention to the potential importance of “indigenous knowledge” to environmental management has been recognised in political ecology theory (Adams 1990; Bryant 1997), which explains that political and economic processes either generate or exacerbate environmental problems such as desertification, tropical deforestation, soil erosion, and wildlife depletion. The role of local people and the value of their management systems have been appreciated for their sustainable use and protection of the forests that they depend on as common property. Eventually, while the role of the state is reduced to only that of a regulatory authority, the communities take total management control (Hobley 1996).

2.2.2 Formation of community forestry

Community forestry is based on the operational co-operation of Forest Department officers and forest user groups. Moreover, the devolution of the power and authority to manage forest areas between these actors is linked to the idea of sharing the responsibility of forest protection. Therefore, in order to ensure the feasibility of resource management, it is necessary to emphasise co-operation between the forester and those who use the forest, especially for domestic purposes and as an integral part of their farming systems (Pokharal 2002).

(a) District Forest Offices (DFO)

In 1990 the government prepared operational guidelines in the Forest Department for the process of handing over responsibility and authority to protect, manage, and use the forests from the regional directors to the district forest offices (DFOs). The responsibility for administering the new institutional arrangements was given to the DFO at the district level and its satellite offices at the sub-district level. The role of the DFOs is shifting from being a manager and a controller of forests to acting as an adviser to forest users and a supplier of technical assistance, in order to formulate and implement operational plans while helping organise FUGs (see below). The partnership between the Forest Department and FUGs is characterised by an element of flexibility that allows user groups to amend the operational plans structured by the Forest Department to meet their needs and then to inform the DFO (Shretha 1998).

(b) Forest user groups (FUGs)

The amendment of the Forest Law in 1993 and 1995 put the control of forests into the hands of the resource users organised into FUGs.³ The responsibility of management, development, and exploitation of forest areas has been handed over to FUGs, with property rights given to them in order to gain access to forest resources (Bhattarai and Ojha 2000–01). FUGs are legitimised as

an autonomous institution of the local community, and consist of various castes and ethnic groups with different social, economic, and cultural backgrounds within a community.

3. Effective function of community-based management as a local institution

As mentioned above, both community forestry and indigenous forest management systems are implemented in line with the concept of community-based forest management in dealing with common property and adopting an institutional system. Groups of individuals can jointly use the same common pool resources, sharing property rights with others by organising themselves in such a way that the group effectively co-operates in practising sustainable use and equally distributes the benefits and costs from the resources on which they depend (Verugese and Ostrom 2001).

As demonstrated in the study by Berkes et al. (1989), in the communities that have effectively managed their resources, perceptions of the long-term benefits have been incurred. Moreover, group-based institutional arrangements have effectively provided adequate individual incentives and secured long-term tenure arrangements and group-imposed restrictions, including rules and regulations (Hobley and Shah 1996). Therefore, the key factors in operating the management system depend on how to deal with institutional arrangements and property rights, how to develop relations with the state, and how to realise quality-of-life improvements for the people in a community.

3.1 Features as an institution

The definition of an institution is a set of working rules that determines who is able to make decisions and be involved in an action, what relations are taken between the actors, and what actions are allowed or constrained (Ostrom 1990). Institutions can also be described as being composed of “sets of formal and informal rules and norms that shape interactions of human with others and nature” (Agrawal and Gibson 2001, 14).

Through the development of locally-based institutions, individual actions at the community level are shaped, and interactions with other actors are structured. Thus, the fundamental idea and perception of common property and natural resources varies according to the culture that people belong to. Regarding conservation of natural resources, communal norms can “facilitate resource management by preventing certain behaviours or encouraging others” (ibid., 11). According to Alcorn (1993), in resource management regimes, shared community-level norms can promote conservation so as to specifically prohibit particular actions and encourage co-operative decision-making within the community, creating communal informal rules.

3.2 The function of the institutional system

The concept of an effective institutional system is

³ According to the CPFD database 2000, more than 9,000 FUGs with about one million beneficiary families are managing about 660,000 hectares of community forest in Nepal. The number of FUGs is still increasing, with new communities being formed and community forestry being applied to a wide range of forests.

likely to be based around the premise that local communities share the characteristics of being a small unit that has territorial concerns and is homogeneous in social structure (Ellis and Allison 2001). It can be argued, however, that the effectiveness of an institution varies with the degree of co-operation found in collective ac-

tions (Varughese 2000; Agrawal and Gibson 2001; Varughese and Ostrom 2001); the mechanisms of the institution are interrelated with the formation of collective action, making use of mutual functions, as shown in Figure 1.

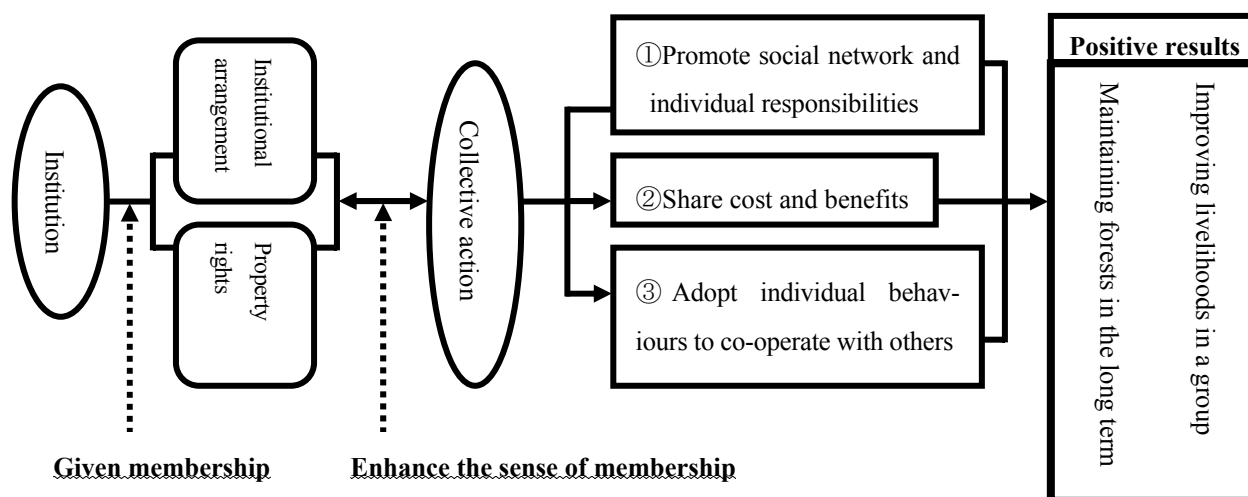


Figure 1. Institutional mechanism

First, the beneficial function of an institution in a common property regime is to facilitate collaborative management practices by sharing rights and responsibilities in a group. The mechanisms of an institution also have the capability to formulate “a social network that contributes to enhance coordination skills in that individuals learn or develop commitment, responsibility, and the importance of task fulfilment” (Futemma at al. 2002, 504). It also helps a group to acquire and exchange information through a learning process.

