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Institutional Factors that Influence Access of the Poor to Forest Benefits: Case Studies of Community and Leasehold Forestry Regimes in Nepal

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Abstract

The community and leasehold forestry regimes (CF and LF regimes) are high priority programmes that are designed by the Nepalese government to conserve forests and reduce poverty through the introduction of formal institutions in terms of legal property rights and governance structures and processes. However, little is known about the mechanisms through which informal and formal institutions influence resource access of the poor under these regimes. By employing a collective case study approach, this research provides some understanding of the mechanisms through which formal and informal institutional factors influence access of the poor to forest resources governed under the CF and LF regimes in Nepal.

This study found that informal institutional factors significantly influence the impact of formal institutions irrespective of the regime that was imposed on the Nepalese hill communities. It was revealed that where more than one social group co-exist in a community, discriminatory sociocultural norms (for example patriarchal and caste-based norms), and customary property rights favour one social group over others. As a result, certain social groups have greater access to resources and benefits from the resources than do other social groups. Of particular significance, and not previously reported, the lack of prior experience in collective action of the low castes along with their weak social networks and poor leadership ability is highlighted as being directly linked to their relatively limited access to forest resources. When the *Bista* system, a specific type of a traditional bridging social network is eroded, the low castes end up with less access due to removal of support from the high castes.

This study shows that a more inclusive regime (for example CF regime) is likely to lead to more effective outcomes for the livelihood of the poor as compared to a more exclusive regime (e.g. LF regime). When the powerful are included in the forest user group (FUG), along with the poor, there is less resistance to the shift in property rights and the improved access of the poor to forest benefits that the regimes are intended to achieve. However, it was found that active participation is more determinant of resource access than is a specified set of property rights granted by right of membership in a FUG. Although some FUG governance structures provide a forum where the disadvantaged members of the FUGs have the right to participate in decision making, their participation is constrained by discriminatory sociocultural norms. Further, this study revealed that the decision-making processes dominated by the elites tend to address the needs of the disadvantaged members to only a very limited extent. However, improving capacities has the potential to enhance participation of disadvantaged members in the processes.

The research findings suggest that informal institutions must explicitly be considered in the design and implementation of CBNRM regimes in order for them to be successful in improving livelihoods of the poor. The implementing staff need support mechanisms for changing their own attitudes and behaviours to those that are more favourable to the social shift that the regimes are intended to bring about. CBNRM regimes have the potential to improve the livelihoods of the poor, but research must continue on how this can be achieved.

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Abbreviations

ADBN	Agricultural Development Bank of Nepal
AUSAID	The Australian Agency for International Development
BISEP-ST	Biodiversity Sector Programme for Siwaliks and Terai
CBNRM	Community-Based Natural Resource Management
CBFM	Community-Based Forestry Management
CBS	Central Bureau of Statistics
CEAMP	Community Environment Awareness and Management Programme
CFD	Community Forest Division
CFUG	Community Forest User Group
ChFDP	Churia Forestry Development Programme
CO	Community Organisation
CPR	Common Property Resource
CPN/UML	Communist Party Nepal, United Marxist Leninist
DANIDA	Danish International Development Agency
DDC	District development Committee
DFID	Department for International Development
DFO	District Forest Office
DFRS	Department of Forest Research and Survey
DLS	Department of Livestock Services
DLSO	District Livestock Services Office
DoF	Department of Forests
FECOFUN	Federation of Community Forestry Users of Nepal
FUG	Forest User Group
GTZ	German Agency for Technical Cooperation
HLFFDP	Hills Leasehold Forestry and Forage Development project
HMG/N	His Majesty's Government of Nepal
IFAD	International Fund for Agricultural Development
LFUG	Leasehold Forest User Group
LFLP	Leasehold Forestry and Livestock Programme
LFP	Livelihood Forestry Programme
MoFSC	Ministry of Forest and Soil Conservation
MPFS	Master Plan for Forestry Sector
NACRMLP	Nepal Australia Community Resource Management and Livelihood Programme
NARC	Nepal Agricultural Research Council
NARMSAP	Natural Resource Management Sector in Nepal
NGO	Non-government Organisation

NPC	National Planning Commission
NSCFP	Nepal Swiss Community Forestry Project
PF	Panchayat Forest
PPF	Panchayat Protected Forest
SAGUN	Strengthened Actions for Governance in Utilization of Natural Resources
SDC	Swiss Development Cooperation
SPD	Society for Partners in Development
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
VDC	Village Development Committee

Glossary

Adhiya	Share cropping (or livestock) system
Bali Pratha	A traditional exchange system in which a fixed amount of grain is provided after each harvest on an annual basis in lieu of the labour supplied in making ploughing tools or clothes annually
Bhari	Head load bundle or load generally carried in a large basket
Bhat	Cooked rice
Birta	A grant of land to a noble as a reward for a service rendered to the state. This led to the emergence of <i>Birta</i> land tenure. It was usually both tax free and heritable, and had no set time limit. It was valid until it was recalled or confiscated.
Bista system	Also called as ' <i>Bali Pratha</i> ', in which lower caste groups work as blacksmith, tailors, or cobblers for higher caste groups and others and in return obtain cereals from them
Guthi	Endowment of land or other property for a religious or philanthropic purpose
Jagir	A grant of land to a government employee (civil or military) in a lieu of salary. This led to the emergence of jagir land tenure. The <i>jagir</i> land grant was also tax free but remained valid only as long as the concerned person served the government.
Jagirdar	Person receiving land as <i>jagir</i>
Janajatis	Ethnic groups of the hills
Brahmin	Higher caste group
Chhetri	Higher caste group
Dalits	Lower caste groups of the hills
Damai	Lower caste, whose occupation is 'stitching clothes'
Danuwar	Ethnic group
Jat	Caste
Kami	Lower caste, also called as blacksmith
Kipat	Ancient type of communal land tenure, applied to both cultivated and forested land. Under this system, a community had communal tenure. On kipat land, the community (community leader) used to give individuals the right to till certain areas and to collect forest products from other areas.
Kshatriya	Social status group based on Hindu caste hierarchy. Kings, warriors, and aristocrats belong to this group.
Magar	Ethnic group
Majhi	Ethnic group
Matawalis	Alcohol drinkers
Mukhiya	Local leader
Muluki Ain	First legal code of Nepal promulgated with the orders of Jung Bahadur Rana, the first Rana Prime Minister of Nepal in 1854

Newar	Ethnic group
Panchayat	Lowest administrative and political unit (before restoration of Democracy), as like present village development committee (VDC).
Pradhan Panch	Chairperson of Panchayat
Raikar	A form of state landlordism, where state granted a bulk of agricultural lands to a small proportion of landowners in lieu of carrying out the administrative functions of collecting tax.
Sarki	Lower caste, also called as 'cobblers'
Shudra	Lower social status group based on Hindu caste hierarchy. They are taken as servants to other higher social status groups (i.e. Brahman, Kshatriya, Vaishya, Shudra).
Tagadhari	Holy cord wearer
Talukdar	<i>Talukdar</i> was responsible to collect land tax for the state and also had the responsible for controlling access to the forests and for distributing forest products. This position was abolished after the end of the Rana regime in the 1950s.
Tamang	Ethnic group
Vaishya	Social status group based on Hindu caste hierarchy. Traders, Peasants, and craftsmen belong to this group.
Varnas	Social status groups based on Hindu religion

CHAPTER ONE

INTRODUCTION

1.1 Research statement

Community-based forestry (CBF) is being widely used for governing forests in developing countries, including Nepal. This research is an examination of community-based forestry and access of the poor to forest benefits under CBF regimes in Nepal. The main aim in this research is to identify and explain key institutional factors that influence the access of the poor to the forests governed under government-initiated community-based forestry regimes.

In this chapter, a review of government-initiated community-based forestry regimes in Nepal provides the background to the research problem. Research questions and objectives are described and an overview of the research approach is presented.

1.2 Background to the research problem

Nepal is characterised as a mountainous country with a subsistence-oriented agricultural economy (FRD, 2005). It has a heterogeneous society in terms of caste, ethnicity, class, and gender (Blaikie et al., 2005). Ninety per cent of the economically active population are employed in the agricultural sector (CBS, 2005b). Thirty-one per cent of the population are poor and face food security problems (CBS, 2005b; Luintel & Bhattarai, 2006). Smallholder farmers, wage labourers, landless, indigenous (or ethnic) people, low castes, female-headed households and displaced people are examples of the poor (IFAD, 2001).

Ninety-five per cent of Nepal's population depend directly on the local forests for firewood, timber, fodder, litter and other non-timber products (Gautum, 2006). Poor people are dependent on forests to meet their need for firewood as cooking energy, and many of them earn income for buying food from selling firewood (Malla et al., 2003). The capacity of the poor to extract their livelihoods from the forests is, however, determined by their access to forest benefits (Porro et al., 2001; Baumann, 2002; Neef et al., 2003).

Poverty reduction is considered to be the highest-priority development objective in Nepal (Chhetri, 2006). Forestry and agriculture are seen as the sectors with the greatest potential to make a positive contribution to rural livelihoods and poverty reduction (Chhetri & Jackson, 1995). To improve the contribution forestry makes to poverty reduction, the Nepalese government initiated community-based forestry policies in 1990. A multiparty political system was also introduced in 1990, which facilitated the design and implementation of community and leasehold forestry regimes (Talbot & Khadka, 1994).

1.2.1 Community and leasehold forestry regimes: Contribution to poverty reduction

In community-based forestry regimes, the government devolves the rights to use and manage the forests to groups of forest users (Edmunds & Wollenberg, 2003). User groups, after registration with the government agency (e.g. the District Forest Office), obtain legal rights to use and manage the state-owned forests (Pokharel & Niraula, 2004).

Community forestry and leasehold forestry are two community-based forestry regimes currently employed by the Nepalese government for forest conservation as well as poverty reduction (NPC, 2002). Leasehold forestry differs from community forestry in terms of the type of forest and the people in the community who are included in the user group for forest management.

Any type of national forest can be a community forest, whereas only degraded national forests can be allocated as leasehold forests (Sterk, 1996). In the case of community forestry, all people, irrespective of socioeconomic status, who were customary users of the forest and who are willing to manage it are regarded as legal forest users and the forest area adjoining the settlement is handed over to them (Singh, 2004). But in the case of leasehold forestry, only those people in the community who are below the poverty line can be included in the user group. Small homogeneous groups (of about 10) are formed and are given degraded forests under the leasehold regime (Yadav & Dhakal, 2000).

Property rights associated with both regimes provide for legal ownership of forests by the government, while people of the community receive only user and some management rights over the forests (Sterk, 1996; Ohler, 2000). In both regimes, groups of forest users, which are registered with the government agency, are required to follow government policies in protecting and utilising the forests. For this purpose, they must prepare

applications and obtain approval from the government for their five-year operational plans regarding protection and utilisation of the forests (Kanel et al., 2006).

Community forestry has legal and technical priority over leasehold forestry for the government. Only the forests not allocated for community forestry are identified as potential leasehold forestry. Accordingly, community forestry receives higher priority in the government budget and for staff allocation compared to leasehold forestry (Singh, 2004).

The community forestry (CF) regime has been successful in assisting with conservation of the forests (Gautum et al., 2002; Bhatta & Dhakal, 2004; Pokharel & Niraula, 2004). However, many argue that the regime has not been successful in contributing to poverty reduction (Malla et al., 2003; Springate-Baginski et al., 2003b). The poor were often no longer able to harvest forest products such as firewood, wild fruits and vegetables, and medicinal plants due to restrictions imposed by the CF regime (Adhikari, 2005). The poor typically do not share equitably in the costs and benefits of the forests (Adhikari et al., 2004).

The leasehold forestry (LF) regime has not been particularly successful in either forest conservation or poverty reduction (Karmacharya et al., 2003; Nagendra et al., 2005b). Yadav and Dhakal (2000) and Thoms et al. (2003) argue that, though the leasehold forestry regime targets poor people, implementation of the regime introduces many difficulties for improving the contribution of forests to their livelihood.

Yadav and Dhakal (2000), Malla (2001) and Adhikari (2005) identify weaknesses in the implementation of both regimes, which constrain their contribution to poverty reduction. Timsina (2003) and Buchy (2005) argue that the legal user-rights given to the groups are often usurped by the elite and politically influential within the communities. In some areas, poor people do not obtain legal user-rights, and in other areas, even if they obtain such rights, they are unable to influence group decision making regarding forest resource use and management (Richards et al., 1999; Nagendra et al., 2005a; Maskey et al., 2006). As a result, poor people benefit less from community and leasehold forestry regimes than do the non-poor.

In the leasehold forestry regime, excluding those users who had customary rights creates more resource-use conflicts between members and non-members (Thoms et al., 2003). As a result of these conflicts, members, who are poor are often unable to protect their legal user-rights, and hence are unable to obtain benefits from the forests (Karmacharya

et al., 2003). Yadav and Dhakal (2000) argue that the government's non-participatory planning procedures discourage poor people from being involved in group formation.

In summary, the two main weaknesses in the implementation of both regimes are: (i) the government enforces legal rights without taking into account the customary rights of local people, and (ii) implementation processes do not favour the poor for obtaining benefits from participation. The mechanisms through which the relationship among legal and customary rights and implementation processes influence the forest access of the poor are not adequately explained in the literature.

1.2.2 Justification for the research

Despite the weaknesses described above, the implementation of both community and leasehold forestry regimes has a high priority in the government's recent national plan (i.e. Tenth Five Year Plan for 2002-2007) as a means of alleviating poverty through the sustainable use of forest resources in Nepal (NPC, 2002). Given the high incidence of poverty (approximately 31 per cent of the population are below the national poverty line)¹, the high annual deforestation rates (1.8 per cent during 1990 to 2000) and the high dependence by the poor on the forests for their livelihoods in Nepal², the contribution that community-based forestry makes to the livelihood security³ of the poor needs to be improved. For improving the contribution of the regimes to poverty reduction, it is crucial to understand the reasons why the regimes have not been successful in this regard. However, there has been little research into the practical effects of the regimes' implementation insofar as it affects the contribution made by the forests to the livelihood of poor people. Not only in Nepal, but also elsewhere in Asia, the community-based forestry regimes have been reported as having limitations in improving poor people's livelihoods (Dewi et al., 2005; Mahanty et al., 2006a).

Access to forest resources and benefits for the poor is linked with the governance of the forests (Beck & Nesmith, 2001; Mahanty et al., 2006b). Participation — or the lack of it — of the poor in the making of decisions about forest management and benefit utilisation

¹ The national poverty line stands at about US \$77 per person per year (NPC, 2002). The incidence of poverty is higher among ethnic minorities, low caste members of society and women.

² As the poor have little or no land, they rely on the local forests for many necessities, for example firewood for cooking, timber and poles for house construction and supplementary food for household consumption.

³ Livelihood security is evaluated in terms of secure access to resources, equity in rights and benefits from resources and empowerment (adapted from Chambers & Conway, 1992; CARE, 2002)

determines their access to forest benefits (Resosudarmo, 2004; Ribot et al., 2006). Institutions provide rules, norms and authority that shape governance of the forest (Platteau & Abraham, 2002). Institutions can be categorised as formal or informal, and interrelationships between formal and informal institutions affect the forest access of the poor (Klooster, 2000; Jentoft, 2004). Power is a product of both formal and informal institutions that shape the governance of forests (Agrawal, 2003; Ribot, 2003). Forest governance structures and processes provide authority (or power) and mechanisms to make decisions on rules (Stoker, 1998; Hoon & Hyden, 2003; PROFOR, 2003). Governance of the forests at the community level is guided by not only the community but also by other civil-society stakeholders outside the community (McKean, 2000; McCarthy, 2005). Since the government has introduced the community-based forestry regimes at the community level, it has an important role in the governance of the forests (Meinzen-Dick & Knox, 2001). Policies and legal rights and rules specified by the regimes are examples of formal institutions (Ostrom, 1995; Meinzen-Dick & Knox, 2001). Sociocultural norms and networks and customary rights that are rooted in the specific social and cultural setting of a community guide whether the poor gain access to forest benefits or not (Khan, 1998b; Klooster, 2000), and are examples of informal institutions (Ostrom, 2000a; Platteau, 2004; McCarthy, 2005).

Property rights have a key role in governance of the forest, because they convey authority and shape the incentives for people to work jointly in relation to their forest access (Meinzen-Dick & Knox, 2001; Agrawal, 2007). In much literature to date it has been assumed that community-based forests are governed under common property regimes (Adhikari, 2002; Acharya, 2005); however, according to some scholars this may not be the case in reality (Tachibana et al., 2001; Meinzen-Dick et al., 2002). Property rights under CBF regimes are often complex, and the influence of this complexity on forest governance in relation to forest access of the poor cannot be well understood from the literature (Di Gregorio et al., 2004).

Bromley (2001) suggests that property rights must be analysed as part of the larger institutional structure of society. Understanding of social relationships and customary (or traditional) rights of local people is necessary for exploring the influence of property rights on the governance of forests in relation to forest access (Banda, 2001; Nemarundwe, 2004). The rights guided by traditions or sociocultural norms are termed 'customary rights' (Warren & McCarthy, 2002). Such rights can be as strong as legal rights within a community (McCay & Acheson, 1987; Mohamed-Katerere, 2001). The legal rights imposed by the government and existing customary rights dominate or mutually adjust

within the complex sociocultural context of the community (Hanna & Munasinghe, 1995; McCarthy, 2005). However, there has been only limited research on the influence of customary rights and the interplay between customary rights and legal rights on the forest access of the poor (Banda, 2001; Mohamed-Katerere, 2001).

Power relationships are linked to people's participation in decisions on forest access (Bhatia, 2000; Agarwal, 2001; Edmunds & Wollenberg, 2003). People in the community have different social positions, powers and capabilities based on class, caste, and gender (Agrawal & Gibson, 2001), and they have different levels of influence in decisions concerning forest access.

Although the literature on natural resource management in developing countries supports the need to understand the influence of social networks on resource management (Agrawal, 2000; Newman & Dale, 2005; Crona & Bodin, 2006; Bodin et al., 2006), little has been written about the mechanisms through which social networks influence the access of the poor. Although a few authors (e.g. Andersson et al., 2004; Platteau, 2004) have reported that traditional (or informal) social networks characterised by power inequalities constrain real decentralised governance of natural resources, little is mentioned about the impacts of these networks on the resource access of the poor. Fukuyama (1995) and Kay (2006) argued that bonding as well as bridging social networks, which are needed to ensure a healthy balance within the community, can facilitate forest governance with respect to access of the poor.

1.3 Research problem, questions and objectives

In Nepal, the community and leasehold forestry regimes have increasingly been the government's high priority programmes for poverty reduction through forestry. Moreover, the rights to forest use and management that local user groups obtain are believed to increase the influence of local users, including the poor, on decisions. But improving access of the poor to the forests remains a challenge in reality for both community and leasehold forestry regimes. The government has recently recognised that the implementation of the regimes needs to address weaknesses in their contribution to the livelihoods of poor people. However, limited information is available as to what factors constrain the regimes in regard to improving access of the poor to the forests.

Although good forest resource governance is accepted as the most important prerequisite for sustainable forest management and rural livelihood improvement, understanding of the governance-related factors for improving access of the poor to forest benefits is inadequate. Local institutions are increasingly recognised as having significant roles in guiding decisions about forest access, which can shape the access of the poor to forest benefits. The institutional factors — though perhaps not in the specific context of the two regimes in Nepal — are well known from the literature. But, the mechanisms through which these factors influence access are not well understood. The aim in this study was to bridge this gap by contributing to a better understanding as to why community-based forestry regimes have not been successful in improving the livelihoods of the rural poor in Nepal.

Two major research questions guided this study. They are: (i) what institutional factors influence the access of the poor to the forests that are governed under different government-initiated community-based forestry regimes in Nepal? and (ii) what are the mechanisms through which these factors have that influence? Community and leasehold forestry regimes provide the potential to increase our understanding of the influence of both formal and informal institutions and their relationships to access of the poor to forest benefits. This research was directed by the following specific objectives:

1. identify the key formal and informal institutional factors that influence the access of the poor to the forests governed under the community and leasehold forestry regimes;
2. describe how these factors influence the access of the poor to the forests governed under the community and leasehold forestry regimes;
3. explain why these factors influence the access of the poor to the forests; and
4. determine the relationships among these factors that influence the access of the poor to the forests.

1.4 Research approach

In this research, institutional theory with an embeddedness perspective provides a theoretical foundation for understanding the influence of formal as well as informal institutional factors on the resource access of the poor (McCay, 1998; Klooster, 2000; Jentoft, 2004). Examples of formal institutional factors on which this research was focused

are the formal governance of the forest and the legal property rights introduced by the regimes (Larson, 2003; Rival, 2003; Menzies, 2004). Sociocultural norms and social networks are informal institutional factors (Jenkins, 2000; Platteau, 2000; Ostrom & Ahn, 2003). Understanding the issue of power is critical in analysing the influence of relationships among resource governance, property rights, and sociocultural factors on the resource access of the poor (Blaikie, 2006).

A qualitative case study approach was adopted to draw on people's diverse perspectives and interpretations of their particular circumstances regarding their access to forest benefits. A collective case study design was employed for understanding the resource access of the poor from two theoretically different cases. The identification of the poor for this research was based on 'self-sufficiency in food' along with social status, and level of both income and literacy. These criteria have increasingly been used by the development organisations in Nepal and other developing countries (Fisher et al., 2004; Maharjan et al., 2004). Two cases (i.e. community and leasehold forestry regimes) and two sub-cases (or communities) for each case were investigated in this research. The initial theoretical framework guided data collection and analysis. However, the research design provided for flexibility so that unanticipated happenings (issues, theories and concepts) could be integrated. Data were collected employing a variety of techniques such as participatory ranking, focus group discussions, individual interviews, and observations at meetings. Qualitative data analysis techniques were applied. The analysis process involved going backwards and forwards between data and emergent explanations by questioning the data in a number of different ways. Different strategies were used to ensure the quality of the research throughout the study.

1.5 Structure of the thesis

The thesis is organised into nine chapters. *Chapter One* provides an introduction to the thesis. In *Chapter Two*, the Nepalese context for this research is described. The sociopolitical and economic contexts within which the current community and leasehold forestry policies were formulated are examined, together with — the modalities which were developed for governing forests — in relation to poverty reduction. *Chapter Three* contains a review of relevant theories, concepts and analytical approaches in community-based natural resource and common property resource management. The institutional factors drawn from this review, which influence the access of the poor to a resource governed under a CBNRM regime, are presented. *Chapter Four* includes descriptions of

the qualitative case study approach, methods of data collection and analysis, and the criteria used to ensure quality of the research. *Chapters Five* and *Six* report the findings from the case studies on the access of the poor to the forests governed under the community forestry regime and leasehold forestry regime, respectively. In *Chapter Seven*, results of cross-case analysis including cross-community analysis are set out, and key findings from the two cases are compared. *Chapter Eight* includes discussion of the key findings of this research. In *Chapter Nine*, the final chapter, research conclusions and implications are presented.

CHAPTER TWO

CONTEXT FOR COMMUNITY-BASED FORESTRY IN NEPAL

2.1 Introduction

In this chapter, the Nepalese context for this research is presented. The sociocultural, economic and political issues of Nepal at the macrolevel are described and the context within which the current community-based forestry regimes and forest policies are formulated is explained. The strengths and limitations of state forestry policies and implementation guidelines in terms of their reflection on the pro-poor focus are then identified.

This chapter starts with a brief description of the geography and forest cover of Nepal. Then demographic characteristics, particularly in terms of caste, ethnicity, gender, and poverty are described. The caste system is illustrated as a reflection of the sociocultural context. The land ownership and land tenure systems are explained as they reflect the class, caste, and gender differentiations. The political upheavals of Nepal and their impacts on forest policy are also described. The implementation of community and leasehold forestry regimes and organisations involved in the regimes are also explained.

2.2 Geography of Nepal

Nepal is a small, landlocked country situated between China and India. It has a total area of about 14.7 million hectares and a rectangular shape extending from east to west (CBS, 2004; USDS, 2006). It is a diverse country stretching from the Himalayas in the north to the hot Gangetic Plains along its southern borders. Rugged terrain (mountains and high hills) makes up 83 percent of the total area. Altitude in Nepal ranges from 70 metres above sea level in the South Eastern *terai* to the 8,848 metre peak of Mount Everest (FRD, 2005).

The country has three main ecological zones: high mountains (altitude above 4000 masl), hills (altitude ranging from above 1000 to 4000 masl) and *terai* (altitude ranging from 300 to 1000 masl) (Malla, 2001). The high mountains account for 24 percent of the total national area, while, the hills and *terai* occupy 60 and 16 percent of the land area of Nepal respectively (Malla, 2001). About one-third of Nepal's total area is forested, 21 percent is covered by cultivated land, and seven percent is non-cultivated land. Similarly, about 23 percent of the total area is covered by shrubs, grasses and pastures (DFRS, 2001). By ecological zones, hills have most of the forests (about 26 percent), followed by *terai* (8 percent) and mountains (1 percent) (DFRS, 1999).

2.3 Demography of Nepal

Nepal has a population of 27.1 million people with an annual growth rate of 2.0 percent, based on 2005 estimates (UNFPA, 2005). About 50 percent of Nepalese live in the *terai*, 43 percent in the hills, and seven percent in the high mountains (CBS, 2005c). More than 87 percent of the population lives in rural areas. Population density per square km in 2002 was about 169 (CBS, 2005c).

According to the 'Nepal Living Standards Survey 2004', about 31 percent of the population is below the national poverty line⁴ (CBS/ World Bank, 2005). The proportion of the population below the poverty line is highest in the hills (about 35 percent) compared to the mountain areas (about 33 percent) and *terai* (about 28 percent) (CBS/WorldBank, 2005). About 95 percent of the poor live in rural areas (CBS, 2005b). Poverty in Nepal continues to be a mainly rural phenomenon, and is associated with substantial disparities across ecological zones, castes and ethnicity (UNDP, 2004b).

In 1991 for the first time, Nepal's population census was disaggregated by caste and ethnic composition within the three ecological zones (i.e. mountain, hill and *terai*). These data identify about 103 caste and ethnic groups in Nepal, 37 groups representing high Hindu castes, 16 groups representing low Hindu castes (*dalits*), 47 ethnic groups (*janajatis*), three religious groups, and one unidentified. The high caste and ethnic groups⁵ comprise 33 and 35 percent of the total population respectively (CBS, 2002a). Human

⁴ The poverty line was derived using the Cost-of-Basic-Needs (CBN) method, which was based on the nutrition norm of per capita 2,124 kcal per day (CBS, 2005a).

⁵ Caste groups originated from the Hindu caste groups of India which include high and low castes whereas the ethnic groups are either customary inhabitants of Nepal or originated from Tibeto-Burman areas (China).

Rights Watch (2004) reports that the low caste groups comprise about 21 percent of the total population. The religious groups constitute the remaining 11 percent of the total population.

The high caste groups, such as *Brahmin* and *Chhetri*, account for approximately 29 percent of the hill population. These ethnic groups, *Magar*, *Tamang*, and *Newar*, represent about 18 percent of the hill population. Two other ethnic groups, *Majhi* and *Danuwar* account for about one percent of the total population. The lower castes ('untouchables' also called '*dalits*') such as *Kami*, *Sarki* and *Damai* account for almost seven percent of the total population. The largest *dalit* caste is *Kami* (blacksmiths) comprising 30 percent of the '*dalit*' population, followed by *Damai* (tailor cum musicians) at 13 percent, and *Sarki* (cobblers) at about 11 percent (CBS, 2003b). Most districts in Nepal have a mixed population, though either a single caste or an ethnic group may solely populate some pockets. Caste groups generally tend to congregate in separate settlements or hamlets. *Dalits* are usually found in the periphery of settlements populated by high caste groups (Pradhan & Shrestha, 2005). Distinctions between caste and ethnic groups are discussed in the next section.

Caste/ethnicity is a major variable that reflects variations in poverty rates (UNDP, 2005). The incidence of poverty among lower castes ('*dalits*') of the hills as a whole is nearly 48 percent, which is higher than the national average (31 percent). About 43 percent of the total population of *janajatis* (ethnic groups) residing in the hills are poor. Only 18 percent of higher castes (*Brahmin* and *Chhetri*) are classified as poor; in the case of *Newar* (ethnic group), the poverty rate is 14 percent (CBS., 2005c).

The literacy rate⁶ in Nepal in 2003 was about 51 percent (CBS, 2005c). Caste-wise data from 2001 indicate higher literacy rates for higher caste groups, i.e. *Brahmin* and *Chhetri*, with 75 and 60 percent respectively. The ethnic group *Newar* consists of 71 percent literate people. The ethnic groups, *Magar* and *Tamang*, and also the lower caste '*Sarki*' have 50 percent literacy rates. But, in the two lower castes, *Kami* and *Damai*, only 44 and 38 percent respectively are literate. However, the literacy rates of two other hill ethnic groups, *Majhi* (35 percent) and *Danuwar* (29 percent), are lower than that of the *dalits* (CBS, 2003b). Rural areas have lower literacy rates (46 percent) as compared to urban areas (74 percent). Male and female literacy rates nationally stand at 63 and 39 percent

⁶ Nepal Living Standard Survey 2003 and 2001 defines a person (six years and above) to be literate if he or she can read and write (CBS, 2005a).

respectively, highlighting a wide gender gap. In rural areas, 59 and 34 percent of rural men and women respectively are literate (CBS, 2002b). Differential literacy rates reflect differential access to education. Access to education is the most important determinant of human development indicators and is directly linked to the economic and social well-being of households (UNDP, 2004a).

2.4 Sociocultural and economic context of Nepal

Social relationships in Nepal are guided by the caste system, which represents both castes and ethnic groups. The formation of caste and ethnic identities in Nepal results from a complex interplay of different social processes aimed at diverse economic and political goals (Bista, 1991). Most ethnic groups, except *Newar*⁷, are minorities in terms of low population, and have limited influence on national social, economic, and political activities. The high caste groups lead the state and are often involved in the decisions on national activities. The caste system promoted by the rulers has greatly influenced the sociocultural system of the ethnic groups. The present caste structure and relations are rooted in the historical caste system.

2.4.1 History of the caste system

Prior to 1950, the country's law, *muluki ain*⁸ (in Arabic), was the epitome of orthodox Hindu values. This law featured hierarchy, differentiation and discrimination between higher and lower castes. This law not only protected the political order but also maintained the social and religious values of orthodox Hindu society. Higher Hindu castes could better utilise this law for their own interests. This indicated caste status as the chief factor determining an individual's juridical status (Hofer & Sharma, 2004). The caste system was overwhelmingly based on Hindu religious norms. The system is believed to have originated from Indo-Aryan society (Bista, 1991).

According to this law, all castes and ethnic groups of Nepal were subsumed into four Varnas and 36 castes, and were arranged into five vertical categories (Chhetri, 1999). Hindu caste hierarchy was thus based on the Varna system. Varna and caste (jat) seem

⁷ *Newar* is also referred to as the dominant ethnic group, because most of them reside in the capital city (Kathmandu), and have good access to education and other services.

⁸ This was the first legal code of Nepal promulgated with the orders of Jung Bahadur Rana, the first Rana Prime Minister of Nepal in 1854.

to be understood as mutually inclusive and reinforcing terms (Sharma, 2004). All the castes were grouped into four Varnas denoting different social statuses, namely, Brahman, Kshatriya, Vaishya and Shudra. Brahman comprises priests and religious teachers; kings, warriors and aristocrats belong to Kshatriya; traders, peasants and craftsmen belong to Vaisya; and servants to all of the above three Varnas belong to Shudra (Hofer & Sharma, 2004).

According to five vertical categories, the upper three caste groups, the pure castes, were separated by a demarcation line from the lower two caste groups, the impure castes. The pure caste groups were: (i) wearers of the holy cord ('tagadhari'), (ii) non-enslavable alcohol-drinkers, and (iii) enslavable alcohol-drinkers. The impure caste groups were: (i) impure but touchable castes, and (ii) impure and untouchable castes. The pure caste groups are water-acceptable and the impure caste groups are water-unacceptable. 'Enslavable' are castes whose members, in case of certain offences, can be punished by enslavement. An Upadhaya Brahmin ('cord wearer') is free to accept water as well as *bhat* ('cooked rice') from another Upadhaya, whereas from the Magar ('non-enslavable alcohol drinker'), he may accept only water but not *bhat*, and from an untouchable, neither water nor *bhat* (Hofer & Sharma, 2004).

From 1950 to 1963 (the Rana regime)⁹, members of the pure castes did not accept water, certain kinds of food (i.e. *bhat* or rice) or any physical contact from impure castes. The relationship between individuals was to a large extent determined by their status. Moreover, this law during the Rana regime punished different castes differently for committing the same crime (Gurung, 1999). Justice was thus practised in a discriminatory way, the higher the caste the less severe the punishment, while the lower the caste, the more severe was the punishment. The law functioned in such a way as to protect the status and interests of the high castes. Furthermore, the law promoted perpetuation of high castes' domination in all spheres of Nepali society (Gurung, 1999).

The *muluki ain* law was replaced by a new Civil Code in 1963 at the start of the *Panchayat* regime. Details about this regime are provided in the section on the political context of Nepal below. The new code was promulgated by King Mahendra, who injected into it a more progressive social outlook. Although this new legal code did not explicitly abolish the caste hierarchy that existed in customary society, it did explicitly express state disapproval

⁹ *Rana*, one of the higher castes, ruled the country at that time.

of the hierarchy. In reality, however, discrimination was not eliminated and the hierarchical caste system continued to be practised (Bista, 2001). Discrimination continued on the basis of ethnicity, caste and gender in everyday interactions. The higher castes could better access political and economic resources compared to other castes, because they continued to control the political and administrative structures (Pradhan & Shrestha, 2005).

The state promoted a monocultural 'Hindu' society. Ethnic-based organisations were banned, and no studies on ethnic issues of Nepal were allowed. This created frustrations for ethnic groups¹⁰ organisations (Gurung, 1999). In 1990, during the 'multi-party regime', the new Nepali constitution was formulated (HMG/N, 1990). This constitution declared Nepal a multiethnic and multilingual Hindu constitutional monarchical kingdom. It granted equal rights to all Nepali citizens, and prohibited any form of discrimination based on caste, ethnicity or gender (HMG/N, 1990). However, it seems that the outlook of many Nepali Hindus, even today, is dominated by an outdated view of caste distinctions (Sharma, 2004). Although the diverse caste groups are considered equal by state law, the structural hierarchy of caste and gender remains in practice.

2.4.2 Present caste system still reflects history

The present caste system still reflects the customary hierarchical system. The system can be pictured broadly as a three-tiered hierarchical system. The caste system has also influenced the ethnic groups. Three caste groups are arranged in vertical order, and include both castes and ethnic groups. The one at the top is the '*tagadhari*'¹¹ (includes *Brahman*, *Thakuri* and *Chhetri*); the second is the '*matwalis*'¹² (including ethnic groups which are also referred to as '*janajatis*' such as *Newar*, *Magar*, *Gurung*, etc.); and the third one, at the bottom, is called '*dalits*' (such as *Kami*, *Damai*, *Sarki* and others also referred to as 'the untouchables'). The '*tagadhari*' and '*dalit*' represent higher and lower castes respectively, whereas the '*janajatis*' represent ethnic groups and the middle rank of the caste system. Many ethnic groups, originally Mongoloid, still follow their Buddhist religion and their diverse mother tongues are generally from the Tibeto-Burman language family.

¹⁰ An ethnic group is a social aggregate exhibiting a certain uniformity of culture but not organised for collective action, where the feeling of collective solidarity is rudimentary, and where there is no will for political unification and independence. The ethnic awareness of these groups is of a cultural not political kind in Nepal (Sharma, 2004).

¹¹ Tagadhari means 'wearers of the holy thread'

¹² Matawali means 'alcohol drinkers'

Nepali society has integrated a tremendous amount of change during the past five decades since the revolution of 1950. Many old values and traditions have been replaced by new ones, but this does not mean that all the old traditions and values have disappeared completely. The old structures and frames of caste principles and of social hierarchy are still in evidence.

The caste system guides the social, cultural, and political activities of people of different castes and ethnic groups, and the interactions among them. The high castes have historically been identified in terms of economic and socio-religious superiority. *Dalits* are often prohibited from entering public places and from mixing with higher castes at social gatherings. *Dalits* are still called impure castes. The higher castes generally still do not accept water, cooked food or physical contact from *dalits* (Chhetri, 1999).

Caste identity has been an important social basis for economic class formation (Seddon, 1998). *Dalits* are deprived of access to economic and political resources, and social dignity (HRW, 2004). Inequalities between high caste (*Brahmin, Chhetri*) and low caste groups (*Kami, Damai, Sarki*) and between the dominant ethnic group (*Newar*) and the minority groups (*Magar, Gurung, Rai*) are significant in terms of economic status, human development indicators and in terms of political participation. High caste and dominant ethnic groups have better access to major economic opportunities, social services and political structures (Acharya et al., 2004). Patron client relations between the high caste and low caste groups still persist (Thapa & Sijapati, 2004).

According to the Hindu caste *varna* system, the lower castes are represented by different work-based classifications and are devoid of land rights (Pradhan & Shrestha, 2005). Almost all service castes of the '*shudra*' *varna* system belong to an occupational or artisan group (also called *dalits*), and carry out occupations other than farming for their livelihood. Each caste name denotes the type of work a person with that name does, for example *Damai* are tailors and play musical instruments, *Sarki* make shoes and remove dead carcasses, and *Kami* work with iron and make ploughing tools. These lower caste groups are bound to supply a certain amount of labour to upper caste households for whom their ancestors have been working for generations, making a certain number of ploughing tools and clothes annually. In return, they are provided with a fixed amount of grain after each harvest on an annual basis called '*bali pratha*' or '*the bista system*' (Bista, 1991).

2.4.3 Rural social and economic systems associated with access to land-based resources

Nepal today remains overwhelmingly an agrarian economy, mostly based on subsistence agricultural systems, with only about five percent of total employment outside agriculture (Blaikie et al., 2005). In subsistence agrarian systems in the rural hills of Nepal, the major objective of most farmers is to provide enough for their own consumption, seed for the next year, and to pay their taxes to the state. Under this system, agriculture and forestry are highly interlinked and interdependent (Mahat, 1987). Land tenure is very important in agrarian systems.

Land is central in the sense that the whole society is organised around land. Access to and control over land resources have an overwhelming influence on food security, well-being, and on the economic and social position of the vast majority of the population in such agrarian societies (Seddon & Adhikari, 2003). Most importantly, Nepal's rural social system is interlinked with land ownership and the land tenure system (ICIMOD, 2000). Land ownership is also linked with economic and political power that guarantees other sources of power within society. The present land tenure practices are based on the customary forms of land tenure.

Traditional land tenure system: A basis of the class system

State ownership was the traditional form of land tenure in Nepal (Yadav, 1984). Four types of land tenure systems (i.e. *birta*, *jagir*, *guthi* and *kipat*) were traditionally practiced. The *birta* and *jagir* forms of land tenure evolved out of the classical Hindu land system, in which most land belonged to the high castes or the royal family members (Sharma, 2004). *Jagir* tenure emerged from the *raikar* tenure, which is a form of state landlordism originally involving a direct relationship between the state and cultivators. The state granted the bulk of the agricultural land to a small proportion of landowners and institutions for performing various administrative functions for the state, including helping the state with tax collection from local farmers (Regmi, 1978). These local tax collectors later became feudal landlords by exercising power devolved from the state (Seddon, 1998).

Guthi land was allocated by the state mostly in favour of *guthi* institutions (groups of trustees) to assist with the financing of religious, educational, charitable or philanthropic activities. *Kipat* was a form of communal tenure, as only members of certain ethnic groups are permitted to own land under this system. *Kipat* land could not be used by individuals outside the community (Sharma, 2004). In 1952, most land in Nepal was held under the

raikar system (50 percent of the total land) and the *birta* system (36 percent of the total land). Only a small amount of land was held under the *kipat* (four percent) and *guthi* systems (two percent) at that time (Yadav, 1984).

Under the feudal system where a small number of landlords held most of the agricultural land, most of the landlords who were granted state lands were *Brahmins* and *Thakuri Chhetris*, whose social and political status corresponded to that of the ruling class itself. Many of them were not directly involved in farming but contracted out to tenant farmers on a customary and hereditary basis (Regmi, 1999a). *Dalits* did not receive land grants from the state and remained landless. This historical bias in favour of high caste and ruling classes enabled them to establish a position of economic and political dominance, which remains today (Seddon, 1998).

Though several redistributive land reform policies have been formulated since the 1970s, in reality the implementation has not significantly changed the customary landownership status (Regmi, 1999a). These policies thus have been largely ineffective in providing equitable access to land (SEEPOR, 2000). No effective land reform efforts have been undertaken even after the restoration of a multiparty political system (parliamentary system) in 1990 (Karki & Seddon, 2003).

Unequal land ownership: Characteristics of class and caste systems

The continuing inequality in the distribution of land reflects the persistence of feudal systems of landownership (Regmi, 1999b). The top three percent of agricultural households occupy more than 17 percent of the total cultivated land while the bottom 47 percent operates less than 15 percent of the land. Households' self-sufficiency in food is directly related to their land holding size. Households in food deficit situations are generally landless or own only a small area of land (less than half a hectare) (CBS, 2003a).

A share-cropping system, also known as *Adhiya*, continues to be the major form of tenancy relationship. In some cases, a fixed quantity of produce is shared or a fixed amount of money is paid for the right to cultivate the land (Regmi, 1999b). Most landless and those with small land holdings engage in such tenancy relationship to supplement their food requirement. However, only seven percent of landless and five percent of small landholding households are self-sufficient in food through their involvement in such tenancy relationship (CBS, 2003a).

Landless households and small farmers in rural areas who own few livestock and have little income from other sources are the most vulnerable regarding food self-sufficiency. In such households, labour migration predominantly occurs for the search of income sources for their livelihood (Seddon & Adhikari, 2003). Off-farm employment opportunities are very limited in rural areas, and many of the rural poor depend on loans for their survival, and thus there is a high incidence of indebtedness (CBS, 2005a).

Access to formal credit for the rural poor is very limited due to their lack of land, which is the most important source of collateral. Therefore, they are dependent on informal sources such as private lenders and relatives for loans (Regmi, 1999b). In contrast, households with large landholdings most often borrow money through formal credit services such as the Agricultural Development Bank and co-operatives (CBS, 2003a). The rural poor take most loans for consumption purposes to meet their immediate survival needs. The indebtedness of the rural poor makes them economically, politically and socially dependent on money lenders (Seddon, 1998).

Data from 1999¹³ indicate that 23 percent of *dalits* are landless and 75 percent have owned less than a hectare. About 88 percent of *dalit* families are unable to sustain their livelihood from their own land. About 41 percent of those economically active in the hill *dalit* group are employed in agriculture as waged labour (Sharma, 2006). Most *dalits* are referred to as the poorest group in Nepal based on NPC/UNDP data. These data indicate landless households headed by agricultural wage labourers who are the poorest, while small farmers are the second poorest group in Nepal (NPC/UNDP, 2005).

Unequal land ownership: Characteristics of gender inequities

The Hindu caste system promotes Hindu religious norms and values regarding gender relationships. This system discourages women's formal ownership of land. In Nepal, women in more than 80 percent of households have no ownership rights over land, houses or large livestock (Acharya & Subba, 2004). Women are not entitled to inherit parental property according to the Constitution '*Muluki Ain*' 1963. The Land Reform Act of 1978 also prohibits women who are younger than 35 from being nominated as tenants by the landlords (this is still in force today). The certificates of ownership of land provided through 'land redistribution policies' are only issued in the names of men (MGEP/UNDP,

¹³ More recent data are not available.

2002). Although the recent (11th) amendment of the civil code (in 2000) has brought some changes that provide women with equal inheritance rights to ancestral property, women need to return their share to the family after marriage while men do not need to do so (Bennett, 2005).

The lack of land ownership puts women in an inferior position in Nepali society. The social mobility of women is highly restricted. They are often discouraged from participating in many public activities and development opportunities. Because of this, they often lack access to goods and services (Acharya, 1994). Besides the patriarchal social structure, other social variables such as class, caste and ethnicity are linked with gender inequities. Significant differences exist between the average daily wages received in cash or in kind by men and women working as agricultural labourers with men earning 27 to 35 percent more than women (CBS, 2005a). At the same time, rural women in many cases are left to carry the full burden of earning income and managing households because of the increasing migration of rural men to urban areas to escape poverty.