Second, if people formulate collective action through a local institution, they can effectively organise and govern themselves voluntarily as a group (Ostrom 1990), and can allow the development of their own internal governance mechanisms and formulas so that they are able to allocate costs and benefits to members. Ostrom (ibid.) argues that in terms of the total net benefits that appropriators obtain, individual acts in acquiring scarce common property resources are not as effective as collective actions with co-ordinated strategies. Thus, in resource management, establishing organisations will aid communities to improve both forest conditions and their livelihoods through co-operative conservation practices, and allow the sharing of costs and benefits generated from resource use activities.

Finally, communities need to set up their own institution in order to enhance collective action. Through the formation of a self-organised resource governance system, members are also made well aware of their rights, responsibilities, duties, and benefits from shared information. As a result, they maintain an individual con-

sciousness of being a stakeholder of the institution. Such advantages stemming from participation in organisations and realising beneficial collective outputs provide the community members with enough incentives to co-operate amongst themselves in long-term resource management (Futemma at al. 2002). Thus, institutional mechanisms are able to “regulate irrational or unpredictable behaviour on the part of the individual” (Clever 2000, 364).

This can be explained by the study of Ostrom (1990), who examined the problems associated with a common property regime dealing with the provision and the withdrawal of scarce communal resources (Ostrom 1990). People usually tend to seek benefits from immediate outcomes, not those in the distant future, and by using different individual strategies for their livelihoods. Yet if a group of forest users establishes their own organisation, it is possible for them to devise their own rules, which involves, over time, the making and adopting of rules, and as a result, can prevent forest users from seeking individual benefits from a communal forest (Ostrom 1999).

3.3 Demonstration of the function

The importance of collective action in managing communal resources is proved by the study carried out by Varughese (2000), who found a linkage between changes in forest conditions and local forms of collective action. The study shows that local people organise and manage forest resources depending on the degree of collective action performed within the community (see Table 1).

Table 1. Preliminary comparison of forest conditions with collective activities.

Site location	Forest condition trend	Forest stock condition	Collective action*
Churiyamai (Makwanpur)	Improved	Average	High
Bijulikot (Ramechhap)	Improved	Average	High
Doramba (Ramechhap)	Improved	Average	High
Raniswara (Gorkha)	Improved	Average	High
Bandipur (Tanahum)	Improved	Above average	High
Manichaur (Kathmandu)	Improved	Average	Moderate
Riyale (Kavre Palanchowk)	Stable	Below average	Moderate
Thulo Sirubari (Sindhupalchowk)	Stable	Average	Moderate
Barbote (Ilam)	Stable	Average	Moderate
Baramchi (Sindhupalchowk)	Stable	Below average	Low
Bhedetar (Dhankuta)	Worsening	Above average	Moderate
Agra (Makwanpur)	Worsening	Average	Low
Chhimkeshwari (Tanahum)	Worsening	Average	Low
Chunmang (Dhankuta)	Worsening	Average	Low
Bhagwatisthan (Kavre Palanchowk)	Worsening	Below average	Low
Sunkhani (Nuwakot)	Worsening	Below average	Low
Chhoprak (Gorkha)	Worsening	Below average	None
Shantipur (Ilam)	Worsening	Average	None

* Organised collective action level at the user level:

Low: individual may observe harvesting constraint on their own, no group activities

Moderate: as a group, individuals have harvesting constraints, minimal group activities, little or no monitoring

High: enforced harvesting constraints, organised group activities, monitoring by members

Source: Varughese (2000, 207).

For example, in Rainswara, where the forest has been managed with a high degree of collective action by villagers, forest conditions have improved in terms of the increase in abundance of tree species and shrubs. Despite the characteristics of this community—which has a large membership, increasing population growth, and fluctuating migrant patterns—it overcomes potential problems of co-operation by establishing smaller sub-committees and subgroup activities. Within the subgroups, forest activities and products are allocated. In comparison, in the Agra forest, where the community did not organise a protection and management system, forest conditions have deteriorated. Although they are a fairly homogeneous community with the same ethnic background and religion, and individuals are aware of forest degradation and practise harvesting constraints on their own, there are no organised activities at the group level and no rules on harvesting.

In the institutional mechanism described above, it can

be found that an institution can properly function with collective action. It is now necessary to discuss the suitability of community forestry in setting the institutional arrangements and property rights in the institutional system (discussed below in Section 5). It will be compared with those of indigenous systems in order to consider the advantages and disadvantages of both systems.

4. Institutional arrangements

4.1 Indigenous forestry

Self-organised institutions, as a traditional and informal system, are often considered as having weak mechanisms, since the rules of use policy are not firmly constructed through legal frameworks. Yet, in practise, in indigenous institutional arrangements, shared communal norms associated with forest management activities have established complete sets of binding rules and regulations under communal consensus, and they can promote

co-operative actions in both collective decision-making and at the operational level. Their control and management practices of forest resources are determined by the people's acquired knowledge, with which they interpret experience and generate social behaviour (Messer-schmidt 1985). Communal control, reflecting broader styles of local governance, is based on these norms. It is believed that the forest belongs to the community and, therefore, that actions against that norm should be dealt with through "negative social sanction" (ibid., 470). In indigenous societies, the concept of community is constructed from the perceptions of its members, who believe that they share norms and identity and have common interests and experiences with others within the community (Agrawal and Gibson 2001). Therefore, local voices are reflected in the decision-making consensus regarding the regulation of access to forest resources, as well as in the management system.

4.1.1 Rules and regulation

Indigenous forest management systems are based on the local villagers' definitions of the resources. The customary rights of the users were recognised and identified in indigenous systems, and later they were legalised with indigenous codes.⁴ Indeed, through the study of indigenous forest systems, it has been revealed that some traditional local communities have long practised sustainable management without external influences by regulating access to and use of their forest, and by planting trees in their own ways to regenerate forests. There are many places in Nepal where forest cover has improved and farm land has been gradually returned to forest through practising well-organised management systems with communal regulations and rules (Carter and Gilmour 1989). This can be possible in communities where the function of the traditional voluntary organisations is well supported by the co-operation of individual villagers although there are no written laws, rules, or regulations.

4.1.2 The role of local leaders

Local leaders play a significant role in enhancing regulations determined through community consensus by announcing them through the authority. According to Ojha (2002, 19), "Where local leadership is strong, committed and participatory, the enterprise benefits to disadvantaged section of the communities are enhanced."

Local leadership is therefore considered to be a critical factor in the effective functioning of an indigenous forestry system. For instance, in the Ramche forest in the Dhankuta district (Pokharel 1997), the Limbu family was the traditional forest owner, and one senior family member took care of the forest under traditional obligations that allowed others to use the forest, and ensured that all

householders in the community were able to meet their basic needs.

Provided that the livelihoods of individual householders are ensured by the self-organised institution and strong leadership, the regulations and rules on using forest can be operated by the local community for sustainable management of the land.

4.1.3 Critical views of self-organisation

Although the advantages of the indigenous forest management system have been described above, three factors should be taken into account as critical when the analysis and study of traditional forest management systems are carried out:

- Appropriators in common property regimes do not "always, even usually, self-organise to establish their own rules" (Varughese and Ostrom 2001, 748). Local resource users as appropriators will only organise themselves as long as costs and benefits are perceived in the processes of the institutional changes of local organisation (ibid.).
- Collective action is also carried out to varying degrees and leads to different consequences, depending on the community's social structure and social relationships in relation to class, ethnicity, and gender (Malla 2001). Communities are not always composed of one single ethnic group but usually of various groups who have different backgrounds and culture, including customs and religion. Indeed, in Nepal some traditional groups consist of migrants who do not, or hardly, possess community cohesion and unity, those that move to marginal areas, or who are disorganised underclass workers in agricultural lands (Varughese and Ostrom 2000). Therefore, the claim that traditional communities have shared community norms is not true in all communities; rather such an idea is a myth of traditional communities.
- Even if self-organised institutions are established in line with social norms and social structure, the norms do not necessarily lead the community members to carry out conservation practices (Alcon 1993).

Therefore, in indigenous forestry, in reality, even though there are cases where forest users collectively manage lands by sharing responsibilities and duties, there is not enough evidence and information to prove it. Furthermore, many constraints to implementing a self-organised institution can be seen in many traditional communities.

4.2 Community forestry

In the history of Nepal's forest policy, the introduction of nationalisation included formulating a centrally designed and scientifically informed forest policy. The new policy took away the powers and interests of local people, who had enacted rules to limit forest use and conducted monitoring, and also removed any incentives for sustainable use and co-operative management. However, after the failure of the governmental forest man-

⁴ Indigenous code refers to the rules and exhortations concerning forest practices that guide the treatment and use of the forest resources, at least in nominated areas (Gautam 1991).

agement system, through the revival of common-based management systems—the community forestry projects—local communities have taken back these rights to use and manage their forests, and formed institutions called forest user groups (FUGs).

4.2.1 The rules and regulations of forest use

With the establishment of a FUG, the members control and manage the local forests, including independent harvesting and pricing of all forest products, and forest management is governed by an executive committee elected in the FUG assembly. With the formation of a legitimised FUG, local forest users can gain membership that encourages them to practise sustainable management and observe institutional regulations. The way the FUGs are organised, the members receive a cash subsidy as an incentive for plantation, development, and protection. Moreover, any surplus income from the user group's forests can be used for development purposes other than forestry development.

4.2.2 Local leaders

In order to secure rights and enforce the restricting regulations for sustainable forest management, an authoritative figure(s) should be formed, someone who has the responsibility of protecting the whole forest and securing the livelihoods of the members involved in the community. Therefore, as community forestry is constructed along with the revival of the indigenous forest management system, instituting alternative figures of local leaders such as headmen is necessary. In this case, the FUG committee is given the role of the local authority. It is responsible for the management system and enforcing the regulations and rules, as well as ensuring the livelihoods of members by providing them equal access to the forest.

4.2.3 Critical views of self-organised institutions

(a) Formation of user groups

As mentioned above, in community forestry the formation of a FUG is a critical factor needed to achieve effective forestry with communal rules and regulations. However, the current community forest programme in Nepal tends to emphasise the formation of user groups as new community institutions rather than using existing user groups and locally accepted institutional arrangements (Khatri-Chhetri 1993; Gilmour and Fisher 1998). In this sense, political intervention under community forestry is likely to impose new social institutions over diverse and effective social formations already operating (Fisher 1991; Gilmour and Fisher 1998).

Moreover, development planning by international or state agencies often predetermines the structure of a community and the behaviour of its members before the project is undertaken (*ibid.*; Agrawal and Gibson 2001). The result of incorporating an individual into a predefined category or social structure can lead to the imposi-

tion of ideas and views which do not necessarily reflect the interests of local communities in managing their lands (Housler 1993; Ferguson 1994). In such circumstances, operational plans are more likely to represent the interests and ideas of the state.

(b) Distribution of benefits

There exists a substantial discourse on common property management, in which a community tends to be viewed as a harmonious and co-operative group of people. Originally, community forestry projects were launched along with the revival of the indigenous forest management system, which was pointed to as an effectively functioning community-based management system. In the ethos of the time, traditional communities were treated as something special, and thus they were romanticised as being better managers of local resources. This romanticised idea of traditional indigenous communities resulted from using concepts of static and over-simplified social relations (Cleaver 2000). The narrative of traditional systems claimed to find conservation values in all traditional resource use systems without detailed analysis of their management systems.

From this point of view, people in communities are easily seen as part of a “use community” or as “appropriators,” and considered as a mass unit that shares consensus and culture to collectively practise effective resource management (McCay 2001). Therefore, the problems are located in the use of co-operative actions and participatory arrangements (Dove 1995). Participation is undertaken in the form of representatives in a community or group, assuming that they reflect the voices of individual householders in decision-making processes. In this respect, individuals in a society are likely to be regarded as “an undifferentiated mass, a collection of ‘individual farmers’ and ‘decision makers’” (Ferguson 1994, 178). As long as they take the representational form of community participation, the decision-making processes in forming communal agreements are likely to be dominated by the most powerful actors in the community.

As can be seen from the case of the Kankai forest in Terai (Pokharel 1997), the village user group committee takes a representative form because local institutional arrangements are dominated by village elites. Since local elites in the villages are in influential positions in the forest user groups, decisions are likely to reflect the interests of the most powerful actors. Forest department staff are likely to visit only the powerful individuals, such as local educated men and political party leaders, to offer information and services. From the first stage of establishing a FUG, social inequity within user groups appears because, in practice, social interaction with individual households hardly takes place.

In other words, if the decision-making process in forest management takes place in the form of community representation, then the determined management practices are likely to ignore the critical interests of individ-

ual householders and other social actors (Agrawal and Gibson 2001). By perceiving local communities as a whole, many of the world's poorest rural people have been ignored because they do not belong to any defined community, but they are in fact marginalised (Li 1996). A community usually consists of different ethnic groups, and therefore it is difficult to identify it as one single group.

4.3 Analysis

The movement to restore traditional management systems was necessary in order to encourage local forest users to empower themselves in setting up new local and self-organised institutions. In the revival of common-based management systems, community forestry programmes, local knowledge, and voices should be incorporated into local forest management systems with institutional arrangements. The advantages of organising institutional arrangements for effective management practices are as follows:

- increased awareness, through participation processes, of individual responsibility and each person's role as a forest user in the institution;
- the benefits of setting restricting forest use rules and

regulations—a result of agreements determined in community meetings—that members of the community follow, while excluding from access and use of the forest those who are not included in the institution as a member of the community user group; and

- local leaders are identified in the community that take responsibility for equal distribution of the members' equal access to forest uses.