2.5 Political impacts on Nepal's Forestry Policy

Broadly, two types of political systems, the partyless panchayat and multiparty system have defined the environment in which forestry policies and strategies have been developed. Politically, Nepal is divided into five development regions, 14 zones and 75 districts. Village Development Committees (VDCs) and municipalities are the lowest local level administrative units in each district. The country consists of 3,913 VDCs and 58 municipalities (CBS, 2002a).

Nepal since the 1950s has experienced ups and downs in terms of democracy. The first successful revolution for democracy occurred in 1950. This resulted in the overthrow of the Rana regime, which had ruled autocratically for 104 years. The first election based on a multiparty system took place in 1958, leading to the formation of the first elected government. This elected government was overthrown by a military coup in 1960 led by King Mahendra, who established the partyless panchayat system. The intention in imposing this system was to ensure power returned to the king (Panday, 1999). In 1990, a multiparty system was again reinstated. This multiparty system was unsuccessful in reducing poverty, and led to the civil conflict driven by the Maoists, which began in 1996 (Thapa & Sijapati, 2004). The King took over the power from February 2005.

2.5.1 Political development in Nepal

The partyless panchayat system (1961-1990)

The partyless *panchayat* system was in operation in Nepal from 1961 to 1990. The *panchayat* (also termed 'council') system was a hierarchical arrangement of nonpartisan councils that extended from the village to the national level (Talbot & Khadka, 1994). King Mahendra was the reigning monarch and accepted by the majority of Nepalese to be the representative of God *Bishnu*. The political, economic and social system represented a feudal system that favoured the local elites (generally high caste people) (Panday, 1999).

In 1981, the constitution was amended for the third time to facilitate the smooth working of the partyless political system. The ultimate power of government resided with the king. Those individuals who supposedly represented the people in the national assembly (*Rastriya Panchayat*) were selected by the king and influential elites. A five year national plan was devised in 1985 and implemented by parliamentary ministers and politicians at the national level as dictated by the king (Bista, 2001). In 1988, political parties like 'Nepali Congress' and 'The Communist Party' started rebelling against the undemocratic *Panchayat* system. The pressure of the popular movement led to the collapse of the *Panchayat* system in 1990, which was replaced by a multiparty system (Panday, 1999).

The multiparty system (post 1990)

With the initiation of a multiparty system, most of the strategies and processes adopted during the *panchayat* system were changed. The nomination of commissioners (*Anchaladhis*) to fourteen political zones (*anchal*) by the king for maintaining law and order was discontinued (Bista, 2001). The 'Constitution of the Kingdom of Nepal' was promulgated in 1990. This constitution has been characterised by attributes such as multiparty, democracy, constitutional monarchy, vesting of sovereignty in the people, and respect for human rights. Six major political parties participated in the 1991 general election¹⁴.

¹⁴ Those parties were: Nepali Congress, Communist Party of Nepal (UML), United People's Front Nepal, Nepal Sadbhavana Party, Rastriya Prajatantra Party (Chand), Rastriya Prajatantra Party (Thapa), Communist Party of Nepal, and Nepal Workers' and Peasants' Party (Thapa & Sijapati, 2004).

In this system, the Chief District Officers, as regular civil servants, are responsible for planning and maintaining development activities in collaboration with other district-level officials representing different ministries in 75 administrative districts. Below the district level, each district has a number of 'Village Development Committees (VDCs)' formed based upon population size. Each VDC includes on average between 3000 and 5000 people. District courts, appellate courts and supreme courts are courts for justice. Village councils are authorised to act as courts of justice in disputes of a local nature at the village level. The National Planning Commission (NPC), which is directly under the Prime Minister as its chairperson, develops five-year plans for the nation.

Bista (2001) explains that the Nepalese have faced many different kinds of problems in this multiparty system. The activities of Government ministries did not reflect the content of the national plan as laid down in the five-year national plan (1985-89). Although representatives from all ministries were involved in the development of the national plan, separate ministries implemented the plan in isolation from other ministries. This system did not bring any satisfactory change in Nepal's history of authoritarian rule and customary hierarchical and semifeudal social structure (Panday, 1999).

The process of organising and running political parties was rarely based on a political manifesto. The political parties were prone to internal disunity and division. They could rarely transform into reality their commitment to democratic processes and culture for which they had argued during the struggle against the panchayat system. This was evident also in the failure to bring about changes in the culture within government, political parties and civil society (Panday, 1999; Bista, 2001). Because of this, the Maoist leaders, representing some political groups that contested the parliamentary elections in 1991, became dissatisfied and opposed the system from the time of these elections.

The present King, Gyanendra, dissolved both houses of parliament in May 2002 as well as three subsequent interim governments composed of a prime minister and a council of ministers. The last interim government was suspended in February 2005. King Gyanendra has since ruled with full executive powers assisted by an appointed ten-person crisis cabinet.

Since the restoration of democracy in 1990, the major political actors in Nepal have been the king, the political parties, and the Maoists. The king is the head of state and is the single most powerful political actor. Royal power has been based on strong ties with the military and economic elites. The king suspended all political parties claiming they were

not effectively addressing the civil conflict. Many actions of parties and their members appear to be oriented to acquiring and maintaining power, which is based on personal interests rather than on ideology or policy. Parties are frequently perceived as representing only men of higher caste groups. In 1997, the major political parties agreed formally to a policy of ensuring that women should comprise ten percent of the membership of the central committees. However, none of the political parties have enforced this policy (Bennett, 2005).

The civil conflict led by the Maoists began in 1996 (Thapa & Sijapati, 2004) and by 2005, they had control over an estimated 40 to 60 percent of the total land area (FRD, 2005). The conflict has claimed more than 15,000 lives, and more than 50,000 people had been displaced by this conflict by 2004 (FRD, 2005). The backdrop to the conflict is deep-seated poverty, poor governance, discrimination, and inequalities in a variety of economic, political, and social arenas (Karki & Seddon, 2003). The conflict has also seriously constrained economic activities and livelihoods of people, by restricting government's, donors', NGOs' and the private sectors' ability to respond to demands for goods and services (Hussain & Seddon, 2002). This has also had significant effects on forest sector development.

The country's situation (economic, security, political) deteriorated under the King's direct rule from February 2005. The Maoists and seven main political parties joined together to lead protests, which turned into a people's movement in 2006. The fieldwork for this research was conducted during these political upheavals during October 2005 to April 2006. The political developments of April 2006 have given a new hope of return to a multi-party democracy but launching and sustaining an inclusive peace process and addressing the underlying causes of conflict remain the main challenges for Nepal today. State forest policies and strategies in relation to their focus in poverty reduction have been shaped by Nepal's recent political history of first the partyless *panchayat*, then the multiparty system. This shaping of forestry policies is described in the next section.

2.5.2 Development of forestry policies

Changes in the government's forestry policies have been influenced by several factors and actors. Some important factors guiding the policy changes have been political changes, including the prevailing sociocultural and economic situation, donors' influences, the focus of the government at the time and, importantly, the government's changing

perception of the forestry-related problems (Talbot & Khadka, 1994; Gautum, 2004). Although there have been trends of improvements in forestry policies in terms of pro-poor focus, implementation has not been particularly effective (Hobley & Malla, 1996; Malla, 2001).

Gautum (2004) argues that the structure and function of the policy units of government are top-down processes. The ruling classes and higher castes have greatly influenced the development of policies and implementation of guidelines, including those related to the forestry sector, in terms of inclusion of their own interests and priorities (Gilmour & Fisher, 1991; Hobley, 1996b; Biggs & Messerschmidt, 2003). Furthermore, political situations have created challenges for poverty reduction through forestry (Bhattarai, 2006). For example, the Maoist conflict has negatively affected the implementation of state forestry policies at the local level by imposing 'taxes' on the community forestry user groups (Schweithelm et al., 2006).

Two broad categories of forest management policies have existed over time in Nepal. These categories are nationalisation and community-based management (Hobley & Malla, 1996; Bhatia, 1999; Graner, 1999). Forests have been nationalised for the purpose of protecting them since 1957. The concept of community-based forest management was initiated from the late 1970s. Table 2.1 provides the timeline of forestry policies and their focus.

In 1957, the government nationalised all the forests through the Private Forest Nationalisation Act, to protect them from indiscriminate use by a few landlords (Talbot & Khadka, 1994). This act abolished the private ownership of forests, and forests belonging to the *Rana* family were declared public property. The Ministry of Forestry was established in 1959, and the government bureaucracy was expanded to control widespread deforestation. However, the government was not successful in managing the forests (Joshi, 1993). Local people were deprived of their rights to manage and benefit from the forests by the government and hence they did not favour the forest management policy which they thought curtailed their customary rights over forests (Blaikie & Sadeque, 2000). Forests thus increasingly became open access resources (Hobley, 1996a). Since there were no land records, local elites increasingly cleared forestlands and claimed these as private property (Palit, 1996).

Table 2.1: Development of Forest Policies and Their Focus (Source: Talbott & Khadka, 1994; FDP, 2000; Bhattarai & Khanal, 2005)

Date	Forest policies	Focus of the policies
1957	Nationalisation of private forests	No rights of local people over the forests
1961	The Forest Act	No rights of local people over the forests
1967	Forest Protection Act	More emphasis on prohibition and punishment for forest resource use than people's livelihood needs
1976	The National Forest Act	Realisation of the importance of people's participation in forest management
1977-78	Amendments, Forest Act 1976	Recognition of people's participation in forest management
1988	Master Plan for the Forestry Sector	Emphasis on the sustainable management of forests and livelihood of local people
1993	Forest Act	Legal basis for providing management roles to forest user groups (FUGs)
1995	Forest Regulation	Provision of legal user-rights to the FUGs registered in the District Forest Office (DFO) Provision for leasing degraded forests to groups of poor people
1998	Amendment, Forest Act 1993	Restrictions on forest resource use by the FUGs that do not prepare resource inventory
2000	Forest Policy	Priority to community and leasehold forestry for promotion of people's participation in forest management for sustaining their livelihood

In 1961, with the inception of a partyless *panchayat* system, comprehensive forestry legislation, the 'Forest Act 1961', was promulgated. This policy sought to restore government control over forestlands. The 'Forest Protection Act 1967' further strengthened the enforcement role of the Forest Department by delineating offences and punishments. Forestry staff were responsible for the protection of forests through policing, and a majority of local people were considered offenders (Talbott & Khadka, 1994). Neither of these acts demonstrated any concern for the livelihood needs of rural people (Gautum, 2004).

In the 1970s, Nepal was greatly influenced by international concern about forest degradation, and the international emergence of community-based forestry (i.e. community and social forestry). Outside donors became increasingly influential in shaping the forest management policies of Nepal. They influenced the state for the decentralisation of forest management (Malla, 1996). The National Forest Act of 1976

made provision for the involvement of the community for forest management for the first time. However, only in subsequent amendments to the Forest Act in 1977 and 1978, did the government recognise that local participation is necessary for managing forests (Talbot & Khadka, 1994). The forests of Nepal were categorised into national, community, religious, leasehold and private forests. Inclusion of the *Panchayat* Forest Regulations¹⁵ (PF) and *Panchayat* Protected Forest Regulations¹⁶ (PPF) allowed village *panchayats*¹⁷ to manage barren or degraded lands for forest production (MoFSC, 1995). This was a kind of decentralisation of authority to the community level by the government. According to Fox (1987), these amendments made about half of the nation's forests potentially able to be managed by the village *panchayats*.

The emphasis of the government and donor agencies (such as The World Bank) was on reforestation and afforestation, and rural people's needs were still not considered in forest management policies. Nor were the needs and interests of the rural people who were users of the forests represented through *Panchayats*. Moreover, local leaders were given more opportunities to exert control over the forests through this policy (Winrock, 2002). District Forest Officers (DFOs) were challenged to cast aside their police roles in favour of supporting local development activities (Karki et al., 1994). However, the management committees, which were to be headed by elected members of local *panchayat*, were not required to be users of the forests themselves (MoFSC, 1985). *Panchayats* were large political administrative units which were not effective in forest management at the local level (Karki et al., 1994).

From 1980 to 2005, the focus of community-based forestry policies has gone through a series of modifications (Bhattarai and Khanal, 2005). The Master Plan for the Forestry Sector (1988-2010) was developed as a result of the First National Community Forestry Workshop in 1987. Donors showed their interests for greater involvement of local communities in management decisions and supported development of the Master Plan. This long-term (25 year) plan encouraged the transfer of forest access and management rights to local communities (HMG/N, 1988). The plan recognised the poor and women as primary users of the common forest, and emphasised the need to incorporate their interests in the decision making and benefit sharing processes. The main feature of this

¹⁵ Any government forests which contained only stumps could be handed over by the government to the village *panchayats* for the welfare of the villages.

¹⁶ Government forests in any area could be handed over to the *panchayat* for protection and management purposes.

¹⁷ A village *panchayat* was the lowest politico-administrative unit during the partyless *panchayat* regime. It was renamed as Village Development Committee (VDC) in 1990 after the restoration of democracy.

plan was an integrated programme approach, with programmes specifically directed at basic needs of the people. Six main forestry development programmes and their respective support programmes were identified for planning and implementation (Table 2.2). The plan recognised community and private forestry as the most significant in terms of area and budget, followed by national and leasehold forestry, among the six primary forest programmes (MoFSC, 1989).

Table 2.2: Main and Respective Support Programmes Outlined in the Master Plan of the Forestry Sector (Source: MoFSC, 1989)

Main programmes	Support programmes
1) Community and private forestry	1) Policy and legal reforms
2) National and leasehold forestry	2) Institutional reforms
3) Wood-based industries	3) Human resource development
4) Medicinal and aromatic plants	4) Research and extension
5) Soil conservation and watershed management	5) Forest resources information system and management planning
6) Conservation of ecosystems and genetic resources	6) Monitoring and evaluation

The Forest Act 1993 and the Forest Regulation 1995 were then introduced, which provided management responsibilities to smaller user groups (not to the *panchayats*) who are more closely associated with particular forests (NPC, 2002). The Forest Act 1993 specifically recognised forest user groups (FUGs) as legal entities (HMG/N, 1993). FUGs were recognised as independent and self-governing entities, and were provided sole rights for the management and utilisation of forests (MoFSC, 1995). According to the Act, FUGs can develop and manage forest resources to meet their basic needs. A special priority was given to the expansion of community forests both in hills and *Terai* but not the leasehold forests (FDP, 2000). Section 30 of the Forest Act 1993 stipulates that "any part of the national forest suitable to hand over to the users' group as community forest shall not be handed over as leasehold forest" (FDP, 2000). This suggests that the leasehold forestry that targets poor households is given a lower priority than community forestry, which targets the community irrespective of the economic status of users.

Subsequently, community forestry guidelines were developed, and community forestry rapidly expanded in the hills. The Master Plan for the Forestry Sector has been considered as a basic document for reference in forestry sector policies and strategies. The Master Plan indicated concern for the basic needs of people, although a poverty

reduction strategy is not one of its major strategies. The plan indicates only that land exceeding the needs of the local communities can specifically be allocated for forest management for poor people, small farmers and forest-based industries (MoFSC, 1989).

The Forest Regulation 1995 for the first time explicitly mentioned leasing forestland to poor communities. The leasehold concept prior to this regulation targeted leasing of degraded lands to individuals, cooperatives, institutions or firms for commercial purposes but not to the poor households. Provisions were made in this regulation for giving priority to poor communities to lease forestland ahead of industries, corporate bodies or communities who had also applied to lease the land (Yadav & Dhakal, 2000).

The Third National Community Forestry Workshop in 1997 produced a new vision for community forestry based on the four pillars of social justice, equity, gender balance and good governance. However, this vision was different from the amendment of the Forest Act in 1998, which returned some powers to the District Forest Offices (DFOs). FUGs were restricted from using forest resources unless they prepared a resource inventory and got permission from the DFOs (Bhattarai, 2006). In 2000, Forestry Sector policy was again revised, as a result of which community and leasehold forestry regimes were prioritised for promoting people's participation in forest management to meet their basic needs. The role of forestry in poverty alleviation was also emphasised.

Malla (2001) argues that although the forest policies have been changed, they continue to facilitate the formation of alliance and patron-client relations by which local elites and government officials gain power to control and benefit most from forestry. Although the Master Plan for the Forestry Sector of 1988 recommended relaxing the policing role of the forest bureaucracy, recognised local people's rights over forest resources, and reoriented forest officials to their new roles as extension officers in supporting people's efforts, most of the recommendations provided in the plan are yet to be implemented (Shrestha & Budhathoki, 1993; Bhattarai & Khanal, 2005).

2.5.3 Implementation of community-based forestry policies

Community and leasehold forestry are two major community-based forestry regimes initiated by the government for poverty reduction. In the following sections, the implementation of community and leasehold forestry regimes and the organisations involved with these regimes are described.

Community Forestry implementation

The Community Forestry Directives 1995 and Operational Guidelines 1995¹⁸ provide procedural guidelines for the implementation of the Forest Act 1993 and Forest Regulation 1995 (Bhatia, 1999). The forest policy was revised in 2000, and the community forestry guidelines were modified in 2001 so that community forest user groups (CFUGs) became legally recognised as autonomous entities when registered with the DFOs (Baral, 2004). Such registered CFUGs have the power to benefit from the sale of forest produce, and to punish users who act against the work plan. The objectives of community forestry are development, conservation and better utilisation of forest products. The guidelines specify that CFUGs have authority to manage and use the forests, but cannot sell or transfer them to other people, because the government still owns all forests (MoFSC, 2001). Baral (2004) and Bhattacharya and Basnyat (2005) note that the guidelines still lack focus on sustainable livelihoods, human rights and good governance.

The handing over of national forests to CFUGs is based on the accessibility of the forest, and the willingness and capacity of the community to manage forests (MoFSC, 1989). The MoFSC (1989) in the Master Plan for the Forestry Sector (MPFS) defines “an accessible forest as a forest that is located within 3 kilometres’ distance from the closest village”. The guidelines do not specify by whom or how the needs, willingness, and capacity of CFUGs are to be determined. The determination of a community’s willingness and capacity to manage forest is dependent on the DFO’s assessment of the community.

Establishing CFUGs

Forest users who want to manage a forest as a community forest must submit a written application to the DFO. After receiving an application, the DFO is required to send technicians to prepare a forest resource inventory. The DFO should assist in the formation of a CFUG and the drafting of its 'constitution' and 'operational plan'. The prepared operational plan, constitution and application for registration should then be sent again to the DFO. A CFUG is awarded a certificate of registration based upon submitted documents and assurance from it to abide by the conditions determined by the government. The certificate of registration constitutes legal authority to manage the

¹⁸ The first operational guidelines were prepared in 1989, and revised in 1992, 1995 and 2001 (Baral, 2004).

community forest under a forest management plan (i.e. the operational plan) approved by the DFO (MoFSC, 2001).

The CFUG's operational plan

The operational plan includes rules for the use and sale of forest products and protection of the forest. The document should also include a description of the forest, objectives and methods for forest management, a time schedule of forest conservation activities, provisions concerning the sale and distribution of forest products, and punishment rules for contraventions of the plan. A resource inventory survey of the forest is mandatory. The conditions from the government (the Department of Forests) are also included in the operational plan (MoFSC, 2001). Some conditions which CFUGs need to abide by include:

- The CFUG shall work in accordance with the technical advice, recommendations and directives given from time to time by the DFOs.
- The CFUG shall submit a report in the prescribed format to the DFO within one month after the end of the fiscal year.
- The CFUG shall face legal actions if it is proved that the conditions prescribed in the operational plan, Forest Act and regulation, or by the government have not been followed.

After the forest has been handed over to a CFUG for management, the CFUG can make appropriate amendments where it considers them necessary - but only after receiving approval by the DFO. An amendment will be rejected if it is likely to have serious adverse environmental impacts.

Rights and roles of CFUGs over the forest

After registration with the DFO, a CFUG obtains proprietary rights, but not ownership rights, over forest products generated from the community forest. Its rights to exclude others, use forest produce, and determine price and sale confined within or outside the community have also been recognised by law. The CFUG is not allowed to destroy the forest or mortgage or transfer the ownership of the land covered by the community forest. It may, however, mortgage forest products in order to secure a loan from a financial institution for developing the community forest, but only with the approval of the DFO. The CFUG is bound by its operational plan (MoFSC, 2001).

The guidelines of 2001 permit CFUGs to cultivate non-timber forest products as a means of generating incomes, and commercialise wood and non-wood forest products and their processing in order to fulfil the subsistence needs of local people. The CFUG is free to collect and spend income generated from community forests for forest development as well as for social and community development activities. It should deposit its income into a separate account. It must submit an annual report of its activities, including descriptions of forest's condition, and expenditures and the statement of accounts to the DFO (MoFSC, 2001).

Organisations involved in the community forestry regime

The Ministry of Forests and Soil Conservation (MoFSC) and the Department of Forests (DoF) are two government organisations directly involved in community forestry regime in Nepal. The Ministry is responsible for the overall policy coordination, monitoring, and planning of activities related to the community forestry sector. The DoF is responsible for the implementation of the community forestry regime. The Community Forest Division (CFD) under the DoF is responsible for policy guidance, implementation support, and monitoring of the community forestry regime in Nepal (NPC, 2002). The field level forest management activities are implemented through seventy-four District Forest Offices (DFOs). Each DFO has about three Illaka offices (subdistrict units of DFOs), and eight to fifteen Range Posts under this office. Figure 2.1 shows the organisations involved in the community forestry regime.

Several donors and projects also support community forestry regime implementation in 70 districts in Nepal. The donors include the World Bank, the Danish International Development Agency (DANIDA), the Department for International Development of the UK (DFID), the United States Agency for International Development (USAID), the Australian Agency for International Development (AusAid), the Swiss Development Cooperation (SDC), the German Agency for Technical Cooperation (GTZ), and the Dutch Government (Table 2.3). The nongovernment organisations such as the Care Nepal and the World Wildlife Foundation are also involved in the implementation of the programmes. About 1.2 million hectares or 25 percent of national forests had been handed over to 14,227 community forest user groups (CFUGs) by 2005 (CFD, 2006). About 1.6 million households, or 35 percent of the population of Nepal, are members of the CFUGs. The Federation of Community Forest Users Nepal (FECOFUN) is the network of user groups, with more than 70 percent of the CFUGs affiliated. It serves as a network for user groups, and also works as a pressure group for promoting the rights of the CFUGs (Kanel et al., 2006).

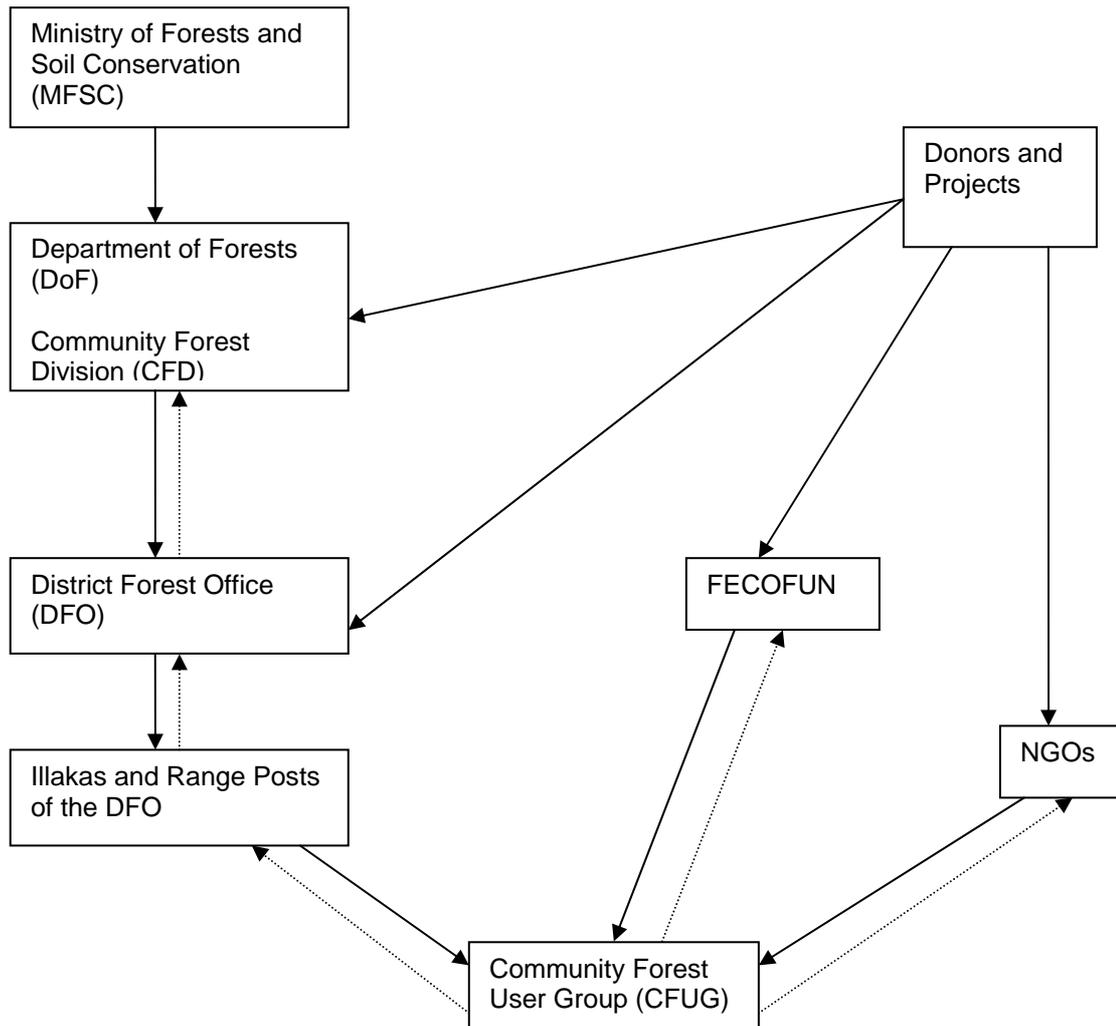


Figure 2.1: Organisations involved in the community forestry regime in Nepal (Source: Kanel et al., 2006)

Note:
 —————> Indicates strong linkage
> Indicates weak linkage

Table 2.3: Involvement of Donors/ Projects in the Community Forestry Regime

Donors/Projects	Number of Districts	Number of FUGs	Remarks
BISEP-ST	7	190	Terai districts
GTZ/ ChFDP	2	185	Terai districts
DFID/UK/ LFP	15	3604	
AusAid/ NACRMLP	2	839	
DANIDA/ NARMSAP	38	8115	
SDC/ NSCFP	3	826	
USAID/ SAGUN	3	364	
Without Projects	4	104	Government support in three districts but no community forestry in one district
Total	74	14, 227	

Source: CFD, 2006

Leasehold Forestry implementation

The drafters of the Master Plan for the Forestry Sector of Nepal 1988 had envisioned leasehold forestry as a mechanism of leasing a forest area to individuals, cooperatives or firms for commercial purposes - but they had not explicitly envisaged leasehold forestry as a mechanism for addressing poverty issues by leasing land to poor households. The concept of leasehold forestry for poverty reduction was integrated only in the subsequent amendments of the Forest Act 1993 and Forest Regulations 1995. Following these amendments, degraded areas of forestland have been allowed to be leased to poor communities for a period of 40 years, with exclusive rights to the produce of the land and with the provision for extension of the lease period (MoFSC, 2002).

The DFO is responsible for identification of degraded forestland to be allocated for lease to the poor. The Agricultural Development Bank Nepal (ADBN) is responsible for identification of poor households eligible for leasehold based on the 'small farmers' concept, which categorises households based on landholding size. The households who own less than 0.5 hectares are identified as poor households for leasehold group formation. The ADBN is also responsible for group formation and social mobilisation activities. The Department of Livestock is responsible for the promotion of improved

livestock production, legume forages, fodder and grasses in leasehold forests (Ohler, 2000).

When classifying land, it must be confirmed that the land to be leased to the poor is not under community forestry, because community forestry has legal priority over leasehold forestry (Yadav & Dhakal, 2000). The field staff members of the DFO are responsible for delineating the boundaries of the leasehold forest area through discussion with community members. They are also responsible for helping leasehold groups to prepare their operational plans and apply for registration to the Regional Director of Forests and Ministry of Forests and Soil Conservation (MoFSC) through the DFO. Upon the approval of their application from the government, lease certificates are issued to the individual farmers in the name of the group. Officially, the leasehold ownership is joint between members of a leasehold group. Individual families who are the members of the group can use the output of the leasehold forest.

In reality, the application process required by the Forest Regulations 1995 is difficult for the rural poor (Yadav & Dhakal, 2000). The application submitted by a group of the rural poor needs approval from the MoFSC, the Regional Directorate of Forestry, and the DFO, which can take a long time. Yadav and Dhakal argue that the process discourages participation of the rural poor in leasehold forestry in the absence of adequate external support. Only since 2002, with the introduction of the 'Leasehold Forestry Policy Guideline', has the process become easier (Brett et al., 2004). The policy guideline proposes to streamline the implementation process and to provide full authority to the DFO to handover management of leasehold forests, approve leasehold forestry operational plans, renew plans and monitor implementation.

Organisations involved in the leasehold forestry regime

The government-initiated Hills Leasehold Forestry and Forage Development Project (HLFFDP) was the first phase (1993 to 2003) of the project responsible for the implementation of the leasehold forestry regime in ten hill districts¹⁹ (DoF, 2005). The project was financed through a loan received from the International Fund for Agricultural Development, and a grant for technical assistance from the Netherlands government (IFAD, 2003).

¹⁹ Kavre, Sindhuli, Sindhupalchowk, Dolakha, Tanahu, Makwanpur, Dhading, Ramechhap, Chitwan, Gorakha

Several government agencies such as Department of Forests (DoF), Department of Livestock Services (DLS), Nepal Agricultural Research Council (NARC), and Agricultural Development Bank Nepal (ADBN) were responsible for the implementation of the project. The DoF was the lead agency, mainly responsible for the forest leasing process. The DLS provided technical support on fodder and animal health services. The ADBN was responsible for the identification of poor households and provision of credit to them (HLFFDP, 1999). The Food and Agriculture Organisation (FAO) also provided technical services in the field. Some nongovernmental organisations (NGOs) (such as the Society for Partners in Development, 'SPD') were also involved to accelerate the process of social mobilisation. The mobilisers were responsible for providing capacity-building support to leasehold groups (HLFFDP, 1999).

The second phase, the 'Leasehold Forestry and Livestock Programme (LFLP)', has been under implementation since 2004. The aim in this programme is to implement leasehold activities in 22 hill districts²⁰. IFAD provided loans of about 10.49 million US dollar to the Nepal government for implementing this programme over eight years (DoF, 2005). Only two government agencies, the Department of Forests and the Department of Livestock Services, are responsible for the implementation of this programme. Some NGOs are contracted by the government for social mobilisation. About 7,465 hectares of national forests have been handed over to 1,775 leasehold forest user groups (LFUGs). About 12,433 households are members of LFUGs (DoF, 2004). Figure 2.2 shows the organisations involved in this programme.

²⁰ Additional new districts are Panchthar, Terhathum, Bhojpur, Khotang and Okhaldhunga, Lamjung, Pyuthan, Salyan, Baitadi, Dadeldhura, Doti and Achham.

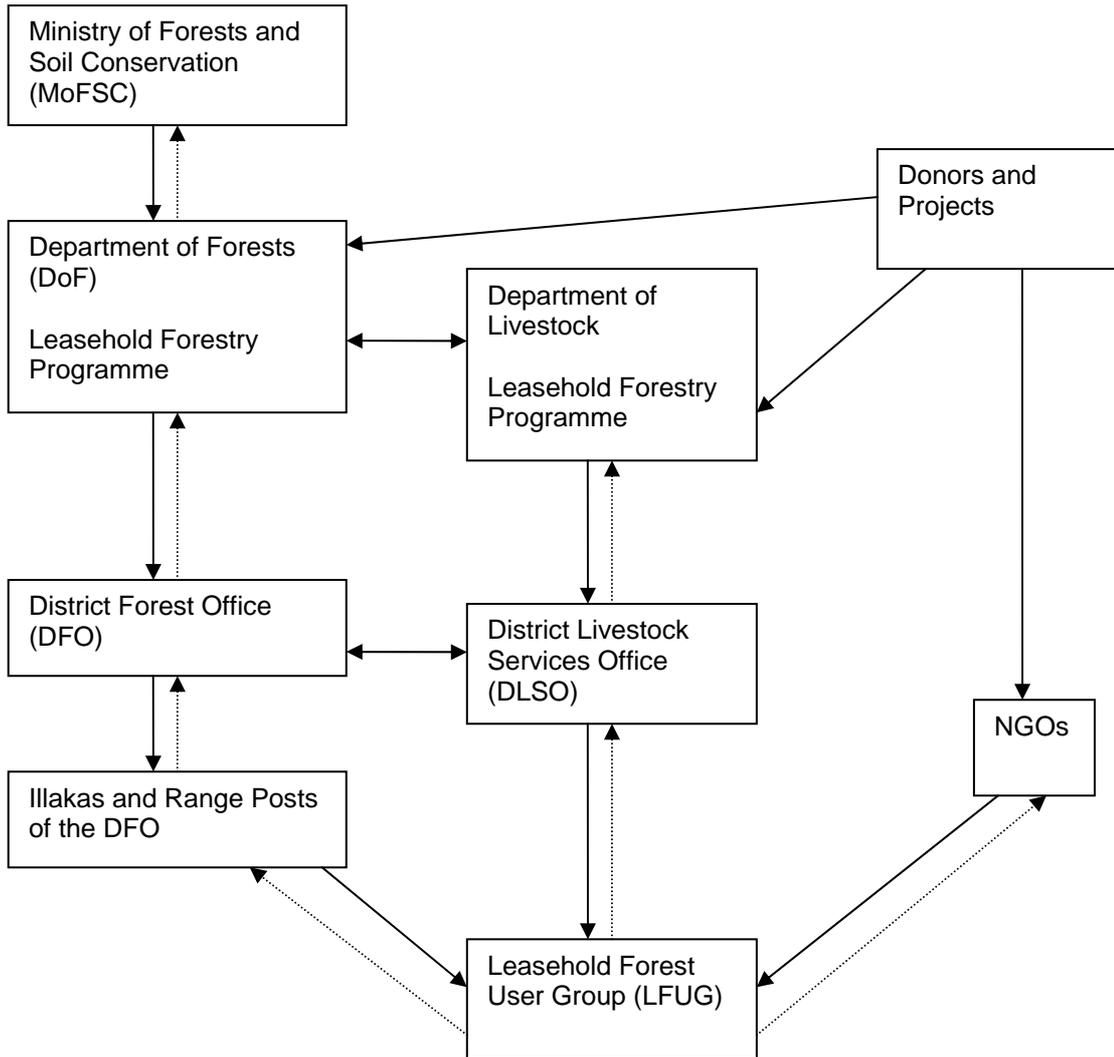


Figure 2.2: Organisations involved in the leasehold forestry regime (second phase) in Nepal (Source: DoF, 2005)

Note:
 —————> Indicates strong linkage
> Indicates weak linkage

2.6 Summary

This chapter describes the sociocultural, economic and political context of Nepal. Approximately one third of Nepal's total area is occupied by forests. Most forests are located in the hills, where the government promoted community-based forestry approaches in the early 1990s. Poverty in Nepal is a rural phenomenon. It is associated with substantial disparities across ecological zones, caste and ethnicity. Most poor people reside in the hills and mountains. The incidence of poverty among hill '*dalits*' (low castes) and *janajatis* (ethnic groups) is higher than the national average. The female literacy rate is only about half the male literacy rate. *Dalits* and hill ethnic minority groups have less access to education as compared to high castes.

The caste system in Nepal guides social relationships and reflects the dominant socio-cultural context. The historic caste system provides the base of the present caste structure and relations. Although the constitution of 1990 considers the diverse caste and ethnic groups as equal, the structural hierarchy of caste and gender remains in practice. People's social, cultural, economic and political activities are often guided by the caste system. Caste identity also provides an important basis for economic class formation. High castes have better access to major economic opportunities, social services and political structures than do *dalits* and *janajatis*.

Land ownership is also linked with economic, social and political power, which provides the basis for class, caste, and gender differentiation. Historically, the high castes and ruling classes had been favoured for land ownership; because of this they have established a position of economic and political dominance. The rural poor have limited access to credit from formal sources because of their lack of security in the form of land ownership. Hindu religious norms and values promoted by the Hindu caste system disadvantage *dalits* and women in relation to land ownership. The lack of land ownership puts women in an inferior position in society, greatly restricting their access to goods and services.

Poverty, poor governance, and inequalities in a variety of economic, political, and social arenas have been reported as reasons for the civil conflict led by the Maoist party. This conflict has itself constrained economic activities and livelihoods of rural people, and also had a negative effect on forest sector development. The multiparty democracy faces challenges in sustaining peace and addressing underlying causes of the conflict.

Only with the introduction of the multiparty system in 1990 did the community-based forestry policies also start to emphasise poverty reduction through forestry. A 'user group' approach was initiated. The DFO was responsible for implementation of the community forestry regime at the district level whereas the DFO, the ADBN and the DLSO were responsible for the leasehold forestry regime. In the community forestry regime, a group of forest users, regardless of their social and economic status, is required to formally register with the DFO in order to obtain legal rights to manage the forest. On the other hand, a group of forest users who are poor obtain permission to formally register with the DFO for managing the forest in the leasehold regime. The political situations and mechanisms of government units responsible for forest development have created challenges for poverty reduction through forestry.

Two important issues can be summarised from this chapter. First, national politics have a large influence on the focus of the community-based forestry policies. Second, sociocultural and economic contexts shape implementation of the policies. In the next chapter, the institutional factors, including sociocultural, that guide policy implementation in relation to resource access by rural people, the poor in particular, are identified.

CHAPTER THREE

RESOURCE ACCESS OF THE POOR

3.1 Introduction

Community-based natural resource management (CBNRM) is the most increasingly used governance regime for managing natural resources in many developing nations (Meinzen-Dick & Knox, 2001; Satria & Matsida, 2004; Haro et al., 2005; Tacconi et al., 2006). In CBNRM, a community has the legal right to the sustained use and management of local natural resources (Soeftestad, 1999). When CBNRM is applied to a local forest resource, then it is known as community-based forestry.

Community-based forestry has become an integral part of government policies and programmes that have aimed for sustainable forest management and poverty reduction over the past three decades (Sikor, 2006). Community-based forestry is believed to benefit people within the community through improved resource management. However, in reality some people have obtained benefits while others, usually the poor, have not (Edmunds & Wollenberg, 2003). An increasing number of scholars have recognised that practices on the ground have been different from stated community-based forestry policies (Ribot, 2002). Shackleton et al. (2002, p.1) noted that, “most community-based forestry reflects rhetoric more than substance”.

The literature concerning successful implementation of community-based forestry is largely focussed on sustainable forest management. However, there is less information about why community-based forestry has not been successful in combating poverty reduction, particularly in terms of access of the poor to forests. The purpose in this chapter is to review the theoretical underpinnings relating to the understanding of the contribution of community-based forestry in developing countries to the access of the poor to forest benefits, and in particular the key institutional factors associated with community-based forestry that influence resource access of the poor. Institutional theory is explored so as to define ‘institution’ in a way that is meaningful to this research. Aspects of power relationships that are useful for understanding the institutions that influence resource access of the poor are described, as are the key institutional factors that affect resource access. Finally, the conceptual framework that guides the conduct of this research is presented.

3.2 Theoretical framework

An understanding of institutions is very important for understanding common property resource management because it is through institutions that management systems work and resource access is determined (Jentoft, 2004; Agrawal & Gibson, 1999; Agrawal & Chhatre, 2006). Institutions are necessary in order to coordinate human activity in resource governance, and they create incentives for people to behave in certain ways (Gerrard, 1998). Institutions can be either formal or informal (Berkes, 1995; Uphoff, 1998; Ostrom et al., 2002). Legal rules are examples of formal institutions while social norms and social networks can be part of informal institutions (Nee & Ingram, 1998).

Defining institutions is guided by 'institutional theory' (also referred to as 'institutionalism'), which has increasingly been used as a foundation for research in different social science fields and common property resource management. Different types of institutionalism are described in the literature. Economists categorise new and old institutional economics (Hodgson, 1989); sociologists characterise institutionalism for sociology (Brinton & Nee, 1998); and political scientists distinguish three forms of institutionalism: rational choice, historical, and new (Hall & Taylor, 1996). Similarities and distinctions exist between these forms of institutionalism. Sociological institutionalism is similar to 'old institutional economics' and to 'new institutionalism in political science' in terms of the focus on institutions as embedded in social relationships and processes. Similarities exist between 'new institutional economics' and 'rational choice institutionalism in political science' in terms of emphasis on humans as rational decision makers.

Institutional theory with an embeddedness perspective provides a broader concept of institutions, and is useful for understanding formal as well as informal institutions and their influence on resource access (Brinton & Nee, 1998). It is particularly useful for this research, in which the aims include identification and explanation of the influence of institutions embedded in the culture on resource access of the poor. Jentoft (1997, 2004) and McCay (1998) argue that a broader concept of institutions, broader than the one guided by rational choice, is necessary in order to understand the operation of CBNRM and common property resource (CPR) management systems (e.g. fisheries, forestry). These systems involve relationships between human beings and nature (i.e. natural resources) that are shaped by institutions embedded in the social context (Steins & Edwards, 1999). Klooster (2000) argues that a concept of institutions that includes social and cultural underpinnings of the systems and that captures social processes and governance mechanisms is essential to understand the long-term operations of CPR management. An historical overview of institutional embeddedness theory is provided below.

Thorstein Veblen and Friedrich Hayek, early institutional economists, were influenced by sociological embeddedness views in their work in the early twentieth century (Groenewegen et al., 1995). For them, institutions are social norms, habits, and culture, which have important roles in economic activity (Vandenberg, 2002). Veblen proposed that economic activity and behaviour are embedded in the broader cultural context. He viewed institutions in terms of common and predictable patterns of behaviour in a society. The patterns of behaviour are reflected by habits and are outcomes of antecedents, heredity and culture (Veblen, 1898). Hayek (1945) defined institutions as widely recognised practices in a society that are commonly deemed appropriate in particular circumstances. For both Veblen and Hayek, the notion of an institution is explained by behaviour, which itself follows a regular pattern or a set of rules. Polanyi (1957), an economic anthropologist, had similar ideas; he suggested that economic activity is embedded within a sociocultural context. Economic activity is embedded in every society in a different way. He argued that in non-market-based societies, the economy is based on reciprocity and/or exchanges.

However, the new institutional economists, such as North (1991), Williamson (2000) and others have different propositions from those of Veblen and Hayek (Mayhew, 1989). People are considered to be rational in their choices and not influenced by culture or other factors. Rationality is understood in individualistic terms (North, 1991). An individual action is guided only by utility-maximising calculations and preferences (Williamson, 2000). It has been argued that the new institutional economists have overlooked the central role of social relationships in shaping human behaviour (Hodgson, 1989). Sociological institutionalists argue that individual action is also determined by social and cultural factors (Taylor, 1989), and that institutions are embedded in social relationships. Sociologists define institutions as

The webs of interrelated norms (formal and informal) governing social relationships. Informal norms are rules of a group or community that may or may not be explicitly stated and that rely on informal mechanisms of monitoring, such as social approval and disapproval. Norms governing interpersonal relationships both constrain and facilitate behaviour by defining the structure of incentives (such as material and nonmaterial) for individuals situated in a group. Formal norms are explicit rules, that rely, in addition, on formal mechanisms (such as the state and organisations) for their monitoring and enforcement, and the incentives backing compliance are often material, though never entirely so (Nee & Ingram, 1998, p. 19).

Scott (1995), a sociological institutionalist, describes a more generally applicable contemporary institutional 'embeddedness' theory, focussing on three perspectives: (i)

regulative, (ii) normative, and (iii) cognitive. The regulative view of institutions (also consistent with Ostrom, 1990) focuses on an analysis of actions and outcomes that legal (or formal) rules allow, require, or forbid and the mechanisms that exist to enforce those rules. The normative view emphasises the ways in which norms (or informal institutions) structure decisions, which corresponds with the views of Coleman (1987), Ostrom (1990), and Putnam (1993). This view focuses on the common values and pressures placed on individuals to fulfill certain obligations and expectations. Roles are not only structuring life through creating reciprocal expectation, but also through the value of doing the right thing (Coleman, 1987). These norms rely on long-standing social relationships within the community rather than on external authoritative rules (Ostrom, 1990; Putnam, 1993). The cognitive aspect of institutions includes the importance of the meanings given to the actions of actors and the actors' subjective interpretation of them (Scott, 1995).

For Scott (1995), institutions are transferred through culture, structures, and routines. Human behaviours and institutions to be analysed are shaped by ongoing social relations (based on culture). Social networks are examples of social structures of interactions which affect social relationships, and thus need to be considered in understanding institutions (Granovetter, 1973, 1985; Putnam, 1993). Human behaviours guided by institutions are context specific and deeply embedded in cultural and socioeconomic and political fields or structures, which Bourdieu (1987, 1993) describes as 'habitus' in his social theory.