However, there are weaknesses to implementing such an institutional system, both in the indigenous forest management system and community forestry, as shown in Table 2, below. In particular, self-organisation of an indigenous forest management system does not guarantee that the people in the community voluntarily form the institutional system, except in communities that have already organised themselves to manage and maintain their common property.

In this sense, state intervention in the forest management system is necessary to some degree with planned community forestry when local people do not organise to provide equal distribution of forest access and use, and where effective forest management has not been conducted, in order to ensure long-term sustainability of forest conservation and people's livelihoods.

Table 2. Institutional arrangement

		Indigenous forest management	Community Forestry
Institution	Formation	Self-organisation	FUG
	Disadvantages	<ul style="list-style-type: none"> • Not always organised • Difficult to be organised and therefore share norms because communities are usually the gathering of many ethnics and migrants 	<ul style="list-style-type: none"> • Difficult to identify and formulate user groups • Given priority to state's interests over communities' • Tend to be represented only by powerful elites
Rules and regulation	Characteristics	Norms and codes (unwritten rules) Customary law Obligation as a member living in a community	Official document Statute law Obligation as a member of a institution
	Problems	No constant standard (different depending on the communities' features)	Advantages and power in common property tend to be given to people who decide the rules and regulation
Leadership	Characteristic	Headman	Committee of FUG
	Roles	Have responsibility for the members of his group Ensure all householders met their basic needs	Ensure equal access and livelihood for FUG members

5. Property rights

One of the most important elements involved in setting up an effective institutional system is common property arrangements, as briefly mentioned above in Section 3. According to Mckean (2000), the rights and duties concerned with resource use are defined in the form of shared ownership, and the users should have a great interest in promoting the long-term responsible stewardship of resources.

The function of property rights in an institution is to promote local sustainable forest management. By incorporating property rights into an institutional system, the following advantages can be expected:

- strict countermeasures taken against the inevitable "free riders" with firmly conformed regulations, and
- a desirably clarified distinction of the resource user groups in a restricted property rights system (Bartlett and Malla 1992).

Each individual is expected to provide support by actively participating in communal management practices, sharing the responsibility as an obligation of all property rights holders. This also offers greater promise for effective conservation, guaranteeing them benefits distribution over communal lands by excluding non-communal members. Therefore, common pool resources need to be regulated as common property with the provision of concessions or property rights to limit the number of users under the system.

There are four different types of property rights over resources: withdrawal, management, exclusion, and alienation (Agrawal and Ostrom 2001) (see Table 3). If property rights over forest resources are in the hands of the community, the potential economic benefits will give the community enough incentives to practise an efficient

and effective management regime (Adhikari 2001). Cleaver (2000) also argues that incentives to be actively involved in the community management system can be gained from property rights, as well as from social norms shaped by the social structure, culture, and beliefs that exist in the community.

In Nepal, however, there are difficulties in carrying out such a common property arrangement. The following statement clearly describes the present contested and complex situation in exercising the property rights regime in Nepal in forest areas where large economic and social values have attracted various stakeholders: "At the heart of participatory forestry lies the battle for ownership of forest lands. Property rights structures have for the last century been skewed in favour of the state, at the expense of local people's needs" (Hobley 1996, 7).

Table 3. Property rights.

	Common property regime	Indigenous forestry	Nationalisation	Community forestry
Withdrawal	Participants as proprietors	Local residents in village communities and their representatives	Restricted by the government Private individuals	Forestry user groups (FUGs) Use all the products
Management	Participants as proprietors	Local residents in village communities and their representatives Decision-making	Forest Department	FUGs Buy and sell forest products in market Design regulations of internal use patterns
Exclusion	No right	Land distribution system by King	Forest Department	District Forest Officers
Alienation	No right	No right	N/A	No right

Source: Gilmour and Fisher (1998).

5.1 Indigenous forestry

5.1.1 Communal property rights

Indeed, the self-organised institution implemented in the indigenous forest management system gave the community members a sense of ownership and responsibility to patrol and manage their communal lands. Such traditional voluntary organisations played an important role in reflecting the voices of individual householders through the process of assembly and in supporting the self-reliance of community members (Bhattachan 2003). All householders, except those of different ethnic groups, participated in the village assembly and accepted the authority of the headman. Although the village headman had de facto ownership of the communal lands as a privilege and reward for his service rendered to the state, the land was assigned to community institutions with the full responsibility of the management and use of the local resources (Gautam 1993). If people are given land that they can control as their own possession, and if there is guarantee that the community meetings are worthwhile participating in and that they reflect local voices, then they will contribute more effort to managing the land

from the perspectives of providing for long-term needs and the security of livelihoods.

Berkes and Farvar (1989) also describe the effectiveness of indigenous self-organised institutions as providing members with customary rights, by which livelihood was ensured in "providing guaranteed access rights to vital resources so that everyone in the community is assured of the opportunity of meeting their basic needs" (ibid., 11). Li (1996) emphasises the advantages of indigenous management systems in terms of balancing individual and community rights with mutual agreements by formulating institutions.

5.1.2 Land distribution

In Nepal, land distribution has been taking shape in various management systems according to versatile applications; forest lands were categorised into private lands, communal lands, state owned lands, and lands related to religion institutions, respectively called *birta*, *kipat*, *raikar*, and *guthi*, as different tenure systems.

As pointed out by McKean (2000), the common property regime was carried out in communal lands in the form of shared private property. On one hand, like pri-

vate property, the forest can be effectively monitored by the voluntary activities of members to manage and protect forest with an awareness and sense that a portion of the distributed land is their own land. On the other hand, as common property, forest uses are restrained by shared communal regulations among members without needing to establish physical boundaries such as fencing, which usually costs money to build and maintain.

According to Alcorn (1993), indigenous land use could deal with the complex and often-overlapping tenure system by sharing benefits over communal lands and excluding non-communal members. Overlapping rights are effectively operated in order to protect the forest from invasion by outsiders.

Traditional systems are conducted with effective “partnerships between individuals and their communities” (Alcorn 1993, 426). Although common property regimes have been operated by larger entities and groups, individuals “theoretically hold private property rights and do in actual fact” (Gibson et al. 2001, 7). The system gave individual resource owners the incentive to carry out long-term planning, to invest in resource quality for productivity, and to properly husband their resources (McKean 2000).

Furthermore, the land distribution system in a community also functioned effectively by dividing communal forest lands into small patches, so that it was easy to identify resource boundaries. In many cases, distribution could be negotiated on an informal basis. In this case, agreed membership was given to individual householders, and the code of practice that “guided the treatment and use of forest resources” (ibid., 11) was applied for a specific area, as was the right to collect forest products and “to till certain areas and to collect forest products from other areas” (Hobley 1996, 289).

Such effective forest management was successfully implemented with the existence of the following two common conditions:

- the acknowledgement of shared property rights with which, as a member of the community, the member can work with others in sharing costs and benefits, while, like private property, a sense of ownership is obtained over small patches of land given to individuals; and
- boundaries were clearly identified in communal lands .