Bourdieu's (1985) concept of capital as a source of power provides a useful analytical tool with which to identify the existence of different sources of power, differentially distributed in the society, and their influences on the resource access of the poor. Cultural, social, and symbolic resources can be drawn on by individuals and groups in order to maintain and enhance their position in the social order. Cultural capital is institutionalised, and people within the group can access it; thus it can become a form of domination. For example in the Hindu caste system, high castes have the capacity to impose on others the means of adapting to the social world by representing economic and political power in disguised forms.

Many social and political theorists have defined power. According to Lupton (1992), the contribution of Max Weber has perhaps been most influential in sociology. Weber (1968, p. 53) defined power as "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance". Social relationships in which power is exercised are more important than the power as such. Lenski (1966) described power relationships as being formed on the basis of differences of either 'position' or 'wealth':

Power due to position is the power which rightfully belongs to the incumbent of any social role or organisational office possessing authority. This type of power takes

many forms based upon positions in terms of age, sex roles, roles in kin groups, roles in ethnic groups, or other kinds of roles or offices with authority. On the other hand, the 'power due to wealth' is commonly based upon the private ownership of property. The more property a person owns, the greater is his/her capacity to influence others, and thus the greater his/her power (p. 58).

Power relationships are described in terms of how people stand in relation to each other in social and economic systems. Power is a description of a relationship, not a 'thing' which people 'have' (Nelson & Wright, 1995; Chambers, 2002). Power relationships are reflected in individuals' behaviours, actions and perceptions that are dependent on power ascribed to the individuals by virtue of birth, kinship, education, networks and connections (Bourdieu, 1985, 1987; Trompenaars, 1993; Chambers, 2004; Kothari, 2004). The extent of power among the local users determines their levels of participation in resource decisions (Agrawal & Gibson, 1999; Agrawal & Ostrom, 2001; Hildyard et al., 2001; Larson, 2005), and hence, their differential resource access (Agarwal, 2001; Edmunds & Wollenberg, 2003). Cooke and Kothari (2001) recognise difficulties in understanding power in participation. They argue that articulations of power are very often less visible as they are embedded in social and cultural practices.

Having reviewed the relevant theories (for example, institutional theory, influence of power relationships) for this research, the next section provides the review of institutional factors that influence resource access of the poor.

3.3 Institutional factors that influence resource access of the poor

An increasing number of empirical studies indicate that community-based forestry regimes are not a panacea for improving access of the rural poor to forest benefits (Beck & Nesmith, 2001; Shackleton et al., 2002). While the prescriptive literature expresses optimism in such regimes for better management of common property resources, such as community-based forests, a increasing number of empirical studies undertaken in different parts of the world have reported emerging doubts as to the outcomes of these regimes, particularly in terms of improving access of the rural poor to resource benefits (Arnold & Bird, 1999; Shahbaz, 2003; Berkes, 2004; Fisher et al., 2004). The reasons why CBNRM regimes are limited in improving access of the rural poor to resource benefits are explored in this section.

Institutional factors associated with property rights, sociocultural norms and relationships, and resource governance significantly influence resource access of the rural poor in community-based forestry regimes (Ostrom, 1990, 1999; Hanna & Munasinghe, 1995; Agrawal, 2001; Meinzen-Dick & Knox, 2001; Meinzen-Dick et al., 2006). Resource governance policies and property rights in the context of government-initiated community-based forestry regimes are generally described as formal institutional factors (Larson, 2003; Rival, 2003; Menzies, 2004), while sociocultural factors, such as sociocultural norms and social networks, are informal institutional factors (Jenkins, 2000; Platteau, 2000; Ostrom & Ahn, 2003). Power relationships overlap with resource governance, property rights, and sociocultural norms and relationships, and all are inter-linked (Edmunds & Wollenberg, 2003; Capistrano & Colfer, 2005; Blaikie, 2006; Thanh & Sikor, 2006).

A number of scholars²¹ have proposed frameworks to understand the influence of inter-relationships among property rights, collective action and resource governance on resource management. Ostrom (1990) has linked governance with institutions for common property resources management in her 'eight design principles'. Schlager and Ostrom (1992) have proposed an approach to link property rights with governance, in which they distinguish three levels of rules associated with specific property rights: (i) operational, (ii) collective, and (iii) constitutional. The rights of use and withdrawal²² are designed at the operational level. The rights of management are designed at the collective level; management rights include the rights to regulate local use patterns and transform the resource by making improvements. The governance arrangements are designed at the constitutional level; the right to decide who can manage is a constitutional right. Ostrom (1990) has integrated these rights and associated rules in her framework of 'eight design principles', which underpins successful governance (or self-governance) of a natural resource by a group of resource users (Table 3.1). Seven out of these eight principles are institutional arrangements required for the successful governance of a common property resource (CPR). These principles are about the rights of local users over a CPR, and their authority (or power) to devise and implement the rules for resource governance. Two principles are about operational rights and rules, three are collective rights and rules, and two are constitutional rights and rules (Table 3.1).

²¹ Agrawal (2001), Ribot (2005), and Blaikie (2006) have done extensive work on natural resource governance; Bromley (2001) on property rights; Schalger and Ostrom (1992) on property rights and governance; Meinzen-Dick and Knox (2001) on property rights, collective action and governance.

²² See section 3.3.1 below for more detail on rights.

Table 3.1: Eight Design Principles for Self-governance of a CPR (Source: Ostrom, 1990)

Eight design principles

Institutional arrangements

Operational rights and rules

- 1) Resource use and management rules are suited to local conditions and are easily enforced
- 2) Those violating the rules receive graduated sanctions (e.g. charges, punishments, etc.) from local users or external authorities

Collective rights and rules

- 3) Local people participate in modifying these rules
- 4) Effective monitoring by monitors who are part of or accountable to local users
- 5) Local users have access to low cost local arenas to resolve resource use conflicts

Constitutional rights and rules

- 6) Rights of local users to devise their own institutions are not challenged by external government authorities

In case of larger common property resources (CPRs)

- 7) Resource governance in the form of multiple layers of nested enterprises, with small and local CPRs at their bases

Characteristics of the resource and users

- 8) Clearly defined boundaries of the resource and the users

The three levels of rules described in the design principles are useful for analysing institutions associated with government-initiated CBNRM regimes for resource governance in relation to resource access of the poor in the hills of Nepal. Ostrom's assumption in this design is that a group of resource users is capable to set and enforce the rules for resource use and management. In 2000, Ostrom integrated aspects of social capital into her design principles. The social capital of local people is positively associated with organising themselves for resource management. She argues that the provision of external support by government or donor organisations may fail to improve the performance of local organisations because those organisations have insufficient social capital to function effectively (Ostrom, 2000a).

The propositions of Agrawal (2001) and Ribot and Peluso (2003) contribute to a framework for understanding natural resource governance in relation to resource access of the poor. Agrawal (2001) focuses on power distribution in the analysis of natural resource management, while Ribot and Peluso (2003) provide an approach that distinguishes 'social access' from 'property right'. Their approach takes into account the social relationships, including individuals' influence and social status within particular sets

of social relationships, which determine social access. Bromley (2001) argues that analysis of property rights should not be seen as something separate from culture.

Meinzen-Dick and Knox (2001) highlight the linkages between property rights and collective action in natural resource governance. They suggest a number of factors that increase the likelihood of a group of resource users coming together for joint actions²³. These are: (i) importance of the resource for local people's livelihoods, (ii) level of cooperation and networks among users (i.e. social capital), (iii) local social structure in which divisions are not too disruptive of cooperation, and (iv) local leadership with the confidence of users. They argue that property rights play a major role in natural resource governance, conveying authority and shaping the incentives for collective action for resource management. Property rights are the outcome of a complex interplay between various types of legal frameworks (e.g. state laws, and local laws such as customary laws, religious laws and social norms). State and local laws²⁴ do not operate in isolation from each other.

Management rights and exclusion rights of user groups are essential for the success of devolution programmes (in terms of forest conservation and benefits from the forests for livelihoods) (Meinzen-Dick & Knox, 2001). Management rights are rights to modify or transform the resource, and exclusion rights are rights to determine who else may use the resource.

Local collective action can be instrumental in devising rules for equitable allocation of resource benefits between different users. However, such action depends upon the capacity of user groups to set rules, determine sanctions, and make critical decisions about their organisations as well as the management of resources. Although Meinzen-Dick and Knox (2001) focus on resource conservation as an outcome of the devolution, their framework described above can guide the analysis of access of the poor to the resource governed under a CBNRM regime in the hills of Nepal.

The framework of Meinzen-Dick and Knox (2001) adds two important aspects to Ostrom's (1990) design principles. First, this framework integrates a broad institutional perspective (formal and informal institutions, or a mix of state laws, customary laws, religious laws,

²³ Consistent with Tang (1991), Wade (1994), Baland and Platteau (1996), and Ostrom (1999).

²⁴ Local law refers to the dominant local interpretations of customary law, religious law, and other relevant normative frameworks.

and social norms) which is not explicit in Ostrom's design principles. Second, this framework has been proposed for the context of devolution of natural resource governance whereas Ostrom's principles have been developed in the context of self-governance. When the government introduces a devolution policy, it also imposes some external laws. In such a situation, local self-governance is ideal but may not happen in reality (Thanh & Sikor, 2006).

Pretty and Ward (2001) suggest an approach to link the capacity of a group of resource users and utilisation of the group's networks for successful resource management. They also provide a typology to categorise groups in different stages of development. The approach of Pretty and Ward (2001) provides guidance for analysing groups at different stages, and for identifying roles of external organisations in developing the capacities of the groups for governing the resource in relation to resource access of the poor. Three stages of group development mentioned by Pretty and Ward (2001) are: (i) reactive-dependence, (ii) realisation-independence, and (iii) awareness-interdependence. Groups at the reactive-dependence stage tend to be dependent on external facilitators for the groups' operation; they have weak horizontal and vertical (formal) networks, and rules for resource use and management are externally imposed. Groups at the realisation-independence stage begin to develop their own rules, and develop horizontal links with other groups. These groups also realise that information flows through linkages with the external agencies can be beneficial for them. Groups at the awareness-interdependence stage tend to be much more self-aware of the values of the groups and want to stay closely linked to external agencies.

The potential use of the approaches developed by some scholars (Agrawal, 2001; Bromley, 2001; Meinzen-Dick & Knox, 2001; Ostrom, 1990; Pretty & Ward, 2001; Ribot & Peluso, 2003) for analysing the influence of the interrelationships among property rights, sociocultural norms and relationships, and resource governance on resource access of the poor has been described above. The sections below provide a review of the influence of key institutional factors on the resource access of the poor under community-based natural resource management.

3.3.1 Property rights factors

The types of property rights over a resource guide resource access of local people, including the poor. Property rights refer to the rights to use a resource (Alchian & Demsetz, 1973). The terms 'rights' and 'rules' are interchangeably used in the literature.

Schlager and Ostrom (1992), however, emphasised the difference between them: 'rights' specify the rights to use the resource whereas 'rules' specify the resource to be taken. Commons (1968, p. 48) defined a property right as "the authority to undertake particular actions related to a specific domain". Rules exist to authorise particular actions for exercising the property right that an individual holds. A property rights regime for CPR management specifies rules as well as rights.

In the CBNRM literature, property rights to a natural resource are generally categorised into legal and customary (or traditional) rights (McCay & Acheson, 1987; Hanna & Munasinghe, 1995; Meinzen-Dick et al., 1997). Legal rights are also referred to in the literature as formal, official, *de jure* or written rights (Meinzen-Dick et al., 1997). '*De jure* rights' are more narrowly defined because they must be backed up by statutory laws. Similarly, traditional, *de facto*, or customary rights often are used synonymously in the literature. 'Customary rights' as used in this study denote rights guided by customs, traditions, religious norms, or sociocultural norms (Warren & McCarthy, 2002). These rights are fundamentally embedded in complex social processes (Banana & Gombya-Ssembajjwe, 2000; McCarthy, 2005) and are perceived to be as strong as legal rights within the local community (McCay & Acheson, 1987; Mohamed-Katerere, 2001; Warren & McCarthy, 2002). Fitzpatrick (2005) and McCarthy (2005) describe customary rights as characterised by kinship or territory-based criteria for land access in developing countries.

'Access' is often referred to as a 'property right', but in fact they represent a very different notion. 'Access' is described as the right to enter and to use common-pool resources such as forests (Grima & Berkes, 1989; Schlager & Ostrom, 1992; Baumann, 2002; Neef et al., 2003). But it has been argued that natural resource analysts use the term 'access' frequently without defining it clearly (Ribot, 1998). Ribot and Peluso (2003) clarify the distinction between these terms:

'Access' is the ability to derive benefits from a resource whereas 'property rights' is the right to benefit from a resource. 'Access' refers to a bundle of powers which highlights the importance of a wider range of social relationships that can constrain or enable an individual to benefit from a resource. But 'property rights' represent just a bundle of rights to benefit from a resource without considering the social relationships (pp. 153-154).

This definition makes the concept of access broader than the classical notion of property rights. People may have legal rights to a resource, but it does not mean that they have access to benefits (irrespective of customary rights). Access is influenced by physical as

well as social factors. Physical access and social access are important for people to obtain benefits from a resource.

Physical access implies accessibility in terms of proximity to the resource. An individual having physical access to the forest may not necessarily have social access. The notion of right to benefits is inadequate for understanding the access of the poor to the forest (Balakrishnan & Narayan, 1996). The notion of ability (also called capability) is required to understand access of the poor to the forest because it takes into account the social relationships, including individuals' influence and social position within particular sets of social relationships (Sen, 1993; Johnson, 2004). It is the social access that really determines what benefits an individual obtains from the resource (Mosse, 1997). Understanding access of the rural poor from the perspective of social access requires a focus on resource governance and the culture of the community (Larson, 2005).

A community in general includes poor and well-off people. They have different powers and positions in social relationships, and as a result they have different access to the resource benefits. Adhikari et al. (2004) found that poor people have more restricted access to products from community forests than do well-off households in the hills of Nepal. Adhikari (2002) also raises the issue of access to different types of forest products by poor and well-off people. Well-off people are able to obtain more forest products such as timber, fodder, grasses, and litter required to maintain their larger land and livestock assets than can poor people. Poor people may be fully dependent upon the forest for their firewood needs (for cooking food) but utilise low quantities of timber, fodder, grasses, and litter because they have smaller land and livestock assets (Adhikari, 2005).

Four types of property rights are described in the literature: state, private, common, and open access (Bromley, 2001). These rights determine who has access to the resource, who is excluded from using the resource, how the resource should be used, and whether or not these rights can be transferred (Ostrom, 1986). Under a state property right, ownership and management control of a resource are held by the state. An individual has an exclusive right to use a resource under a private property right (Bromley, 1991). Under a common property right, access is limited to a specific group of resource users who hold their rights in common (Ostrom, 1986). Under open access, resource use rights are neither exclusive nor transferable and these rights are owned in common but are open to everyone, therefore the property belongs to no one (Grima & Berkes, 1989). Open access denotes lack of ownership and control over a resource (Ciriacy-Wantrup & Bishop, 1975).

Although the theory differentiates these four types of property rights, in reality, they are not distinct and self-contained. Many resources are held in overlapping and sometimes conflicting combinations of these arrangements (McKean, 2000; Meinzen-Dick et al., 2001). Tachibana et al. (2001) and Meinzen-Dick et al. (2002) argue that many resources held under CBNRM regimes in developing countries may be under state property rights by law (i.e. *de jure* or legal state property), but a part of such resources is managed either under *de facto* (i.e. in practice or customary) common property, open access or private property rights. Common property rights theory emphasises the importance of a common property right for successful governance of a common-pool resource (Ostrom, 1990; Bromley, 2001). However, empirical studies report that the poor often cannot improve their access to the resource governed under common property rights (Adhikari, 2002; Shackleton et al., 2002; Shahbaz, 2003; Berkes, 2004; Fisher et al., 2004).

Common-pool resources are particular types of natural resources, the characteristics of which make it costly but not impossible to exclude potential beneficiaries from obtaining benefits from their use (Ostrom, 2003). Forests, ocean fisheries, and grasslands are some examples of common-pool resources. The term 'common-pool resources' is often used interchangeably with the term 'common property resources' in the literature, but this is not appropriate. Common property resources are the resources used in common by a group, and are governed under common property rights (Jodha, 1993). Not all common-pool resources are governed under common property rights (Meinzen-Dick et al., 2006).

Property rights have a significant influence on the way a resource is governed under a CBNRM regime with respect to access of the poor to the resource (Arnold, 2001; Di Gregorio et al., 2004). Two key aspects of property rights that are influential in this regard are: (i) legal rights introduced by CBNRM regimes, and (ii) customary rights and their relationship with legal rights (Khan, 1998a; Cleaver, 2000; Di Gregorio et al., 2004; Nemarundwe, 2004; Adhikari, 2005; Sunderlin, 2006).

Legal rights introduced by CBNRM Regimes

Four key factors regarding legal rights influence the access of the poor to a resource governed under CBNRM regimes: (i) the type of legal rights an individual has through CBNRM regimes, (ii) membership or non-membership of the group, (iii) legal security of the rights, and (iv) resource users' awareness regarding the legal rights.

Under CBNRM regimes, a group of resource users can hold four types of legal rights, which indicate different levels of authority in governing a natural resource and impact on resource access (Schlager & Ostrom, 1992; Agrawal & Ostrom, 2001; Adger, 2003). These are: (i) right to use the resource (e.g. cutting firewood), (ii) right to manage the resource (e.g. planting seedlings, thinning trees), (iii) right to exclude (e.g. determine who else may use the resource), and (iv) right to alienate (e.g. to transfer rights to others, either by inheritance, sale, or gift) (Table 3.2). Authorised users have rights to enter the resource and use resource products. Claimants have rights to enter, withdraw, and also manage the resource. Proprietors hold the rights to enter, withdraw, and manage the resource, and exclude people without the user-rights benefiting from the resource. Owners possess full rights to enter, use, and manage the resource, exclude use by non-members, and sell (or control) the rights over the resource (Agrawal & Ostrom, 2001). Ostrom (1992) and Meinzen-Dick and Knox (2001) suggest that management and exclusion rights by user groups are essential for the success of CBNRM regimes in terms of conservation of the resource. However, little is said about whether these rights, if held by the poor, actually ensure that they have adequate access to the resource.

Table 3.2: Matrix of Common Property Rights over the Resource and Categories of Rights Holders

Right holders	Rights to use	Rights to manage	Rights to exclude	Rights to alienate
Owners	Yes	Yes	Yes	Yes
Proprietors	Yes	Yes	Yes	No
Claimants	Yes	Yes	No	No
Authorised users	Yes	No	No	No

Source: Schlager & Ostrom, 1992; Agrawal & Ostrom, 2001

Khan (1998a) and Tachibana et al. (2001) reported that secure legal rights provide incentives to groups for managing forest resources successfully. In developing countries, the legal rights under CBNRM regimes often provide groups with the rights to use, manage and sometimes exclude other people, but usually not the right to alienate (Agrawal & Ostrom, 2001). All the members within a group are theoretically supposed to get such legal rights equally (Platteau, 1991; Adger & Luttrell, 2000). However, this often is not the case for a heterogeneous group consisting of users with different economic and social status (Bardhan & Dayton-Johnson, 2000; Agrawal & Gibson, 2001; Kumar, 2002; Adhikari et al., 2004). In the group, members with higher social and economic status

obtain a greater proportion of benefits than do members with lower social and economic status (Chopra et al., 1990; Singh et al., 1996; Hill & Shields, 1998; Beck & Ghosh, 2000; Johnson et al., 2003; Adhikari, 2005). The influence of 'culture' and resource governance mechanisms, including the individual attributes of people, may explain these inequities.

Under government-initiated CBNRM regimes, people often must pay fees to obtain membership in the group, through which they obtain legal rights for using and managing the resource (Adhikari, 2005; Thanh & Sikor, 2006). In developing countries, the poor often lack the ability to pay these fees, restricting them from membership and access to the resource (Clark, 2000; Abraham & Platteau, 2000; Mosimane & Aribeb, 2005). In many cases in developing countries, the elite, wealthier and more powerful people obtain legal rights through membership at the expense of the poor and women (Cooke, 2000; Platteau, 2000; Malla et al., 2003).

Local people's awareness about their legal rights is important for them to be able to gain access through these rights (Lise, 2000; Mahapatra, 2001). Lise (2000) reported that when a joint government-village institutional arrangement for forest protection was introduced in India, many poor people did not know about their legal rights and so they did not obtain benefits from the forests. Studies from Bangladesh, Bolivia, Honduras, and Tanzania have shown that many poor people had no feeling of ownership due to lack of awareness about their legal rights, and as a result, they lacked motivation to protect forests and obtain benefits from them (Khan, 1998b; Lise, 2000; FAO, 2001b; Mustalahti, 2006; Sunderlin, 2006).

Customary rights and their relationship to legal rights

The influence of customary rights on resource access of the poor is guided by social norms in which the legitimacy of these rights is rooted (Cleaver, 2000). Customary rights are associated with complex interrelationships among local people for resource use (regardless of the quality of the resource) in developing countries, and they may constrain or facilitate the resource access of the poor (Banana & Gombya-Ssembajjwe, 2000; Banda, 2001; Porro et al., 2001; McCarthy, 2005). Jessup and Peluso (1986) reported in their study in Indonesia that customary rights received through inheritance help people secure their access to forest benefits, both for current and future use. Brosius et al. (1998) and Li (2002) reported that customary rights provide resource access to local communities in developing countries and enable them to manage resources effectively. Platteau (1996)

found that customary rights, guided by social hierarchical structures, favour the more powerful members of society in Sub-Saharan Africa.

In many developing countries, when legal rights were introduced through CPR regimes, these rights overruled customary rights, constraining resource access of the poor (Enters & Anderson, 2000; Shackleton et al., 2002; Sarin et al., 2003; Thongphanh, 2003; Ostrom, 2004; Elias & Wittman, 2005). Studies from India showed that when legal rights were introduced through joint forest management regimes, the customary rights of local people, including the poor, were neglected and their access to forest resources was not addressed (Nagothu, 2001; Sarin et al., 2003). Husain and Bhattacharya (2004) commented that through these regimes, the state focussed on holding the power to control local people's roles in forest governance, rather than on the rights of local people to utilise forest resources for their livelihood needs. Once the legal rights were introduced, many customary users were excluded from legal membership, creating two divisions (i.e. members and non-members) in the community (Lavigne-Delville, 2000; Thoms et al., 2003; Oyono, 2005). Engel & Palmer (2006) found that in Indonesia the extent of influence of legal rights overruling customary rights to resource access is greater in heterogeneous (i.e. multi-ethnic) communities than in homogeneous (i.e. single ethnic) communities. It is the view of Benda-Beckmann (1995) and Hildyard et al. (2001) that legal rights introduced through CBNRM regimes, which do not consider customary rights, will negatively impact on the resource access of the poor because of the social embeddedness characteristics of the property rights.

3.3.2 Sociocultural factors

The importance of sociocultural factors in community development, including CBNRM, is increasingly being recognised (Berkes & Folke, 1994; Ostrom, 1994; Ray, 1998; Ruttan, 1998; Jenkins, 2000; Katz, 2000; Landes, 2000; Rao & Walton, 2004). Sociocultural factors are useful for this research for understanding informal institutions that shape access of the poor to the resource governed under a CBNRM regime (Robbins, 2000; Meinzen-Dick et al., 2001; Cleaver, 2004; Plummer & FitzGibbon, 2006). The implementation of CBNRM regimes is generally in rural communities with their own sociocultural aspects, in developing countries. In these situations, how the property rights regimes guide resource governance in relation to access of the poor is dependent upon sociocultural factors.

People are not simply individuals. They live socially, and their views, values, and beliefs, as well as their abilities, are formed and sustained within social groupings, families and communities (Bliss, 1993; Gerring & Barresi, 2003). Culture is about the relationships among individuals within groups and among groups. Culture can be characterised by caste, ethnicity, ritual, heritage, norms, and beliefs. It shapes and is shaped by the social and economic aspects of people's interactions (Rao & Walton, 2004). People use cultural, social and symbolic resources in order to enhance their social position. According to Bourdieu (1987), people of different social groups may have different levels of such power, and this may lead to different levels of influence of their participation in resource decisions. Uphoff (2000) describes social relationships from two perspectives: structural and cognitive. The structural perspective focuses on the numbers and types of social networks, while sociocultural norms and trust that characterise the functions of social networks are the focus of the cognitive perspective.

Social networks are networks of social exchanges through which groups of people keep in contact with each other (Uphoff, 2000; Ostrom & Ahn, 2003). They are mechanisms that connect individuals to society, reflecting social structures and providing patterns of social interactions (Granovetter, 1985; Coleman, 1990). Sociocultural norms prescribe some behaviour or thought regarding the proper or right things for individuals to do or think, according to some principles or set of values in the society (Coleman, 1987; March & Olsen, 1989; Cleaver, 2000). They reflect complex social constructions with cultural meaning (Cleaver, 2000). Sociocultural norms are informal institutions that guide decisions and behaviour of individuals (Platteau, 2000).

There is an increasing acknowledgement in the CBNRM and CPR literature that researchers who aim to identify institutional factors influencing the resource access of the poor must focus on sociocultural aspects, since institutions are embedded in the culture (Klooster, 2000; Jentoft, 2004). Drawing from Newman and Dale (2005), Bodin et al. (2006) and Smith et al. (2006), the key sociocultural factors are: (i) types and levels of social networks, and (ii) sociocultural norms.

Types and levels of social networks

Different types of social networks have different structural and functional characteristics, which can have differing influences on resource governance with respect to resource access (Newman & Dale, 2005; Bodin et al., 2006). Social networks provide people with

trust, reciprocity, cooperation, unity, and information, which can facilitate their collective action in governing a resource in relation to resource access (Bodin et al., 2006). Levels (or the extent) of social networks that people can utilise for their resource access vary with their economic status (Bourdieu, 1985; Swartz, 2000).

Rose (2000) distinguishes between formal and informal social networks. A lot of literature in the resource management and development fields focusses on membership of formal groups and the networks between such groups, often neglecting informal social networks (De-Silva et al., 2005; Plummer & FitzGibbon, 2006). Narayan and Pritchett (1996) found, in their study in rural Tanzania, that people with memberships in many groups often have higher incomes than people with fewer memberships. Crona and Bodin (2006) reported, in their study with fishermen in Kenya, that multiple group membership facilitates information exchange, trust and social ties for successful implementation of community-based management. Gibson et al. (2000) proposed that creating several types of membership within a resource user group provides potential to address diverse needs of different users, including those of the poor users. Rose (2000) described informal networks as face-to-face relationships among a limited number of individuals who know each other and are bound together by kinship, friendship, or propinquity.

A few studies have shown that poor people with small land holdings and women are often excluded from formal social networks, constraining their resource access (Agarwal, 2001; Malla et al., 2003). Dasgupta (2000) reported that in India the high castes of 'Hindu' (who are usually big landowners) could utilise formal networks provided through the common property regimes in obtaining resource benefits while the low castes could not. The reasons why the low castes were unable to utilise such networks and obtain resource access, however, were not explained. Theory suggests that membership of formal groups can extend people's access to, and influence over other organisations; however, little empirical research has been done on this (Cleaver, 2000; Gonzalez & Healey, 2005; Savage et al., 2005; Westermann et al., 2005).

Putnam (2000) and Woolcock (2001) categorise social networks into bonding and bridging networks. Bonding social networks are social relationships among people who are similar to each other. Social relations among family members, friends and neighbours in closely connected networks are examples of bonding networks. Social relationships among people who are different from each other are referred to as bridging networks. People can gain access to a far wider range of resources and opportunities than are available within

the community through bridging networks (Granovetter, 1973; Putnam, 2000; Woolcock, 2001), and this can facilitate their access to resources.

Different types of social networks are useful for collective action in CBNRM and sustainable livelihoods. Bonding networks are seen in the literature as useful for establishing and maintaining the trust needed for collective action in CBNRM (Bebbington & Perreault, 1999; Bodin et al., 2006). De Silva et al. (2005) in their study in Peru found that bonding social networks, through informal connections with family, friends or neighbours, were very useful for sustaining the livelihoods of the majority of poor people. They highlighted a system of reciprocal work called *peonada* as an example of a bonding network. In *peonada*, residents help each other in work that cannot be performed alone, usually agricultural and construction work. De Silva et al. (2005) also described similar examples such as the traditional system of reciprocal exchange, '*gotong-royong*', in Indonesia, and the patterns of work in Scottish crofting communities. The bonding networks were more useful than bridging networks in enabling poor people to survive in rural areas of Peru. Likewise, informal networks were more important than formal networks in developing a deeper level of trust and social harmony in a rural community (De Silva et al., 2005). Anderson (2000) reported in Peru that good access to markets and roads has decreased the usefulness of informal social networks, weakening trust and social harmony among people. However, the mechanisms by which this happened were not described. Bebbington et al. (2006) reported that in Indonesia, bonding social networks were useful for the poor and the elites for different reasons. The poor utilised bonding social networks in securing their livelihood, while the elites utilised them in increasing the economic basis of their power and controlling the village government.

Thin and Gardingen (2004) also describe linking network as a type of social network between people or organisations that are unequal and are located in different areas. For example, networks between forest users and forestry professionals are linking networks. These networks are different from bridging networks that refer to networks between social groups within or outside the community.

Putnam (1993) differentiates between horizontal and vertical networks within groups of people. Horizontal networks bring together groups of individuals or organisations of relatively equivalent status and power (e.g. networks among local groups of forest users). Vertical networks link groups (or organisations) of unequal individuals or organisations in asymmetric relations of hierarchy and dependence (e.g. networks of local groups with district-level organisations). Vertical networks are often established formally. Thin and

Gardingen (2004) reported that in India the horizontal networks of a forest user group with other local groups (such as saving groups, cooperatives, etc.) facilitated forest conservation. Crona and Bodin (2006) found that such networks facilitated the exchange of information and knowledge for successful management of the natural resource. The vertical networks of forest user groups with 'national federation of users' enhanced groups' capacities for continuing community forest management in India, Indonesia and Nepal (Sarin et al., 2003).

Crona and Bodin (2006) in their studies in Kenya described the influence of centralised and decentralised networks in co-management of the natural resources. A centralised network is an intra-stakeholder network that includes a small cluster of actors, who are centrally positioned in the network, leaving others in the periphery. A decentralised network is an inter-stakeholder network that involves collaboration among stakeholder groups. Crona and Bodin (2006) found that in Kenya the centralising networks facilitated coordination and collective action for coastal resource management during the initiation phase. Decentralising networks, on the other hand, provided access to the diversity of information from different groups, which was required for their resource access in the long term.

Sociocultural norms

Sociocultural norms can also modify ways in which formal rules (i.e. community-based forestry policies) function in practice, shaping the resource access of the poor (Smith et al., 2006; Thanh & Sikor, 2006). Sociocultural norms are shaped by a complex of physical and social conditions (Platteau, 2000). Norms based on caste, ethnicity, gender, class and religion have a significant influence in shaping the social relationships in a community (Coleman, 1990; Moser, 1993; Williams, 2004).

Saigal (2000) and Sarin et al. (2003) identified the fact that power ascribed to people in India is based on norms of caste, ethnicity, class, or gender, which influence the benefits they are able to obtain from a resource. De Jong et al. (2006) and Nguyen (2006), in their studies in Bolivia and Vietnam respectively, highlighted the fact that power ascribed to people based on norms of class (wealth) positively correlates with benefits they obtain from a resource. Lupton (1992) and Chakravarti (2006) suggested that sociocultural norms associated with social inequalities based on class, gender, and caste create the potential for unequal access of people to resource benefits. NSCFP (1997) and

Mustalahiti (2006) suggest that unequal participation of people of different social status in the decision-making processes of forest protection committees is due to discriminatory sociocultural norms. The influence of discriminatory social norms on the implementation of community-based forestry regimes limits women's membership in forest user groups, and limits their participation in group meetings even if they have membership (Campbell & Denholm, 1992; Dahal, 1996; Ghimire, 2000; Ohler, 2000). Which sociocultural norms lead to unequal participation in decision-making processes, however, is not well described in the literature.

Collective action theory suggests that small size groups, having better trust and cooperation among members, organise better than large size groups (Ostrom, 1994; Agrawal & Goyal, 2001; Poteete & Ostrom, 2004). Empirical studies have shown mixed results. Gautum (2004) found in his study in Nepal that smaller user groups conserved forests better than did larger user groups. However, Agrawal (1994) and Meinzen-Dick et al., (2002) reported that larger groups organised better and mobilised resources better than did smaller groups for the management of natural resources (such as water) in India.

3.3.3 Resource governance factors

Governance is the activity of introducing and implementing policies, and deciding resource use and management rules (Mearns, 1996; de Alcantara, 1998; Stoker, 1998; Cortner et al., 2001; Berger, 2003; Rival, 2003; Froger et al., 2004; Dixon et al., 2006). Governance comprises the structures and processes that determine how resource use and management decisions are taken (CBNRM, 2007). Governance is defined in a variety of ways and has a variety of meanings in the literature (Rhodes, 1996; Stoker 1998). Table 3.3 outlines the ways in which governance is defined in the different types of literature. The field of political science has guided the conception of governance in the field of natural resource management.

Pierre (2000) distinguishes between a society-centred and a state-centric approach to governance. A society-centred approach focuses on the role of society (or the community) in governing the resource. People in a society (or a community) coordinate and act collectively to govern the resource themselves. The collective actions of people are manifested in their different types of networks, and their social and political relationships in this approach (Rhodes, 1996; Pierre, 2000). This is termed self-governance by Ostrom (1999). A state-centric approach focuses on the role of the state as a political actor in

governing the resource. Many scholars in the field of political science (Kooiman, 1993; de Alcantara, 1998; Berger, 2003) believe that an interface between state-centric and society-centred governance is important for a nation's development. This balanced conceptualisation of governance is also suitable for government-initiated community-based natural resource management in developing countries (Varughese, 1999; Kumar & Kant, 2005; Thakadu, 2005; Wollenberg et al., 2006).

Table 3.3: Concepts of Governance

Authors	Concepts of governance
<u>Political science</u>	
Pierre (2000)	Describes two approaches of governance (state-centric versus society-centred)
Pierre and Peters (2000)	Makes distinctions between 'governance structures' and 'governance processes'
Berger (2003), de Alcantara (1998), and Kooiman (1993)	Adds an interface of state-centric and society-centred as a type of governance to the conceptualisation by Pierre (2000)
<u>Political science and rural livelihood</u>	
Hoon and Hyden (2003)	Describes governance from a constitutive perspective
<u>Political science and natural resource management</u>	
Ostrom (1999)	Focusses on 'self-governance' (i.e. society-centred perspective)
Meinzen-Dick and Knox (2001)	Describes governance from a broad institutional perspective
Ribot (2003), Ribot et al., (2006), Agrawal (2003), Blaikie (2006)	Focusses on power relationships (between state and community or among resource users in the community) to describe governance

Pierre and Peter (2000) suggest categorising governance into 'governance structures' and 'governance processes'. Organisations, actors, and decision-making structures make up the governance structures. Governance processes prescribe how resource decisions are made, who is involved in the decision-making process, and how the forest rules and policies are enforced and implemented on the ground (Stoker, 1998; PROFOR, 2003; Rival, 2003; Vogler & Jordan, 2003; Menzies, 2004). These processes include interaction among the actors for the designing and implementation of policies. Different actors have differences in power, resources, expertise, and access to information, implying that different actors have different influences on governance processes.

Meinzen-Dick and Knox (2001) propose a broad institutional perspective to describe natural resource governance. In a government-initiated CBNRM regime, a community

does not operate autonomously (as in the case of Ostrom's self-governance), but within an overall context of continuing state involvement. Hoon and Hyden (2003) point out that governance needs to be described from constitutive rather than distributive perspectives of politics when linking governance with rural livelihood. A distributive perspective focuses on how the resources are allocated in the community; it seeks answers to 'who gets what, when and how?' On the other hand, a constitutive perspective centres on the rules of the political game and seeks answers to 'who sets what rules, when and how?' This can be further clarified by linking governance with the rules at different levels (i.e. operational, collective, and constitutional) described by Schalger and Ostrom (1992). Natural resource analysts often use the term 'management' interchangeably with the term 'governance', which benefits neither the resource management agenda nor the governance debate. These terms are related but are different. Management involves implementation of decisions and actions in accordance with the rules. Governance involves the sharing of responsibility and power, and processes of setting rules for management actions (Bene & Neiland, 2006). Management rights are designed at the collective level whereas rights to govern the resource are designed at the constitutional level (Schlager & Ostrom, 1992). The meaning of 'resource governance' for this study includes CBNRM regime implementation and local (or community) structures and processes for setting and enforcing rules for resource use and management.

As stated above, the type of governance associated with government-initiated CBNRM in developing countries is characterised by the balance between state-centric (or national level) and society-centred (or local level) views. Resource governance at the local level (or community level) is associated with local decision-making structures and processes, whereas at the national level, it is about enforcement and implementation of policies (Nygren, 2005; Ribot et al., 2006; Scheyvens et al., 2007). A large amount of literature stresses the need for understanding the power relationships that occur at the national and local levels, and in between these two levels in governing natural resources (Agrawal, 2003; Blaikie, 2006; Ribot, 2003; Ribot et al., 2006).

The governance of a common property resource is dependent upon the collective action of local people, shaping their access to the resource (Ostrom, 1990; Singleton & Taylor, 1992; Agrawal & Ostrom, 2001; Meinzen-Dick & Knox, 2001). Collective action refers to the joint action (or working together) of a group of people in pursuit of their common interests (Meinzen-Dick et al., 2002; Poteete & Ostrom, 2004). Examples of collective actions may include setting rules of conduct of a group, designing management rules, implementing decisions, and monitoring adherence to rules (Futemma et al., 2002;

Meinzen-Dick et al., 2004; Ostrom, 2004). The extent of collective action of a group of people is dependent upon its sociocultural aspects (Ostrom, 2000a; Meinzen-Dick & Knox, 2001).

Power relationships are important at national, regional, district and village levels when a CBNRM policy is introduced and implemented (Agrawal, 2003; Nguyen, 2006). Power relationships among the actors, such as government officials and local resource-users, and among the local resource-users themselves, shape the resource access of the poor (Agrawal & Ribot, 1999; Nhantumbo, 2001). Resource access is dependent upon the authority that a local community obtains from the government for making decisions on forest use and management (Ribot, 2003; Vandergeest, 2006). The authority which a local community obtains from the government is specified through a particular property rights regime (Meinzen-Dick et al., 2004; Nygren, 2005). Community consists of people of different castes, ethnic groups, and economic positions. People in the community often have different powers based on caste, ethnicity, gender, and wealth (Giuijt & Shah, 1998; Beck & Nesmith, 2001). These people may have different livelihood needs and interests (Kumar, 2005). The complexities of the community need to be understood because they can affect the processes around resource governance and shape the resource access of different people in the community (Agrawal & Gibson, 2001; Tyler, 2006).

Resource governance factors associated with CBNRM can have a significant influence on the resource access of the poor (WRI, 2005). Two key governance factors that influence the resource access of the poor are: (i) CBNRM policy enforcement and implementation, and (ii) local decision-making structures and processes (Fisher, 2000; Meinzen-Dick et al., 2002; Edmunds & Wollenberg, 2003; Thanh & Sikor, 2006). These factors and their interrelationships can shape the participation of local people in regime implementation and their power to influence decisions.

CBNRM policy enforcement and implementation

Two key aspects of CBNRM policy enforcement and implementation that influence resource access of the poor are: (i) the level of authority that a group of resource users possess, and (ii) the capacity of a group of resource users to govern the resource (Edmunds & Wollenberg, 2003; Agrawal & Gupta, 2005).

CBNRM generally involves the transfer of some form of authority and/or responsibility to local entities (Edmunds & Wollenberg, 2003; Gibson & Lehoucq, 2003). This transfer is either through decentralisation or devolution (Post & Snel, 2003; Ribot, 2004; Ferguson & Chandrasekharan, 2005). Fisher (2000) differentiates between decentralisation and devolution in natural resource management. Decentralisation involves the transfer of responsibility for various administrative functions from higher to lower levels of government, as well as communities and private sectors. It does not necessarily involve changing the locus of decision making, or devolving power. On the other hand, devolution is the relocation of power away from the centre, where power is the capacity or authority to affect the outcome of decision-making processes (Fisher, 2000).

Community-based forestry in developing countries generally involves devolution of authority or power of decisions on forest management from the government to the community (Fisher, 2000; Edmunds & Wollenberg, 2003; Thanh & Sikor, 2006). Based on participation and power to influence decisions, Meinzen-Dick et al. (2002) categorise levels of devolution arrangements for CBNRM into two types: restrictive, and complete. In restrictive devolution, user groups are responsible for implementing a number of operational rules set by the government agencies. Participation of local users is only on the government's terms, and they have restricted access to the resource. In complete devolution, user groups have significant influence at the collective level regarding how operational rules are set, and they have greater access to the resource than in restrictive devolution. The authors explain that in most cases of government-initiated regimes, the state maintains a strong influence at the constitutional level. The state introduces the legal framework in which the user groups must be registered in order to be authorised by the state to take over management functions.

Agrawal (1996) noted that user groups (which can be called community organisations) can be more efficient in managing local common-pool resources than can either private individuals or the central government, and are more cost effective in using the resource, and monitoring and enforcing the rules. However, community organisations may not work successfully for equity outcomes of resource management if the government imposes enforcement rules without recognising customary rights and rules (Banana & Gombya-Ssembajjwe, 2000; Karmacharya et al., 2003).

The success of regime implementation depends significantly on the capacity of user groups to govern the resource, and this capacity is dependent on the group leadership (Sekher, 2001). The group members often have to follow the leadership's directives and rules. So, it is largely dependent on the capacity of the group leaders for ensuring participation of the poor in devising operational, collective and constitutional rules (Martin

& Lemon, 2001; Sekher, 2001) (Table 3.4). Operational rules specify resource utilisation and management rules. Collective rules are for specifying position and roles in management, and changing operational rules. Constitutional rules specify the leadership structure and eligibility for membership.

Table 3.4: Operational, Collective and Constitutional Rules (Source: Kiser & Ostrom, 1982; Tang, 1991; Ostrom, 1993; Ostrom et al., 1994)

Types of rules	Examples of each types of rules
Operational	<ol style="list-style-type: none"> 1) Boundary: who do or do not have rights to use the resource 2) Allocation: rules to withdraw the resource 3) Input: rules to contribute to the resource management, e.g. labour 4) Penalty: penalties for actions of resource use 5) Output: rules to utilise the resource benefits
Collective	<ol style="list-style-type: none"> 1) Position and authority: rules to specify positions and roles within the management 2) Information: rules to collect and use information 3) Procedural: rules to specify ways to change operational rules
Constitutional	<ol style="list-style-type: none"> 1) Membership: Rules to specify who is eligible for membership 2) Leadership: Rules to specify leadership structure (i.e. who may participate in setting collective rules)

Devolution theoretically involves a transfer of decision-making power from the state to the community (or the group of resource users), and is purported to help in the reduction of poverty by strengthening poor people's decision-making power in obtaining benefits from the resource (Brown et al., 2002; Mayers & Vermeulen, 2002; Suryanata et al., 2003). But empirical studies show different results. Nguyen (2006), in his study on forest devolution in Vietnam, reported that the state still retains important authority and power in the distribution of forest benefits even after devolution. Sarin et al. (2003) and Kumar and Kant (2005) in their studies of Joint Forest Management (JFM) regimes in India, reported that the Forest Department strengthened its control over local initiatives in forest use and management. Power to allocate resources has been transferred to the community in some countries, Bolivia, Cameroon, Indonesia, Uganda, Zimbabwe, for example (Banerjee, 2000; Ribot, 2002), but Shackleton et al. (2002) and Froger et al. (2004) found that many government officials and local elites have reaped benefits from this type of power transfer.

Studies carried out in Africa highlighted the fact that many rural poor were unable to obtain benefits from resources governed under decentralisation or devolution policies (Crook, 2003; Oyono, 2005). Similar results were reported from India (Baumann et al.,

2003), Indonesia (Anshari et al., 2005), Honduras (Nygren, 2005), and Nepal (Adhikari, 2001) where devolution failed to address power relationships. Several authors pointed out that in developing countries, many local elites utilise the local power structures, such as local government, for obtaining greater resource benefits (Malla, 2001; Elias & Wittman, 2005; Perez-Cirera & Lovett, 2006; Wollenberg et al., 2006). Cornwall (2000) found in Sudan that local women were not interested in participating in project-initiated groups because of the non-participatory attitudes and behaviour of the facilitator and project workers.