5.1.3 Critical view of the property rights regime

It is true that in order to secure rights and enforce the restricting regulations, property rights should be distributed to all households in the community and include clearly identified boundaries to exclude others from using the resources.

But in Nepal, indigenous communities vary in terms of spatial and temporal location, and each community also differs in social structure and cultural diversity. Therefore, there is not always a guarantee that all members belonging to the institution gain equal benefits by exer-

cising their property rights. Although in some communities equitable access to resources might have been ensured for the members of the community under a communal forest management system, in many cases communities were controlled by local elites who had strong ties as officials and nobles with the state, and were able to exercise their authority in enforcing or withdrawing access rights (Gilmour et al. 1989).

In fact, an effective forest management system functioned only in communities with the following particular conditions:

- The lands were not contested amongst various interest groups. This occurred in the case where there was no economic and social value and benefits; for example, where forest cover was divided into patches, which makes it difficult to use machines to collect timber, and therefore it was not beneficial and efficient for the private or state entrepreneurs to cultivate the forest.
- The forests were situated in inconvenient locations by reasons of remoteness or unfamiliarity.

5.2 Nationalisation

When indigenous management systems were operating, local people were actively involved in forest management practices, possessing the autonomy to control the use of forest (Hobley 1996). However, as Tamang (1993) argues, “The displacement of indigenous communities which exercised customary law over their forests actually weakened control over the use of resources” (ibid., 308).

Upon institution of the nationalisation policy, local people lost not only autonomy but also their property rights to take responsibility for the management and use of their forest (Soussan et al. 1995; Agrawal and Gibson 2001). They were forced either to leave the land or to give up their familiar forest management system without being replaced by effective alternative management practices.

The dissolution and replacement of the traditional system by state-imposed management practices took place during nationalisation in Nepal; land surveys were conducted without detailed examination of the many localised people-resource relationships that already existed. The cadastral survey demarcated lands according to their geographical location (Hobley 1996). In line with collected data by the land survey and its resulting boundaries, new communities and user groups called *panchayat*⁵ were set up by the government over the pre-existing locally accepted institutional arrangements.

Consequently, the results of nationalisation created new boundaries without considering the existing forest

⁵ *Panchayat* boundaries divided the whole country into about 29 town and 4,000 village *panchayats* (Guatam 1991). In these circumstances, people who proximately lived within the *panchayats* were automatically included in the community and given user rights, whereas those outside the new boundary were excluded from access to and the use of the forest, even though they were traditional users.

boundaries identified by indigenous communities, and the newly articulated communities were given responsibilities to protect and manage the forests, but they were subsequently less effective than the groups they replaced (Gilmour and Fisher 1998). Under such circumstances, conflicts over boundaries occurred at the *panchayat* level, due to this system of seeing a community as a physical unit and ignoring individual roles in forest management. It is difficult now to identify who possesses the legitimate rights to management due to the overlapping boundaries. The emergence of conflicts between indigenous communities and newly established communities for control of community forestry programmes cannot be avoided, as both lay claim to the right of managing the same areas. Lacking clearly recognised boundaries leads to difficulties in establishing co-operation and collective actions with others.

5.3 Community forestry

From the historical experience of changes in Nepalese forest management, as described above, it is recognised that unless people are given user rights and ownership, or at least the authority to control and make decisions on the work plan of a forestry management system, people lose interest in active practices of management, or conflicts emerge. In other words, co-operation and collective actions will be obtained by transferring authority and responsibility for forest management, so that “the legitimate needs of these people for forest products were met” (Gilmour and Fisher 1998, 36) and incentives are made available to collectively control the forest through the practise of sustainable activities for income generation.

5.3.1 Property rights arrangement

The responsibility of management, development, and exploitation of forest areas has been handed over to FUGs, with property rights given in order to access forest resources (Bhattarai and Ojha 2000–01). FUGs have de facto use rights and rights to control the land (Hobley 1996; Gilmour and Fisher 1998), as well as to establish co-operation within communities to effectively manage communal forests and property granted by the government. In Nepal, current legislation allows local users to have power to control and access forest products. In community forestry programmes, a community member possesses a license to share access of communal forest resources and the benefits gained from them under the agenda of the provision of equal distribution of benefits and costs to a community,

5.3.2 Critical view of property rights arrangements

There are problems in present property rights arrangements in the structure of boundaries of communal lands and the distribution of property rights; the boundaries and distribution of forest lands are administrated by territorially-based forms of local government (Gilmour and Fisher 1998). Such boundaries are still under the influences of the nationalisation policy in order to facili-

tate the regulation of forest activities in government forests. International agencies and the Forest Department have defined communities in line with the boundaries created by using geographical mapping systems (Hobley and Malla 1996).

Such an institutional arrangement of property rights does not provide equal opportunities of access to the communal forest, and therefore does not guarantee the equal gain of benefits and security for each householder’s livelihood. Bhattarai and Ojha (2000–01) revealed with a study of labour distribution of householders and their livelihood strategies that, even though distribution of access and uses of the forests was equally given to each householder, the wealthier gained more benefits from the communal forests, while the poor could not effectively exercise their rights to use the forest because of many constraints. The former possesses the capacity to carry out maximum use and benefits from given opportunities under community forestry, as well as the strong power to exercise their rights to harvest forest products. On the contrary, even though the poor gain equal opportunity to access and use forest products, they are not able to maximise their opportunities due to a lack of time and technical capability.

5.4 Analysis

As can be seen in Table 4, it is necessary to create the situation where forest users are responsibly ensured and respected in terms of awareness of their rights with which forest users harvest and manage with a sense of ownership of the lands. There are difficulties, however, in implementing a communal property regime, as follows:

- There is the difficulty of identifying and deciding who is included or excluded in a community as a forest user, in defining clear boundaries in communal lands, and in setting up a user group in order to conduct an effective management system.
- There are also questions in the communal property regime of whether it takes place in practice in terms of equal distribution of the rights for all members of the community. If it does, then it should function in a way that ensures the share of benefits of the members so all of them can meet their basic needs.

In practice, as Li (1996) states, the distribution of property is often contested, and therefore, in this sense, it is likely to be articulated by the representatives of the community. The existence of representatives who are powerful spokespersons, such as local leaders or local elites, that can gain power from the co-operative actions with the state, can easily simplify the needs of a community. These factors have created a weakness in institutional arrangements in both indigenous forestry and community forestry. As self-organised institutions vary from community to community, there is not always a guarantee for all members that belong to the institution that they will equally gain benefits by exercising their property rights.

Table 4. Periodical differences in communal property management systems.