Participation of local people in decisions: Influence of local decision-making structures and processes

Approaches to describing meanings of participation are often dichotomised into ‘means’ and ‘ends’ classifications (Nelson & Wright, 1995). Chambers (1995) and Michener (1998) referred to these two approaches as ‘planner-centred’ for ‘means’ and as ‘people-centred’ for ‘ends’. A planner-centred approach emphasises local people’s participation in project planning and implementation as a tool for achieving better project outcomes. On the other hand, a people-centred approach emphasises local people’s participation as a process that enhances their capacity to improve their lives. Chambers (1995, p.30) said that “this [latter] approach focuses on empowering disadvantaged local people to do their own analysis, to take command, to gain in confidence and to take their own decisions.”

Types of participation in the rural development literature are primarily categorised in relation to the project cycle, that is planning or decision-making, implementation, benefits, and evaluation (Michener, 1998; Leeuwis, 2000; Brett, 2003). Cohen and Uphoff (1980) consider two other aspects, ‘who participates’ and ‘how participation is occurring’, in the typology of participation in relationship to project cycle (Table 3.5). This typology can be used to analyse the types of participation, the actors who participate, and participation mechanisms employed during the CBNRM regime implementation.

Arnstein’s (1969) ‘ladder of citizen participation’ is one of the earliest and most cited typologies of participation. She described three levels of citizen participation ranging from exclusion, through consultation, towards citizen control (Table 3.6). There is no participation at all in the ‘manipulation’ and ‘therapy’ in which the power-holders instruct and educate the participants. The next level is ‘degree of tokenism’ in which the power-holders inform, consult or listen to the participants, but do not guarantee that views of participants are taken on board. The third (highest) level is the ‘degrees of citizen power’ in which the power-holders negotiate with the citizens and the participants have decision-making power.

Table 3.5: Cohen and Uphoff's (1980) Typology of Participation

Types of participation	Participation in planning or decision making Participation in implementation Participation in benefits Participation in evaluation
Who participates?	Local people Local leaders Government staff Foreign personnel
How is participation occurring?	Basis of participation Form of participation Extent of participation Impact of participation

Pretty (1994) describes a useful typology that consists of seven types of participation by local people in natural resource management, and is similar to Arnstein's (1969) typology (Table 3.6). 'Manipulative participation' is characterised by essentially non-participation of local people where the external professionals (e.g. government, NGO, or project officials) manipulate and prepare plans for them. In 'passive participation', local people participate by being told what is going to happen or has already happened. External professionals provide information to local people but do not listen to their responses. In 'consultative participation', local people participate by being consulted and external professionals listen to views. But the external professionals define both problems and solutions and may modify these, and they are under no obligation to take on board local people's views. People participate by providing resources, for example labour, in return for food, cash or other material incentives in 'bought participation'. In 'functional participation', local people participate by forming groups to meet predetermined external objectives that can involve promotion of externally initiated groups. Local people are not involved in planning but can participate after plans have been formulated. Groups formed tend to be dependent on external professionals. In the 'interactive participation', local people prepare action plans jointly, new groups are formed or existing groups are strengthened. Groups take control over local decisions. In 'self mobilisation', local people participate by taking initiatives independent of external professionals. Such self-initiated mobilisation and collective action may or may not challenge the existing inequitable distribution of wealth and power.

Table 3.6: Typologies of Participation and their Levels of Influence on Decisions

Arnstein (1969)		Pretty (1998)	Creighton (1986) Rowe & Frewer (2005)
Citizen control		Self-mobilisation	<i>High influence on decisions</i>
Delegated power	<i>Degrees of citizen power</i>	Interactive	
Partnership			
Placation		Functional	<i>Medium influence on decisions</i>
	<i>Degrees of tokenism</i>	Bought	
Consultation		Consultative	
		Passive	<i>Low influence on decisions</i>
Informing			
Therapy			
Manipulation	<i>Non-participation</i>	Manipulative	

Creighton (1986) and Rowe and Frewer (2005) note that types of participation listed by Arnstein and Pretty are associated with different levels of influence on decisions. Local people in 'bought', 'consultative', 'passive', and 'manipulative' participation have a low level of influence on decisions as a result of their participation, where the flow of information is non-transparent and downward and participants' feedback is neither sought nor required (Rowe & Frewer, 2000; Andersson, 2006). In the 'functional' and 'interactive participation', local people have a medium level of influence on decisions. In these, information is collected by the government from local people and may influence decisions, but the decision-making process is still one-way, that is externally made decisions are imposed downward. In 'self-mobilisation', local people have a high level of influence of their participation in decisions. Flow of information is two-way; external professionals receive and provide information to local people (Rowe & Frewer, 2005).

Pimbert and Pretty (1995) stress the need to clearly spell out the meaning of participation in CBNRM regimes. A large number of studies focus on the factors influencing people's participation in the implementation of government-initiated programmes or projects, but only a few consider levels of participation and impacts of participation on decision processes (Buchy & Race, 2001; Nightingale, 2002). Kumar and Puri (2004) and Ribot (2004) argue that participation in the natural resource management literature is often used to label processes for mobilising local people to implement the agendas by external professionals. It is used for the instrumental objectives of implementation rather than the procedural objectives of empowerment. Pimbert and Pretty (1995) propose that the types of participation from 'functional participation' and above are required for achieving

sustainable natural resource management. Martin and Lemon (2001) and Sinha (2003) in their studies in India found that community-based forestry management regimes initiated by the government imposed certain basic rules at the initial implementation stage that curtailed the freedom of people to participate in decision-making processes.

Nemarundwe (2004), in a study of CBNRM in Zimbabwe, reported that there exists a complex interface between traditional and formal decision-making structures and processes at the local level, which influence people's participation in NRM decisions. At the group level, formal decision-making structures describe who among resource users can participate in decision processes (Gibbs & Bromley, 1989; Tang, 1991; Oakerson, 1992). Executive bodies associated with formal groups introduced by government officials, and resource users occupying positions in these bodies are constituents of formal decision-making structures (Gibson et al., 2005). Formal networks (e.g. vertical networks with external organisations) are also examples of such structures that influence the participation of resource users in decision-making processes (Sinha, 2003). Martin and Lemon (2001) in their study in India reported that government-initiated joint forest management often reproduces the social relationships that marginalise women from participating in decision processes. But adequate information could not be obtained as to whether and how such regimes reproduce social relationships that discriminate against the poor and/or low caste from participation in decision-making processes.

Drawing from the literature (Martinez, 1997; Lise, 2000; Chatterji, 2001; Sekher, 2001; Sinha, 2003; Gauli & Rishi, 2004; Maskey et al., 2006), key structural factors were identified that can restrict the participation of the poor and/or women in resource governance in relation to their resource access. These are: (i) inadequate access to information, (ii) low incentives, (iii) discriminatory sociocultural norms (iv) dominance of local elites in decision-making processes, (v) limited local expertise, and (vi) ineffective control over implementation.

A study carried out by Martinez (1997) in Mexico reported that the poor did not participate in externally initiated local groups because they had inadequate access to information. Weinberger and Jutting (2001), in their study in India, found that poor women did not participate in project-initiated local groups because the risk associated with participation was high. There were two reasons for this. First, poor women had to forgo income from other activities for the time they had to contribute voluntarily in participating in the groups. Second, the sociocultural norms rooted in the Muslim culture restricted their participation. Baral and Subedi (1999) and Gauli and Rishi (2004) reported that local elites (who are

also politically powerful) often take leadership in the decision-making structures (e.g. executive committees) of forest user groups in developing countries. Sinha and Suar (2003) noted that the group leaders often have limited skills in facilitating the processes in a participatory way, which constrains women and the poor from participating in decision-making processes. Chatterji (2001) and Lachapelle et al. (2004) found that poor people or women often have low capacity for exercising power through their positions in the decision-making structures. Nightingale (2002) argues that those women who attend the FUG meetings often 'sit and keep quiet' and do not 'participate'. Feelings of powerlessness, inferiority, incompetence, and illiteracy discourage the poor and/or women from participating in the processes (Sinha, 2003; Cooke, 2004; Lachapelle et al., 2004).

Local decision-making processes are guided by formal rules as well as social norms. These processes are often dominated by local elites (who also take leadership), and their attitudes and behaviours (guided by social norms) constrain the participation of the poor, the low castes, and women in decision-making processes (Agarwal, 2000; Lise, 2000; Agarwal, 2001; Gaudi & Rishi, 2004). Although economic status and caste structures have been reported to influence participation of local people in decision-making processes in developing countries (Agarwal, 2000; Baumann et al., 2003; Agrawal & Gupta, 2005; Upadhyay, 2005; Agrawal & Chhatre, 2006; Maskey et al., 2006), the specific factors and mechanisms that influence different levels of participation of the poor low castes in particular are still poorly understood.

3.4 Conceptual framework

Community-based natural resource management (CBNRM) has been widely used in many developing nations for sustainable resource management and poverty reduction over the past three decades. Community-based forestry is an example of this policy, which involves the devolution of power from the government to the group of resource users for governing the forest. Such a policy is believed to benefit people within the community through improved resource management. However, in reality, some people have obtained benefits while others, usually the disadvantaged people, have not. The review in this chapter has provided a framework for understanding the institutional factors that influence the access of the poor to a resource governed under a CBNRM regime. Institutional theory provides the theoretical underpinnings on which this framework is built.

The literature suggests that resource access of the poor can be influenced by many institutional factors, irrespective of the type of community-based forestry regime. These factors can be organised into three main themes: (i) property rights, (ii) sociocultural norms and relationships, and (iii) resource governance, and these have influence on each other (Figure 3.1). These are the key inter-related factors that shape poor people's participation and power to influence the decision-making processes, which can facilitate or hinder their resource access.

Two key property rights factors emerged that influence resource governance under the CBNRM regime in relation to resource access of the poor: (i) the security of rights through legal membership, and (ii) the level of recognition of customary rights of local people, including the poor. In a CBNRM regime, a group of resource users that is formally registered obtains legal rights to use, manage and exclude. The literature highlights that the poor need to be included in the group and given secure rights through membership. Recognition of customary rights of local people, the poor in particular, during CBNRM regime implementation is important for resource access of the poor.

Two key sociocultural factors that can have significant roles in improving the access of the poor to resources governed under a CBNRM regime emerged from the literature. First, certain types and levels of social networks support poor people's participation and power to influence decision-making processes. Second, regime implementation methods and processes need to be adapted to suite sociocultural norms so that these norms support poor people's participation and power to influence decision-making processes.

Two key resource governance factors have a significant influence on the resource access of the poor. Firstly, CBNRM policy enforcement and implementation can provide adequate authority to a group of resource users for governing the resource, and can develop the capacity of the group to govern the resource with regard to the resource access of the poor. Secondly, local decision-making structures and processes can facilitate or constrain poor people's participation in decision-making processes.

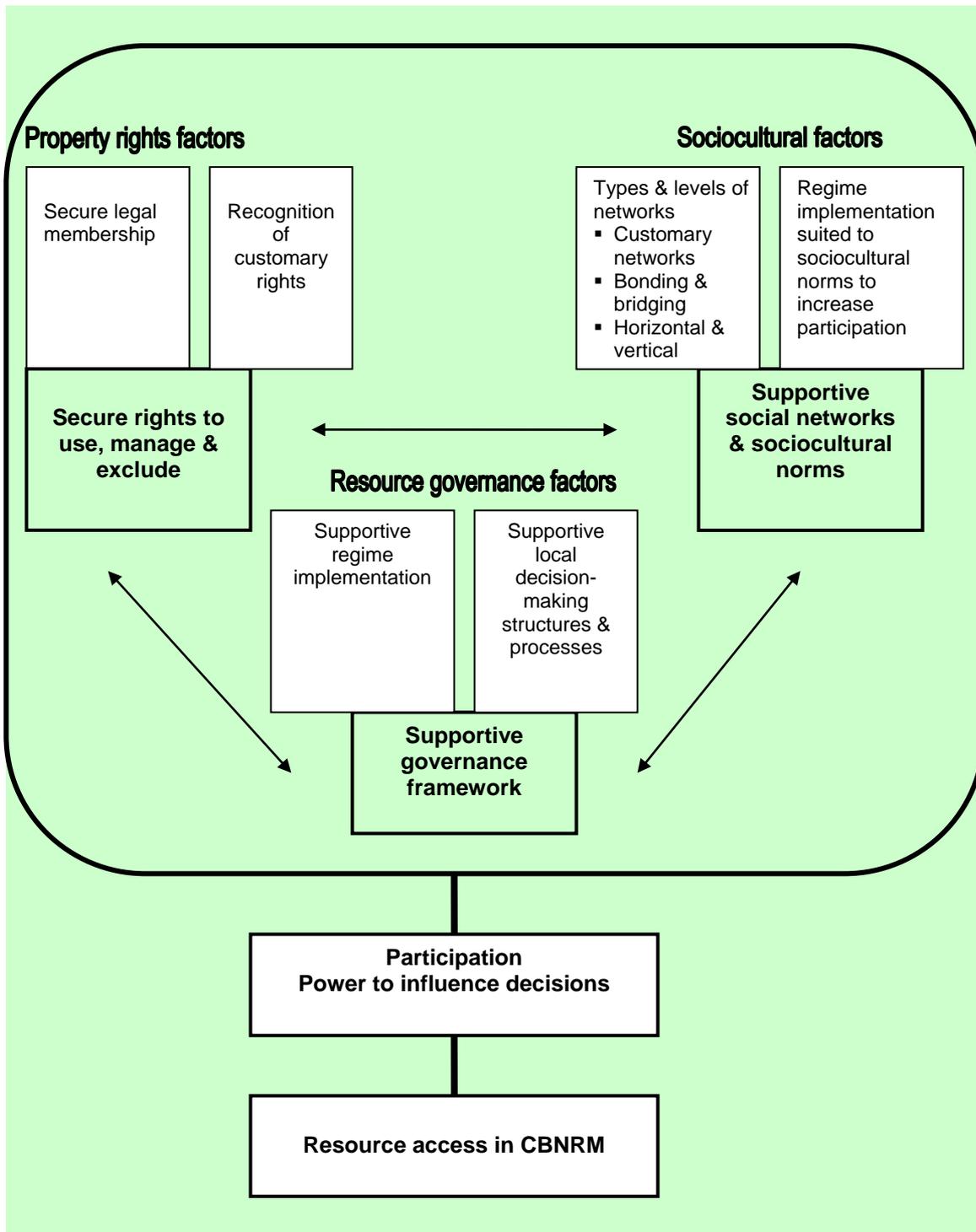


Figure 3.1: Conceptual framework: Key institutional factors that influence resource access of local people, including the poor (Adapted from Ostrom, 1990; Agrawal & Ostrom, 2001; Meinzen-Dick & Knox, 2001)

In this chapter, the theoretical underpinnings to understanding access of the poor to resource benefits under CBNRM regimes have been described. Drawing from different CBNRM and CPR literature, a conceptual framework has emerged that contributes to an understanding of what institutional factors influence access of the poor to resources governed under CBNRM regimes, and why they influence it in this way. The review also shows that often, empirical research does not support the theoretical propositions regarding CBNRM. This research aims to empirically contribute to this field by exploring and explaining the institutional factors that influence the resource access of the poor under community and leasehold forestry management regimes in Nepal. The purpose in the next chapter is to describe the methodology for this research.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

Two questions the researcher seeks to answer in this study are: (i) what institutional factors influence the access of the poor to forests that are governed under different government-initiated community-based forestry regimes in Nepal? and (ii) what are the mechanisms through which these factors have that influence? The methodological approach for this research is a qualitative case study approach. In this chapter, the selection of a qualitative case study approach is explained and the case study design, methods of data collection and analysis are described. Finally, the procedures used to ensure quality of the research are outlined.

4.2 Qualitative case study approach

The researcher's interest to understand why the poor have not benefited under community-based forestry regimes originated from her work experiences prior to this PhD study. Her personal experiences suggest the need to explore this research issue in-depth; and the need for this research has also been discussed in Chapter 1. Only limited information is available on the experiences of people involved in community-based forestry regimes in relation to resource access of the poor in developing countries (Mahanty et al., 2006a). A qualitative case study approach is selected in this study for understanding in-depth the resource access of the poor (Creswell, 1998). This research is focussed on exploring formal and informal institutions embedded in complex social relationships, in order to understand the complexity of the resource access of the poor. The qualitative approach provides the opportunity to the researcher to understand in-depth the resource access of the poor from different research participants' perspectives and their meanings (Klein & Mayers, 1999; Denzin & Lincoln, 2000). Furthermore, relating the participants' perspectives with the contexts in which they are embedded so as to understand why the participants have that perspective is possible in this approach (Gilbert, 2002; Snape & Spencer, 2003; Steins & Edwards, 1999).

The philosophy behind this research is that researchers with different viewpoints may look and interpret the same data differently, and that there is much scope for researchers to influence the results. Interpretations of the same data are influenced by the researchers' understanding of the various participants' perspectives, and these may differ across researchers in qualitative case study research (Hycner, 1999; Blaikie, 2000; Bryman, 2001; Gomm, 2004).

For this research that aims to understand the influence of the context and local factors on the resource access of the poor, an approach that allows researchers to design flexible research strategies suited to natural settings is useful (Denzin & Lincoln, 2000; Neuman, 2006). The qualitative approach allows researchers flexibility to apply methods suitable for gathering data in a social context for capturing participants' perspectives in detail, in the form of words and statements (Creswell, 1998; Snape & Spencer, 2003; Silverman, 2005). This approach is also useful in this research for obtaining further insights to better understand resource access because it allows further probing of key issues aroused during interviews.

For several reasons, a qualitative case study strategy is most suitable for a study such as this, which investigates social, local organisational, and policy management. The second question this research needs to answer is regarding the mechanisms through which the institutional factors influence resource access, which cannot be explored in depth without qualitative study. In particular, how and why institutional factors influence resource access of the poor in the way that they do cannot be understood in detail without taking a case study approach (Stake, 2000; Cepeda & Martin, 2005). The case study is especially appropriate when exploring complex phenomena such as institutions guided by social relationships that influence resource access (Verschuren, 2003; Davenport et al., 2007). This approach allows researchers to use two or more methods of data collection that can then provide multiple sources of evidence for theory (Hakim, 2000; Punch, 2005).

The issues associated with this research topic can be best understood in natural settings where participants' perspectives at one point of time may differ from those in another point of time (Ragin, 1992). A case study research strategy allows researchers to understand the experiences and opinions of participants on research issues in detail, as well as the context and reasoning behind these expressions (Bonoma, 1983; Stake, 1995). The context determines meaning and includes such issues as social setting, timeframe and spatial context (Miles & Huberman, 1994b). The questions 'how' and 'why' cannot be answered directly without understanding the context and may involve a variety of

interrelated contextual factors (Ragin, 1997; Hakim, 2000). Several scholars (Edwards & Steins, 1999; Ostrom, 2000; Armitage, 2002; McCay, 2002; Agrawal & Chhatre, 2006) have argued that the consideration of context is essential for understanding the influence of institutional complexity in shaping resource use, governance and outcomes because institutions are embedded in the context. The case study is particularly useful in this research for uncovering a relationship between influences of institutions on resource access and the context in which these are occurring (Stake, 2000; Hartley, 2004). In this way, the mechanisms of influence of the institutions embedded in the local sociocultural context on resource access can be better explained.

4.3 Case study design: A collective case study

Selecting an appropriate research design and maintaining flexibility are critical for case study research (Merriam, 1998; O'leary, 2006). The case study design includes data collection and data analysis strategies, which are useful for answering the research questions. The literature identifies several different examples of case study designs (Stake, 1994; Yin, 2003).

Stake (1994) identifies three types of case study designs: (i) intrinsic, (ii) instrumental, and (iii) collective. An intrinsic case study is aimed at understanding a specific case. The purpose of an instrumental case study is to understand something more general than the particular case. In this design, the researcher is usually interested in how and why a phenomenon operates as it does. The researcher chooses the case to develop and/or test a theory or to better understand some important issues. Explanation is a key goal. The specific case can be selected because it is extreme or unique in some way (and can be used to test theoretical predictions) or because it is typical (and can be used to understand the general case). A collective case study design is defined as a study of multiple cases in one research study, also called multiple-case design. In this design, the researcher believes that he or she can gain greater insight into a research topic by concurrently studying multiple cases in one overall research study. Two or three cases might be studied when a relatively in-depth analysis of each case is required and when resources are limited. The cases in this study are usually studied instrumentally rather than intrinsically (Stake, 2000).

In this research, a collective case study design is applied to study multiple cases for understanding the research issues (i.e. resource access of the poor) rather than

understanding the particular cases. This type of collective case study involves the study of multiple instrumental cases. Scholars refer to this design as a comparative (or multiple or cross-case or multicase or multisite) case study, in which two or more cases are compared to provide an understanding of the research phenomena (Herriott & Firestone, 1983; Merriam, 1998; Verschuren, 2003; Yin, 2003; George & Bennett, 2005; Punch, 2005). The application of comparative case studies in the field of natural resource management, including forestry is increasing (Klooster, 2000; Fraser et al., 2006; Agrawal, 2007).

Hakim (2000) and Johnson and Christensen (2004) suggest that the number of cases can be limited to two or three, depending upon the research problem, and that these cases can be compared and contrasted. In such situations, some degree of prior knowledge may be necessary for suitable cases to be selected. In this study, the research problem of interest is related to government-initiated community-based forestry regimes and the influence of the institutional arrangements associated with these regimes on the access of the poor to the particular forests in Nepal (see Chapter One). The aim in this research is to identify and explain key institutional factors that influence the access of the poor to the forests governed under government-initiated community-based forestry regimes. The conceptualisation of this research problem and research aim guided the collective case study used in this research. The collective case study for this research, in line with Merriam (1998), involved collecting and analysing data from two cases, namely community forestry and leasehold forestry, each of which has two sub-cases (or communities). Comparison of the two cases and the four communities provides greater understanding about resource access of the poor as it provides an opportunity to explore the influence of the different characteristics of the cases and the communities on resource access.

4.3.1 Research process

The research process is depicted by Stake (1994), Cepeda and Martin (2005), and Punch (2005) as comprising four stages: (i) planning, (ii) data collection, (iii) data analysis, and (iv) reflection (Figure 4.1). In this case study, 'planning of research design' and 'data collection' were iterative processes, in which planning aspects were revised based on the information collected during the fieldwork. At the planning phase, a theoretical framework was developed from an initial review of the literature. The initial theoretical framework guided the data collection and analysis processes. However, the design process was

flexible so that unanticipated happenings (issues, theories and concepts) that reveal the nature of the case could be integrated (Hartley, 2004; Silverman, 2005). Likewise, the literature review was a continuous iterative process throughout the research. The data collection stage included the process of defining boundaries of the cases and sub-cases, the design of the data collection protocol, the development of research ethics guidelines, conducting fieldwork and collecting data (Cepeda & Martin, 2005). Some criteria were identified to define cases during the planning stage, but further refinement of case definition and boundaries was done during the fieldwork.

This collective case study involved collecting and analysing data from two cases and two sub-cases (or communities) within each case. In a collective case study, there are two stages of analysis: (i) within-case and (ii) cross-case (Miles & Huberman, 1994a). Within each case in this study, a cross-community analysis was done. For doing cross-case analysis, Miles and Huberman (1994a, p.205) suggest that “a researcher should look carefully at the complex configuration of processes within each case and understand the local dynamics, before one can begin to see patterning of themes that transcends particular cases.” In the reflection stage, findings from the analysis were compared with the literature. New themes or concepts that emerged from the data guided the incorporation of new literature and themes into the theoretical framework and the discussion. Theoretical and methodological implications were described.

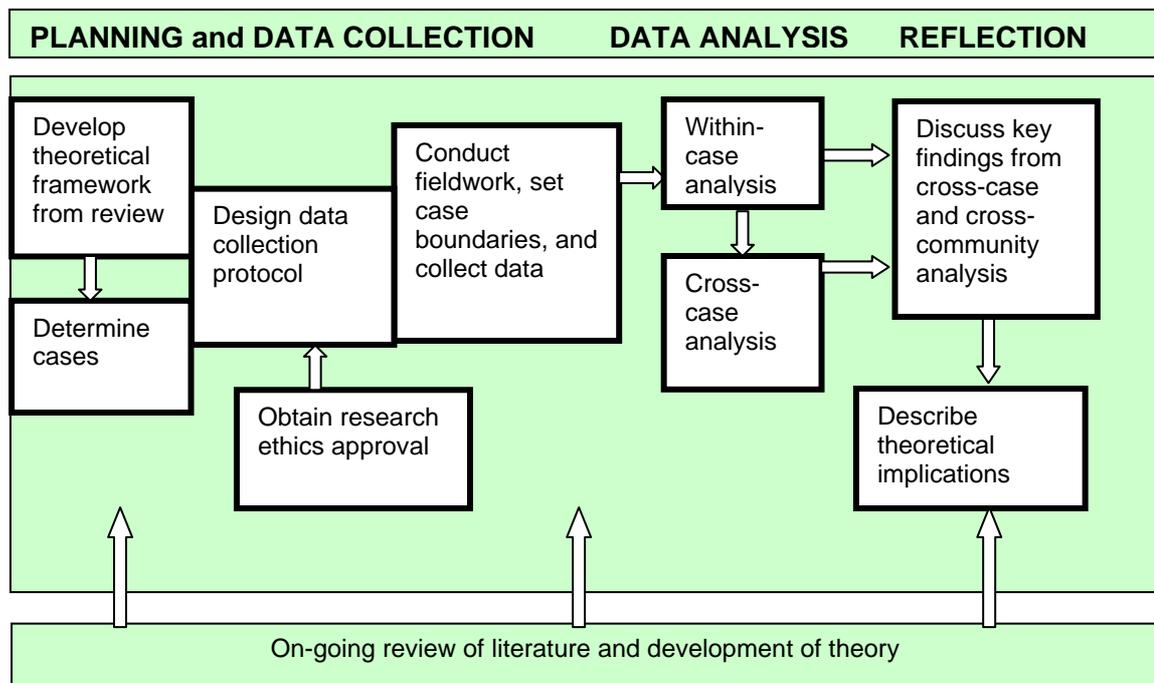


Figure 4.1: A collective case study research process (Adapted from Stake, 1994; Cepeda & Martin, 2005; Punch, 2005)

4.3.2 Case selection

The selection of cases in this research was guided by the research question, characteristics of potential cases that have theoretical relevance, and richness of information. Understanding the research issues depends on defining the right cases (Patton, 1990; Miles & Huberman, 1994b; O'leary, 2006). Yin (1989) said that the definition of a case is guided by the way the research question is stated. The research question of this study is: What institutional factors influence the access of the poor to forests that are governed under different government-initiated community-based forestry regimes? Here, the emphasis is on government-initiated community-based forestry regimes, and hence in accordance with Yin (1989), one or more of these regimes can be defined as cases. The 'community forestry regime' and the 'leasehold forestry regime' are two community-based forestry regimes that have been implemented by the government for more than ten years in Nepal. Thus, the 'community forestry regime' and 'leasehold forestry regime' are the two cases in this study. This research focused on these two regimes rather than on the indigenous or community-initiated regimes because of the trend in formation of increasing numbers of forest user groups under government initiatives in the hills of Nepal. More importantly, the government's support is necessary for not only conservation of the forests, but also for enhancement of livelihoods of the rural poor through forestry, and this is likely to be an issue in the future in Nepal.

The cases in this case study research were determined based on their distinct characteristics that have theoretical relevance (Patton, 1990; Merriam, 1998; Bennett & Elman, 2006; Ritchie & Lewis, 2003). One can learn a great deal about research issues from such cases (Patton, 2002). Further this type of theoretical (or purposive) sampling allows researchers to manipulate sampling activities as needed during the research process to a much greater extent than in statistical sampling (Mason, 1996; Silverman, 2005). This strategy is a useful way to determine the nature of the cases (Miles & Huberman, 1994a; Patton, 2002) and 'a theoretically defensible strategy' in the research on common-pool resources (e.g. forests) (Agrawal, 2003).

The criteria recommended by Agrawal (2003) and others (Singh, 2004; Nagendra et al., 2005a) have been used in this research for distinguishing characteristics of the two cases. The two regimes have distinct characteristics in terms of type of forest, group approach, group characteristics, and agencies involved in the implementation at the district level (Table 4.1). These distinctions provided a basis for answering the research question from the perspective of their influences on resource access, which would otherwise not be possible by studying only one regime.

Table 4.1: Characteristics of the Two Regimes

Criteria	Community forestry regime	Leasehold forestry regime
<u>Forest characteristics</u>	Good quality forest	Degraded forest
<u>Regime characteristics</u>		
Focus of the regime	Poverty reduction through forestry	Poverty reduction through forestry
Government agencies involved	DFO	DFO and DLSO
Group approach	Inclusive	Exclusive (targetted to the poor)
Group characteristics	Heterogeneous in wealth	Homogeneous in wealth

Source: Singh, 2004; Nagendra et al., 2005a

Selection of two different cases in this research was also supported by a series of communications through emails carried out with related academic and development experts (refer to the list in Annex 4.1) in Nepal and elsewhere. Most of the feedback supported the selection of the two regimes for this study because most studies in the past had focused on the community forestry regime. The inclusion of the leasehold forestry regime has been recognised as necessary for understanding the complexity of access of the rural poor to forests governed under community-based²⁵ regimes (Nagendra et al., 2005b). Both community and leasehold forestry regimes have been implemented in Nepal for over ten years, so people involved in the regimes' implementation have rich experiences.

4.3.3 Setting boundaries of the cases

Establishing criteria for setting the boundaries of the cases is an important step in defining the cases (Miles & Huberman, 1994b; Stake, 2000). However, Bryman and Burgess (1999) and O'leary (2005) state that outlining specific boundaries for cases is a challenging task. According to Creswell (1998, p.64), "some case studies may not have clean beginning and ending points, and the researcher will need to work with contrived boundaries". Setting the case boundary involves "the selection of a research site, time period, specific people and events" (Burgess, 1982, p.76).

²⁵ Community-based forestry is a generic term, whereas community forestry refers to the specific regime in Nepal.

In line with Yin (1989), in defining boundaries for this study, some aspects similar to those previously studied by others and some aspects that deviate from these in clear, operationally defined ways have been applied. For setting boundaries in this study, criteria were determined in order to choose the research sites, people, communities, or organisations that would be the sources of data (Merriam, 1998). Establishing criteria for clarifying boundaries of the cases is important so that they can be compared with other cases and their generalisability in terms of theory can be described (Ragin, 1992); Vaughan, 1992; Flyvbjerg, 2006). Three main criteria were applied in this study for choosing the research sites, people, communities, and organisations: (i) maximum variation and information richness, (ii) accessibility of data, and (iii) resources available to the researcher.

The maximum variation selection strategy is information-oriented focused (Abbott, 1992; Stake, 1994; Hakim, 2000; Silverman, 2005; Patton, 2002; Flyvbjerg, 2006). In this strategy, the cases and sub-cases selected vary in their characteristics and have rich information on research issues. The researcher did not employ an extreme or critical case selection strategy²⁶, because the key informants (i.e. staff members of the DFOs, NGOs, projects, and FUG members) said that they did not have adequate information for identifying successful or unsuccessful examples from the perspective of a regime's influence on the resource access of the poor.

The accessibility of empirical data relevant to the research question is the second criterion (Gummesson, 2000; Silverman, 2005). Accessibility can be in terms of location (i.e. near distance) or convenience (Stake, 1994). The purpose behind this criterion was to choose the research sites, people, communities, and organisations, which have high potential to provide learning, and which were also convenient in terms of logistics, potential reception, and resources. Their selection for this study was guided by criteria such as closeness and convenience, recognising that it was more useful to select those with which the researchers could spend the most time. The Maoist insurgency was occurring in Nepal at the time the field research was being undertaken. For this reason, the personal safety of the researcher was an important consideration in the selection of the sites for the research, also. In the next section, the application of these criteria in selecting the sites for the study is described.

²⁶ An extreme case is a highly unusual manifestation of the phenomenon of interest, whereas a critical case is the one having strategic importance in relation to the general problem (Miles & Huberman, 1994b).

4.3.4 Site selection

Two hill districts (i.e. Sindhupalchowk and Kavre) of the Central Development Region of Nepal, where the community and leasehold forestry regimes have been implemented for more than ten years were selected. Two sites in each district were selected because these vary in terms of degree of homogeneity of the communities, and the communities' access to markets and roads. Selection of more sites would have obvious value, but resources available to the researcher did not allow for this.

Fieldwork for selection of sub-cases was started in Sindhupalchowk district, which had a long history of implementation of the regimes, and was accessible and convenient for the researcher since she had prior working experience there (Figure 4.2). The researcher visited Sindhupalchowk in October 2005, and obtained permission to undertake the study from the District Forest Office. A district level workshop was carried out in which four staff members²⁷ and three members of local forest user groups participated. In the workshop, the purpose of the research was explained and then criteria for identifying cases and sub-cases in the field for this study were discussed. There were 417 community forest user groups (CFUGs) and 216 leasehold forest user groups (LFUGs) in Sindhupalchowk in 2005 (DFO/Sindhupalchowk, 2006a). It was not easy to decide the most suitable two FUGs (one community FUG and one leasehold FUG) from such a large number of FUGs in the district. Two criteria were decided for selecting forest user groups: (i) accessibility and (ii) completion of one five-year implementation cycle of the regime.

The workshop participants suggested that a heterogeneous FUG (consisting of members of different social and economic status) would provide richer information to understand the research topic (i.e. the influence of informal institutions such as caste-based networks and caste-based norms on community forestry regime implementation in relation to the resource access of the poor) as compared to a homogeneous FUG. But they said that this criterion could not be strictly applied for the leasehold forestry regime, which had mostly been implemented in the settlements of single ethnic groups. Two potential community forest user groups (CFUGs) and leasehold forest user groups (LFUGs) based on this criterion were listed. A preliminary visit was made to communities of which the FUGs were from and their suitability was assessed. One CFUG and one LFUG were selected because they were receptive and provided permission for the study to be undertaken.

²⁷ Three from government agencies (the DFO, the DLSO, the ADBN) and one from an NGO (the FECOFUN).

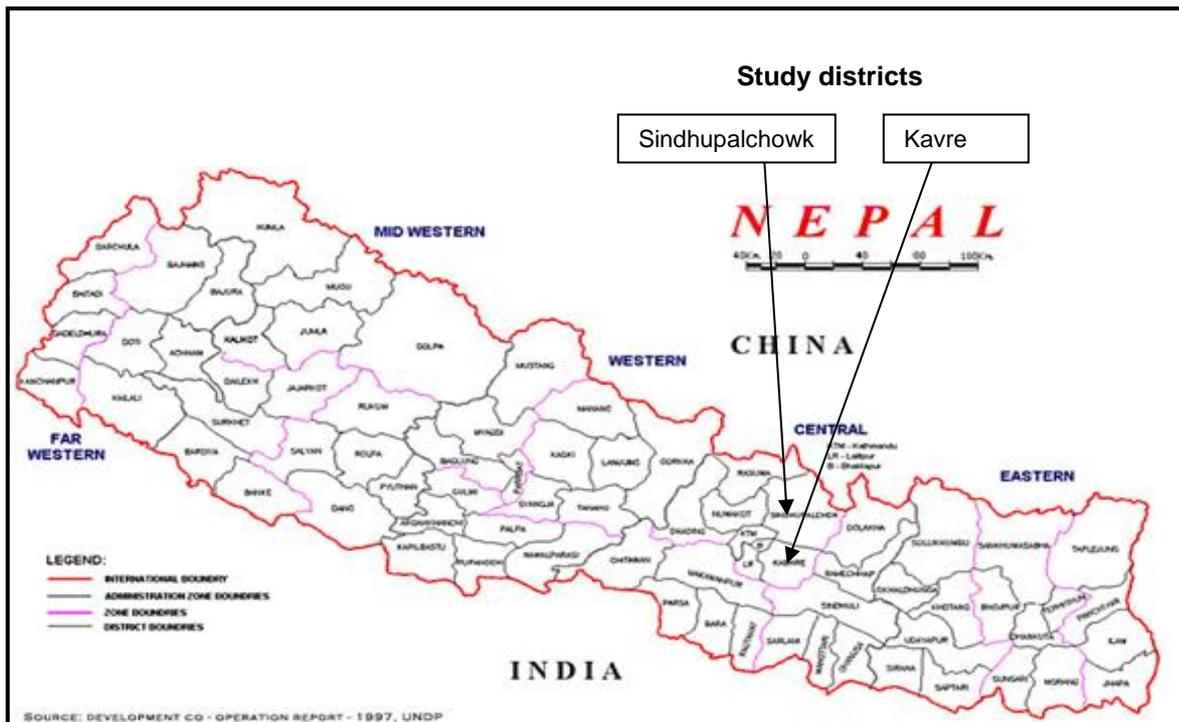


Figure 4.2: Location of the study districts (Sindhupalchowk and Kavre)
(Source: www.nabkavre.org/Images/Nepal_map.jpg)

The participants of the district level workshop also suggested that FUGs located in different areas (i.e. districts) would have different experiences and that they strongly recommended the researcher study at least two CFUGs and LFUGs located in different areas. Similar suggestions were made by three key informants (staff members of NGOs and donor projects). During the workshop, the access to markets and roads was identified as an appropriate criterion to select two types of FUGs: (i) FUG with good access to markets and roads, and (ii) FUG with low access to markets and roads. The purpose behind this criterion was to understand whether the resource access of the poor is influenced by the different levels of access to markets and roads. Gautum et al. (2004) reported that members of the FUGs with good access to markets have obtained more benefits from community forests than members of the FUGs with low access to markets in the hills of Nepal. However, whether all group members, i.e. the well-off and the poor, obtained similar benefits could not be determined from this study. The FUGs which were identified from the Sindhupalchowk district workshop had poor access to markets. In order to select FUGs with good access to markets, a neighbouring district 'Kavre' was selected because it was accessible, had FUGs that had completed one five-year implementation cycle, and had heterogeneous CFUGs. Selection of the CFUG and the LFUG in Kavre was comparatively easier because the staff member of the donor project (i.e. NACRMLP)

who had good access to information on the FUGs assisted. One each of suitable CFUGs and LFUGs in Kavre²⁸ were identified by three staff members²⁹ and two key local informants. In this way, the case design was modified in the field in such a way to integrate two differently located CFUGs and LFUGs as the basis for two sub-cases to enhance understanding of the collective case study. Gomm et al. (2000) suggest that findings emerging from the study of several sites that are quite varied would be more robust than a study of several very similar sites.

The selection of the four FUGs in two districts was also based on the impressions obtained from the preliminary visits to the communities in which the FUGs were a part. After the identification of each FUG, the researcher obtained permission for the study and initiated steps to establish rapport. Rapport was easily built with members of the communities in Sindhupalchowk because the researcher had prior working experience there. In Kavre, the researcher and the staff member of the donor project visited the FUGs jointly twice and presented them with the purpose of the research, and this helped in establishing trust. From the visits to all four FUGs, the researcher came to know that there were many households in the 'communities' who were affected by the regimes' implementation but were excluded from the FUGs; they were the nonmember households. Many previous studies have focused on FUGs for selecting cases (Pokharel, 1997; Varughese, 1999; Thoms, 2006). Agrawal (1999) and Vandergeest (2006) argued that a CBNRM study needs to include both member and nonmember households. Therefore, an effort was made to identify nonmember households in each community. In three of the four sub-cases³⁰, communities were larger than the FUGs because they included members as well as nonmembers of the FUGs. The selection of the 'community' was based on the forest that was being governed under a particular regime and those people who had accessed the forest historically (Figure 4.3). The community forestry case included *Dhuseni* and *Saparupa* communities of Sindhupalchowk and Kavre districts. Likewise, the leasehold forestry case included *Tutikhola* and *Odarepakha* communities of Sindhupalchowk and Kavre districts.

²⁸ Out of 415 CFUGs and 234 LFUGs (DFO/Kavre, 2006b)

²⁹ One from the DFO, one from the donor project (the NACRMLP), one from a NGO (the FECOFUN)

³⁰ In the fourth sub-case, the non-members in the community have been included in FUG in its first planning cycle, and therefore, were FUG members at the time of this research.

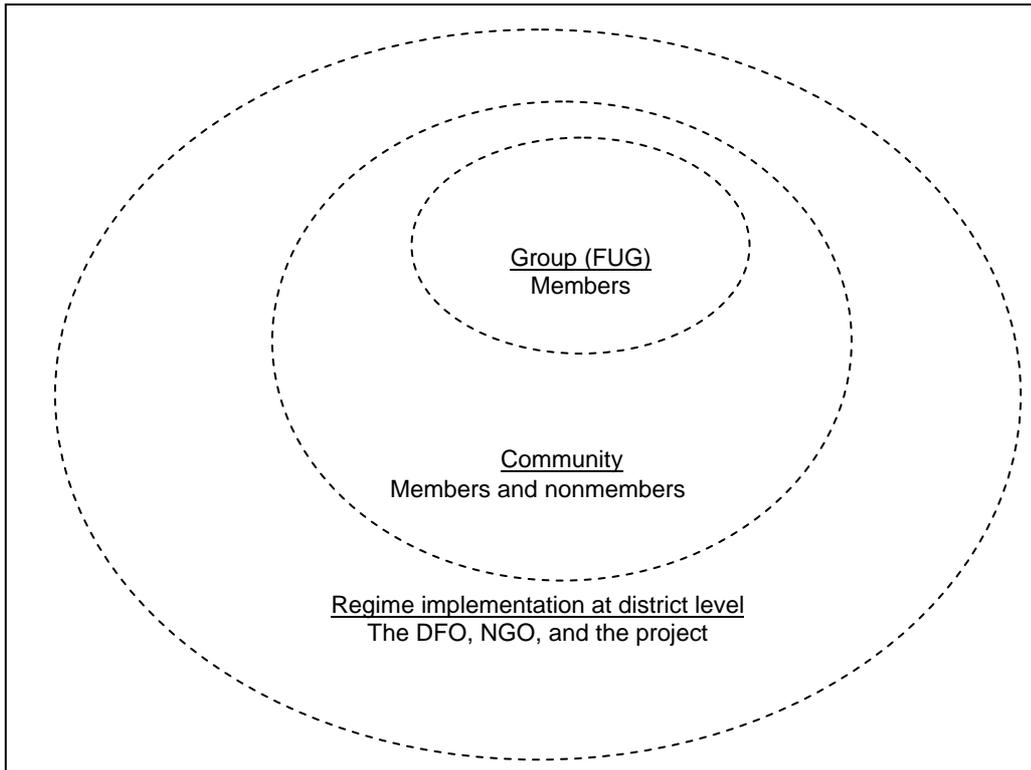


Figure 4.3: Three levels considered to construct a case

In summary, the collective case study for this research consisted of two cases and two sub-cases (or communities) within each case, and had temporal (i.e. October 2005 to April 2006), geographical (two typical hill districts of the Central Development Region) and social (four communities) aspects. The study focused on the influence of institutional elements of community forestry and leasehold forestry regimes on the access of the poor to forests. Understanding institutional elements was initially focused on three themes identified from the literature: property rights, culture, and resource governance (Chapter 3). Table 4.2 outlines the key criteria of selecting the communities for each of the cases.

Table 4.2: Key Criteria for Selecting the Communities for each of the Cases

	Community forestry case	Leasehold forestry case	
DFOs	Long experience (> five years) of the regimes' implementation	Long experience (> five years) of the regimes' implementation	
Communities	Sub-case 1 Dhuseni community, Sindhupalchowk Poor access to market	Sub-case 1 Tutikhola community, Sindhupalchowk Poor access to market	
	Sub-case 2 Saparupa community, Kavre Good access to market	Sub-case 2 Odarepakha community, Kavre Good access to market	
	FUGs	Sub-case 1 Heterogeneous Completed one five-year implementation cycle	Sub-case 1 Homogeneous Completed one five-year implementation cycle
		Sub-case 2 Heterogeneous Completed one five-year implementation cycle	Sub-case 2 Homogeneous Completed one five-year implementation cycle

4.3.5 Ethical considerations

Research ethics were considered to be very important in this research as it involved interactions with people in their environment, and there were safety issues for the researcher. The ethics report prepared by the researcher for this research was reviewed and approved by the Human Ethics Committee of the Massey University (see the ethics report in Annex 4.2). There were three major principles the researcher ensured for research ethics. First, the participants in this research were given the required information about this research and the researcher. The participants were informed about the research purpose prior to data collection. Then, key information they provided was summarised for their approval at the end of each stage of data collection. Furthermore, key findings of this research were summarised and translated into Nepali and made available to the participants after the completion of the research. The second principle the researcher followed was the principle that participants provide information voluntarily. Prior to data collection, participants were consulted to find out whether they were interested in providing information regarding institutional factors that influenced resource access of the poor. The third principle the researcher employed was consideration of strategies to minimise harms to the participants and the researcher from this research

process. For this, it was ensured that also the disadvantaged people felt comfortable in providing information. Finally, audio recordings were not made to avoid the risk of the researcher being suspected as a spy by the police as well as the Maoist cadres.

4.4 Data collection

The data collection protocol for this research included techniques and processes for data collection. The protocol was made flexible enough to adapt to the field reality so that data could be collected effectively (Hartley, 2004; Silverman, 2005). The protocol design was guided by the conceptual framework (see Chapter 3) and three broad sets of questions were developed in order to gather information that would inform the research questions from the points of view of different categories of interviewees (see Table 4.8 in section 4.4.3 below). These questions were developed from concepts and theories outlined in the theoretical framework (see Chapter 3). The initial questions, however, were refined after a preliminary interview and more probing and clarification questions were added after a preliminary interview in each category. The main methods through which data were collected were focus groups, interviews, observations, and documents. A participatory ranking was a specific technique used to gather data to support and complement the focus groups and interviews.

The focus for data collection was on the resource access of the poor. ‘The poor’ and ‘local key informants (the poor and the well-off)’ were two main categories of interviewees who resided within the communities. They were asked to provide their views on the resource access of the poor. The third category was the ‘key external informants’ who were staff members or development consultants involved in the implementation of the regimes. They were asked to provide their views on the regimes in relation to the resource access of the poor. Table 4.3 lists sampling and data collection techniques used to collect data from the interviewees.

Table 4.3: Sampling and Data Collection Techniques

Categories of interviewees	Sampling techniques	Data collection techniques
The poor	Purposive sampling	Focus group, interview
Local key informants	Purposive sampling	Focus group, interview
Key informants (external)	Snowball sampling	Interview

The data collection process was conducted in a specific order, because the information collected from one technique guided another technique (Figure 4.4). First, a few selected 'key informant interviews (external)' with the staff members involved in the implementation of the regimes were conducted. Data obtained from these key informants helped in defining boundaries of the cases. 'Participatory ranking' was then carried out with the communities of both the cases in order to categorise FUG members and nonmembers in terms of their economic status. 'Focus groups' were then conducted with the poor to collect data on factors that influence their access to the particular forest governed under the regime. 'Focus groups' were also conducted with local key informants in order to understand their views on the resource access of the poor. Key observations were also made in order to gain insights on the activities, behaviours, and social relationships of participants during group meetings, some of which were not obtained through other techniques.

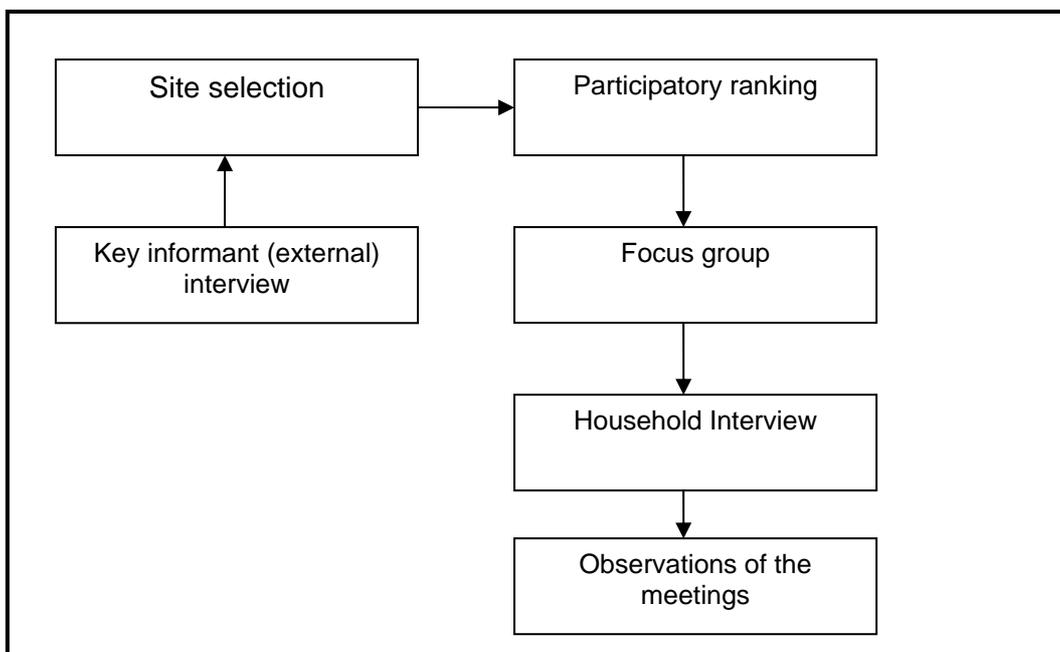


Figure 4.4: Data collection process

Snowball sampling (a kind of purposive sampling) was applied to select key informants (external) for the interviews. Bouma (2000) recommends using this technique when researchers needed to interview certain types of people but they know only a few people who fit the category and no listing of such people is publicly available. In this technique, researchers first interview those whom they know and ask them to identify others that they know, and then they identify still others. A purposive sampling was applied to select interviewees for participatory ranking. Local people with knowledge about their

settlements and an interest in providing information for the study were invited for participatory ranking. Purposive sampling was applied to select interviewees for ‘focus groups’. This sampling technique is particularly useful when researchers have to select people of different sub-groups (or categories) and gather data from each category (Patton, 2002). This technique involves dividing the population into various sub-groups and then taking a purposive sample from within each one (Patton, 2002). People from a particular sub-group who are interested in providing information are invited to participate in focus groups (O’leary, 2005). People of a particular sub-group, who had indicated interest in providing further information during focus groups, were selected for individual household interviews.

4.4.1 Interviews with key informants

In order to understand the context and external environment of the two cases, information was requested from relevant government and non-government organisations and projects, working at national, district and local levels, which directly or indirectly influence the governing of specified forests under community or leasehold forestry regimes. Interviewees from these organisations were selected purposively to obtain information on their experiences regarding the aim of this study. Through these interviews the researcher also aimed to understand the external factors influencing the access of the poor to forests. Table 4.4 lists the organisations and number of interviewees in each one.

Table 4.4: Key Informants Selected for the Interviews

Government agencies	Non-government organisations and projects
2 staff, DFO Kavre	1 staff, NACRMLP (donor project)
2 staff, DFO Sindhupalchowk	2 staff, NSCFP (donor project)
1 staff, DLSO Kavre	1 staff, LFP (donor project)
2 staff, CFD, Department of Forest (DoF)	3 staff, FECOFUN
2 staff, LFD, DoF	1 staff, SPD
2 staff, Department of Livestock	3 Community development consultants

See Abbreviations, p. xvii

The selection of the first interviewee was guided by the researcher’s prior knowledge about the organisation and the staff. The researcher could not make appointments with the government officials by telephone; she had to visit each office several times to get to

know them and get their agreement to give interviews for this study. Information about the research and research ethics was provided prior to each interview. A semi-structured interview guideline was used to obtain information from a key informant. Table 4.5 illustrates the topics covered in the interview guideline. A brief summary of the interview was presented at the end of each interview. In this way, the researcher ensured that the record of the interview accurately reflected the views of the interviewee. The rest of the key informant interviews were conducted over the period of the fieldwork.

During initial visits to the districts, the researcher also identified two locally-based assistants in consultation with key informants. The research assistants provided administrative support, such as arranging the dates for data collection with the communities and informing the researcher about the forest user groups' invitations to participate in their events, and they also assisted in the collection of data.

Table 4.5: Interview Guide for an Interview with a Key Informant

1) Views about community and leasehold forestry regimes in relation to the resource access of the poor
2) Group formation process, planning process, forest tenure regulations
3) Views on differential access to forest benefits, participation of women/the poor/low caste in planning process, equity in benefits distribution
4) Roles/responsibilities of agencies
5) Experiences in implementation, influence of local culture

4.4.2 Participatory ranking

A participatory ranking is an established method to identify households of different caste, ethnic and economic groups in donors as well as government projects in Nepal (Koirala et al., 2004; Maharjan et al., 2004; Poudyal & Thapa, 2004). The participatory ranking exercise was first done in the *Dhuseni* community, and then in the *Tutikhola* community. The same process was followed in both the cases. Initial meetings were carried out with local key informants to identify the settlements. Nonmember settlements were included in the process as far as possible. The researcher and the research assistants jointly planned the participatory ranking exercise for each settlement. They then received permission and dates from the people of those settlements. The NACRMLP (2005) had recent demographic data on the *Saparupa* and *Odarepakha* communities; hence no participatory ranking exercise was undertaken in these communities.

Local people with extensive knowledge about their settlements, and an interest in providing information were invited to the participatory ranking exercise. The exercise started with an introduction about the research and consents from the participants were obtained. The participants were then asked to provide criteria for categorising households in their settlements, and to identify households in each category. Each exercise took approximately two hours. The key criteria the local people discussed for categorising households were land holding size, food self-sufficiency from farming, income sources, and social status. These criteria were similar to those listed in the NACRMLP data. Table 4.6 shows two wealth ranks identified by local people. Well-off households were self-sufficient in food and some had surplus production and other income earning sources. Poor households were food self-sufficient for less than eight months of the year from farming.

Table 4.6: Characteristics of Well-off and Poor Households

Economic classes	Characteristics
Well-off	<ul style="list-style-type: none"> ▪ Have food security for eight months to a whole year from own farmland ▪ Have tin or zinc roofed house in the village ▪ Some have income from selling cereals, milk and livestock ▪ Some have off-farm income earning sources
Poor	<ul style="list-style-type: none"> ▪ Have food security for less than eight months from own farmland ▪ Have rented-in other's land in the form of share-cropping or contract ▪ Have some production from floodplains lowland (<i>khet</i>) or religious land, which are not under their legal ownership ▪ Have to do wage labour (e.g. farm worker, porter) to earn money for buying food ▪ Need to take loan for additional expenses (e.g. for marriage, medical expenses) ▪ Some have to raise others' cows and buffaloes ▪ Unable to send the sick family members to the health post

Source: Participatory ranking exercises

The social categories identified through the participatory ranking were based mainly on the caste or ethnic identities of households. Five social categories were identified in the *Dhuseni* community; high caste (*Brahmin/Chhetri*), two low castes (*Kami and Damai*), and two ethnic groups (*Majhi and Tamang*)³¹. The social categories identified in the *Saparupa* community were high castes (*Brahmin/Chhetri*), three low castes (*Sarki, Kami* and

³¹ National level caste/ethnic group classification is discussed in Chapter two.

Damai), and two ethnic groups (*Newar and Tamang*). The *Odarepakaha* community consisted of high caste (*Brahmins*) and low caste (*Sarki*) categories while the *Tutikhola* community consisted of one ethnic group (*Danuwar*). Figures 4.5 and 4.6 show pictures of participatory ranking exercises carried out in the *Dhuseni* and *Tutikhola* communities where women and men participated in the exercises.



Figure 4.5: A participatory ranking exercise in the Dhuseni community

Facilitating discussions and listening to people in the participatory ranking exercises provided an understanding of the social and economic differentiation and the social, economic and political contexts of the communities. One of the major criteria for identifying the poor was caste. The participants also suggested that women were more likely to be poor because they have low social status. Based on these arguments, the participants recommended that 'low caste people' and 'women' be included in the study of the resource access of the poor.



Figure 4.6: A participatory ranking exercise in the Tutikhola community

4.4.3 Focus group discussions

Krueger (1988) described a focus group discussion as a powerful means for gaining opinions and beliefs of a particular group of people. Focus group discussions were employed in order to understand whether people of different socioeconomic categories had different access to the forest. Focus groups are suitable to record the experiences of all people, even those who are normally left out in general group discussions in Nepalese society (Waldegrave, 2003). A focus group is defined as a group of people with a similar background on a specific topic (Waldegrave, 2003). A total of 24 focus group discussions were carried out in the communities (Table 4.7). Separate focus groups were arranged for specific groups of local key informants (e.g. poor nonmembers, low caste members, poor members, ethnic group members, etc.). A key advantage of such focus groups was that people having the same background feel more at ease in interacting with each other (Greenbaum, 1993), and such group interaction generates a variety of views and stimulates the discussion of new perspectives (Morgan, 1997; Gray, 2004).

Table 4.7: Number of Focus Groups Discussions

Categories of interviewees	Number of focus groups			
	Dhuseni	Saparupa	Odarepakha	Tutikhola
Local key informants (executive committee members)	1	1	1	1
Poor nonmembers	1	1	1	1
Low caste members	2	2	0	0
Poor members	1	1	1	1
Ethnic group members	1	1	0	0
High caste members	1	1	1	0
Women members	1	1	1	0
Total	8	8	5	3

The first focus group discussion was carried out in the *Dhuseni* community. Focus group discussions in other communities were carried out based on the dates suggested by local people. Information about the focus group discussion was shared in the communities during the participatory ranking exercises. Stratified purposive sampling (Patton, 2002) was applied based on gender, wealth, caste, ethnic group and FUG membership. Participants within each focus group were selected on the basis of willingness to spare time for discussion on the specific topic. The research assistants arranged the dates and venues for the focus group discussions in consultation with the participants. Most of the focus groups had seven to 10 participants. Waldegrave (2003) and Gomm (2004) reported that this group size works best for participatory discussion. Each focus group discussion began with a brief presentation of the research purpose and the ethical issues surrounding the study. This was then followed by introductions of the researcher, assistant, and participants. Each group discussion took about two hours. A checklist with a broad set of questions was used to focus the discussion (Table 4.8).

The order and the way of asking the questions were adjusted to fit the specific group situation. This type of semi-structured guideline has advantages in terms of flexibility, which motivates the participants to express their experiences (Finch & Lewis, 2003). A team of two people (the researcher and an assistant) facilitated the focus group discussions. The team exchanged the roles of facilitating and note taking in the series of discussions across focus groups.

Table 4.8: Broad Set of Questions for Focus Group Discussion

Property rights

1. What are your formal rights over the forest (membership of the forest user group)? How do they influence your access to the forest?
2. What are your traditional rights over the forest? How do they influence your access to the forest?
3. What forest products are useful for your livelihood? What are the rules for accessing various forest products, product distribution systems, the group funds? Who gets what benefits?

Influence of culture

4. What informal norms in your society influence your participation in decision-making processes? Why do they influence in this way?
5. What types of social networks exist in your society? How do they influence your access to forests?

Resource governance

6. Who are involved in making rules (by gender, socioeconomic status)? What type of involvement and why? How are decisions made?
 7. What factors influence your participation in decision-making processes? How does your participation influence your access to forests?
 8. What other rules and organisations in your society influence your access to the forest? Why do they influence in this way?
 9. How are agencies and other local organisations linked with the forest user group? Do they influence your access to forests, and why?
-

In the focus groups, participants appeared to be open, self-motivated and confident with each other in presenting their opinions. As Casey and Kreuger (2000) described, focus group discussions present a more natural environment (than that of individual interviews) because participants are influencing and are influenced by others, just as they are in real life. The researcher observed, in the case of the focus groups of poor people representing high or low castes, that poor high caste people often did not give a chance to poor low caste persons to express their opinions. In such cases, the researcher requested poor low caste persons to present their opinions. The researcher presented a brief summary of the discussion at the end of each focus group meeting in order to check that whatever was noted down was agreed to by the participants. Figure 4.7 shows a focus group of executive committee members in the Dhuseni community where men and women members participate in the discussions.



Figure 4.7: A focus group discussion in the Dhuseni community

4.4.4 Interviews with individual households

Interviews are recommended as good sources of information in a case study (Patton, 2002). Semi-structured interviews with individual households were carried out in order to gather information about their experiences and opinions with regard to the factors influencing their access to the forests. Bryman (2001) says that a semi-structured interview is a suitable interview method to address more specific issues and also to provide some structure to ensure cross-case analysis. The purpose of these interviews was to explore the access of the rural poor to forests from the perspective of the interviewees, and to understand how and why the interviewees came to have their particular perspectives.

Lists of households of different social and economic groups were obtained from the participatory ranking exercises and the project data. From this list, couples from a range of groups who were interested in providing information about their households and their perspectives on their access to forests were selected. Couples from each group were

selected and interviewed until no new information was obtained (i.e. saturation was reached) (Glaser & Strauss, 1967). Lincoln and Guba (1985, p.202) referred this as “redundancy as the primary criterion for defining the number of households”. Table 4.9 illustrates the number of interviewees in each community.

Table 4.9: Number of Interviewees (Households)

Categories of interviewees	Number of interviewees							
	Dhuseni		Saparupa		Odarepakha		Tutikhola	
	M	NM	M	NM*	M	NM	M	NM
Poor low caste	5	2	6	-	-	2	-	-
Poor ethnic household	2	2	3	-	-	-	4	2
Poor high caste	2	-	2	-	3	-	-	-
Well-off low caste	1	-	2	-	-	-	-	-
Well-off ethnic household	1	1	2	-	-	-	-	1
Well-off high caste	5	1	2	-	2	2	-	-
Total	16	6	17	-	5	4	4	3

Note: M: member, NM: nonmember, NM*: all community members are also FUG members in *Saparupa*

An interview guide (Table 4.10) was used to direct the interview and ensure that all relevant topics were covered. The researcher used open-ended questions and a conversation approach in the interview. This allowed a thorough examination of the experiences, feelings and opinions that closed-ended questions would not have captured.

Each interview was carried out by the researcher (a female) and an assistant (a male) for a maximum of two hours. The mix of gender appeared to motivate both husband and wife from a household to express their views. The field assistant helped the researcher by getting approval of dates for interviews by visiting households beforehand. However, during the interviews, though both were present, men tended to dominate the interview. Men in high caste households appeared to be more dominant than men in low caste households. The researcher, being a woman, felt at ease in requesting women to express their views. Once a woman was asked by another woman to express her views, she appeared confident in relating her experiences.

Table 4.10: Interview Guide for an Interview with a Couple

-
1. Household information: family size, age, education, main occupation
 2. Changes in getting benefits from the forest after the handover of the forest to the group
 3. Timber/fuelwood/fodder/ grass/charcoal demand from forest
 4. Knowledge about forest rules, roles of FUG and members, and influence of these on access to forests
 5. Benefits from forests, reasons for not getting benefits
 6. Participation in group's assemblies/ committee meeting/ voluntary labour/ training/ workshops: do you get opportunity to participate, why you cannot participate, how can you participate, will it be beneficial if you participate, in what situation can you participate, how can you put your ideas and interests, how often do others accept your ideas. What factors influence your participation?
 7. Influence of your participation (point 6) on your access to forests
 8. Membership of other groups
 9. How do you get support when you need?
-

The expressions and views of the interviewees were recorded as field notes and in their own words. Both the researcher and assistant took field notes and compared them in order to reduce the bias from a single interpretation (O'leary, 2004). Another strategy used to reduce researcher bias was that the key points were verified with the interviewee at the end of each interview (Patton, 2002).

4.4.5 Observations

Observation is a major means of collecting data in qualitative research. Merriam (1998, p.111) said, "it offers a firsthand account of the situation under study and, when combined with interviewing and document analysis, allows for a holistic interpretation of the phenomenon being investigated". In this study, observations supplemented the data collected in household interviews, focus group discussions, and from documents. Observation was also used to triangulate emerging findings from the interviews and document analysis. Merriam (1998) recommended using it when people will not discuss the research topic or when behaviour can be observed firsthand. As Lindsay (1997) and Schutt (2006) noted, this method allowed the researcher to understand the behaviour of people and the processes in a context that was more natural than interviews. Observations in this study also offered the opportunity to record and analyse behaviour and interpretations as they occurred (Ritchie, 2003).

This observation technique provided the researcher with an opportunity to observe the participation of people representing different socioeconomic categories, positions and gender in meetings (such as general assembly, executive committee meeting, group meeting, etc.). The researcher attended two general meetings of the executive committee of the *Dhuseni* and *Saparupa* forest user groups and a general assembly of the *Dhuseni* FUG. The general assembly meeting was a large meeting with about 100 participants whereas the two other meetings were small with about 8 to 13 participants. The researcher observed and recorded data without predetermined observation schedules or checklists. The researcher had no opportunity to observe the meetings of leasehold groups because no meetings were organised during her fieldwork. The researcher visited and observed all of the four forests to gain an understanding about their resources. The researcher took detailed fieldnotes of her observations, and included descriptions, direct quotations, and her own comments in the fieldnotes. Data from the observations contributed to the results.

4.4.6 Documents

Merriam (1998, p.126) wrote, “data from documents are particularly good sources for qualitative case studies because they can ground an investigation in the context of the problem being investigated”. Policy documents provided useful information on forest policies and the government’s implementation strategies, part of the context of the research problem for this study. Documents collected from the relevant government agencies and NGOs provided useful preliminary information for understanding the social, economic and political context at the national level. Operational plans and the constitutions of the FUGs provided information about the formal rules and rights of forest management. Data from these documents were also used as a means of triangulating the data from focus group discussions and interviews.

4.5 Data analysis and interpretation

Descriptive, contextual and comparative analyses were employed in this study. Within-case and cross-case analyses were carried out, which according to Bennett and Elman (2006), brings greater evidence for explaining theories. For within-case analysis, data within two communities (or sub-cases) studied for understanding resource access in each case were analysed and the results are presented. The case description and the results regarding the factors influencing access of the poor to forests managed under the community regime are presented in Chapter 5. This chapter also includes a description of each community and the results from the two communities (i.e. *Dhuseni* and *Saparupa*) obtained from cross-community analysis. Likewise, the second case description and results regarding the factors influencing access of the poor to forests managed under the leasehold regime are presented in Chapter 6. This chapter also includes descriptions of each community (or sub-case) and results obtained from a cross-community analysis of the two communities (i.e. *Odarepakha* and *Tutikhola*). The key findings obtained from cross-case and cross-community analysis are discussed in Chapter 7.

4.5.1 The data

The raw data were in the form of fieldnotes collected during the participatory ranking exercises, focus group discussions, household interviews, key informant interviews, and from field observations at group meetings. In these fieldnotes, the expressions, comments, observations, and feelings of the research participants were reproduced in their words to the best of the researcher's ability. The field notes were written in the Nepali language, the national language of the researcher's country and the participants.

The researcher and the field assistant³² discussed the points written in the fieldnotes. The team added data from their field observations to the fieldnotes. The phrases, quotations, and key words were elaborated by remembering what the participants had said about these. The researcher and field assistant did a preliminary analysis and interpretation of earlier fieldnotes to identify gaps to be focused on in the next exercises. The fieldnotes were labelled separately for each community of each case (Table 4.11). The label 'KIK' was used for key informant interviews.

³² The researcher did the key informant interviews alone.

The researcher had an opportunity to discuss with her field supervisor (working in Nepal) her experiences in employing the various techniques to gather data. The researcher also reported monthly the field activities, experiences in using the techniques, and her impressions and preliminary interpretations to her academic supervisors in New Zealand and reviewed their feedback accordingly. These discussions were used to improve the use of the techniques as the research progressed.

Table 4.11: Labelling of the Fieldnotes

Districts	Communities	Techniques used	Labels
<u>Community forestry case</u>			
Sindhupalchowk	Dhuseni community	Focus group discussion	CF-FGDK
		Household interview	CF-HK
Kavre	Saparupa community	Focus group discussion	CF-FGDS
		Household interview	CF-HS
<u>Leasehold forestry case</u>			
Kavre	Odarepakha community	Focus group discussion	LF-FGDK
		Household interview	LF-HK
Sindhupalchowk	Tutikhola community	Focus group discussion	LF-FGDS
		Household interview	LF-HS

4.5.2 Qualitative Data Analysis (QDA) strategy

As a first step in the qualitative data analysis (QDA) process, the researcher translated four selected interviews³³ into English directly from the fieldnotes. The researcher read each translated note thoroughly, made comments in the margins, and identified the themes and categories. An example of a theme is 'participation'. Examples of 'categories' are 'quality of participation', and 'participation process'. After the themes and categories had been identified, the researcher connected the themes. For example, the 'participation' of a person is linked to the 'economic class' he/she represents. At the end of this preliminary process, the researcher had a preliminary understanding of the key themes and the categories in each theme, along with the connections between the themes.

³³ One each of focus group discussion, household interview, and key informant interview from the *Dhuseni* community for the community forestry case were selected.

Three key challenges were identified in this exercise: (i) translation into English by a researcher whose mother tongue is not English, (ii) maintaining the original meanings in the translation, and (iii) translation actually involved some level of interpretation based on the researcher's understanding. The researcher experienced difficulties in translating all Nepali words into English. There were more difficulties when she tried to maintain the original meanings in the translation. In such situations, she had to interpret the sentences the way she understood in translation. Little is mentioned about these kinds of practical challenges in qualitative data analysis in the literature³⁴ (Temple & Young, 2004).

The analysis was focussed not only on what people said, but also how they said it and what factors led them to say it. For this, reflection on the contexts (sociocultural, economic, location, forest attributes) in which people are located is equally important to understanding and interpreting what they have said. The researcher found that she could capture the event and local context better going through the original fieldnotes (in Nepali) than with the translated notes (interpreted by the researcher into English). As the translated notes included interpretations by the researcher, she found that reflections on new understandings in repeated readings and analyses of them were more limited.

The researcher applied the techniques for qualitative data analysis that were most applicable for this study, as Patton (2002) and Schutt (2006) both note:

Qualitative analysis transforms data into findings. No formula exists for that transformation. Guidance, yes, but no recipe. Direction can and will be offered, but the final destination remains unique for each inquirer, known only when and if arrived at (Patton, 2002, p. 432).

There is no one way to analyze textual data (Schutt, 2006, p. 326).

The use of QDA software (such as NUDIST or N-VIVO) is very useful for managing qualitative data³⁵, but this was not the best tool for this study. The major reason for this was that the researcher gained greater advantage in using the original fieldnotes than the translated ones (as indicated above). The original fieldnotes were in Nepali, and QDA software has no facility for this language. The researcher found the manual method of

³⁴ QDA books read include Dey (1993), Miles & Huberman (1994a), Bryman & Burgess (1999), and Ritchie et al. (2003). Lists of journals are *International Journal of Social Research Methodology*, *Qualitative Research*, *Management Decision*, and *Annual Review of Political Science*.

³⁵ See Dey, 1993; Fielding, 2002; Schutt, 2006

qualitative data analysis suitable for this study³⁶. Thus, the researcher had the opportunity of using raw data from original fieldnotes for the analysis.

Gilbert (2002, p. 226) notes that:

A manual method held to the standard of methodological description such as clear description of methods used, the justification for those choices, and explicit links between the data and the findings, is a valid method for qualitative data analysis.

4.5.3 Method and process of QDA analysis

QDA involves an iterative movement between the original data and the conceptualisation, abstraction and interpretation derived from them (Miles & Huberman, 1994a; Spencer et al., 2003). QDA is an iterative process of describing, classifying and inter-connecting data (Dey, 1993). This involves both inductive and deductive processes, in which the researcher generates concepts and linkages between them based on reading the data, and also checks the data to see whether her/his concepts and interpretations are reflected in them (Patton, 2002; Schutt, 2006). This is an in-out process, in which the researcher follows both ways of zooming in and ways of achieving a wide-angle view. Familiarity with diverse views and subtle differences in views are achieved through closeness to the data. But distance from the data allows the researcher to obtain abstraction and synthesis of ideas from them (Richards, 1998).

The researcher made two photocopies of the original fieldnotes and kept these in separate folders. The fieldnotes were labelled according to the labels listed in Table 4.11. All the fieldnotes were then read through to get a sense of the overall data, which according to Dey (1993) is a process of 'description'. Generally, the QDA literature recommends reviewing all information at the first step (Hycner, 1985; Tesch, 1990; Bogdan & Biklen, 1992; Miles & Huberman, 1994a). The researcher experienced that repeating the review of the original data twice was enough because she did not gain further usefulness by going through the data a third time. In-depth reading and re-reading of data prior to coding (sorting themes, concepts, and categories) provides a researcher with understanding of data. David and Sutton (2004) describe this activity as increasing the validity of the codes chosen.

³⁶ It is recommended to use the manual method in such situations in QDA literature (Raymond & Esterhuizen, 2000; Crowley et al., 2002; Fielding, 2002; David & Sutton, 2004; Sarantakos, 2005)

While reviewing the data, notes were jotted down in the margins of the text. This strategy is called 'sketching ideas' by Bogdan and Biklen (1992) and Miles and Huberman (1994b). Use of the English language began at this step. Violet and yellow coloured sticky notes were used to write down understandings of the findings in the form of reflective notes in the first and second copies of fieldnotes, respectively. Recurring themes and meanings of these themes (or concepts) were identified in this process. Such recurrent themes and issues were noted down on A3 size paper to develop a thematic framework. Themes were then sorted and grouped under a smaller number of broader key or 'main' themes and placed within an initial overall framework. This thematic framework was used to classify and organise the data according to key themes, emergent categories, and descriptions of categories. Table 4.12 is the thematic framework that was outcome of this first stage of analysis.

Table 4.12: Initial Thematic Framework

Themes and categories
<u>Theme 1: Formal structures, rights and rules</u>
Membership: types
Position in EC
Awareness about rules and rights
Rules for assembly meeting, and decision-making
<u>Theme 2: Informal structures, rights and rules</u>
Social structures/ social relationships (hierarchy, different caste & ethnicity, class)
Social networks and socio-cultural norms
Customary user-rights
Informal rules in practice
<u>Theme 3: Participation in decision-making process</u>
Representation of actors in the process
Decision-making techniques
Influence of the themes 1 and 2
<u>Theme 4: Other factors</u>
Membership in other groups
Literacy
Leadership
Type of livelihood activity
Influence of local organisations
Influence of FECOFUN
Influence of government organisations
Access to markets

After deciding on the themes and what would count as evidence of themes, the fieldnotes were coded by writing themes in the margins to indicate passages as examples of them. The analysis was then focussed on which kinds of people said what, which related to a particular theme, and in what ways the categories within the theme were linked. During this, the researcher ensured a balanced mix of perspectives of the majority and of the poor. Sticky notes³⁷ were used to write their perspectives down in English. The thematic framework was also used for making comparisons and contrasts between high and low castes, well-off and poor, and men and women from different communities. This was done by organising the sticky notes on A3 paper according to the perspectives of each group (of high castes, low castes, the well-off, the poor, men, and women) from each community separately. At the same time, the researcher's own thoughts and reflections recorded on sticky notes were included on the same A3 sheets.

Having developed the initial thematic framework, the connections between themes were still not very clear. Therefore, further analysis was carried out in order to understand in what ways themes were related with each other. This was done particularly for answering the second research question explaining the mechanisms of influence of informal institutions on formal ones and vice versa, and their impacts on resource access of the poor. At this stage, the analysis was focussed on how saying something with regard to one theme by different groups from a particular community related to saying something with regard to another theme by these same groups. As mentioned earlier, different A3 papers were used for different groups. The researcher employed an iterative process of referring to the raw data until all relevant linkages and associations were identified. The search for explanations for these linkages and associations involved re-reading the original data in fieldnotes, and thinking around the data. It involved going backwards and forwards between data and emergent explanations by questioning the data in a number of different ways to understand the research phenomena.

The review of literature was continued throughout the QDA process. Identification of themes was also inspired by a set of theoretical ideas influenced by the literature review. The inferential explanations were based on the underlying logic within what research participants had said, what the researcher understood about the participants' views, common sense assumptions, development of explanatory concepts, comparison of the researcher's findings with those in other studies, and/or relating findings to a theoretical

³⁷ These are also referred to as memos.

framework³⁸. During the analysis, the areas that needed to be added to the literature review were also highlighted. The theoretical framework (see Figure 3.1 in Chapter 3) includes three overall institutional factors (property rights factors, sociocultural factors and resource governance factors) as key factors that influence resource access of the poor. However, the analysis of resource access under community and leasehold forestry regimes in four different hill communities of Nepal carried out in this research revealed that two key overall institutional factors were influential. These were: (i) sociocultural factors and (ii) regime factors. This analysis also revealed that separating the factors associated with property rights and resource governance was not useful. With such separation, the mechanisms of influence of institutions on resource access of the poor could not be as clearly explained.

This analysis process began with data from the *Dhuseni* community in the community forestry case. Then data from the *Odarepkaha* community in the leasehold forestry case were analysed. Repeating the review of the data from the first two communities to understand the data and interpret them required a relatively long time. After the analysis of these communities, the researcher had a good sense of the themes and categories, and connections between the themes, which helped her to understand and interpret the data from the two remaining communities within a shorter timeframe. Data were drawn together to describe the contexts in terms of a physical description of each community or leasehold forest, and the sociocultural and economic characteristics of each community. Analysis of the themes outlined in the initial thematic framework (Table 4.12) also guided the writing of the case descriptions. In addition to the case description, a logical structure (slightly different from the initial thematic framework) was developed for writing results in terms of not only describing the influential institutional factors but also providing explanations on how and in what ways these factors were inter-connected. Moreover, the factors and the mechanisms of the factors' influence could be better explained together.

The logical structure for presenting results includes three overall headings: (i) sociocultural factors, (ii) regime factors, and (iii) level of external support. Under the first heading, not only are the key influential informal structures, rights and rules embedded within contexts of communities (see Theme 2 in Table 4.12) presented, but also the mechanisms of influence of these informal institutions on formal institutions (see Theme 2 in Table 4.12) and on resource governance processes (see Theme 3 in Table 4.12) are

³⁸ Looking for evidence and explanation which had potential for some wider application in terms of contribution to theory or to a theoretical debate.

reflected. Under the second heading (regime factors), the key formal structures, rights and rules imposed by the regimes in the communities, which influence resource access, and the mechanisms through which these institutions influence resource governance processes are presented. The third heading covers the explanation of mechanisms through which the donor organisations influence resource governance and hence resource access of the poor.

Having done within-case analysis and cross-community analysis in each case, cross-case analysis was then carried out. In the cross-case analysis, findings from community and leasehold forestry cases were compared and contrasted. The analysis focussed on identifying similarities and differences in the themes and categories (as suggested by Miles & Huberman, 1984), and also identifying divergent views of different interviewees (as suggested by Eisenhardt, 1989) within-case and between cases. Through this cross-case analysis, the ways that particular characteristics of the regimes influence resource access of the poor in different communities, and the mechanisms of that influence could be better explained. During this stage of analysis, the researcher worked in close collaboration with the supervisors for better understanding of the factors and mechanisms that emerged as important to be included as cross-case results in Chapter 7.

The findings emerged from all the analyses described above were then discussed relative to the literature in Chapter 8. Following Eisenhardt (1989), the emerging theories or concepts from the findings were compared with the extant literature. This process involved describing what theories or concepts are similar or different from the findings, and explaining the reasons for these. The conceptual framework developed in Chapter 3 is reflected in this discussion.

4.6 Quality of case study research

In this study the criteria suggested by O'leary (2005) were employed for ensuring the quality of the research. Consideration was given to neutrality, dependability, authenticity and transferability in order to ensure the quality of this research. Table 4.13 shows a list of strategies applied in ensuring the quality of this research.

Table 4.13: Criteria Employed to Ensure Quality of the Research

<u>Neutrality</u>
Reflected interpretive positioning in the research process
Considered issues of personal positioning
<u>Dependability</u>
Designed case study protocol and used during fieldwork
Data collection and analysis methods were described in detail
Spent six months to understand the cases in the field
<u>Authenticity</u>
Analysed data rigorously to obtain credible conclusions
Used multiple sources of evidence to triangulate data and theory
Used a combination of methods (such as focus groups, interviews)
Obtained interviewees' feedback in the summaries
<u>Transferability</u>
Developed theoretical framework
Provided detailed description of the research context
Used existing literature to enlarge applicability of findings

Neutrality

Neutrality recognises that a researcher has some subjective positioning in relation to her/his research topic. Good research requires a reflection of the roles of the researcher's subjective and personal positioning in the research process (O'leary, 2006). In this study, the researcher took an interpretive position, which had an influence on the processes of data collection and analysis. The researcher attempted to fairly represent the different viewpoints among people of the community (high caste and low caste, rich and poor, men and women, FUG members, nonmembers) in the results; however, perspectives of the poor were particularly emphasised because of the research focus. Raw data were in the form of fieldnotes and the researcher realised that such data captured her understanding of interviewees' perspectives. Attempts, however, were made to record the exact words and statements of the interviewees and use them as quotations in presenting results. Data from the 'participatory ranking' and 'focus group discussions' were recorded by the researcher and the research assistant in separate fieldnotes for comparison. O'leary (2005) suggests that this is a good strategy for authenticating data.

The researcher's position as a Nepali ethnic woman had influences on the fieldwork, which she has considered in data collection. The researcher observed three positive

influences that added to the quality of the research. First, the understanding of the participants' language by the researcher provided deep insights, which she could reflect in the translation and interpretation of data. This would not be possible for a non-Nepali who would have to hire an interpreter. Second, the awareness of the researcher about the participants' customs and traditions facilitated the building of trust with the participants in a relatively short time. Third, female participants were relaxed and confident in expressing their feelings, ideas and experiences to a female researcher. However, the researcher also tried to reduce the negative influences that brought some challenges to her fieldwork. The researcher had to visit the government offices many times just to fix an appointment with the relevant staff members (the majority of whom were men). The researcher experienced that being a woman, she was not given due respect by men (government staff members) in giving her time for the interviews. A few interviewees (high government officials, in particular) interrupted the interviews by making unnecessary phone calls to colleagues.

The researcher's position in terms of her knowledge and skills gained through her long participatory development work experience had a positive influence on enhancing the quality of the research. Her knowledge and skills enabled her to adjust to the local situation that was significantly influenced by the Maoist insurgency. In most of the communities, this made it easier not only for the researcher to capture diverse views, but also for the participants to express them frankly.

Dependability

O'leary (2006, p.60) states that "dependability indicates quality assurance through methodological protocols that are designed and developed in a manner that is consistent, well documented and designed to account for research subjectivities". In this research, flexibility of case study protocol allowed the techniques and processes employed to be adapted to realities in the field. Some examples were: criteria for selecting sub-cases and processes of applying data collection techniques. The researcher was given approval from the NZAID (the scholarship provider) for six months' fieldwork in Nepal. The researcher realised that a six-month period would not have been enough if she had had no knowledge and prior experience of the research areas. However, the researcher had prior experience with the society of which she was also a member and this helped her to quickly acquire a detailed understanding of the research context. However, such pre-understanding on the part of the researcher, as Gummesson (2000) pointed out, also brought some biases into the research. Various techniques were applied to reduce those biases, and these are described below.

Authenticity

As O’leary (2006, p.61) explains, “authenticity indicates that while the links between theoretical frameworks, questions, and findings may not lead to single valid truth; rigour and reflexive practice have insured that conclusions are justified, credible, and trustworthy”. Different types of data collection methods were used in generating data, which provided better evidence to explain the data. From observation, from interview, from focus groups, and from key informants’ interviews, the researcher drew evidence for findings and conclusions (Stake, 1988; Lincoln & Guba, 2000; Hartley, 2004). The researcher obtained interviewees’ feedback in the interview summaries. Various scholars (Hycner, 1999; Lewis & Ritchie, 2003; Gray, 2004; Schutt, 2006) describe accountability of the researcher as being transparent about the methods employed in the study, which contribute to the quality of the research. The researcher had discussed these with supervisors and colleagues³⁹. Going through a series of questioning, clarifying and discussing by the researcher-supervisors team on specific themes minimised the researcher’s bias in interpretation and losing the reflection of context while translating data into English. This activity helped in further establishing the rigour of this study. Data analysis was carried out systematically and comprehensively by repeating the review of the original data again and again, understanding the data comprehensively, and interpreting the data with the use of participants’ quotations as evidence.

Transferability

Transferability can be a useful indicator of the applicability of the research in other contexts. O’leary (2006, p.63) stated that “transferability highlights that lessons learned from the study are likely to be applicable in alternative settings”. Detailed descriptions of the research context (Chapters 2, 5 and 6) and of the data generating and analytical methods were provided. Key characteristics of the cases were outlined and the findings were linked with the contexts of the cases. The theoretical framework guided the data collection and analysis. The findings were checked against the current literature to determine to what degree the findings fitted or did not fit with the literature in the area (Chapter 8). These strategies, as explained by Lewis and Ritchie (2003) and Hartley (2004), illustrated the extent of applicability of findings within other contexts as well. The

³⁹ A team of the 'writing group' (a mix of five persons representing supervisors, research staff, and research candidates), to which the researcher is also a member.

researcher had the opportunity to present the preliminary findings⁴⁰ of this research to the scientific community⁴¹. This provided a forum wherein the preliminary findings were discussed and evaluated from a larger number of perspectives. Participation in this forum strengthened the confidence of the researcher in her research findings. This also motivated her to return to the data and explore the integration of diverse views. This, according to Hycner (1999), adds to the quality of the research.

4.7 Summary

In this study a qualitative case study approach was adopted to draw on people's diverse perspectives and interpret the research findings, recognising the researcher's influence. A collective case study design was selected as a suitable research design for this study, which requires deep insights into the experiences and opinions of rural people and the context and reasoning behind these expressions for understanding the resource access of the rural poor from two theoretically different cases. Two sub-cases (or communities) for each case were studied to enhance understanding of the collective case study.

A theoretical framework guided data collection and analysis; but this was kept flexible to enable incorporation of emergent concepts from the data. Data were collected employing a variety of techniques such as participatory ranking, focus group discussions, individual interviews, and observations at meetings. Secondary data were also collected from relevant documents on the forest user groups and from relevant agencies.

The participatory ranking exercises provided an understanding of the social and economic differentiation within the communities. Focus groups were arranged in such a way as to make separate groups of women, poor, specific low castes, high castes, ethnic groups, executive committee members, and nonmembers of the FUGs, in order to integrate their views regarding the factors that influence the resource access of the poor. Individual households representing different socioeconomic categories, both member and nonmember households, were interviewed to obtain a range of views and expressions. The aim in conducting interviews with the key external informants was to reach some understanding of the contexts for building pictures of the different cases.

⁴⁰ Bajracharya et al. (2006)

⁴¹ DevNet Conference held during 30 November - 2 December 2006 at Otago University, New Zealand

A manual method of qualitative data analysis was employed to use raw data from original fieldnotes for analysis and to reduce the researcher's bias during translation into English. The analysis process involved going backwards and forwards between data and emergent explanations by questioning the data in a number of different ways. Different strategies were used to ensure the quality of the research throughout the study. The results from the community and leasehold forestry cases are reported in Chapters 5 and 6, respectively.

CHAPTER FIVE

ACCESS OF THE POOR TO THE FORESTS: THE COMMUNITY FORESTRY CASE

5.1 Introduction

In this chapter, the findings of the community forestry case are reported. The aim for studying this case was to identify and explain the institutional factors that influence the access of the poor to forests governed under the community forestry (CF) regime in Nepal. The community forestry regime is implemented by the District Forest Offices for forest conservation and poverty reduction in the hills of Nepal. Results from two separate communities (i.e. the *Dhuseni* and the *Saparupa*) of Sindhupalchowk and Kavre districts, which have access to forests governed under the CF regime, are reported.

First, a description of the community forestry regime is provided. Then, the physical descriptions of the two community forests and the socioeconomic descriptions of the two communities of the case study are reported. Similarities and distinctions between these two communities are also summarised. Key local organisations and their networks that have influence on access of the poor to the community forests are also described. Finally, the key institutional factors that affect access of the poor are described. These factors can be usefully categorised into: (i) sociocultural factors and (ii) regime factors. However, the level of support by external organisations has been identified as an influential factor that is not included in the regime and sociocultural factors. Sociocultural norms and networks that exist in the CF communities are identified as key sociocultural factors that influence access. Regime factors comprise two interrelated factors, property rights and governance, and separating them is not very useful when relating to their influence on access of the poor to forest benefits.

5.2 Community forestry case description

The rights to manage a state-owned forest are devolved to a group of users (called a community forest user group) in the community forestry regime. The Community Forest Division (under the Department of Forest) in Nepal provides policy guidance and implementation support, and monitors the community forestry regime. The field level

forest management activities in the districts are implemented through seventy-four District Forest Offices (DFOs). Each DFO has usually three sub-district units and eight to fifteen field offices (i.e. Range Posts under this office). Several donors and projects also support the implementation of the regime. Approximately 25 percent of national forests had been handed over to 14,227 community forest user groups (CFUGs), and 35 percent of the population in Nepal were CFUG members in 2005 (CFD, 2006).