	Indigenous forestry	Nationalisation	Community forestry
Institutional characteristics	Self-organised institution and local leaders	<i>Panchayats</i> : Establishing new village administrative institutions. New communities and user groups were set up by the government.	FUGs and DFO: Re-establishment of local users' rights and social organisations, including institution building for the use of natural resources.
Communal land system	<i>Kipat</i> system: A form of communal tenure that provided community members with the right to collect forest products. <i>Talukdari</i> system: Forest as common property was under the control of local state functionaries	<i>Panchayats system</i> : The government took over all land rights from people and made it state-owned land.	Community forestry system: Newly articulated communities were given the responsibility of management, development, and exploitation of forest areas.
Other land systems	Diversity of land systems: private land (<i>birta</i>); state-owned land (<i>raikar</i>); lands related to religious institutions (<i>guthi</i>)	Simple land system: state-owned land	Diversity of land systems: national park; state-owned land; private land
Institution	Self-regulation: Administered with traditional land tenure system by local headmen.	<i>Panchayats</i> : New village administrative institutions.	FUGs: Local institutions have de facto use rights and the right to control the land.
Boundaries	Easy to identify the boundaries of the resource. Could be negotiated on an informal basis.	Cadastral survey demarcated lands according to geographical location with unclear boundaries. Forest users also unclear.	Still under the influence of the nationalisation policy in order to facilitate the regulation of forest activities in government forests.

Sources: Takako Wakiyama.

Indeed, although in indigenous forestry of hill areas in Nepal, where small patches of forest land were distributed to individual households in a sustainable and effective way, certain segments of groups, including women and the marginalised in the community, were excluded from using the forests and faced problems in meeting their needs (Soussan et al. 1995).

Therefore, it should be borne in mind that it is a myth to assume that every householder in a community would have equal access to and benefits from distribution of common resources if a member of the community is given the ownership of resources (Adhikari 2002). Therefore, it is also based on the assumption that through the establishment of self-reliant and self-organised institutions, local people can regain their autonomy and security for their livelihoods with equal distribution of benefits.

6. Relations amongst the state and local actors

As described in the previous chapter, the state has intervened in the forest management practices of local communities in different ways. The state intervention has been exercised since the time when indigenous forestry management was practised (Hobley and Malla 1996). Although the power of the state has been weakened, still now the government has the authority to dictate how to use forests in the economically and socially

beneficial areas. In the era of nationalisation, land ownership in Nepal was vested in the state. Interventions exercised by the government have been aimed towards the "planned transformation of a dynamic inter-relationship among community, state, and [the] physical environment" (Dove 1995, 316). Therefore, when community forestry is initiated in a community, one of the key elements necessary is to build up the partnership between those who own the land and those who use the land; relations with the state are an inevitable factor for local people who live close to forests. The historical relations amongst these actors were described in Table 5.

Table 5. Relationship between the state and community.

	Indigenous forestry	Nationalisation	Community forestry
Actors	<ul style="list-style-type: none"> • The state • Local functionaries; local headmen • Local forest users 	<ul style="list-style-type: none"> • The state (scientifically-trained forester) • Panchayats 	<ul style="list-style-type: none"> • The state (DFO) • The committees • FUGs
Type of relationship	<ul style="list-style-type: none"> • No direct interaction between local people and the state • Indirect relation with the state through local leaders in a community (relation between local authority and the state) • Close relationships between local leaders and the local government 	<ul style="list-style-type: none"> • The state is wholly involved in forest management • Dynamic inter-relationship among community, state, and physical environment • Divide the roles between those who own the land and those who use the land 	<ul style="list-style-type: none"> • The state is partly involved in forest management (the foresters and FUGs) • Dynamic inter-relationship among community, the state, and the physical environment • Co-operation between the forester and those who use the forest • Close relationships between local leaders and the local government
Intervention by the state in a community	<ul style="list-style-type: none"> • No direct intervention • Land use and livelihood strategies have been affected 	State intervention in forest management system of local communities	Less intervention in forest management, however, in defined areas territorially-based forms of local government administrate the formation of FUG meetings and the boundaries of forest land and communities.

Sources: Takako Wakiyama.

6.1 Indigenous forest management system

Although forest users had not previously had direct interactions with the Forest Department, their land use and livelihood strategies were affected by influential forces formally and informally imposed on local management systems with local governments “through social (kinship, alignment with political parties, ethnic and regional identity) and economic (bribing, rent-seeking behaviour) relations” (Timsina and Paudal 2003, 8). In other words, the interference of the state in local communities appeared indirectly through the interaction with local functionaries who had influential power in the local forest management system as well as the social lives of the community.

6.1.1 Local leaders and local community

As already mentioned earlier in Section 4, local leaders played a significant role in supporting the effective management of communal forests and promoting the functions of institutional arrangements and property rights. The local authority figures, such as local headmen, held the title and responsibility of forest areas under their land ownership, and they also fulfilled their functions as collectors of land taxes for the local government. As a local leader of a community, they achieved a close relationship with government officials. The relations between the headmen and the state had been effectively enhanced as leading the policy tendency to focus on the devolution of central government since the 1900s. As a result, an official document confirmed the role of local headmen by providing guidelines for the utilisation and

management of forests.

Ultimately, the government handed over all responsibility over forest areas to the local functionaries, recognising the difficulties of implementing forest management with the responsibility of looking after all the forest areas (Hobley and Malla 1996). Therefore, local authority figures were appointed as a local functionary, regulating forest management practices on behalf of the state. Furthermore, he was given the rights to administer the traditional land tenure system and self-regulation established by the local people. The management strategies taken by the government were carried out through the effective relationships with local leaders, and the state provided *birta*⁶ (private lands) to the local authorities in exchange for their services of looking after the lands and communal obligations towards the state.

6.1.2 Critical views of relations

In traditional societies that did not have legal frame-

⁶ Private lands: since the Rana era began in 1846, when Jung Bahadur Rana became prime minister, a large portion of the land in Nepal was in the hands of local elites or local functionaries, who obtained ownership through the *birta* system. By 1950, when the system was abolished, “one-third of the county’s agricultural and forestlands had been granted to private individuals” (Malla 2001: 291). Under the *birta* system, landlords were given rights to use forest products, and therefore regulated use through their responsibility to look after the lands. While a large portion of lands was converted into private property, many rural farmers had to rent land from *birta* holders (Gautum 1991). As the penalty for failing to pay their obligation, a large number of tenant farmers ended up as “bondage labour” (slaves) working for large *birta* owners or had to supply forest products to landlords.

works in communal lands “manipulative control” by the state tended to create co-operative interests and management strategies with powerful local actors in the representative form of land distribution and ownership (Mosse 1998). Even though local functionaries should have dedicated themselves to being an intermediary between the state and local communities, their choices and related behaviour were likely to respond to the government expectations through their interaction processes. This is because they tended to represent and express the community’s needs and interests in line with their expectation of what the state offered, resulting in a beneficial relationship between the state and local functionaries.

Therefore, even though the local people did not have a direct relationship with the state, their management system and livelihoods strategies were affected. Ultimately, the state had the power to ratify the forestry system and to “attribute it with agency in the re-shaping of social and productive relations” (Mosse 1998, 1).