The case study was carried out in two hill districts, Kavre and Sindhupalchowk. Two communities, one in each of these districts, were studied. Each community is associated with a CFUG and a community forest. The community forestry regime has been implemented for more than ten years in both districts. Each DFO has about 20 staff members who are involved in regime implementation in the district. The DFOs of Kavre and Sindhupalchowk districts had formed 415 and 417 CFUGs respectively by the end of 2005 (DFO/Kavre, 2006b; DFO/Sindhupalchowk, 2006a). The DFOs identify community forests and form CFUGs. They also provide support to the CFUGs in preparation and approval of operational plans and constitutions, which need revision every five years. However, they provide little support to the CFUGs once they have been registered as formal groups with the DFOs. The Federation of Community Forest Users Nepal (FECOFUN) has district committees in each district that work as pressure groups for promoting the rights of the CFUGs. The donor project, Nepal Australia Community Resource Management and Livelihood Programme (NACRMLP), also supports the implementation of community forestry in both districts, but this support mainly has been concentrated in the few areas with good access to roads.

5.2.1 Physical descriptions of the two community forests

The *Dhuseni* forest is a natural mixed type forest situated in ward four of Badegaun VDC⁴², Sindhupalchowk district. It is 110 hectares in area, and consists of broadleaf tree species as well as pines. The altitude of the forest ranges from 800 to 1300 metres above sea level, and the soil is of red sandy loam type. Most of this forest is located in the lowland area occupied by settlements of the ethnic group *Majhi* and high caste *Brahmin*. Being a mixed type of forest with different tree species, the *Dhuseni* forest is a source of various forest products, such as firewood, fodder, grasses, litter, timber, fruits, and medicinal plants (Figure 5.1).

⁴² Village Development Committee is the lowest political and administrative unit in Nepal.

Most of the forest is composed of *Sal* (*Shorea robusta*), followed by *Katush* (*Castanopsis indica*), *Chilaune* (*Schima wallichii*) and other timber trees. These trees are used as a source of timber and poles for house construction. *Sal* leaves, which have a religious value, are used as plates during *Puja* (worshipping) and festivals. Green leaves and branches are collected and used as fodder for animals. Fallen dried leaves are used as litter for animals and then as composting materials. Medicinal plants and fruit trees are also found in the forest. Dead and fallen branches and twigs of trees and shrubs are used as firewood, and are also used for making charcoal. The forest is divided into five blocks for forest use and management. The forest cover is classified as medium type with 45 percent of forest area covered by trees.



Figure 5.1: The Dhuseni forest

The *Saparupa* forest, 298 hectares in area, is located in wards one, two and three of Methinkot VDC, Kavre district. The altitude of the forest ranges from 1000 to 1600 metres above sea level, and the soil is of black sandy type. This forest is a natural mixed type consisting of more pines than broadleaf species (Figure 5.2). It is a source of fodder, ground grasses, litter, timber, and medicinal plants. Timber trees found in the forest are *Salla* (*Pinus* species), *Sal*, *Chilaune*, and other trees. Medicinal plants and fruit trees are also found in the forest. The forest is divided into ten blocks for forest use and

management. About 65 percent of the area has medium forest cover (45 percent tree coverage) while 35 percent has low forest cover (only 25 percent tree coverage).

Although both the community forests are mixed forests consisting of pines and broadleaf tree species, the *Dhuseni* forest has a smaller number of pines than has the *Saparupa* forest. The majority of pines are planted trees while the broadleaf trees are naturally regenerated. People prefer broadleaf trees over the pines because the former are more useful. Pine needles are not useful for litter or preparing compost; they are not readily decomposed and application of the compost prepared with pine needles increases soil acidity (Schreier et al., 1994). The number of trees per area of the *Dhuseni* forest is greater than that of the *Saparupa* forest. A CFUG member in the case of the *Saparupa* forest has more forest area and more trees than does a CFUG member in the case of the *Dhuseni* forest. But the former has more pines while the latter has more broadleaf trees. Table 5.1 shows the differences in the attributes of the two community forests.



Figure 5.2: The Saparupa forest and the settlements in the Saparupa community

Table 5.1: Comparison between the Dhuseni and the Saparupa Forests

Characteristics	Community forests	
	<u>Dhuseni</u>	<u>Saparupa</u>
Forest size (ha)	110	298
FUG size (no. of households)	220	277
Area of forest per member (ha)	0.5	1.08
Forest cover (percent of trees/ha)	45	38
Forest type	More broadleaf trees than pines	More pines than broadleaf trees
Forest products availability per hectare	Greater number of different products in Dhuseni than in Saparupa	

5.2.2 Socioeconomic characteristics of the communities

In this section, descriptions are provided of the *Dhuseni* and *Saparupa* communities, particularly their location, sociocultural and economic characteristics. The term 'community' in this research is different from 'VDC', 'village' or 'settlement'. A community includes local people who influence, or are influenced by, the governance of a particular forest. A 'VDC', 'village' or 'settlement' refers to a geographical location. A VDC is the lowest political and administrative unit, which consists of several villages and has a geographical boundary. A village has several settlements (or *toles*) and has a fixed geographical boundary. A community in this research may include people of different VDCs, villages, or settlements.

The Dhuseni community

The *Dhuseni* community includes local people residing in four villages of three VDCs (Figure 5.3). This community consists of legal members of the *Dhuseni* CFUG, customary forest users who are not members of the CFUG, and nonmembers who want to become members (Figure 5.4). These members and nonmembers represent a mix of different castes and ethnic groups, and economic classes. Member households are those households who are legal members of the *Dhuseni* CFUG. Nonmembers are those households who are customary users of the forest, as well as households who are not customary users but want to become members of the CFUG. For this research, the *Dhuseni* community consists of 220 member households and 75 nonmember households.

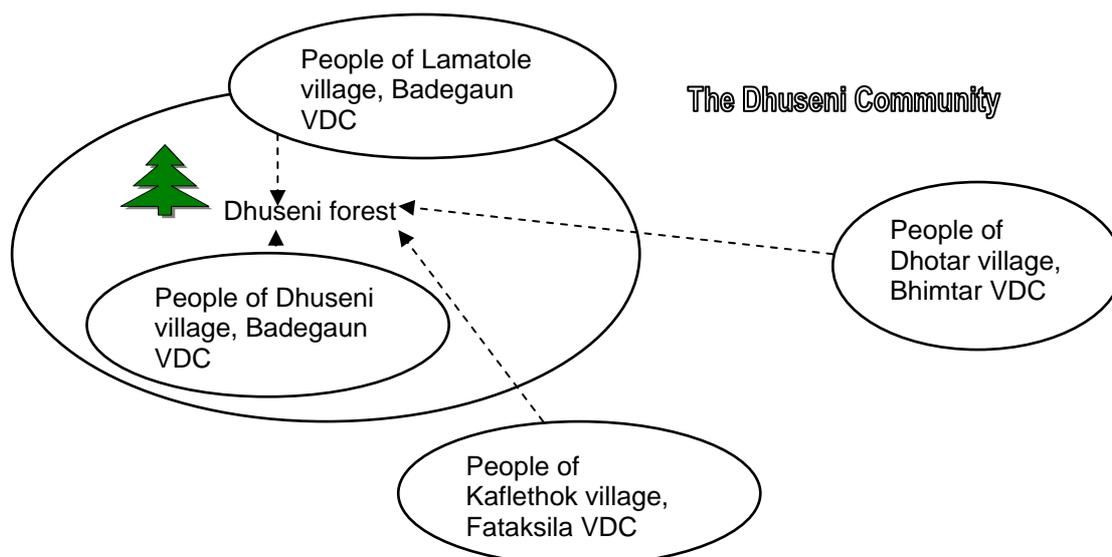


Figure 5.3: The Dhuseni community

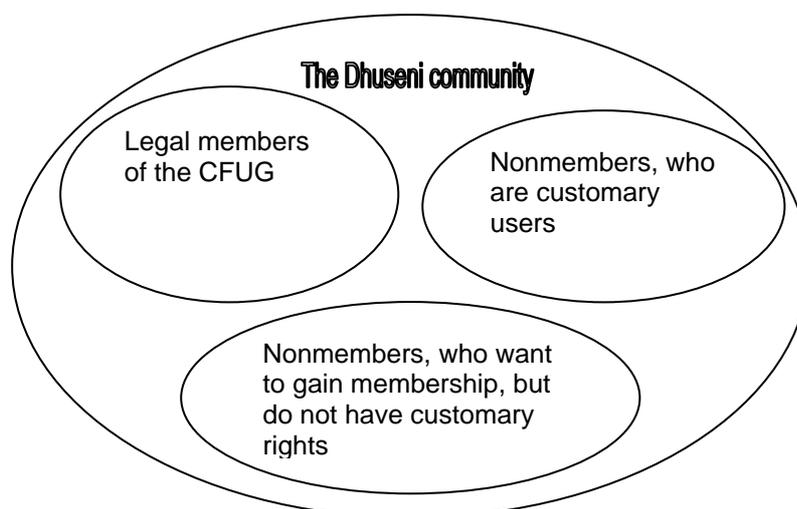


Figure 5.4: Three types of households in the Dhuseni community

As the *Dhuseni* forest is located in ward four of Badegaun VDC, the majority of the users of this forest reside in the *Dhuseni* village located in the same ward of this VDC. In addition, some users reside in the Lamatole village of this VDC, and Kaflethok and Dhotar villages of Fataksila and Bhimtar VDCs, respectively. FUG members are mostly from Dhuseni village whereas nonmembers are mostly from Lamatole, Kaflethok, and Dhotar villages. The *Dhuseni* community consists of a total of nine settlements; six are located in the Dhuseni village, and one each in the Lamatole, Kaflethok and Dhotar villages. The settlements of the Dhuseni village include Thumka Hukatar, Katheri Dharapani, Majhtole, Pyughar, Bhaduaire, and Dandathok. The settlements can be demarcated by different castes and ethnic groups. Figure 5.5 shows the location of different settlements related to the *Dhuseni* forest.

The majority of households in the *Dhuseni* community belong to the *Majhi* ethnic group (47 percent) and the *Brahmin* caste (41 percent). Twenty households belong to the low castes (*Damai*, *Kami*, and *Sarki*) and fifteen households belong to other ethnic groups (*Magar* or *Tamang*). Table 5.2 indicates the caste and ethnic composition of the *Dhuseni* community.

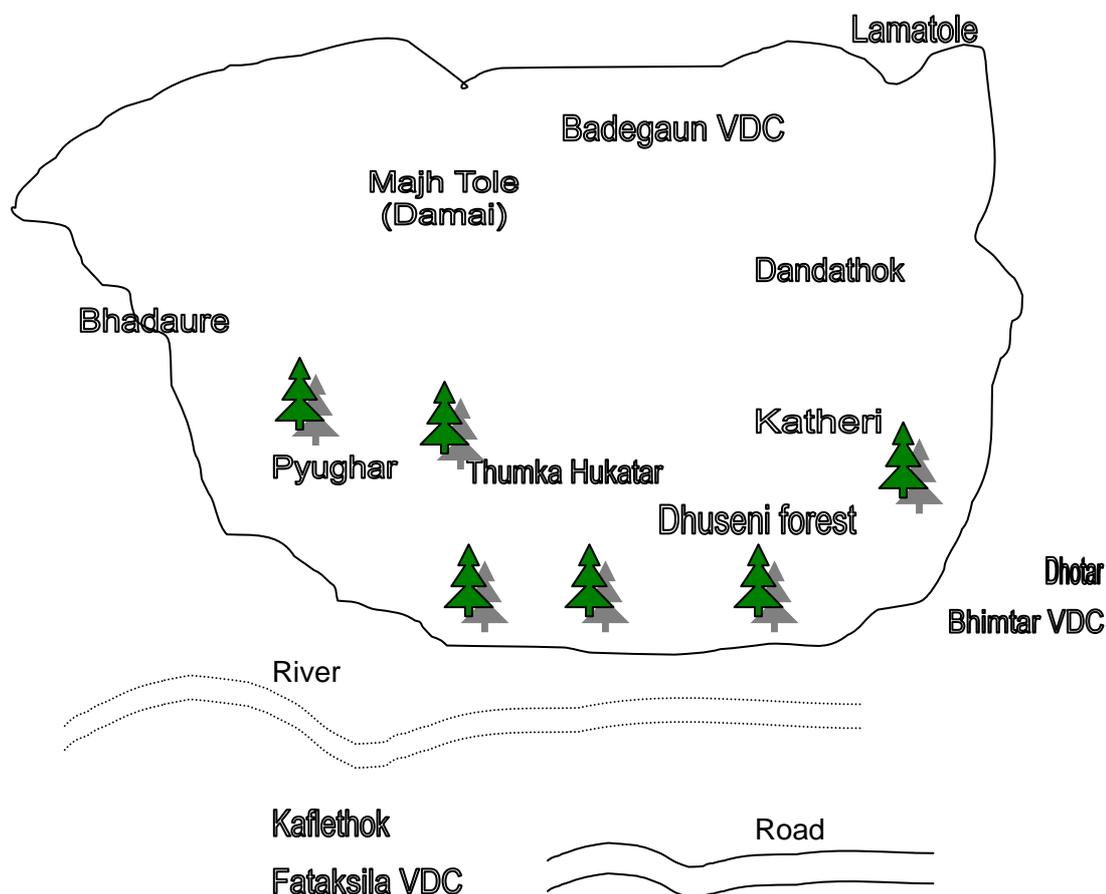


Figure 5.5: Location of different settlements in the Dhuseni community

Table 5.2: Caste and Ethnic Group Composition of the Dhuseni Community

Castes/ ethnic groups	Number of households (percent)
High castes: Brahmins and Chhetris	120 (41)
Ethnic groups: Magar and Tamang	15 (5)
Ethnic group: Majhi	140 (47)
Low castes: Kami, Damai, and Sarki	20 (7)
Total	295 (100)

There are some social differences between the member and nonmember households (Table 5.3). The majority of members belong to the high castes (48 percent) and the ethnic group '*Majhi*' (41 percent). Nine percent of the member households belong to the low castes '*Kami* and '*Damai*', and two percent of total member households belong to the ethnic groups '*Magar* and '*Tamang*'. The majority of nonmember households belong to the ethnic group '*Majhi*'.

Table 5.3: Caste and Ethnic Group Composition of the Member and Nonmember Households in the Dhuseni Community

Castes/ ethnic groups	Number of member households (percent)	Number of nonmember households (percent)
High castes: Brahmins and Chhetris	105 (48)	15 (20)
Ethnic groups: Magar and Tamang	5 (2)	10 (13)
Ethnic groups: Majhi	90 (41)	50 (67)
Low castes: Kami, Damai, and Sarki	20 (9)	0
Total	220 (100)	75 (100)

The *Dhuseni* forest (and *Dhuseni* village) is about two to three hours' walking distance from a motorable road. A focus group of local key informants reported that more than 90 percent of households were dependent on farming and livestock rearing for their livelihood. The major crops grown were paddy, maize, wheat, millet, mustard, blackgram, and soybean. The same focus group also reported that 49 households used others' land for farming under share-cropping arrangements. '*Guthi*' (religious) land⁴³ and unregistered land were used for cultivation by 26 and 46 households respectively. Almost 80 percent of the poor households used the *Guthi*, un-registered or others' land for farming.

Local participants in the participatory ranking exercise identified two categories of households based on economic status (Table 5.4). Thirty-nine percent of total households were 'well-off', and they had eight months to year-round food sufficiency and some had surplus income from farming and other income sources. Sixty-one percent of total households were 'poor', and they had food security for less than eight months per annum from farming. Almost all poor households owned less than 0.25 hectares. Some poor households had rented other farmers' land through share-cropping. During those months

⁴³ See Chapter 2 for details of share-cropping and *Guthi* land.

of the year when the poor households had no grain left from their own production, they had to do waged labour to sustain their livelihood.

Table 5.4: Wealth Composition of the Dhuseni Community

Wealth status	Number of households (percentage)
Well-off	117(39)
Poor	178 (61)
Total	295 (100)

The status of the majority of the low caste member households (87 percent) is poor. Sixty-seven and 37 percent respectively of the ethnic group ‘*Majhi*’ and the high castes are poor. In the case of the nonmember households, the majority of the ‘*Majhi*’ (80 percent) are poor, and 60 percent of the ‘*Tamang*’ are poor. Table 5.5 shows the percentage of member and nonmember households by caste and wealth.

Table 5.5: Percent of Member and Nonmember Households by Caste and Wealth in the Dhuseni Community

Castes/ ethnicity	Percent of member households			Percent of nonmember households		
	Well-off	Poor	Total	Well-off	Poor	Total
High castes	63	37	100	100	0	100
Ethnic group: Tamang	100	0	100	40	60	100
Ethnic group: Majhi	33	67	100	20	80	100
Low castes	13	87	100	No nonmembers		

Other important considerations are the community’s access to education, employment, development support, transportation services, and political parties. The community has good access to primary and secondary schools. Forty-five percent of the population are literate, yet only eleven percent of these are women. Only the high castes have other employment outside agriculture, such as teaching, government service, working as electricians or plumbers, or are in overseas jobs. People do not have easy access to development services because most government agencies and development organisations are located in the district headquarters, and transportation to the district

headquarters is not easy. The bus services are limited and as a result, a visit to district headquarters may require a full day away. People in *Dhuseni* are affiliated with different political parties: the Rastriya Prajatantra Party, the Communist Party of Nepal (UML), the Nepali Congress, and the CPN Maoist Party. The CPN Maoist Party has more influence in the community than do other parties.

Caste-based social network: the Bista system

The *Bista* system is a customary practice of social relationships between high-caste and low-caste households that still exists in the hills of Nepal. *Kami* (blacksmiths), *Sarki* (cobblers) and *Damai* (tailors) are examples of low-caste households residing in the hills. They are usually the poorest village members with little or no land. This is evident in the *Dhuseni* village, where almost all low-caste households (87 percent) have low economic status (Table 5.5). They also have low social status, and are socially discriminated against.

The low castes receive grain (*Bali*) annually for the services they provide to higher caste households. They generally get a fixed amount of grain after harvest, which contributes to their basic subsistence from year to year. The quantity of grain they receive is estimated based on an estimate of the demands of the higher caste households. A high caste *Brahmin* from the *Dhuseni* village explained that:

Kamis in this village made ploughs, sickles, axes, and Khukuri (Nepali knife) for us. We paid them grains in November and also in festivals. The type of grain (i.e. maize, wheat, millet or coarse paddy) we provided to Kami depends upon our cropping system, and the rate is roughly approximated based on the size of our [high-caste] household (Interviewee, CF-HS/Brahmin-11⁴⁴).

The majority of low-caste households (*Kami*, *Damai*, and *Sarki*) are dependent on the forest for their daily firewood needs. *Kamis* also depend on charcoal from the forest to sustain their blacksmith occupation. The types of grain these occupational low caste households receive from their customer-patrons (*Bistas*) is also a function of the caste the patrons belong to. *Kamis* of this village explained that:

We make farm implements such as ploughs, sickles and axes for our Bistas [mostly Brahmins]. They give us cereal grains in return. Brahmins give us millet

⁴⁴ For detail, see Annex 5.1

and they keep rice grain for themselves. Our children are happy if they get rice to eat (Participants, CF-FGDS/Kami-6⁴⁵).

The *Bista* system is embedded in the sociocultural norms and customs of society. It comprises socioeconomic relationships that are rooted in a society in which discriminatory sociocultural norms and customs prevail. In such a society, there exists unequal social relationships between the low-caste and higher caste households.

The occupational low-caste households are considered un-touchable to the other caste households. According to low caste *Damai* and *Kami* men, they face social discrimination during daily social encounters, and also at festivals. They mentioned some examples of the discrimination they have to face:

In the festivals, people used to make us feel that we are from the lowest status. They are not concerned about us. They behave as if we are not there. We become the last one to be served with the leftover food. They tell us "wait! wait!" and then bring us the curry by adding water. Sometimes there is a separate cook, utensils and even the dishes (less than those for the high castes) for us. They used to give the high-caste guests the woollen carpet to sit on, but they even hesitate to give the low-caste guests the water to quench their thirst (Participants, CF-FGDS/Damai-4⁴⁶, CF-FGDS/Kami-6).

The high caste people often discriminate against the low caste people because of a lack of cleanliness amongst the *Kami*, one of the reasons for which, according to *Kamis*, is the unequal access to water resources. A *Kami* man explained that:

Brahmins often think that we are dirty...we do not wear clean clothes. We have to work with charcoal daily. We do not have enough water for washing, taking bath and drinking. Brahmins [high caste] have diverted the water flow through pipes to their houses (Interviewee, CF-HS/Kami-1).

Unequal land ownership reinforces class and caste differentiation

Acharya (Brahmins) of the Lamjung district migrated to the *Dhuseni* village when they were granted land by the government in return for services they provided to the royal family some 32 generations ago. The ethnic group *Majhis* were historically settled on land above the riverside because their livelihood was obtained from fishing. The *Brahmins* later brought the low castes *Kamis*, *Damais* and *Sarkis* to the village to provide them with farm

⁴⁵ Seven *Kami* men and two *Kami* women participated in this focus group discussion.

⁴⁶ Four *Damai* men and three *Damai* women participated in this focus group discussion.

implements, clothes, and shoes, respectively. They also brought in the *Magar*, an ethnic people, to do ploughing work. This historical land ownership still continues today. The majority of land still belongs to *Brahmins*, but some has been rented-out to poor *Chhetris* and *Majhis*. Twenty-six percent of poor households rent land from the *Brahmins* for farming and 46 percent farm on *Guthi* (religious land) and unregistered lands. Those farming on *Guthi* land have to pay half of the production annually to the *Guthi* organisation, and such families have low value (power) and status (position) in society. These families cannot use the land they rent as collateral in order to obtain a loan from the Bank or local money-lenders.

Other types of social networks

Social networks exist in the form of social relationships through marriage and kinship within the same caste or ethnic group. The social custom of establishing marital relationships within the same caste is still prevalent in *Dhuseni* village. *Brahmins* being the largest caste group, have a comparatively wider social network in terms of marriage and kinship than do the other castes. They have marital relationships with *Brahmin* families from 20 VDCs in the Sindhupalchowk district and also from the neighbouring district, Kavre. The marriage relationships for low caste or middle caste *Majhi* are limited to people in neighbouring villages in the district.

Local participants in the participatory ranking exercise reported that factors such as the distance people travelled for education, to visit temples, to access markets, and for employment, training and study contributed to the variation in social networks between different caste families. These factors, according to the local participants, were also linked to the variation in economic status within the same caste. For example, *Brahmins* of 'well-off' status had access to more distant places than had *Brahmins* of 'poor' status.

The Saparupa community

All of the households in the *Saparupa* community are members of the *Saparupa* CFUG and represent a mix of different castes, ethnic groups and economic classes. Member households are recognised as legal users of the forest. This community consists of 277 member households from wards one, two, three, and four of the Methinkot VDC. During focus group interviews carried out in the settlements, the researcher did not identify any nonmembers. There are seven settlements in this community. These settlements can be

demarcated by different castes and ethnic groups. Figure 5.6 shows the location of the settlements.

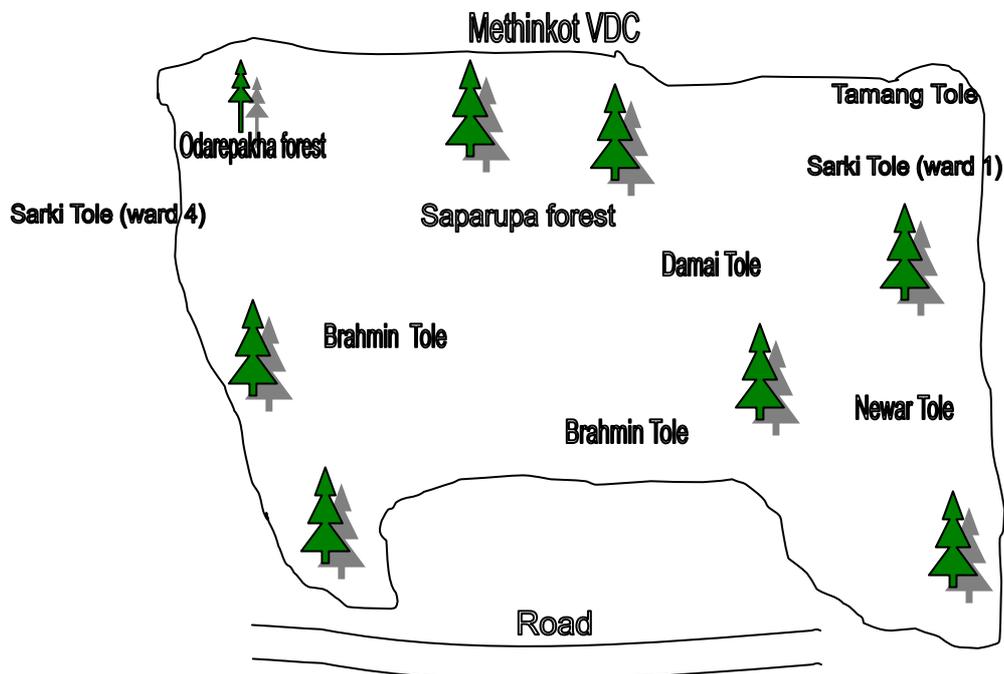


Figure 5.6: Location of different settlements in the Saparupa community

Most *Brahmins/ Chhetris* and *Newars* reside in the lands near the road. *Tamangs* reside in the area comparatively far from the road, and the settlements of low castes *Kami*, *Damai*, *Sarki* are located in the middle part of the village. The majority of households in the community belong to the high castes *Brahmin* and *Chhetri* (48 percent), followed by the low castes *Damai*, *Sarki*, and *Kami* (33 percent), and the ethnic groups *Newar* and *Tamang* (19 percent). Table 5.6 gives the caste and ethnic group composition of the *Saparupa* community.

Table 5.6: Caste and Ethnic Group Composition of the Saparupa Community

Castes/ ethnic groups	Number of households (percent)
High castes: Brahmin and Chhetri	133 (48)
Ethnic groups: Tamang and Newar	53 (19)
Low castes: Kami, Damai, and Sarki	91 (33)
Total	277 (100)

Forty-two percent of the member households in the *Saparupa* community belong to the ‘poor’ category, having food sufficiency for less than eight months per annum from their own farm production. The remaining 58 percent are considered ‘well-off’, having more than eight months to year-round food sufficiency, with some having surplus production and savings (Table 5.7). Table 5.8 shows the wealth status of different caste and ethnic groups. The majority of the low caste households (80 percent) are poor while 35 percent of the high castes and the ethnic groups are also poor.

Table 5.7: Wealth Composition of the Saparupa Community

Wealth status	Number of households (percent)
Well-off	161(58)
Poor	116 (42)
Total	277 (100)

Table 5.8: Percentage of Member Households by Caste and Wealth in the Saparupa Community

Castes/ ethnicity	Member households (percent)		
	Well-off	Poor	Total
High castes: Brahmin and Chhetri	65	35	100
Ethnic groups: Tamang and Newar	65	35	100
Low castes: Sarki, Damai and Kami	20	80	100

Tar-sealed motorable roads to the district headquarters and to other VDCs have given people of the *Saparupa* community easy access to the market and other services. In addition, there are dirt roads linking some villages within the Methinkot VDC. Most people in the community are dependent on farming and livestock rearing for their livelihood. However, accessibility to the markets and roads has created a number of income-generating occupations, such as tailoring, carpentry, wooden basket making, commercial livestock production, and milk production and sale. Figure 5.7 shows the rearing of goats and buffalo as commercial livestock production in the *Saparupa* community, and figure 5.8 shows the local milk collection centre in the Methinkot VDC, where people sell milk.



Figure 5.7: Commercial livestock production in the Methinkot VDC



Figure 5.8: Local milk collection centre in the Methinkot VDC

Five households have shops for groceries and two have shoe-making enterprises, and 20 households have members with government jobs. Some people, who own small landholdings and a few unproductive livestock, have migrated to the city areas in search of livelihood opportunities. The major crops grown by people in the community are paddy, maize, wheat, millet, mustard, and soybean. Fifty-two percent of the community are literate and 23 percent of these are women.

The land and livestock sharing systems (*Adhiya* system) have an important influence on the livelihood of poor people. The poor grow crops on the land leased from well-off land-owners for a certain period. The crop production from that land contributes to the food security of the poor families. The poor people do not pay for the land but pay annually half of the production from that land to the land-owners. Some poor people borrow cows and goats from well-off people. They can keep these livestock but have to give half the offspring to the owners. They borrow cows to obtain manure for farming and milk for the children, and they borrow goats so they can sell some of the offspring (some of the offspring go back to the owner) and get income.

Caste-based social Network: The Bista System

The traditional *Bista* system has lost some of its importance in the *Saparupa* community due to the influence of a well-developed small market in the VDC, and easy road access to a nearby market, 'Dhulikhel'. The *Bista* system is partly being replaced by the market, moving from '*Bali*' to 'cash'. This change has had the greatest effect on the *Sarkis*, who have lost their customary occupation. Cheaper shoes imported from China and India are readily available in the market, and as such the village people buy these shoes rather than those made by the *Sarkis*. Because of this, most of the men from the *Sarki* families have been forced to migrate to the city areas in search of livelihood activities. The women and children remain behind in the village. Most *Sarki* men are involved as wage labourers in the brick factories in nearby cities.

Ten *Kamis* and *Damais*, who could invest in renting shops, have moved to the market in the same VDC and opened shops to continue their customary occupations. According to *Kamis* in the focus group discussion, the majority of them have started charging money for the implements they made for the *Bistas*. These *Kamis* further reported that comparatively better-off *Kamis* prefer to receive cash for the implements they make for their *Bistas* rather than getting the '*Bali*'.

Though there has been a change in the *Bista* system, the economic situation of poor lower caste families (*Kamis*, *Damais*, *Sarkis*), in general, is still the same. For most of them, the '*Bali*' or 'price' system does not make any difference to their livelihood. Moreover, they have been negatively affected due to the unavailability of alternative livelihood opportunities in the village. According to *Damai* men and women, they are still discriminated against as 'untouchables'. Discriminatory sociocultural norms and customs, particularly between low caste and other caste people, still exist in the society. As *Sarki* women said, low caste people in their village face social discrimination at cultural events, particularly during the festivals. Low caste people observe and face discrimination from an early age and because of this, they feel inferior to others in society. A six-year-old *Damai* boy who accompanied his mother into the focus group interview with women of the *Saparupa* community asked his mother, '*Ama* [mother]!, am I allowed to enter that house and play with the children there?'. High caste people do not eat cooked food touched by low caste people. A *Brahmin* local resource person of the same village stated that:

My job is to facilitate tole meetings and identify the demands of high caste as well as low caste poor people. Whenever I visit Sarki Tole [the low caste settlements] for this purpose, I prefer to hide my packet of snacks [roasted corn and soyabean] under the shrubs on the way rather than take them along with me. If Sarkis happen to touch my bag, then I have to throw away my snacks. I have to make myself 'pure' by taking a bath if a low caste person touches me (Interviewee, KIK-7).

Other types of social networks

In the *Saparupa* community, the bonding social networks (the networks within the castes or ethnic groups) of the *Brahmin* (and *Chhetri*) and the *Newar* are wider than those of the low castes, *Damai*, *Sarki*, and *Kami*, and the ethnic group '*Tamang*'. The *Brahmin/Chhetri* and *Newar* have marriage relationships with the same caste people residing in small cities and market areas. They have better access to information through such networks. However, the men from *Brahmin* or *Newar* households have more access to information through their wider social networks than do the women from the same households.

5.2.3 Key local organisations and their networks

Key local organisations include the community forest user groups (CFUGs), with their executive and other committees. The networking of the CFUGs with local and other organisations influences the governance of the forests. The *Dhuseni* CFUG and *Saparupa* CFUG are the main local organisations involved in the management of the *Dhuseni* and

Saparupa forests. The *Dhuseni* and *Saparupa* CFUGs are registered with the Sindhupalchowk DFO and the Kavre DFO respectively. The CFUGs have their own constitutions and operational plans that set out the rules concerning forest management.

The *Dhuseni* CFUG was registered in 1996. A total of 220 households were listed as members of the CFUG. The *Saparupa* CFUG was registered in 1999, at which time, a total of 205 households were listed as members, and this number had increased to 277 by 2005.

Committees of the CFUGs

The *Dhuseni* and *Saparupa* CFUGs are slightly different in terms of the types of committees. Both have executive committees, but the *Dhuseni* CFUG has *Tole* committees at the settlement level while the *Saparupa* CFUG has an account committee and an advisory committee, but does not have *Tole* committees. The executive committee is the key decision-making structure of the CFUGs. *Tole* committees are responsible for helping the executive committee to implement decisions. The account committee is responsible for keeping the accounts of the CFUG fund. The advisory committee is supposed to play an advisory role by providing technical advice to the group.

A person has to be a member of the CFUG to be eligible for selection to the executive committee. The committee is responsible for organising the general assembly meeting at least once a year to make decisions about forest use and management. The members of the committee are supposed to be elected in the general assembly meeting. However, the researcher observed in the assembly meeting of the *Dhuseni* CFUG in 2006 that the names for the members were proposed by key people (i.e. chairperson, treasurer and secretary) of the CFUG, and selected (without voting) during the general assembly meeting of the group. Such a situation also occurred in the recent general assembly meeting of the *Saparupa* CFUG (in March 2006), according to the local key informants of the *Saparupa* community.

The current executive committee of the *Dhuseni* CFUG, which first undertook its responsibilities in March 2006, consists of five women and ten men. All executive positions such as chairperson, vice-chairperson, treasurer, secretary, and assistant secretary are occupied by *Brahmin* men. Among the general members of the committee, five belong to the '*Majhi*', four belong to the *Brahmin*, and only one belongs to the low caste '*Kami*'.

The current executive committee of the *Saparupa* CFUG has seven women and eight men. All the key decision-making positions are occupied by men. With the exception of the chairperson (who is *Newar*), all other key positions are occupied by high caste *Brahmin*. The majority of the executive committee are *Brahmin* (8 out of 15), with three *Newar*, two *Tamang*, and two low caste *Sarki* making up the remainder.

A total of eight *Tole* committees of the *Dhuseni* CFUG have been formed, each consisting of a coordinator, secretary and treasurer, to represent the issues of forest needs and management from each *Tole* in the assembly. People from different settlements are represented on the *Tole* committees. Members of the *Tole* committees may or may not be members of the executive committee. Four *Tole* committees are led by the *Brahmins*, and the other four by the *Majhis*. Only one *Tole* committee has a *Brahmin* woman as a coordinator, and the other seven have men as coordinators. The members for the *Tole* committees are selected by the CFUG executive committee. The members of the executive committee propose the names and select them for the *Tole* committees during an executive committee meeting.

The account committee of the *Saparupa* CFUG has a coordinator and two members. The advisory committee has six members. Both these committees are composed of *Brahmin* men only, except for an executive committee member who is a *Newar*. Two positions in the executive and account committees are occupied by the same *Brahmin* men.

The organisations with which the CFUGs are linked

The neighbouring CFUGs, project-initiated local groups, the DFO field offices (i.e. the Range Posts⁴⁷), the donor projects, the district-level units of the FECOFUN⁴⁸, and the political parties are examples of the organisations with which the CFUGs are linked. The *Dhuseni* and *Saparupa* CFUGs are different in terms of strengths of networks they have with these organisations. The networks of the CFUGs provide avenues for sharing information and experiences. Regular sharing of information and cooperation among the CFUGs that the local key informants (of the *Dhuseni* community) reported in the focus group discussion indicates that networks among the CFUGs are stronger than in the *Saparupa* CFUG.

⁴⁷ Range Posts are the geographical areas within a district administered by a Forest Ranger. They are the lowest field units of the District Forest Offices. In the hill districts, there are eight Range Posts per district.

⁴⁸ FECOFUN is the network of the forest user groups.

Networks of the Dhuseni CFUG

The *Dhuseni* community also includes members of other CFUGs. The *Dhuseni* CFUG has informal horizontal networks with the neighbouring CFUGs (Figure 5.9). It has a stronger link with the *Laligurans* CFUG than with other CFUGs. The *Laligurans* CFUG is a women-only group and their husbands are members of the *Dhuseni* CFUG. Some members of the *Pipalmane* CFUG are also members of the *Dhuseni* CFUG. The neighbouring CFUGs, such as the *Pyughar Baghmara*, *Nepalthok*, *Saunepakha*, and *Tinghare* influence the management of the *Dhuseni* forest.

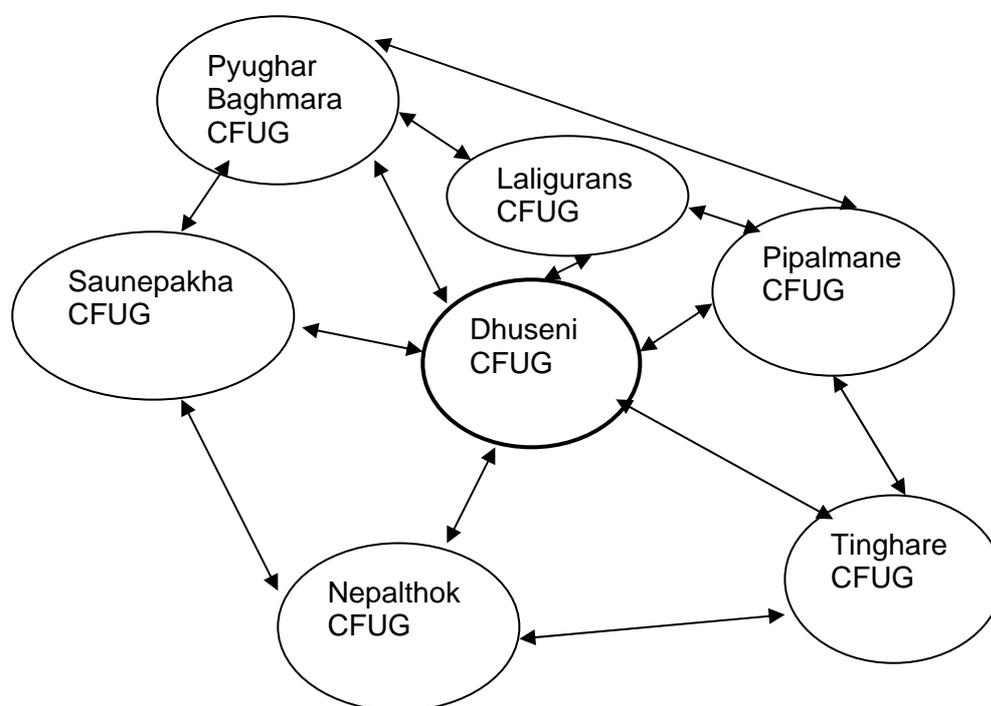


Figure 5.9: Horizontal networks of the Dhuseni CFUG with other CFUGs
(Source: As drawn by participants in the key informants' focus group)

Note: The relative proximities between entities in the diagram indicate the strength of networks — the closer they are, the stronger are the networks and vice versa.

The networks provided more opportunities to discuss and resolve issues. When the key executives of the *Dhuseni* CFUG came to know that some members of the *Saunepakha* CFUG also collected firewood from the *Dhuseni* forest, they went to discuss this with the executive committee of that CFUG, and resolved that issue. They have been inviting the chairpersons of the neighbouring CFUGs to the general assembly meetings of the *Dhuseni* CFUG since 2005, to share experiences and to resolve conflicting issues. The

chairperson of the *Pyughar Baghmara* CFUG has shared the mechanisms his CFUG has followed in getting approval from the DFO and for selling timber to an external contractor. The Nawalpur Range Post is responsible for providing forestry management services in the *Dhuseni* community. But the role of this office has been restricted by the CPN Maoist Party because the local people affiliated with this party discourage the rangers from staying in this Range Post.

The *Dhuseni* CFUG is a member of the district-level unit of the FECOFUN. A member of the CFUG represents the district on the FECOFUN. The FECOFUN has not had any significant influence on the operation of the CFUG. Although it could help improve the management of the local CFUGs, it is reasonably inactive. According to CFUG members, FECOFUN could bring all eight CFUGs of the VDC together to share and discuss their experiences. By creating such a forum, lots of problems could be solved through learning from each others' initiatives and mistakes. They added: *But FECOFUN has done nothing. For us, it seems to be sleeping* (Participants, CF-FGDS/ Brahmin-1).

The influence of the CPN Maoist Party on the community and the CFUG is significant compared to other political parties (RPP and CPN/UML). According to a local Maoist cadre, the VDC now is being run by the 'new people's government' (Maoist movement '*Naya Jana Sarkar*'), which was also confirmed from this statement he made to the researcher:

We Maoist Party have allowed you to conduct this research in partnership with the CFUG, only on the condition that our local friends, also members of the executive committee of the Dhuseni CFUG, have informed us that they have permitted you to do so (Personal Communication with a Maoist Cadre, November 2005).

The *Dhuseni* CFUG has identified the need for integration of people affiliated with the Maoist Party on the executive committee for forest use and management.

Networks of the Saparupa CFUG

The cross-CFUG linkages in the *Saparupa* CFUG are weaker than those in the *Dhuseni* CFUG⁴⁹. But the *Saparupa* CFUG has stronger linkages with other local groups and government organisations than does the *Dhuseni* CFUG.

⁴⁹ Lack of regular sharing of information and cooperation among the CFUGs that the executive members of the *Saparupa* CFUG reported in the focus group discussion indicates that the networks among the CFUGs are weak.

The *Saparupa* CFUG has some linkages with the neighbouring CFUGs such as *Kaflethok*, *Dahalthumka*, and *Kanpur*. They learn informally from the experiences of each other. Members of the executive committee of the *Saparupa* CFUG explained:

The Dahalthumka CFUG has banned the entry of the nonmembers inside their forest. We have also learnt a lesson from this, and we have seriously initiated the protection of our forest through supervision of the forest blocks since last month (Participants, CF-FGDK/EC-7⁵⁰).

The 'Livestock Insurance Committee (LIC)' and 'Community Organisations (COs)' are key influential organisations for the operation of the *Saparupa* CFUG (Figure 5.10). The members of the *Saparupa* CFUG are also the members of the LIC and the COs. The LIC provides credit and technical services on livestock production to the members. People who get loans and insurance for livestock production will place requests to the CFUG for more fodder and litter from the community forest. The members of the CFUG receive information on forest use and management and notification for attending the CFUG assemblies through their participation in the meetings of the COs.

The LIC and the COs are promoted through the Decentralised Local Governance Support Programme by the Kavre District Development Committee (DDC) with financial support from the UNDP and the Norwegian Government. Three executive members of the CFUG also occupy positions in the Livestock Insurance Committee. This committee provides livestock insurance services (particularly for buffaloes and cows), and also provides loans for the purchase of buffaloes, cows, or goats to its members. The LIC has promoted livestock production as a major income generating activity within the VDC. According to a member of the committee, this has also resulted in an improved forest environment through the promotion of gobar gas⁵¹. Because of the increasing number of large livestock such as buffaloes or cows, gobar gas is increasingly used for fuel and electricity (Figure 5.11).

This has reduced the demand for firewood from economically well-off people. However, it has had no impact on the demand for firewood by the poorer people because they do not have either the livestock numbers or finances required for the construction of a gobar gas

⁵⁰ Eight men and two women participated in this focus group discussion.

⁵¹ About 90 households have *gobar* gas. The *gobar* gas plant is a technology which generates energy from livestock manure and human excreta. This energy can be used for cooking and to produce electricity for lighting.

plant. People need to have at least two large animals (buffaloes or cows), and some capital for construction of a gobar gas plant. The government provides a subsidy for construction, but this is of no use to the poor. A poor family generally has a cow, and/or a few goats or chickens, which is not enough for gobar gas. Poor people are dependent upon the community forest for firewood.

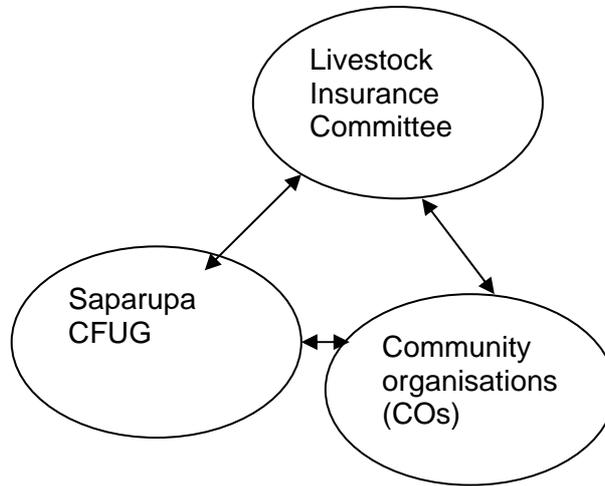


Figure 5.10: Networks of the Saparupa CFUG with project-initiated local organisations



Figure 5.11: A gobar gas plant

Members of the CFUG are generally also members of 'Community Organisations (COs)'. There are 37 COs in the nine wards of the VDC. The COs represent either men only groups (19), or women only groups (18). There are 17 groups in wards one to four of the VDC. These are the groups to which the members of the *Saparupa* CFUG are also entitled to have membership. The groups meet weekly and manage a saving and credit fund. These groups are also members of the 'Livestock Insurance Committee'. Each group has a chairperson and a manager who are responsible for linking the group with the committee for insuring the livestock of the group members. According to a secretary of the executive committee of the *Saparupa* CFUG, the weekly meetings of these groups also serve as a forum for sharing information about the needs and problems of the forest users. These groups also help the CFUG to collect annual membership fees, and inform the CFUG about the demands and problems of the forest users. Moreover, these groups also support the CFUG in monitoring the forest blocks located in their areas.