6.2 Nationalisation changed the intervention of local government

In the post-Rana⁷ period in Nepal, just before the nationalisation policy was implemented, while state control and the power of forest departments had been increasing, especially through the *birta* system, a “technical elitism based on forest science” (Soussan et al. 1995, 17) began to be developed as a result of the influence of Western countries. For example, foresters began to be trained in the developed countries (*ibid.*), and such scientifically trained foresters began the nationalisation policy in order to enact forest conservation and economic development through the conversion of private and communal lands to state ownership (Houster 1993). The nationalisation of forest lands and state ownership were justified with the assertion that they would contribute to the welfare of the country and the people by the equal distribution of natural resources (Soussan et al. 1995).

6.3 Community forestry

Today, dialogues between communities and the state for establishing forestry projects have progressed regarding the issue of handing over a defined area of government forest to community control, so that all sections of communities participate in the formation of a legally-recognised forestry user group which follows the government’s community forestry regulations (Soussan et al. 1995).

6.3.1 The relations between DFOs and FUGs

The government’s role is to give property rights to local user institutions to provide political legitimacy to the concept of local use (Gilmour and Fisher 1998). The

state should also reveal and take it into account the existence of migrants and the marginalised within and outside of a community to implement equal distribution of benefits. In addition, the DFOs maintain authority over forests so as to prevent local users from mismanagement, and the roles of the DFOs as a local authority are to support and facilitate the forest users’ activities by giving them legal rights (Gilmour and Fisher 1998).

The community forestry mechanism is reinforced with the partnership between FUGs and DFOs in order to enforce communal rules and regulations. While FUGs are given responsibility for the lands, and therefore the obligation to follow the rules set up themselves, the DFOs play a key role in monitoring the practice of regulation and supporting FUGs with advice to establish their own rules, following the legal procedures and rules determined in forest policies.

However, because national governments do not possess enough staff and money to enforce their laws over forest resources, some user groups in local communities tend to ignore the rules determined by the central government and add their own rules and familiar pattern of activity (Gibson et al. 2000). Such rules and activities are likely to be different from the expectations of the government.

6.3.2 Critical view of the relations between local government and local community

There are constraints to FUGs having full autonomy in their forest management practices, because the DFOs have legal power over the FUGs in regulating mechanisms for their constitution and operational plans as well as formation. For instance, if a DFO does not return a response to the application for amendments from an FUG, it cannot function and the amendments are not completed. Although FUGs possess the power to amend the constitution and operational plans, according to the study carried out by Springate-Baginski et al. (1999), most FUGs have not done so.

Furthermore, as already mentioned in the previous section, it becomes more difficult for FUGs to obtain the power to manage forest in areas that have economic and political value. Therefore, although the FUGs were established as a local institution, it became clear that user groups were “either dominated by local elites or existed on paper only and were in practice moribund” (Soussan et al. 1995, 83).

The prescribed existence of a community FUG does not necessarily give the users incentives to actively engage in such activities, because there is no guarantee for the members of the group that they will gain benefits and value through effective participation. In Sitalpati, in the district of Sankuwasabha (Soussan et al. 1995), the FUGs formed by the Forest Department were handed over lands that were already degraded, and so the FUG existed in name only and was irrelevant to the lives of most villagers.

Even in hill forests that have not been subject to state

⁷ The Rana period ended with the introduction of the *panchayat* system in 1959. During this period, the unification of the country was enhanced in sense of social and economical unification (Gautam 1991).

intervention due to their geographic characteristics, as soon as the value of forest products suddenly increases, the focus of the Forest Department might extend its power to these areas, which means that “the access of the marginalized groups to the forests is questioned by more powerful groups” (Hobley and Shah 1996, 10). In the Terai forest, arguments against community forestry have been common within the Forest Department due to the value of the forest products and the great interest shown by commercial loggers, leading to unwillingness to relinquish management. It is clearly described in the study by Pokharel (1997) that since the process of the formation of FUGs, meetings with local communities have not taken place in Terai, where the state has a great interest due to the area’s rich natural resources, such as valuable timber and forest products, and its suitable location for commercial purposes.

6.4 Analysis

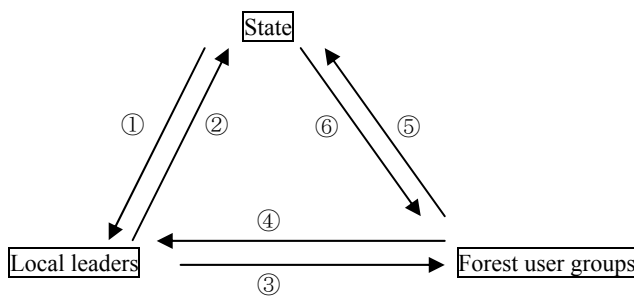
In order to practise effective local forest management, another key element is to build up a triangular relationship between local communities, local leaders, and the state (see Figure 2).

In practice, however, such a relationship has constraints, because each actor is dedicated to conducting their own tasks and roles for community management due to the economic and social values of the forest and

its resources. Therefore, it should be kept in mind that even though in some communities, in both indigenous forestry and community forestry, local participation seems to have been successfully obtained—and function effectively as a user-group-oriented management system in decision-making and consensus—the co-operative interests and strategic engagements tend to be promoted by the state and the elite groups, rather than by individual interests in terms of costs and benefits (Pokharel 1997).

As Springgate-Baginski et al. (1999) state, the decisions made at the implementation stage by elite groups within FUGs are likely to deal their desired actions concerning roles, responsibilities, and plans, and therefore they might reach the conclusion that “it is easier just to close the forest than to reach complex agreements on [a] regular basis” (ibid., 13). Such agreements occur possibly because villagers do not regard the constitutions and operational plans as working documents that guide their own forest management practices, and they continue to practise their familiar methods.

Therefore, in order to avoid such unequal distribution within a community when new institutional arrangements are set up, the government should stick to the role of facilitator in order to support local forest users and monitor the functions of user groups—working flexibly with them, while giving them the autonomy to make decisions and to manage their communal forests.



State and local leaders	①	Hand over the responsibility for management.
	②	Look after forest and communities in terms of conservation and livelihoods, respectively.
Local leaders and local communities	③	Ensure the livelihood security of local forest users as members of the community.
	④	Practice forest management following communal rules and regulations determined in community meetings.
Local communities and the state	⑤	Practice sustainable management.
	⑥	Subsidies for community development activities. Administrate legal rights to local people so they can access forest lands provided by the government.

Source: Takako Wakiyama.

Figure 2. The triangular relationship and the roles of the state, local leaders, and forest user groups.