The *Saparupa* CFUG has strong linkages with the Nepal Australia Community Resource Management and Livelihood Programme (NACRMLP). As a result of this programme, four local resource people have been trained to provide facilitation support for participatory ranking and user needs identification, and women's literacy.

People in Methinkot VDC have good access to the Range Post of the Kavre DFO. The rangers are supposed to be stationed in the Range Post situated in Bhakundebesi, the nearby small market area. The members of the executive committee of the '*Saparupa* CFUG', however, are not satisfied with the support of the DFO. An executive member said: *The DFO usually controlled us, and did not care about the needs of local people.* The District Livestock Services Office however, is not easily accessible. The Office is situated in Dhulikhel, the district headquarters, which takes two hours to reach by bus. This Office has trained two local people as 'Rural Livestock Health Workers (RLHWs)'. One of the RLHWs has opened a small veterinary shop in Bhakundebesi. According to the secretary of the executive committee of the '*Saparupa* CFUG', the group pays NRs 200 (about NZ\$ 4) annually to the district level FECOFUN for membership, but has not yet received any support. The District Agricultural Development Office has formed separate groups of poor and low caste farmers and provides them with training in vegetable growing and fodder production. In addition, UNICEF implements awareness programmes to encourage low caste children and girls throughout the district to attend the local school.

People in Methinkot VDC have affiliations with four major political parties. These are the Rastriya Prajatantra Party (RPP), the Communist Party of Nepal (CPN/UML), the Nepali

Congress, and the CPN Maoist Party. Party affiliations impact on selection of individuals to the executive committee of the CFUG. Executive members of the *Saparupa* CFUG explained this:

We have people affiliated with RPP, CPN/UML, or Nepali Congress on the executive committee. The selection of executive members of the CFUG is generally like an election of politicians. A person is more likely to be elected to a key position if he/she is a member of the more popular political party (Participants, CF-FGDK/EC-8⁵²).

5.2.4 Community forestry case summary

Though both the community forests are mixed forests consisting of pines and broadleaf tree species, the *Dhuseni* forest has fewer pines but more broadleaf trees than the *Saparupa* forest. The majority of the pines are planted trees while the broadleaf trees are naturally regenerated. People prefer broadleaf trees over pines because the former is more useful than the latter. The number of trees per area of the *Dhuseni* forest is greater than that of the *Saparupa* forest. A *Saparupa* CFUG member has greater forest area (1.08 ha/member) and more trees per member than has a *Dhuseni* CFUG member (0.5 ha/member).

Both communities are located in the hills of Nepal. Table 5.9 shows the key similarities and differences in the characteristics of these two communities. The *Saparupa* community has easier access to roads and markets than does the *Dhuseni* community. The communities are similar in terms of having distinct and separate settlements (*Toles*). The *Dhuseni* and *Saparupa* communities consist of nine and seven settlements, respectively. The *Dhuseni* community includes people from three VDCs whereas the *Saparupa* community consists of people from only one VDC. The *Dhuseni* community includes households that are legal members of the CFUG, nonmembers but customary users, and nonmembers who want to be members, whereas the *Saparupa* community consists only of households who are members of the CFUG.

The *Dhuseni* community includes a higher proportion of the *Majhi*, while the *Saparupa* community has a higher proportion of high castes. The latter has more low caste households and fewer ethnic group households than the former. Poverty is comparatively higher in the *Dhuseni* community (61 percent) than in the *Saparupa* community (42

⁵² Nine men and two women participated in this focus group discussion.

percent). Due to market integration and road accessibility, the *Saparupa* community has a greater diversity of occupations as compared to the *Dhuseni* community. These occupations are carpentry, grocery, restaurants, electricians, commercial livestock production, and milk production and sale. The incidence of poverty is highest among the low caste households in both communities, followed by the ethnic group *Majhi* of the *Dhuseni* community. In both communities, 35 to 38 percent of high caste households are also poor.

Table 5.9: Key Similarities and Differences in the Characteristics of the Two Communities

Characteristics	Dhuseni community	Saparupa community
Forest products available	Firewood, fodder, timber, litter, grasses	Firewood, fodder, timber, litter, grasses
Forest area per member	0.5 hectares	1.08 hectares
Poverty (percent of total households)	61 percent	42 percent
Economic status	Both well-off and poor as members. Well-off and poor as nonmembers	Both well-off and poor as members. No nonmembers
Caste/ethnicity	High castes, low castes and ethnic groups	High castes, low castes and ethnic groups
Gender	Men are listed as members. Only few female-headed households are members	Husband and wife of the household listed as members from 2006
Access to markets and roads	Poor	Good
Strength of the Bista system	Strong	Weak
Strength of CFUG's networks with other organisations	Weak	Strong

The local social networks such as the *Bista* and *Adhiya* (or land-sharing) systems are weaker in the *Saparupa* community (which has better access to roads and markets) than in the *Dhuseni* community. The *Dhuseni* community has strong inter-dependent social and economic relationships where the low castes and poor people are highly dependent on the *Bista* and *Adhiya* systems for sustaining their livelihoods. The bonding networks of the high castes are stronger than those of the other castes or ethnic groups in both communities.

The forest user groups and their committees are the main local organisations involved in the governance of the specified forests. The *Dhuseni* and *Saparupa* CFUGs are different in terms of the types of committees they have. The *Dhuseni* CFUG has eight separate committees at *Tole* (settlement) level but no other committees except the executive committee at the CFUG level. The *Saparupa* CFUG has no committees at the settlement level, but three committees (executive, account, and advisory) at the CFUG level. The executive committees of both CFUGs are responsible for organising the general assembly meeting at least once a year to make decisions about forest use and management. The *Tole* committees of the *Dhuseni* CFUG are responsible for implementing decisions at the settlement levels and informing the executive committee of people's demands. The account and advisory committees of the *Saparupa* CFUG are responsible for keeping the accounts of the CFUG fund and providing technical advice to the executive committee. The accounting and advisory roles are carried out by the executive committee itself in the case of the *Dhuseni* CFUG.

The *Dhuseni* CFUG has stronger horizontal networks with other local CFUGs than does the *Saparupa* CFUG. The *Saparupa* CFUG has horizontal networks with the project-initiated local groups whereas the *Dhuseni* CFUG has no such networks because no project support exists. The *Saparupa* CFUG has also vertical networks with the project (NACRMLP), and has stronger vertical networks with the government agencies (DFOs) than does the *Dhuseni* CFUG. The influence of the Maoist Party on the *Dhuseni* CFUG is greater than that on the *Saparupa* CFUG. The FECOFUN has limited influence on both CFUGs.

5.3 Institutional factors that influence access of the poor to forest benefits

In this section, the key institutional factors that influence access of the poor to the forests governed under the community forestry regime are identified and explained. The two communities, *Dhuseni* and *Saparupa*, which have access to the forests governed under the community forestry regime, were investigated. Sociocultural factors and regime factors emerged as the two key groups of institutional factors that influence the access of the poor to the forests governed under the community forestry regime in the study areas. Sociocultural norms and networks, and customary rights have been identified as key informal institutional factors that influence the access. The legal property rights and governance structures and processes that are imposed on a community through the introduction of a forestry regime have been identified as formal institutional factors

influencing access. Informal linkages are associated with sociocultural factors, but formal linkages are associated with regime factors. However, there exists a link between regime and sociocultural factors. Specifically, governance factors are directly influenced by sociocultural factors. Another factor that is not covered under regime and sociocultural factors is the level of support by external organisations, which also has influence on access.

5.3.1 Sociocultural factors

The influence of sociocultural factors is associated with the level of power through which the community members influence the decision-making processes to obtain access to forest benefits. The sociocultural norms and the strength of social networks that are dominant in the communities have significant influence on the regime implementation, thus shaping the access of the poor to community forests. Wealth differences that are also linked with the discriminatory sociocultural norms indicate that there exists power inequities in both communities (Figure 5.12).

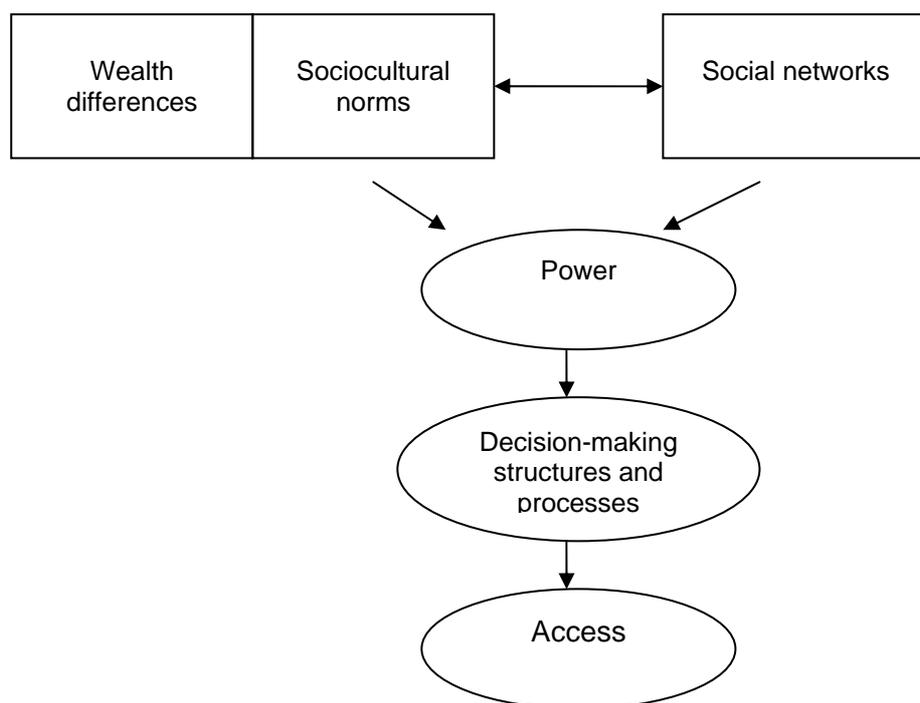


Figure 5.12: Sociocultural factors and mechanisms through which these factors influence access

The *Dhuseni* and *Saparupa* communities have different characteristics in terms of poverty and access to markets and roads. These communities, however, are similar in terms of

composition of castes, ethnic groups and economic groups. The community forestry regime was introduced in the *Dhuseni* and *Saparupa* communities in 1996 and 1999, respectively. The purpose in this section is to present findings that enable an understanding of the influences of sociocultural factors on the CF regime implementation regarding access of the poor to community forests. The access of the poor to community forests is influenced by their capacity to obtain group membership and legal rights, and to influence group decision-making processes.

The influence of sociocultural norms and wealth differences

Sociocultural norms that prevail in both communities play an important role regarding access because some people within the community are excluded from the decision-making processes.

Hindu religion-based sociocultural norms (untouchability and patriarchy, in particular) are dominant in both communities. In both *Dhuseni* and *Saparupa* communities, sociocultural norms are associated with the unequal power relationships among people belonging to different economic classes, and these have a significant influence on access of the poor to forest benefits. Because of the power associated with land ownership, people of higher economic classes are more successful than are the poor in being involved in key decision-making structures and in influencing decision making to favour themselves. Such power in property is directly linked with the power of position or authority. In the *Dhuseni* community, people of higher economic classes are better accepted as members in the executive positions in community decision-making structures (e.g. positions on the executive committee of the CFUGs) as compared to poor people.

Economic class and power are directly associated with caste structures in both *Dhuseni* and *Saparupa* communities. Most often those who are rich and powerful also belong to a higher caste, and vice versa. Low caste people suffer from caste-based discrimination in terms of 'untouchability', which affects their social dignity and prestige. Low caste *Damai* men of the *Saparupa* community complained: *High caste people often forget to invite us for the meeting. They think it's the cultural norm; it's not their fault* (Participants, CF-FGDK/Damai-3). Very often, because of these sociocultural norms based on hierarchy of caste, low caste people are excluded from local decision-making processes and, hence, from obtaining benefits from access to the forests. Higher caste people generally behave towards low caste people as though they are backward. They seem to think that whatever

low caste people say is not relevant. Though the ideas of low caste people may be correct, higher caste people do not listen to them. Low caste people said:

We really have difficulties in getting enough firewood from the forest. Though a low caste male member of the group raised this issue twice in the CFUG meetings, people just ignored him and behaved as if they did not hear what he said. Some people argued, and we could not stand up to justify our problems strongly (Participants, CF-FGDS/Damai-4⁵³).

The low caste members lack power due to low wealth and social status, as a result of which they are discriminated against in obtaining benefits from resource access:

The high caste people having power (of money, social position, and political influence) are respected [Jasko Shakti Usaiko Bhakti]; we do not have power so we do not have status in the society, and so we do not get the benefits (Participants, CF-FGDK/Sarki women-4⁵⁴).

Sociocultural norms shape the nature of participation in the CFUG meetings. In both communities, the poor members have expressed feelings of powerlessness. They said that they feel powerless not only in terms of a lack of productive resources but also in their social relationships with other people due to discriminatory sociocultural norms. In both *Dhuseni* and *Saparupa* communities, the poor lack the confidence to attend CFUG meetings, having to wear unclean and untidy clothes, and are often ignored in the meetings when they do attend. Thus, they often sit at the back even though they can neither hear nor participate in the decisions being made. The poor tend to be hesitant to speak up in front of so many people.

High castes are better educated and are considered as better leaders and as such tend to be preferred by both the community and the DFO for leadership positions. In contrast, ethnic people are considered by the community as less educated and less competent in terms of leadership skills. Low castes have the lowest social status within the CF communities and are viewed by the communities as uneducated and lacking in leadership skills. Across all social groups, men are considered as the natural leaders and as such tend to be more likely to be selected to leadership positions than women. Low castes and women are the social groups that are most negatively discriminated against in the Hindu caste system. The Hindu caste system prescribes to them certain sociocultural norms and as a consequence they lack respect, self-esteem, and confidence. Untouchability and patriarchy are examples of these norms.

⁵³ Three men and six women participated in this focus group discussion.

⁵⁴ Eight women participated, while no men were present in this focus group discussion.

Most sociocultural norms in both *Dhuseni* and *Saparupa* communities based on Hindu religious norms reflect a dominance of patriarchy, which constrains women's opportunities to obtain forest benefits through various mechanisms. First, in this patriarchal structure, women are in subordinate positions to men both at a household and at a community level. Men have more power in terms of ownership of property, social status, and authority compared to women. Such inequities in power relations are thus associated with unequal access to productive resources and also to forest benefits. Second, gender roles guided by patriarchy constrain women from attending group meetings and expressing freely, and thus influencing the decision-making processes. Women have to manage all their daily household chores and they are not supposed to leave the chores and attend the group meetings. Third, decisions in the home and in the community are generally made by men. Women are only informed of decisions on forest access if they have to contribute to the implementation of such decisions.

Women and the low castes in this case study have linked their power with their self-confidence. Women of both *Dhuseni* and *Saparupa* communities raised the issue of low self-confidence in discussion with men in the CFUG meetings. There are usually just a few women in the CFUG meetings, and women do not feel confident in presenting their ideas in front of many men. However, they feel at ease in discussing when only women are there:

We do not feel any hesitation to speak up in the meetings of this group [Community Organisation]. We can discuss and decide ourselves in the meetings. But in the CFUG meeting, we are not confident to speak up and we feel that men will not be interested in what we presented (Participants, CF-FGDK/Brahmin women-6).

The low castes also feel that they cannot influence decisions because they and others think that they lack confidence to speak up in the meetings, even in small groups, and that they lack competence:

The amount of weekly saving in the group was increased from Nepali Rupees five to ten last year. Though we had difficulty to save the increased amount, we could not say this in the meeting. We feel that poor people are often dominated. People think that we [the poor] can do nothing, and neither can we present good ideas nor are we influential in terms of political affiliations. Though we work hard during pruning of the trees, we never get enough firewood. We think that people cheat us easily because we are not smart (Interviewees, CF-HK/Kami-3, CF-HK/Damai-1, CF-HK/Sarki-5).

Women members of both CFUGs said that the gender division of labour and discriminatory practices constrain their opportunities to participate in meetings. According

to women, their husbands are informed about the meetings, but they occasionally tell them just before they leave home. Women can not say that they also want to join them to attend the meetings. Men are supposed to attend the meetings and women are responsible for all household chores. Women further added:

Our neighbours will criticise if we attend the meetings and our husbands stay at home. They will tell our mother-in-laws that we are very mischievous. If a woman takes the initiative on her own, people complain that the woman is becoming over smart [Pothi Basyo or 'Aimai Badhi Bhayo] is not good for the family [Aba Hamro Gharma Ramro Hudaina]. So, we just listen to our husbands and obey them (Interviewees, CF-HS/Brahmin-11, CF-HK/Brahmin-8).

Women's powerlessness is also due to their multiple burdens at the household level, because this hinders their ability and confidence to attend group meetings, as explained by women:

Our husbands order us to finish the household work before leaving for the meetings. We have lots of work at home... It is impossible to finish all this work before attending the meetings. So, most of the time, we have to decide not to attend the meetings (Interviewees, CF-HS/Brahmin-16, CF-HK/Brahmin-10).

Women of different caste and economic classes, however, are influenced differently by sociocultural norms and customs. Poor low caste women face more discriminatory societal norms and hence are more marginalised and powerless as compared to well-off high caste women. According to low caste *Damai* women in the *Saparupa* community, they are more discriminated against compared to high caste women in collecting firewood from the forest. FUG members (who happen to be members of the executive committee of the CFUG) used to scold them and warn them not to take firewood from the forest, but they expressed the view that the high caste women collect firewood without any scolding by others. They said:

Brahmin women bring grasses and firewood freely though the forest is closed at that time, but whenever we go there to collect the forest products people accuse us of stealing the products (Participants, CF-FGDK/Damai-3).

According to the community development consultant, low caste women have fewer opportunities to attend the FUG general assembly meetings than high caste women because low caste women face more discriminations than do high caste women. Even if they attend the meeting, they feel that they have no influence:

We are poor women, and we lack knowledge, so people pressure us and frighten us. We are afraid to speak in the meeting, because we think that people may again charge us with stealing in front of so many people (Participants, CF-FGDK/Sarki women-4).

The influence of social networks

Strengths of bonding, bridging and linking social networks, and customary caste-based networks (the *Bista* system in particular) have influence on access of the poor to the forests. The social networks influence the access through levels of awareness, trust, support, capacity and confidence, dependency and also through decision-making structures and processes.

Bonding networks are social relationships among people who are similar to each other, while bridging networks are social relationships among people who are different from each other (Figure 5.13). Social relationships of people within social groups of different locations, or among different social groups of a particular location are considered as bridging networks. Linking networks are social relationships of people with the staff of external organisations (Figure 5.13).

The strength of bonding networks provide people with levels of trust, cooperation, support, solidarity, and a strong voice within a social group, whereas the strength of bridging and linking networks provides them with access to information and builds trust between the social group and other groups or organisations. As a result of the dependency relationships between the *Bistas* and the low castes in the *Bista* system, the *Bistas* provide support to protect the customary rights of resource access of the low castes.

Local elites (well-off high castes) have stronger bonding, bridging and linking social networks that give them access to information and confidence and thus better access to forest benefits. The poor low castes in both communities don't have access to this same level of information. The strength of bonding networks reflect levels of trust, support and cooperation, access to information, and confidence, and hence, the capacity for leadership in collective action regarding forest use and management. The strengths of

bridging networks reflect levels of access to information and confidence and also capacity for leadership in collective action. The strengths of linking networks of local people with the external staff also reflect the levels of access to information and confidence for leadership.

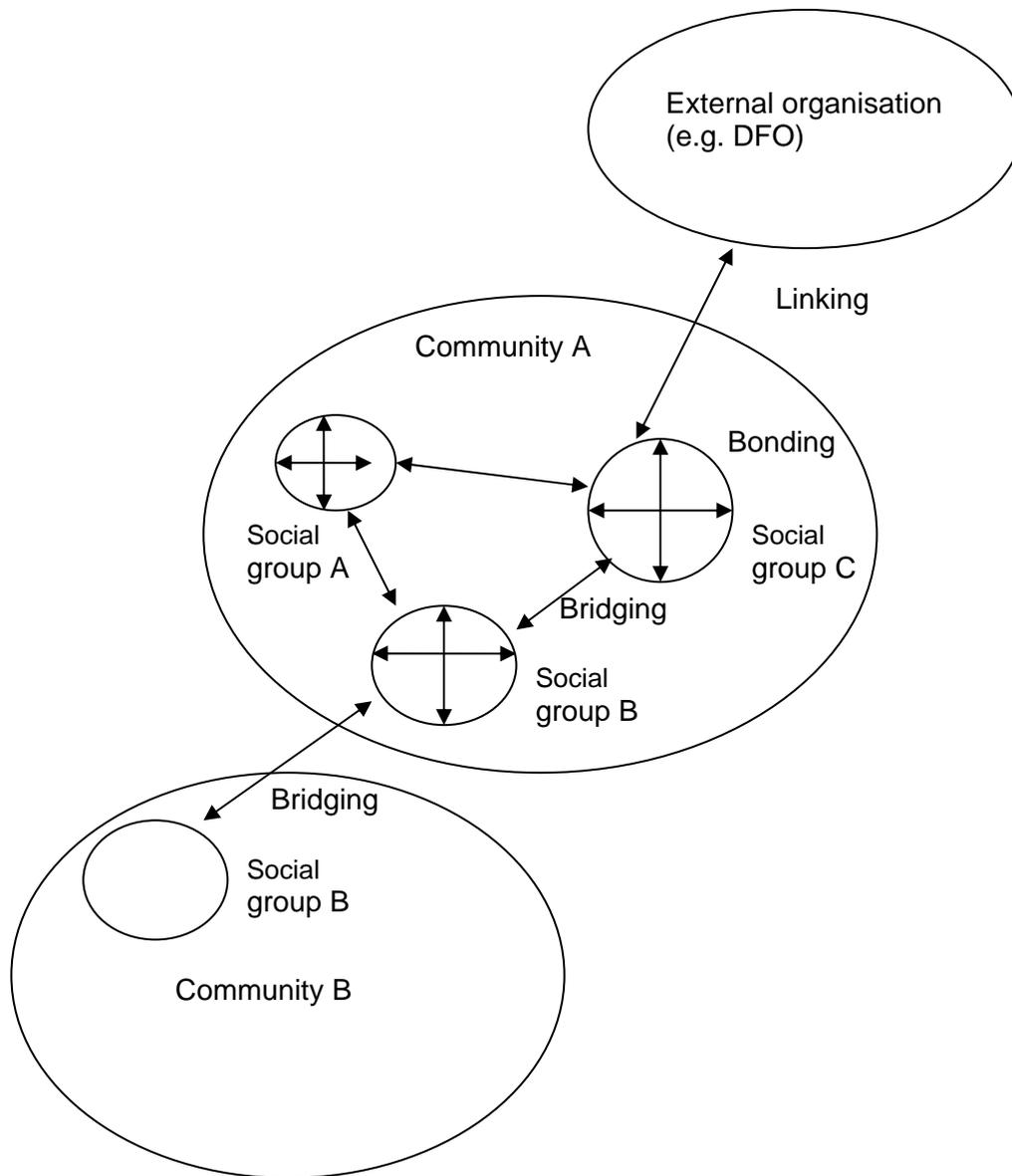


Figure 5.13: Bonding, bridging and linking networks

Brahmins (high castes) have stronger bonding social networks (networks with families, friends, and neighbours within the same caste group) as compared to the low castes and ethnic groups in both communities. As a result of this, *Brahmins* are more confident in taking leadership roles in the executive committees, and they influence who are selected or elected for those positions. Although low caste people are members of the executive

committees, those on the committees lack confidence in getting support for their ideas, and hence, have limited influence on decision making. Poor *Brahmins* have comparatively wider social networks through their group memberships than do the poor low castes. As a result of weak bonding social networks, the poor low castes have low levels of unity and cooperation, and have a 'weak voice', and hence, have limited bargaining power to obtain legal rights for accessing the forests. Low caste men (who are nonmembers of the CFUG) of the *Saparupa* community lack unity and trust among themselves, and they do not have a strong voice to argue for their customary rights to be recognised, and thus, have lost their access to forest products. Although the *Majhis* in the *Dhuseni* community have membership in the ethnic group organisation '*Majhi Utthan Samaj* [Majhi Upliftment Society]', they lack bridging relationships with the other castes. Because of this, their influence on decisions for obtaining forest benefits is limited.

The high castes have better access to information through their wider bridging social networks (networks between groups within one or many communities) and stronger linking networks (networks with the staff of external organisations) as compared to low castes and ethnic people in both the communities. Because of stronger networks, the high castes have greater capacity to obtain memberships in the CFUGs and to influence decisions on forest use and management at the local level than do low castes and ethnic people. They are acquainted with many people, and have many chances to develop relationships with political, social and economic elites. Through such relationships, they have gained confidence and are more powerful as compared to the low castes (*Kami/Damai/Sarki*) and ethnic groups (*Majhi* and *Tamang*), who have limited social networks and have expressed low self-confidence due to low access to information and limited knowledge and confidence.

The low castes expressed the view that due to weak social networks, they have limited power to bargain with the high castes to obtain legal access rights to the forests. Members of the forest user group seem not to consider the customary rights of the low castes, who thus have lost their rights to use and benefit from forest products, even though they are CFUG members. Low castes of the *Saparupa* community said:

We [low castes] do not have unity among ourselves. We do not come together and help each other when we have problems. We do not have strong voice to convince Brahmins that we should get permission to collect charcoal and firewood free of cost as in the past [prior to introduction of the regime] (Participants, CF-GDS/Kami-6).

Prior to the registration of the CFUG, the *Kamis* (low castes) used to burn dried and dead stems and branches of trees from the *Dhuseni* forest to make charcoal free of charge. But at present, though they are also members of the *Dhuseni* CFUG, they have to pay Nepali Rupees 20 for a basket of charcoal to the executive committee of the CFUG. Who decided this rule? When asked this question, the *Kamis* answered that the high castes, as they are competent, they make the rules. The high castes are considered as literate and knowledgeable, have confidence and capacity to take leadership, and hence, they have power to make decisions in both communities. Similarly, the prices for other forest products such as firewood and timber are also decided by the high castes. According to low caste *Damais*, the high caste people, who make decisions, do not know the problems and needs of the low castes. The prices fixed by them are high for low castes who are poor. The poor low castes cannot afford these high prices.

The low caste members of the *Dhuseni* CFUG feel that they are illiterate and lack knowledge, and as such they lack the confidence to talk about the decisions the high castes have made:

Though we attend the meetings where such rules are decided, we cannot say anything because we think whatever we say is not appropriate. We do not know what to say! We are unaware about the rules and plans of the CFUG (Participants, CF-FGDS/ Damai-4, CF-FGDS/Kami-6).

According to some high caste members of the *Dhuseni* CFUG, who are also the *Bistas*, they have facilitated the *Kamis* in collecting charcoal from their own land. They expressed the view that if *Kamis* do not have enough charcoal they will not mend their farm implements. However, some high caste members reported that it is because of this reason that they kept quiet even though some *Kamis* collect charcoal which they are not supposed to. However in the *Saparupa* CFUG, the importance of dependency relationship has reduced. The *Bistas* buy the things from the nearby market and the things made by the low castes are no more useful for the *Bistas*. The *Bistas* in the *Saparupa* community no longer support the access of the poor low caste people to the forest. *Damai* men said:

We mentioned the problem of getting firewood from the community forest to our Bistas. They just listened and nodded their heads but did not support us to present this issue in the meeting. We found that they were no more supportive because we did not have to stitch clothes for them as we did in the past (Interviewees, CF-HK/Damai-1, CF-HK/Damai-13).

5.3.2 Regime factors

Membership for legal rights, membership selection process, decision-making structures and processes, enforcement of the rules, and roles of external organisations (i.e. the DFO) in regime implementation have been identified as regime factors that influence access of the poor to forest benefits in the study areas (Figure 5.14). The impacts of the decision-making structures and processes on forest access are linked with the power and authority devolved to a FUG and its capacity to decide rules and enforce these rules, which are both influenced by the sociocultural factors. These factors and the mechanisms by which they influence access are reported in the following sections.

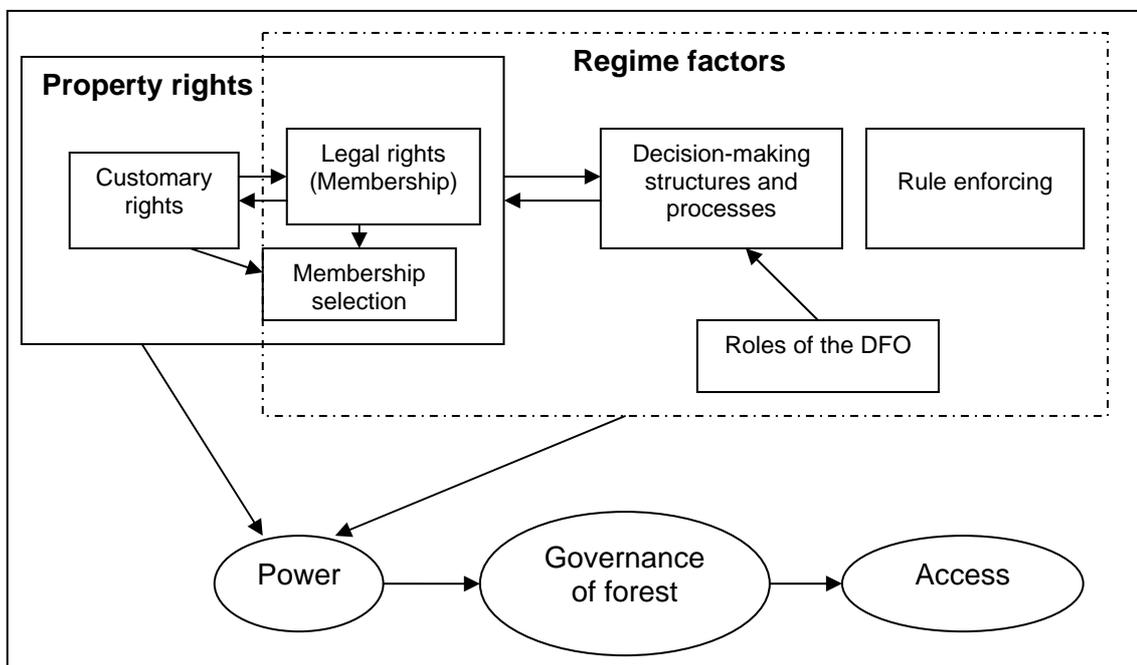


Figure 5.14: Regime factors and mechanisms that influence access

The CF regime has introduced legal rights that replace customary rights. Customary rights of community members, particularly those of the poor, have traditionally been very important for their livelihoods. The local elites (the well-off and the high castes) were able to convert their customary rights to legal rights under the community forestry regime, whereas the disadvantaged people (the poor and the low castes) often were unable to do so. As a result of this, the disadvantaged people had less access to the forest products as compared to the local elites.

Both *Dhuseni* and *Saparupa* forests were government forests prior to the introduction of community forestry. Effectively, parts of these forests were under common property and

parts under open access. People of both communities said that they had customary rights over the forest. These rights, passed on to them from their forefathers, were to use the forestland for grazing and forest products (such as firewood, fodder) free of cost, and traditionally were not restricted in terms of the amount of forest products they could use.

However, there was a difference in practice in the amount of forest products used by poor and well-off people through their customary rights in the past. The well-off people took a lot of timber free of cost for construction of their big houses while the poor could utilise only small amounts for such things as maintenance of their small houses. However, for the poor low castes, the customary rights still contributed significantly to their livelihood because the forest products were free:

We had rights to use firewood and charcoal from the forest free of cost, but nowadays, we have to pay for these (Interviewees, CF-HK/Damai-1, CF-HK/Kami-11, CF-HS/Damai-3, CF-HS/Kami-1).

Membership for legal rights

Under the CF regime, members of the communities obtain legal rights to use the forest products, regardless of their customary rights. All users of the forest are supposed to obtain equal property rights to the forest under the CF regime policy, through which customary rights of forest users are replaced by legal rights. However, since forest users had unequal customary rights prior to the regime, introduction of the equal legal rights has created conflict among the forest users. The forest users who had greater access to forest benefits through their customary rights are not happy with the regime's equal legal rights because they have to equally share the resource with the forest users who had more limited access.

The CFUGs have withdrawal, management and exclusion rights but no ownership rights (Annex 5.2). The CFUGs have operational rights to enter the forest, withdraw forest products and decide operational rules. They are also provided with the decision-making authority concerning the planting of saplings, thinning of trees, and devising limits on withdrawal rights. In addition, they have authority to decide rules to exclude others from using the forest resource. However, the CFUG members do not have complete control and rights over the forest resources because they cannot legally sell or lease withdrawal, management and exclusion rights.

The CF regime specifies the nature of legal rights and who should obtain them. However, the implementation of the regime in reality guides who obtains the legal rights. In both communities, the regime implementation has resulted in some households who were customary users of the respective forests failing to gain membership to the CFUGs. This suggests that there are problems with the membership selection processes in both communities.

Membership selection process

The process of selecting forest users for membership in both communities is similar. Membership rules and the ways these have been applied in reality have influence on who actually obtain membership of the FUG and thus the legal rights to the forest resources. In the case of the *Dhuseni* community, the criteria for household membership are residence within the same ward or VDC, and residence near the *Dhuseni* forest. In the case of the *Saparupa* community, the criterion for household membership is residence within wards one, two, three, and four of the Methinkot VDC.

According to members of the *Dhuseni* CFUG, a ranger (from DFO Sindhupalchowk) came and consulted with a few well-off high caste men to form a group in 1996. At that time, 220 households located in the *Dhuseni* village were given membership and a *Dhuseni* CFUG was formed. Fifty customary users who lived outside the village were not recognised as group members. Although the customary users had been using the *Dhuseni* forest for firewood since their forefathers' time, when the CFUG was formed, they were completely stopped from entering the forest. They were not included in the group, because they resided outside the *Dhuseni* village. The nonmembers, of course, were unhappy about the membership rule because it negatively affected their livelihoods. The poor nonmembers lost their income from selling firewood. Below is part of the focus group discussion with the *Majhi* women (who are nonmembers), which illustrates this point:

Researcher: *Why are you not happy with the community forestry?*

Participant: *The Dhuseni forest had been the only source of firewood for us since our great grandfathers' time. After this community forestry, people told us that we should not collect firewood from the forest, because we have not taken membership of the Dhuseni CFUG.*

Participant: *We feel that we should be given membership automatically based on our customary user rights.*

Researcher: *How does it affect your access to forest products?*

Participant: *We now face difficulties in collecting firewood, we go here and there, and sometimes we have to steal from the forest. We have to do this otherwise we won't have enough firewood to cook food for our families.*

Participant: *In the past, we used to sell the firewood collected from the Dhuseni forest, and earn income to feed our children, which we can't do today. We have no firewood, and we have no food to eat [Daura Payako Chhaina, Bhat Khan Payako Chhaina].*

Participant: *We have difficulties in finding alternatives to sustain our livelihood [Jivan Dhanna Muskil Bhayo]. Though we [women] get some work on the farm, we get very low wage, Nepali Rupees 40 per day [less than one New Zealand Dollar] (Participants, CF-FGDS/Nonmember-7⁵⁵).*

The customary users, who had failed to obtain initial membership in 1996, have not yet obtained membership. According to them, their residences are located in the distant village (two hours walk to reach to the forest) from the *Dhuseni*; due to this they lack access to information about the assembly meetings of the CFUG. They feel that if they had knowledge about the dates of the assembly meetings, they could attend and present their request for membership. However, the CFUG members reported that the distant customary users steal from the forest and they do not care about the protection of the forest. According to the CFUG executives, they are aware that the protection of the forest will not be possible until the nonmembers, who were customary users, are given membership. But, they are not ready to give them membership because they expressed the view that the distant users will not contribute much for forest management.

In the *Saparupa* community (in 1999), a ranger (from DFO Kavre) initiated the process. A total of 205 households were listed as members of the CFUG in consultation with few well-off high caste people, and the *Saparupa* CFUG was registered with the Kavre DFO. At that time, 72 customary users of the *Saparupa* forest were excluded from the CFUG. Later, in 2005, they obtained membership. According to a local resource person in the *Saparupa*, the majority of these customary users were poor or they were low castes. The staff members of the donor project (NACRMLP) provided support to identify those excluded households in each settlement of the community. They also provided support for the process required to list them as members in the document of the CFUG and obtain

⁵⁵ Two men and eight women participated in this focus group discussion.

approval on it from the Kavre DFO. Due to this, the whole community had obtained membership of the CFUG by 2005.

The influence of property rights on access

The poor low castes, since they have limited power and confidence to bargain with the well-off high castes, often were unable to convert their customary rights into legal rights. *Kamis* (low castes) of the *Dhuseni* community have traditionally used charcoal from *Dhuseni* forest for their blacksmith work. Since the initiation of the CFUG, they have had difficulty in maintaining their customary rights to use the charcoal from the forest. Other members of the forest user group seem not to consider their customary rights, and thus, they have lost their rights to use and benefit from forest products, even though they are CFUG members.

The elite members (the well-off, the high castes) have undermined the legal rights of the disadvantaged (the poor, the low castes) members because they have power due to sociocultural factors and their authority in the governance of the forests. In both communities, literate, well-off and high caste people have more power as they have more opportunities to acquire knowledge of the legal rights of the CFUGs as compared to illiterate, poor and low caste people. The powerful people often have frequent contact with the DFO staff.

However, members of the *Dhuseni* community (where little support from the external agencies is available to the community) have less awareness of their legal rights than do the members of the *Saparupa* community (where support from the DFO and the donor project are available). The reason for this is due to the existence of more information-sharing mechanisms through networks (for detail, see section 5.2.3) in the *Saparupa* community than in the *Dhuseni* community.

Legal rights of the disadvantaged members to participate in and influence the governance of the forest are also challenged by the elite members because the elite members are powerful due to sociocultural norms and strong networks.

The influence of decision-making structures

The decision-making structure imposed by the regime at the FUG level is mainly the executive committee. Participation on the executive committees of both CFUGs translates into power and authority, which can be turned into better access to forest benefits. People in decision-making positions on the executive committees of both CFUGs have a significant influence on the rules regarding forest access.

The executive committees of both CFUGs consist of fifteen individuals. The committee has two types of positions: (i) leadership and (ii) executive membership. Five leadership positions include chairperson, vice-chairperson, treasurer, secretary, and assistant secretary. Ten other positions are for executive membership. Most operational rules are decided in the executive committee meetings and the important issue is who is represented on the executive committee and how they influence decisions. People in leadership positions have a greater level of authority to influence decisions as compared to people with executive membership.

Both CFUGs have rules for representation of low caste and women on the executive committee, but the CFUGs tend to ignore the representation of poor members on the committee. All but one leadership position on the committees of both CFUGs is occupied by high caste *Brahmin* men. The exception is the chairperson of the *Saparupa* CFUG who is a *Newar* (ethnic) man. The authority gained by being on the committees gives committee members greater access to the forest benefits because of their influence on decisions.

The resource benefits obtained by women, who are committee members, differ between the CFUGs. Those women of the *Saparupa* CFUG have obtained more resource benefits than those of the *Dhuseni* CFUG for three reasons. First, women of the *Saparupa* CFUG have more awareness regarding forest benefits than do the women of the *Dhuseni* CFUG because of women's greater access to information-sharing forums in the *Saparupa* than in the *Dhuseni*. Second, they have more confidence (as they have better access to education) to tap the opportunities as compared to women of the *Dhuseni* CFUG. Finally, they have received greater motivation from the key executives of the *Saparupa* CFUG to participate in the meetings and influence the decisions from the key executive than do the women of the *Dhuseni* CFUG.

The women, who are executive committee members of the *Saparupa* CFUG, were poor two years ago, but then they successfully got loans for buying goats from the 'Livestock Insurance Committee'. A woman member added:

With the loan of Nepali Rupees 2000, I bought a female goat, and had income of double the loan within one year. I have already paid back my due. Now, I can buy stationery and dresses for my children with this money. When I joined the committee, I could not speak a word, but now I have confidence to present my ideas in front of men in the meetings (Interviewee, CF-HK/Newar-12).

Women members of the executive committee of the *Dhuseni* CFUG do not participate in the committee meetings because they are either unaware of the meeting dates or the dates and times are unsuitable for them: *We could not attend the meetings twice, because the meeting dates and time were inconvenient for us (Interviewees, CF-HS/Brahmin-8, CF-FGDS/Brahmin-1).*

However, women who are not members of the committee have not obtained the same benefits as have the women members of the committee in both CFUGs. Having a woman on the executive committee has not guaranteed that other women members also benefit. *Tamang* women explained:

Rita [name changed for anonymity] is a member of Ban Samiti [a woman member of the executive committee of CFUG], but she does not communicate us anything about the rules and decisions made in the meetings (Participants, CF-FGDK/Tamang-5⁵⁶).

Low caste people, though members of the executive committee, are also not able to have much influence on decisions. A low caste member of the *Dhuseni* CFUG's *Samiti* explained:

I am just a member in the Samiti [executive committee]; I just listen to people in higher positions. How can I influence them, I am alone and they [Brahmins] are many in the Samiti [Executive Committee]? (Interviewee, CF-HS/Damai-17).

⁵⁶ Three men and five women participated in this discussion.

The executive committee led by well-off high caste people organise meetings for their concerns. Moreover, the concerns of the poor low castes are rarely understood and reflected by the committee. He further said:

Eleven positions (out of fifteen) of the executive committee are occupied by Brahmins. They are educated and clever. They just inform me to attend the meeting. They have never asked me to bring agenda for the meeting from my settlement. I just listen to them in the meeting. In some meetings I could understand very little of what they have discussed (Interviewee, CF-HS/Damai-17).

The influence of decision-making processes

Decision-making processes of the CFUGs are the processes for deciding rules jointly by the CFUG members for forest use and management. The CF regime provides some authority to the CFUGs to make decisions regarding forest access. Both the CFUGs have two formal decision-making forums, where they can develop and modify operational rules: (i) the executive committee meetings, and (ii) the general assembly meetings. The rules for use of forest products, protection of the forest, and provision of sanctions and fines for breaching the rules are examples of the operational rules. The operational rules are decided by the executives and are informed at general assembly meetings where CFUG members can attend. However, processes of general assembly meetings constrain participation of disadvantaged members (the poor, the low castes, and women) of the CFUGs, limiting their influence in meetings. Processes of setting location for the meeting venues and agendas of the meetings do not often involve disadvantaged members of the CFUGs.

The researcher had the opportunity to observe the processes involved in the general assembly meeting of the *Dhuseni* CFUG on 15th February 2006. The researcher observed that the majority of participants were high caste men and some *Majhis*; only a few women and low castes were present. The low castes stayed in one corner of the venue while women stayed at the back because they arrived half an hour late, and the front rows were occupied by well-off *Brahmins*.

Three main mechanisms were observed, which had neglected participation of the disadvantaged members in the meeting. First, the agenda was fixed by the executives in decision-making positions. According to poor low caste members, the executives neither understood their problems with forest access nor were concerned about their needs. As a result, the agenda did not directly address their problems and needs for forest access. For

example, 'membership fee payment' and 'allocation of CFUG funds to irrigation' were the main agenda items for the meeting. These items were of little interest for the disadvantaged members; access to firewood, charcoal, fodder and grasses was of main interest to them. Second, the disadvantaged members were not considered by other members to be present in the meeting. They were neither asked to tell their problems nor to respond to the decisions of the rules. Due to this, almost all women and low caste participants had left the venue in the middle of the meeting. Third, the key executives, particularly the chairperson, were the ones who had spoken a lot in the meeting. Decisions regarding rules were dominated by the chairperson and treasurer of the executive committee of the CFUG. Major decisions made were: (i) members have to pay their membership fees on time, (ii) allocation of CFUG funds to the construction of village road and irrigation infrastructures, and (iii) provision of membership to nonmembers. The chairperson and treasurer proposed these and people supported by clapping; no discussion took place. Most decisions were made when almost all low castes and women were gone.