7. Analysis: an effective forest management system

There is the fact that “traditional” systems are easily romanticised by advocates of restoring past practices. They describe and categorise effective community-based

management systems as traditional/local in comparison to modern/scientific management (McCay 2001; Gilmore and Fisher 1998). This happens because, while the latter is easily criticised when examining recent comparative

information and references to past experiences, the traditional systems are difficult to evaluate due to lack of data and informants. Therefore, if the discussion on traditional and modern systems takes place without considering the factors and functions of self-organisation in indigenous forestry, then there is the danger that a simple dichotomy of the traditional system from the modern system will emerge. In other words, as a counterpart of the occasion that when traditional systems do not properly work out in a particular situation or are not adopted by a community, it may lead all attention to shift to using Western scientific knowledge⁸ established by outside specialised expertise as the only alternative (ibid.; Housler 1993).

The use of Western knowledge over local knowledge arises from assumptions such that, even though people had effectively managed resources harmoniously in the past, community-based forest management has been lost, and traditional knowledge cannot be adopted into a modern society influenced by external forces, such as the market for economic development, which exert increasing pressure to exploit natural resources (Agrawal and Gibson 2001). Forsyth (1996) states that the “indigenous knowledge of hill farmers may be no more accurate because it was developed in a time when shifting cultivation had sufficient time and space to be sustainable, which is no longer the case” (ibid., 381).

In this sense, the state can justify the appropriateness of its interventions concerning forest conservation and sustainable use. The government and donors tend to view local actors as being weak and lacking the capacity to deal with the problems they face as a result of external changes, such as the loss of forest cover, population growth, and the influence of market forces on their livelihoods (ibid.).

For example, the formation of FUGs is likely to be established with the assumption by the government that “individuals cannot organise themselves and always need to be organised by external authorities” (Ostrom 1990, 25). In other words, although the government recognises that self-organised and self-governed institutions are necessary for communal resource management, if the institutions are not fully developed and accepted by a community, then this presumption tends to be used to justify state intervention in the organisation of local institutions.

Therefore, even though it is necessary to initiate community forestry management, when setting up forest user groups as a local institution in communities where people do not practise a sustainable management system, in terms of forest use and regeneration as well as distribution of benefits from communal forest lands, the following factors should be carefully examined:

- The reasons why traditional practices functioned properly should be considered, including examining what the roles were of local individual householders in resources management.
- A survey should be conducted of the characteristics of the communities, including social structure and geographic constraints, and of other stakeholders in the forest, as well as influences from outside the communities and the interaction with other local communities, etc.

That is, before an intervention is introduced to a group of people by establishing a new community organisation, the study and analysis of the area and group have to be carefully carried out in order to avoid creating conflicts amongst different groups and individuals, as well as avoiding mistakenly dissolving existing effective forest management systems.

8. Closing remarks

The past experience of nationalisation in forest policy in Nepal reveals the danger of using scientific knowledge alone as a problem-solving method, because doing so most often resulted in the imposition of externally defined problems and technical solutions. It is associated with the development discourse which claims that “the ‘Third World’ has been created as a ‘problem’” (Housler 1993, 84) in order to justify the necessity of external intervention through the input of First World science and professional expertise (Bryant and Bailey 1997).

With the emergence of nationalisation, new forestry systems were established, creating gaps with pre-existing indigenous forestry. Indigenous management systems, composed of a combined system of community-based management and private management, were converted into “an externally-imposed system of state regulation” (Soussan et al. 1995). Eventually, the pre-existing forest management was dissolved with the abolition of the traditional *talukdari* system (indigenous authorities as local functionaries). The areas ruled by local authorities were supplanted by “a territorially-based form of local government” (Gilmour and Fisher 1998, 34). The other effect of nationalisation emerged with the introduction of a cadastral mapping system based on scientific knowledge and measuring tools. The idea of such scientifically mapped boundaries enhanced the support of the advocates of community-based conservation, who conceptualise communities as territorially fixed, small, and homogeneous.

Consequently, the impact of the policy change appeared negatively, resulting in deteriorating forest conditions and the livelihoods of the poor, due to the lack of support from local people and hindered ability to exercise forest regulation. Community forestry was introduced along with the reconsideration and study of the effectiveness of the indigenous forest management system. This new forest system has had a positive impact on indigenous people and their knowledge by focusing on their existence and capacity to manage forests.

⁸ Knowledge concerning scientific and economic principles that can be seen when comparing differences with indigenous knowledge and interpreting it as the “ability to break down data presented to the senses and to reassemble in different ways” (Agrawal 1995: 417). Thus, it will be possible to gather, document, and spread useful information in the society easily and rapidly in a systematic fashion.

However, there are some problems associated with community boundaries and the constraints on local people's autonomy to control their communal lands, due to the power relations between the poor and local elite in terms of equity of benefits distribution, and also because the Forest Department still retains power over working plans at the legitimate level. In addition, some foresters are not willing to give up their authority over forest products and economic values, having the sceptical view that the local communities do not have the capacity to manage the forests effectively and that their professional role is being threatened.

As a next concern, it should be considered whether community forestry has achieved the goals set out above in Section 2.2. From the analysis, it is clear that with community forestry programmes, local institutions are established in an area either where the indigenous forest management system was dissolved by the impact of nationalisation, or where the local people had not formulated any institutional arrangements. However, there are two problems involved in defining a community: first, a community may be newly established in a location where co-operative actions already take place with organised group arrangements; second, if it is considered whether or not the institutional arrangements are to effectively function by collective action amongst community members, then the results will differ in each community, depending on the formations of FUGs and forest conditions. Furthermore, the formation of FUGs is largely influenced by the economic values of the forest as perceived by the state. The valuable Terai forests have attracted the attention of the Forest Department officials, who seek either economic development of the country, or those who care about the loss of forests and consider the conservation of forests in line with the conventional attention to the natural functioning of biodiversity. As a result, the Forest Department neglected to hand over the lands to local users when formulating FUGs.

The newly created boundaries of forest lands have made it difficult to identify who exactly possesses the use rights. Subsequently, the formation of FUGs is also difficult to implement due to unclear identification of community members. Unclear boundaries also create constraints when regulating forest uses. Shared interests, however, can be easily created between the Forest Department and elite user groups, as the interests of these powerful actors are not affected by the enclosure of forests for conservation purposes because they are able to meet their own needs from private sources without difficulty.

However, community forestry is undergoing an evolutionary learning process. It is obvious, as illustrated by the progressive changes to operational plans and the involvement of autonomous local users—as well as the continuing improvement of forest conditions in some sites where community forestry has been carried out—that the method will achieve its goals, provided that the necessary conditions for success are in place.

Therefore, as a next step, it is important to clarify the boundaries of communal lands and identify the users by conducting new mapping. In East Kalimantan, Indonesia (Eghenter 2002), for instance, community mapping is taking place, with the aim of finding naturally-established communal tenure boundaries over forests by focusing on “indigenous ways to organise and use space and how these might conflict with or support forest protection” (Sirait 1994, 411). Community mapping systems might be useful for recognising the perceptions of local management of territory and resources, while local people obtain information about other stakeholders and their communal lands—enhancing their ability to control, manage, and monitor their forest lands. Furthermore, the results of mapping can be used in negotiations over land use.

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