The *Saparupa* CFUG's general assembly meeting was slightly different than that of the *Dhuseni* CFUG. There was greater participation of women in the meeting in the *Saparupa* CFUG than in the *Dhuseni* CFUG. However, there seemed to be two differing perspectives on the extent of participation of women in the *Saparupa* CFUG. The *Saparupa* CFUG had an assembly meeting in March 2006, in which there was attendance of many women (mostly *Brahmin* with only a few low caste women). But women did not influence the decisions because the process did not provide them opportunities to present their ideas:

Though some issues of interest to us were also raised sometimes, people just ignored these, and no discussion on such issues took place (Interviewees, CF-HK/Brahmin-8, CF-HK/Damai-9).

When *Kamis* were asked whether they had presented their problems in the meeting of the *Saparupa* CFUG, they explained the reasons why they could not present them and also complained about the lack of participatory process. They felt they were not considered as participants in the meeting or their presence were totally ignored. According to *Kamis*, they were not given any opportunity to present their problems regarding charcoal in the meeting. They just had to listen to the *Brahmins*. *Thulathalu* (elites) *Brahmins* made the decisions in the meeting. They set dates for firewood collection from the forest. They did not ask the low castes for their feedback. Poor members explained that most people

ignored their problems and were attentive only to what well-off members said. The local elites in general are eloquent and act as though they have not heard their issues:

Most people did not listen to our problems. Rather, they were attentive to what rich people said. Rich people have power due to wealth and education. Anything they say can thus impress people. It seems, when we sit and speak they cannot hear, and when we stand and speak, the wind blows away whatever we say [Basare Bole Kasaile Nasunne, Uthera Bole Hawale Laizane] (Interviewees, CF-FGDK/Tamang-5, CF-HK/Brahmin-10).

A local resource person, however, has a different view. According to him, there was active participation of women and low castes in the CFUG meeting⁵⁷. The facilitator and key executives (the secretary and the assistant secretary in particular) supported the participation of women and low castes. For this reason, the CFUG made decisions in favour of the poor members and women. These decisions were: (i) allocation of Nepali Rupees one lakh (NZ\$ 2000) for providing soft loans (with low interest rate of 16 percent) to the poor members for generating income through goat raising, (ii) leasing of a certain part of the forest to the poor members for improved forage and fodder production, and (iii) implementation of women literacy classes in the settlements where many poor and low caste people are located.

The influence of enforcement of the rules

There exists inequity in the enforcement of the rules, and this has negatively impacted on the access of the poor. According to poor low caste members of the *Dhuseni* CFUG, the formal rules are enforced for the poor but not for the well-off elites:

The Samiti [executive committee] people recorded higher price for the timber we obtained and we were enforced to pay that price. The high castes even took timber secretly but were not enforced to pay (Interviewee, CF-HS/Brahmin-18).

According to low caste women, the enforcement of the rules restricting collection of firewood from the forest for a long period constrains their access to firewood:

We are not allowed to collect firewood from the forest when the forest is closed. The Samiti people told us that we can collect firewood at a price of Nepali Rupees 5 per backload during silvicultural activities [Kantchant Ra Jhadisudhar] in December and January only. Due to this, we have problem in fulfilling our need of firewood (Participants, CF-FGDK/Damai-3).

⁵⁷ The research did not attend this meeting.

The enforcement of the rules restricting preparation and collection of charcoal from the forest has decreased the access of the poor *Kamis* in *Saparupa* to charcoal.

Roles of the DFO in the regime implementation

The DFO is given specific roles in the implementation of the CF regime in the district. The DFO influences forest governance in relation to access through its approach in plan formulation and determination of rules for the FUG, attitudes and skills of the staff, and commitments of the DFO chief.

The DFO's overall planning approach has been 'planner centred' in both the communities. Local people have rarely been involved in the plan formulation and decisions of rules. The DFOs prepare their annual plans through range-post planning workshops, to which few CFUG representatives are invited. According to CFUG members, the plans are reported for the government rather than for local people. Problems of local people, particularly those who are poor (or the disadvantaged people such as low castes and women) have rarely been integrated in implementation plans. The plans of the DFOs are focussed on the protection of the forests, but neglect the role of forests in sustaining rural livelihoods. Moreover, they do not adequately take account of local governance issues so that the poor, low caste and women continue to be marginalised from decision-making processes.

The planning process of a DFO is non-participatory. According to the staff involved in the implementation of the community forestry, the more controlling attitudes of the forestry professionals often constrain them from listening to local people, including the poor, and identifying their needs. The forestry professionals, who lack facilitation skills, seem to be unable to encourage the poor to express their problems and needs. Moreover, they seem to lack the commitment to work as 'facilitators' rather than 'controllers'. This has been expressed by the project staff who supported implementation of the CF regime:

It is like! we [facilitator or implementer] are giving the wrong medicines to a sick person. We are giving medicines for headache to a person who is suffering from stomachache. The reason is we have not changed our attitude. We think and force rural people to act according to our perspectives; we have not tried to listen to their perspectives. We need to change our 'attitude of controlling' to the 'attitude of facilitating'. We really need to have commitment for change. Rural people (low caste people, the poor, and women) should be given space to be empowered to realise their own rights (Interviewees, KIK-3, KIK-4).

Although, the CF regime policy provides the CFUGs with the authority to make decisions regarding forest access, in reality, the authority of both CFUGs in this case study differs in some aspects from that intended. They do not have full authority to govern the forest. The DFO and others (the local government and the Maoist) seem to manoeuvre to gain and maintain a level of control over the CFUGs:

A CFUG is like a 19 year old orphan girl, who in our society neither has voice nor rights to decide her own life. The ruling government (old government), Maoist government (new government), local government, and the local rich elites struggle with each other, and sometimes make alliances in order to control the CFUG (Interviewees, KIK-3, KIK-21).

In reality, the collective rules are developed by the DFO staff without consulting the CFUG members. Examples of collective rules are mainly the position and authority, and information and procedural rules that the CFUG and its executive committee have to follow to use and manage the forest resource (Annex 5.3). Although the CFUGs are given authority to modify some of these rules but need approval from the DFO to implement them.

The commitments of the DFO chief and the organisational context were reported to have an important influence on implementing CF policy as intended:

If a DFO chief is committed and strict in planning and implementing the plans effectively, the rangers (field-level technicians) will be forced to implement such plans at the CFUG level. In the organisational hierarchy of the DFO, the rangers have to follow the orders of the organisational chief. A ranger will follow the orders of the DFO chief to avoid taking the risk of losing the job (Interviewees, KIS-6, KIK-14).

5.3.3 Level of external support

The influence of external support on access of the poor is evident in the *Saparupa* community. Such influence is not evident in the *Dhuseni* community since there is a limited external support. The support from the external organisations (government, NGOs and projects) to the *Saparupa* community has mainly been for capacity building, which has influence on forest access of the poor.

There was donor support for the community forestry implementation and non-formal literacy programmes for women in the *Saparupa* community, but not in the *Dhuseni*

community. The influence of a donor project (NACRMLP) in transforming the society is evident in the *Saparupa* CFUG. This support has provided opportunities to build their capacity for technical training and women's literacy programmes, as a result attendance of women and poor members in assembly meetings has increased. Literacy skills have provided women with confidence to attend the meetings. Such skills also increase women's opportunities to be selected for the executive committee of the CFUG. This is evident in the executive committee of the *Saparupa* CFUG, in which the proportion of women increased from 20 percent in the committee during 1999 - 2005 to 47 percent in the committee initiated in 2006.

Training in participatory ranking and need identification has built the capacity of four selected members of the *Saparupa* CFUG in identifying and implementing activities that are advantageous for livelihoods of the poor. These members are called 'resource persons' because they have certain skills. They were hired by the executive committee of the *Saparupa* CFUG for ten days for identification of poor members and their needs in each settlement, which has resulted in the initiation of pro-poor activities, such as providing loans (from the CFUG fund) to the poor members for goat farming. The poor members, who have bought goats, are able to derive more benefits from the degree of access which they have because they can utilise fodder from the forest.

An executive of the *Saparupa* CFUG explained the significant contribution of the group's linkage with the project on their motivation for pro-poor activities:

The NACRMLP project has motivated and supported us in well-being ranking to identify poor households. We had not thought of this prior to NACRMLP's support. The project has helped us to develop our capacity, and also motivated us to implement women's empowerment activities through our own CFUG fund. We have four local resource persons now who are capable of facilitating participatory group discussions to identify the needs of the poor, low caste people and women (Participant, CF-FGDK/EC-7).

The involvement of local resource persons in the CFUG executive and general assembly meetings has had a positive impact on the involvement of the poor in the groups. As a result of such involvement, differential needs of community members became part of the agenda for discussion in the general assembly meetings.

According to a local resource person, the recently (in 2005) revised operational plan of the *Saparupa* CFUG has integrated some pro-poor rules as a result of external financial and capacity building support. Some examples of the pro-poor rules of the *Saparupa* CFUG

are: subsidised timber prices for poor members, priority in social development work (e.g. awareness-generation activities for poor men and women, and women empowerment activities for poor women), special priority in income generating activities for the poor members (e.g. goat raising, commercial vegetable farming, collection and sale of non-timber forest products), allocation of an emergency fund to support the poor, and *Tole* level meetings to identify needs of different members, including the poor and women (Annex 5.4).

The external support has also motivated the executives of the *Saparupa* CFUG to commit for the pro-poor rules:

The project staff frequently visited us and supported us to evaluate our activities. We could identify the needs of the poor members of our group. We were encouraged to think that we should initiate activities to fulfil the needs of the poor (Participants, CF-FGDK/EC-8).

Despite the project's intervention being good in the *Saparupa* community, the poor, however, reported that they still face discrimination with regard to access to the forests and its benefits. The local resource persons still tend to make contact with the elite '*Tauke*' (people of high caste having higher authority and position in the society) rather than the poor, who thus are often unaware of the projects.

5.4 Summary

The focus of this chapter was the identification and explanation of key institutional factors that influence the access of the poor to the forests governed under the community forestry regime. The key institutional factors identified from the two different communities in this case are grouped as 'sociocultural factors' and 'regime factors', with the sociocultural factors dominating in the sense that they influence the regime factors. Another factor that also has influence on access is level of support from external organisations.

The sociocultural norms, including untouchability and patriarchy, and bonding, bridging and linking social networks that prevail in both the communities, were identified as key informal institutional factors that have a significant influence on the access of the poor to community forests. The reduced importance of the *Bista* system in the *Saparupa* community due to roads and markets has negatively influenced the access of the low castes to the forest. The same is not evident in the *Dhuseni* community because the

relevancy of the *Bista* system has not been affected due to limited access to roads and markets.

In both communities, the sociocultural norms are linked with the unequal power relationships among people belonging to different economic classes, castes, ethnicity and gender. Economic class and power are directly associated with caste structures. Low caste people are excluded from group decision-making structures and processes as a result of sociocultural norms based on hierarchy of caste (untouchability). Hindu religious norms that reflect a dominance of patriarchy constrains women's opportunities to obtain forest benefits. Poor low caste women are more marginalised and powerless as compared to well-off high caste women due to norms of untouchability and patriarchy.

On one hand, the poor, the low castes, and the ethnic people have weak bonding, bridging and linking social networks, and on the other hand, they have a lower capacity to utilise such networks in obtaining information, gaining confidence, and attaining social position. As a result, they have limited opportunities to be selected for key executive positions and have a limited capacity to influence group decision processes. The poor have lost their customary access to the forests in the community as they lack power to translate them to legal rights.

Membership for legal rights, membership selection process, decision-making structures and processes imposed by the regime at the FUG level, enforcement of the rules, and roles of the DFO are key regime factors that influence access of the poor to forest benefits. Under the CF regime policy, all users of the forest are supposed to obtain equal property rights to the forest and consequently have equal access to forest resources. However, in both communities, the implementation of the CF regime has resulted in some households who were customary users of the respective forests failing to gain membership to the CFUGs. Such customary users have been included after the group formation in the *Saparupa* CFUG, but yet to be included in the *Dhuseni* CFUG. This difference is due to the external donor support for the processes in the *Saparupa* CFUG. The elite members (the well-off, the high castes) have undermined the legal rights of the disadvantaged (the poor, the low castes) members because they have power due to sociocultural factors and their authority in the governance of the forests.

Participation on the executive committees of both CFUGs translates into power and authority, which can be turned into better access to forest benefits. Both CFUGs have rules for representing the low caste and women in the executive committee, but they

seem to ignore the representation of poor members on the committee. The forest access of women, who are on the executive committee, differs between the CFUGs. These women of the *Saparupa* CFUG have obtained more forest benefits than those of the *Dhuseni* CFUG due to increased awareness, confidence (due to literacy), and supportive leadership. Having a woman on the executive committee has not guaranteed that other women members also benefit. Low caste people, though members of the executive committee, are not able to have much influence on decisions. The executive committee led by well-off high caste people organise meetings for their concerns.

The CF regime provides some authority to the CFUGs to make decisions regarding forest access. However, the DFO's 'planner centred' approaches in both the communities ignore the local governance issues so that the poor, low caste and women continue to be marginalised from decision-making processes. In reality, the collective rules are developed by the DFO staff without consulting the CFUG members. The operational rules are decided by the executives and are informed at general assembly meetings where CFUG members can attend. Processes of general assembly meetings constrain participation of disadvantaged members (the poor, the low castes, and women) of the CFUGs and they have limited influence in meetings. However, external support for capacity building motivates a CFUG to set pro-poor operational rules. This is evident in the *Saparupa* CFUG. But this is not the case in the *Dhuseni* CFUG because no such external support is available to this CFUG.

The next chapter is focused on the access of the poor to the forests governed under the leasehold regime in Nepal.

CHAPTER SIX

ACCESS OF THE POOR TO THE FORESTS: THE LEASEHOLD FORESTRY CASE

6.1 Introduction

In this chapter, the findings on the institutional factors that influence the access of the poor to the forest governed under the leasehold forestry regime in Nepal are reported. Two separate communities (i.e. the *Odarepakha* and the *Tutikhola*) in Kavre and Sindhupalchowk districts, which have access to forests governed under the leasehold regime, were investigated.

This chapter starts with a description of the leasehold forestry regime in Nepal. Then, the physical descriptions of the two leasehold forests, and the socioeconomic descriptions of the two communities of the case study are reported. Similarities and distinctions between the two communities are also summarised. Key local organisations and their networks that have influence on the access of the poor to the leasehold forests are also described. Regime and sociocultural factors are two groups of key institutional factors that have influence on access. As described in Chapter 5, regime factors include property rights and governance factors, and sociocultural factors comprise factors related to sociocultural norms and networks.

6.2 Leasehold forestry case description

The leasehold forestry (LF) regime is specifically designed to target the poor. Under this regime, the rights to manage a state-owned degraded forest are devolved to a group of users (a 'leasehold forest user group'). The LF regime is undertaken in two phases: the first from 1993 to 2003, and the second from 2004 to 2011. About 1,775 leasehold forest user groups (LFUGs) had been formed by 2003 and these comprised some 12,433 member households in Nepal (DoF, 2004).

Several government agencies, including the Department of Forest (DoF), the Department of Livestock Services (DLS), the Nepal Agricultural Research Council (NARC), and the Agricultural Development Bank Nepal (ADBN), were responsible for the implementation of

the Hills Leasehold Forestry and Forage Development Project (HLFFDP) in the first phase. The DoF was the lead agency, which provided policy guidance and implementation support, and monitored the HLFFDP. The DLS provided technical support on fodder and animal health services. The ADBN (prior to 2004) was responsible for the identification of poor households and the provision of credit to them, and the NARC was involved in research into forages and grasses production. Field level forest management activities were implemented through the District Forest Offices (DFOs). A non-governmental organisation (i.e. Society for Partners in Development) was also involved to accelerate the process of social mobilisation by hiring social mobilisers. The 'International Fund for Agricultural Development (IFAD)' provided loans to the Nepalese government for implementing this programme.

The second phase, the 'Leasehold Forestry and Livestock Programme (LFLP)', has been under implementation since 2004 in 22 hill districts (DoF, 2005). The DoF and the DLS are involved in the second phase, and they have responsibilities similar to those in the first phase. The ADBN and the NARC are not involved in the second phase. The IFAD provided loans for the programme for this phase also. Social mobilisers hired through NGOs are responsible for group operation and development.

The leasehold forestry regime has been implemented since 1993 in Kavre and Sindhupalchowk districts. Only a small portion of the staff members (five out of 20) of the DFOs are responsible for the implementation of leasehold forestry. The DFOs of Kavre and Sindhupalchowk districts had formed 234 and 216 LFUGs respectively by the end of 2005 (DFO/Kavre, 2006b; DFO/Sindhupalchowk, 2006a). The DFOs identify leasehold forests, target households and form LFUGs. They prepare, revise, and approve operational plans every five years and provide these documents to the LFUGs. They provide little support to the LFUGs once these have been registered as formal groups with the DFOs. Technicians from the DLSO provide technical support on livestock production to the members of the LFUGs in the district. Two different communities were studied, one that is homogeneous in ethnic group, and another that is heterogeneous in caste. Each community for this study is associated with a LFUG and a leasehold forest.

6.2.1 Physical descriptions of the leasehold forests

In this section, the physical characteristics of *Odarepakha* and *Tutikhola* forests are described. Both forests exhibit similar characteristics. Both are degraded forests that consist of wild grasses and shrubs; the forest products available in both forests are grasses and some fodder and firewood; and about one hectare of forest is available for each member household in both forests.

The *Odarepakha* forest is 10 hectares of degraded forest situated on the border between wards three and four of Methinkot VDC, Kavre district, and consists of mostly wild grasses and shrubs, with a few pines and other planted timber trees (Figure 6.1). The altitude of the forest ranges from 1200 to 1400 metres above sea level. A significant area of the forest borders the low caste *Sarki* settlement of ward four. The land is hilly⁵⁸ and consists of sandy soils. The area is separated into two blocks, *Odarepakha Ka*, and *Odarepakha Kha* for forest use and management. A small number of fodder and fruit saplings were planted by the leasehold members in 2000, but these have not survived because of the sandy soils. Less than 10 percent of the area is covered by trees.



Figure 6.1: The Odarepakha forest

⁵⁸ About 15 to 30 degree slopes (Operational plans of *Odarepakha* LFUG, 2004)

The *Tutikhola* leasehold forest is a degraded forest situated along the top of the hill of ward two, Bhimtar VDC, Sindhupalchowk district. The forest is eight hectares in area, and consists of mostly wild grasses and shrubs, with a few timber trees. The altitude of the forest ranges from 800 to 900 metres above sea level. Like the *Odarepakha*, this forest is also on rolling slopes, but with red loamy soils. Like the *Odarepakha*, the *Tutikhola* forest has less than 10 percent tree coverage.

6.2.2 Socioeconomic characteristics of the communities

In this section, the *Odarepakha* and *Tutikhola* communities, particularly their location and sociocultural and economic characteristics are described. As described earlier in the community forestry case, the term ‘community’ for this study is defined as the local people who influence, and are influenced by, the governance of a particular forest.

The Odarepakha community

The *Odarepakha* community consists of 10 member households of the *Odarepakha* LFUG and 30 nonmember households representing a mix of different castes and economic classes (Table 6.1). Member households are those households who were customary users and are now legal members of the *Odarepakha* LFUG. Nonmembers are those households who were customary users of the forest but who are not legal members of the group.

Table 6.1: Caste and Wealth Composition of Member and Nonmember Households in the Odarepakha Community

Castes/ ethnic groups	Number of member households (percent)		Number of nonmember households (percent)	
	<u>Well-off</u>	<u>Poor</u>	<u>Well-off</u>	<u>Poor</u>
High caste: Brahmin	6 (15)	4 (10)	8 (20)	0
Low caste: Sarki	0	0	0	22 (55)

Total number of households: 40 (100)

As the *Odarepakha* forest is located in wards three and four of the Methinkot VDC, the majority of the users of this forest reside in these wards. A significant area of the *Odarepakha* forest borders the low caste *Sarki* settlement of ward four. All the group

members are from ward three. The nonmembers are mostly from ward four with a few from ward three. The *Odarepakha* community consists of two settlements; one located in ward three and another in ward four (Figure 6.2). The settlements are demarcated by different castes. This community consists of more low caste *Sarki* households than high caste *Brahmin* households. There are some social differences between the member and nonmember households. All the members belong to the high caste *Brahmins*. The majority of nonmembers (73 percent) are of low caste *Sarki*, with the remaining being *Brahmins*. The *Odarepakha* community is part of the bigger *Saparupa* community (see Chapter 5), and both are located in the Methinkot VDC. There are a smaller number of member and nonmember users of the *Odarepakha* forest, which is smaller than the *Saparupa* forest.

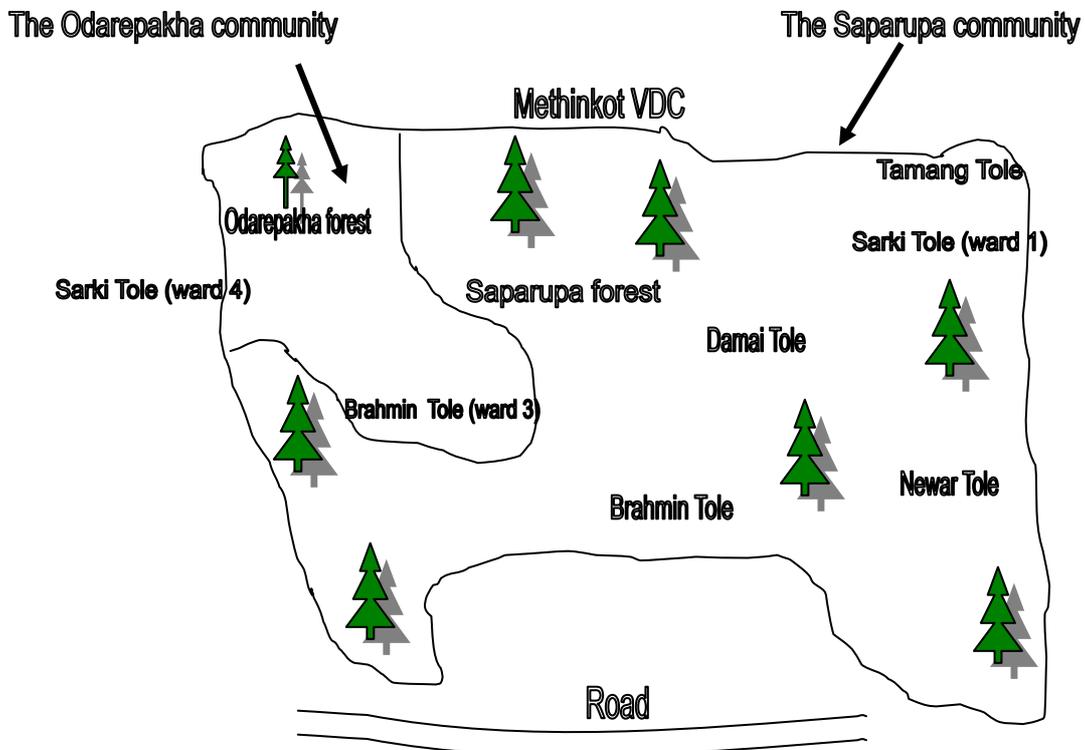


Figure 6.2: The Odarepakha community as a part of the Saparupa community

Sixty-five percent of the households in *Odarepakha* are classified as poor and have food sufficiency for less than eight months annually from their own farm production (Table 6.1). They often own less than 0.25 hectares of land and have only a few livestock. Thirty-five percent of total households are well-off and have food security for eight months to a year from their own farm production. All *Sarkis* are poor while 78 percent of the *Brahmins* are well-off. The major crops grown by people in the community are paddy, maize, wheat, millet, mustard, and soybean.

Six out of the ten member households are well-off and the rest are poor. Two members have migrated to Kathmandu though they have not formally left the group. Both of them have 'well-off' economic status. Key positions (chairperson and secretary) in the group are occupied by *Brahmins* of 'well-off' economic status. Figure 6.3 shows a *Brahmin* leasehold member household.



Figure 6.3: A Brahmin household (husband is a leasehold member)

Similarly to the *Saparupa* community, people of the *Odarepakha* community have easy access to the market and roads. However, accessibility to the market and roads has had a negative impact on the inter-dependent economic relationships between *Brahmins* and *Sarkis* in the *Odarepakha* community. The economic relationship associated with the *Bista* system is disappearing. *Sarkis* have lost their traditional occupations of cobbling. In the past, they used to make shoes for their *Bistas* (in this case, *Brahmins*) and get maize from them each year in return. At present, cheaper shoes imported from China and India are easily available in the market, and people like to buy these from the market rather than those locally made by the *Sarkis*. Because of this, the majority of *Sarki* men have migrated to urban areas to earn a living, while the women and children remain behind in the village. The social attributes of the *Odarepakha* community are similar to those of the *Saparupa* community. The *Bista* system still has the same traditional social characteristics, and the discriminatory sociocultural norms and customs still persist, maintaining the untouchability of the *Sarkis*. Sixty percent of *Brahmins* are literate

whereas only 27 percent of *Sarkis* are literate. Forty-four percent of the community are literate and 19 percent of these are women.

According to DFO staff members, many *Brahmins* in the community have stronger bonding and bridging social networks than do the *Sarkis*. They communicate better and help each other more than do the *Sarkis*. They also have better access to information through their bridging linkages with other castes in the same, or other, communities than do the *Sarkis*. However, many women in both caste groups have less access to information through their social networks than do men.

The Tutikhola community

The *Tutikhola* community consists of eight members of the *Tutikhola* LFUG and 55 nonmember households. There is a single ethnic group in this community, the '*Danuwar*', and within this community there is a mix of economic classes. Member households are those households who are customary users and legal members of the *Tutikhola* LFUG. Nonmembers are customary users of the forest but not legal members of the group.

The *Tutikhola* forest is located in ward two of Bhimtar VDC and the majority of the users of this forest reside in this ward. The *Tutikhola* community consists of three settlements, Ratmate, Pangaltar, and Simaltar (Figure 6.4). These settlements are dense with houses built near each other.

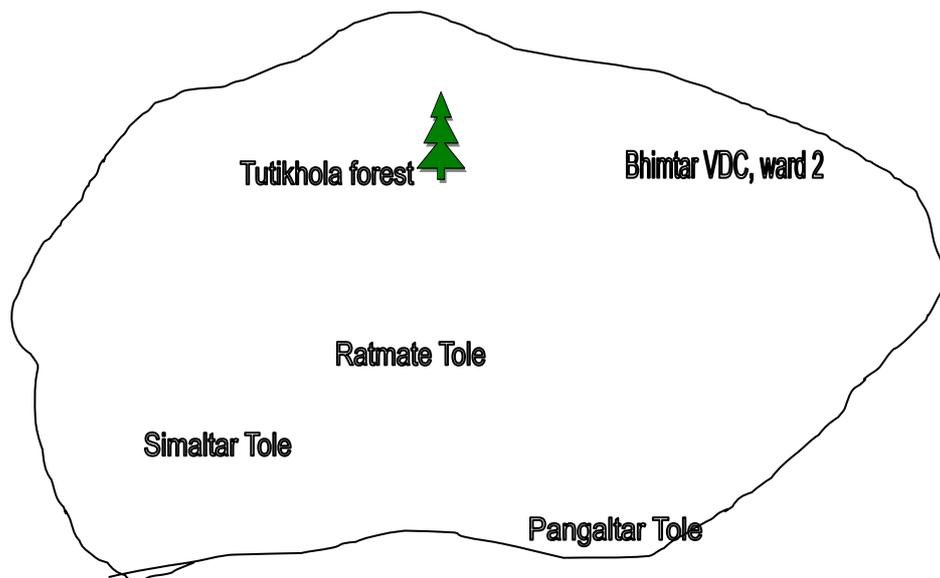


Figure 6.4: Location of the Tutikhola forest and settlements

Table 6.2 shows the wealth status of both the member and nonmember households. Seventy three percent of the total households in this community are poor, and have food sufficiency for less than eight months annually from their own farm production. The other households are 'well-off' and have food sufficiency for up to a year from their own production.

Table 6.2: Wealth Composition of the Member and Nonmember Households in the Tutikhola Community

Economic status	Number of households (percent)	
	<u>Member</u>	<u>Nonmember</u>
Well-off	0	17 (27)
Poor	8 (13)	38 (60)
Total	8	55

Total number of households: 63 (100)

Many poor households (60 percent) are nonmembers. Landholding size per household is very low (less than 0.25 hectares) because of the division of land among the sons in the process of inheritance from their parents. All eight members are of poor economic status. Key positions (such as chairperson, secretary) of the *Tutikhola* LFUG are occupied by men, except for the position of treasurer, which is held by a woman.

According to local key informants in a focus group discussion, 73 percent of *Danuwar*s were dependent on farming and wage labour for their livelihood. The major crops that they planted were paddy, maize, wheat, mustard, blackgram, and soybean. The well-off households interviewed said that they earned income from the sale of vegetables, chillies, goats, and milk. The local key informants in the participatory ranking exercise said that 30 male youths have moved to Sipaghat (a market centre located in the neighbouring VDC) or to the district headquarters for wage labour such as portering, carpentry, or agricultural work.

According to *Danuwar* men and women, their ancestors earned their livelihood from fishing. Because of this, good forests in the hills have traditionally been managed by the *Brahmins* of another VDC (i.e. Sipapokhare). The *Danuwar* do not have access to these forests as a result of this. They have traditionally been using only the degraded forests located in their settlements.

A nearby small market is about 20 minutes walking from the *Danuwar* settlement. Roads to other markets and the district headquarters, though ungravelled, enable people to access the markets and other services, but only to a limited extent because only limited transportation services are available in the study area.

No *Bista* system exists in the *Tutikhola* community because no high or low castes reside there. Nineteen percent of the population are literate, yet only five percent of these are women. The *Danuwar*s seem to have weak bonding and bridging social networks; they expressed a lack of trust in each other and they have weak linkages with other groups in other communities. As a result of this, they lack motivation to jointly work for community activities.

6.2.3 Key local organisations and their networks

Key local organisations include the leasehold forest user groups (LFUGs) and the village-level inter-user group network committees. The networking of the LFUGs with local and other organisations influences the governance of the forests. The *Odarepakha* LFUG and *Tutikhola* LFUG are the main local organisations for the utilisation and management of the *Odarepakha* and *Tutikhola* forests. The *Odarepakha* and *Tutikhola* LFUGs are registered with the Kavre DFO and the Sindhupalchowk DFO respectively. The LFUGs have their own five-year operational plans that set out the rules concerning forest management. They have to obtain approval from the DFOs on their operational plans every five years. Each LFUG has a chairperson, a secretary and members who are supposed to meet monthly for joint planning and implementation of the group activities.

Inter-user group network committees have also been established by the staff members of the DFOs. All LFUGs within one VDC have at least one member who also occupies a position in the network committee. The network committee is a type of horizontal network of the LFUGs, because through this committee, the LFUGs have some linkages with each other. The network committee is responsible to organise meetings where group activities and problems are shared. The main purpose of establishing such a committee is to help the small leasehold groups in solving their group problems.

The LFUGs also have linkages with other local groups (such as community forest user groups and community groups) and external organisations (such as the district agencies, donor projects and district-level NGOs), which have an influence on the governance of

leasehold forests. The LFUGs have either informal or formal linkages with other local groups but they have formal vertical linkages with the district level agencies.

Leasehold forest user groups (LFUGs)

The *Odarepakha* LFUG was formed by the Agricultural Development Bank Nepal (ADBN) but registered with the Kavre DFO in 1999. The group's registration was again confirmed in 2005 for a further five years. This group consists of ten members, all men, who belong to the *Brahmins* (high caste) and reside in ward three of the Methinkot VDC. Although they are supposed to meet monthly for planning group activities, they said they had met only when they had to select members to participate in the district-level meetings. Most of the time, they waited for the DFO staff members to come and tell them to organise the meetings. The group has a five-year operational plan, but most members (six out of ten) do not have any idea of what is written in the plan.

On the other hand, the *Tutikhola* LFUG was formed and registered with the Sindhupalchowk DFO in 2000, and was renewed in 2006 for a further five years. It consists of eight members, six men and two women. All the members are from the *Danuwar* ethnic group. Two men occupy the chairperson and secretary positions. The other four men and two women do not occupy any particular positions other than being members. The social mobiliser hired by the NGO guided them to organise monthly meetings in the past. After 2004, the social mobiliser's visits to the group have been irregular; as a result, the group meetings have been discontinued.

Inter-user group network committees

An inter-user group network committee of the LFUGs in Methinkot VDC was initiated by the Kavre DFO in 2003. The committee was established to support the individual groups in tackling problems with regard to management of group funds and conflicts of forest resource use. The committee consists of eleven members (ten men and one woman), representing the *Odarepakha* LFUG and six other LFUGs of Methinkot VDC. Some LFUGs have more than one person on the committee. The committee has four decision-making positions (chairperson, vice-chairperson, treasurer, and secretary). Except for the vice-chairperson (which is occupied by a *Brahmin* woman), the three other decision-making positions are occupied by *Brahmin* men. Three members of the committee are from the ethnic group '*Tamang*', and there are no members from the low castes. The

network consists of a total of 42 general members, who are also members of LFUGs in the Methinkot VDC.

The network committee has established a joint saving scheme where all 42 individual members of LFUGs contribute five rupees per month. These funds are deposited at the bank in Dhulikhel (i.e. the district headquarter) or lent to the members who need loans (the interest rate is 14 percent). The DFO has financially supported the committee by buying a box and bags to keep money, a ledger notebook, and writing pens. According to the committee people, there used to be regular monthly meetings of the committee in the past. However, since 2004, the DFO staff members have visited the area infrequently, so their meetings have also been discontinued.

An inter-user group network committee in Bhimtar VDC was initiated by the Sindhupalchowk DFO in 2004 for continuity of the operations of individual LFUGs. The purpose of this committee was to establish a forum where LFUGs share their experiences and jointly solve groups' problems. This network has members from a total of six LFUGs located in wards two, six, and eight of the Bhimtar VDC. The network committee consists of six members; a chairperson, a treasurer, a secretary, and three general members. Two members are women, including the chairperson. A member of the *Tutikhola* LFUG is a general member of the network committee.

Networks of the LFUGs

The *Odarepakha* LFUG has some linkages with the *Saparupa* CFUG and several other project-initiated local groups, such as the 'Community Organisations (COs)' and the 'Livestock Insurance Committee'. All members of the *Odarepakha* LFUG are also members of the *Saparupa* CFUG, the COs, and the Livestock Insurance Committee. The COs are either men-only or women-only groups. There are three men's and three women's groups in the area. The groups meet weekly and manage their saving and credit funds, and link with the 'Livestock Insurance Committee' for insuring the livestock of group members. All male LFUG members are also members of the men's groups, and women of the same households are also members of the women's groups. Members, who obtain loans from these groups for livestock, use more grass from the leasehold forest than do those who do not obtain such loans. The *Odarepakha* LFUG has no links with the donor project.

Similarly, the *Tutikhola* LFUG has some linkages with the COs. No community forestry user groups (CFUGs) exist in the area and so the *Tutikhola* LFUG has no linkages with CFUGs. There are a total of four women's groups (COs) consisting of 31 women as members in the area. These COs are basically saving and credit organisations that provide loans to the members, with interest rates of 16 to 20 percent⁵⁹. The majority of women from LFUG member households are also members of the COs. This LFUG has a vertical network with the project Community Environment Awareness and Management Programme (CEAMP), which trained a woman member in the construction of improved cooking stoves. This kind of stove generates more heating energy than the traditional stove with the same quantity of firewood.

6.2.4 Leasehold forestry case summary

Although the *Odarepakha* and *Tutikhola* forests are located at different altitudes, they are similar in terms of forest products available, such as grasses and firewood. And both LFUGs have a similar forest area per member (1 ha/member). Both *Odarepakha* and *Tutikhola* communities are located in the hills of Nepal. Table 6.3 shows the similarities and differences in the characteristics of these two communities.

The *Odarepakha* community has easier access to roads and markets than does the *Tutikhola* community. The *Odarepakha* community is a part of the larger *Saparupa* community. The *Tutikhola* community is homogeneous in terms of ethnic group composition (only Danuwar), whereas the *Odarepakha* community is heterogeneous with a mix of high and low castes. The incidence of poverty is comparatively higher in the *Tutikhola* community (73 percent are poor) than in the *Odarepakha* community (65 percent are poor). No *Bista* system exists in the *Tutikhola* community. The influence of market and road availability has negatively affected the *Bista* system in the *Odarepakha* community and the traditional occupations of *Sarkis* (who are nonmembers of the LFUG), increasing the migration of *Sarki* men to urban areas. Being women of low caste who are socially interdependent on the high caste *Bistas*, the *Sarki* women often face social discrimination from the *Bistas*. The *Odarepakha* and *Tutikhola* communities are different in terms of social networks of *Brahmins* and *Danuvars*. The social networks of *Brahmins* are wider than those of *Danuvars*.

⁵⁹ The interest rate charged by local money-lenders is 25 to 30 percent.

Table 6.3: Similarities and Differences in the Characteristics of the Two Communities

Characteristics	Odarepakha community	Tutikhola community
Forest products available	Grasses, and some fodder and firewood	Grasses, and some fodder and firewood
Forest area per member	One hectare (approx)	One hectare (approx)
Poverty (percent of total households)	65 percent	73 percent
Economic status	Well-off and poor as members. Well-off and poor as nonmembers	Only poor as members. Well-off and poor as nonmembers
Caste/ethnicity	High castes as members. Low castes as nonmembers	One ethnic group (i.e. Danuwar)
Gender	All ten members are men	Two members are women. Eight members are men
Access to markets and roads	Good	Low
Strength of the Bista system	Weak	N/A
Strength of LFUG's networks with other organisations	Weak	Weak

The *Tutikhola* LFUG is smaller (8 members) than the *Odarepakha* LFUG (10 members). All the group members of the *Tutikhola* LFUG are poor, but the majority of group members of the *Odarepakha* LFUG are well-off. The *Odarepakha* LFUG consists of only *Brahmins* whereas the *Tutikhola* LFUG consists of only *Danuwar*s. Both the LFUGs have weak networks with other organisations.

6.3 Institutional factors that influence access of the poor to forest benefits

In this section, the key institutional factors that influence the access of the poor to the forests governed under the leasehold forestry regime are identified and explained. The two communities, *Odarepakha* and *Tutikhola*, under the leasehold forestry regime have different characteristics. The key factors identified that influence the access of the poor are different in some aspects between the communities and similar in others. The regime and sociocultural factors are identified as key to the access of the poor to forest benefits. The sociocultural factors include informal linkages and the regime factors include formal linkages. Unlike the community forestry case, LFUG membership consists only a minority

of the community, therefore regime factors tend to be less important. Similar to the CF case, the level of support by external organisations also has some influence on access.

6.3.1 Sociocultural factors

The *Odarepakha* and *Tutikhola* communities have different characteristics in terms of poverty, caste and ethnic composition, caste-based social networks (i.e. the *Bista* system), the influence of sociocultural norms on the community, and access to markets and roads. The leasehold forestry regime was introduced in the *Odarepakha* and *Tutikhola* communities in 1999 and 2000 respectively. The access of the poor to the leasehold forest depends on their capacity to obtain user group membership and legal rights, to influence group decision processes, and on the influences of other informal institutions, such as customary rights that are predominant in the communities. The sociocultural factors that influence regime implementation and thus access of the poor to leasehold forests are sociocultural norms and strength of social networks. The influence of these factors is associated with relative levels of power, through which community members are able to access forest resources.

The influence of sociocultural norms

Sociocultural norms, including untouchability and patriarchy, prescribe behaviours that are favourable for some caste, economic or gender groups, but discriminatory to other groups. The influences of these norms on resource access of the poor are more evident in the heterogeneous community (*Odarepakha*) than in the more homogeneous community (*Tutikhola*).

In the heterogeneous community (in terms of caste, ethnicity and wealth), the sociocultural norms associated with the caste hierarchy and discrimination influence the LF regime implementation in ways that limit the access of the low castes to the leasehold forest. *Sarki* nonmembers of the *Odarepakha* community explained that the well-off *Brahmins*, who are members of the groups, have captured the benefits from the leasehold forest. They have increased the number of female buffaloes, thus utilising more grasses and fodder from the leasehold forest and raising income from selling milk. But the norms of 'untouchability' do not allow the low castes to sell their milk to other castes. As they are untouchables to other castes, selling milk by them is unacceptable. So, even if they obtain

membership and legal rights, they will not be able to obtain the same benefits as the well-off *Brahmins* because of this discriminatory sociocultural norm.

The norm of 'patriarchy' tends to limit the access of women to forest benefits. Men are heads of households and are officially listed as members in the LFUG in the *Odarepakha* community, whereas women are not members. However, in the *Tutikhola* community, the LFUG has included a few women (although they are not heads of households) as members. According to women in both communities, men are the ones to receive training and gain knowledge on forest management. Although the *Danuwar* of the *Tutikhola* community have fewer gender discrimination practices as compared to the *Brahmin* of the *Odarepakha* LFUG, the social norms in both communities generally view women as being inferior to men, and so women have to follow whatever men tell them to do. In the case of the *Odarepakha* LFUG, men planted seedlings in the leasehold forest and ordered women to take care of them. Because of this, women faced more problems in collecting grasses compared to men. Women of the member households of the *Odarepakha* LFUG clarified this:

We had to take care of the seedlings in the forest. We went there often to collect the grasses. We used to see the nonmembers collecting the grasses and uprooting the seedlings. So, we had to argue with them not to enter into the forest. Men did not have to face these problems since they did not go to the forest like we did (Participants, LF-FGDK/women-2).

The norms of untouchability and patriarchy also limit the low castes' and women's mobility to other settlements and other communities, and to participate in the community meetings. They face restrictions guided by customs and cultural beliefs. People do not generally accept women regardless of their caste attending meetings with men. When the low castes and women attend meetings, the sociocultural norms prescribe how they should sit and behave with the high castes and men respectively. These norms restrict the male staff members of the DFO in their attempts to directly discuss matters with local women to form groups, as noted by a ranger:

When I go to form a group, it is easier for me to meet men and discuss with them compared to women. The social norms do not encourage outsiders to talk first with women, if men are at home. Such norms restrict us [men] in our attempts to gather women and discuss with them [when we are unknown to the local people] without the help of local men (Interviewee, KIK-14).

The selection of community leaders is guided by the sociocultural norms that prevail in the community. This is more evident in the *Odarepakaha* community, which is heterogeneous

in caste, ethnicity and wealth, than in the *Tutikhola* community, which is homogeneous in ethnicity (no caste system exists in this community). The well-off and high caste people have greater potential to be selected as community leaders not necessarily because of their ability, but because of their higher social status. According to poor people in the communities, the behaviour of people with higher social and wealth status is normally accepted in the society, which negatively impacts on their ability to bargain on the basis of either legal or customary rights for resource access. The DFO staff members also often support this behaviour, which further constrains poor people to access resources.

The influence of social networks

The bonding, bridging and linking social networks of different caste groups have significant influence on the resource access of the poor in the heterogeneous community, whereas bonding social networks of the single ethnic group in the homogeneous community has a significant influence on their resource access. The *Bista* system that has eroded due to roads and market access has a negative influence on access of the poor to the forest in the socially heterogeneous *Odarepakha* community.

The bonding, bridging and linking social networks of the low caste *Sarkis* in the *Odarepakha* community are comparatively weaker than those of *Brahmins*. Weaker bonding and bridging networks of a social group, according to the local key informants, means that the group lacks regular sharing of information and cooperation within the group or with other social groups. Likewise, the weaker linking networks of the *Sarkis* result in a lack of visits to them by the staff. Because of weaker networks, *Sarkis* have limited access to information and knowledge about the advantages they can get from the leasehold forest, and their limited confidence in bargaining with others is one of the reasons for not getting legal membership to use the forest. Both the *Danuvars* of the *Tutikhola* community and the *Sarkis* of the *Odarepakha* community identify lack of trust, unity and cooperation within their groups (due to weaker bonding networks among *Danuvars* or *Sarkis*) as one of the reasons why they are unable to retain their customary rights over the leasehold forest and access to forest products. As a result of stronger linking network from the *Brahmins* with the local Bank (ADBN) staff in the *Odarepakha*, the staff visited and consulted *Brahmins* in forming the LFUG. According to *Sarkis*, the staff did not visit them because they did not have such linkage with the staff:

We are low caste people. How can we have social relationships with big people [staff]...? They are higher caste people. We do not know them. So, they neither

visited us nor informed us about the leasehold programme (Participants, LF-FGDK/Nonmember-4).

As a result of the above, *Brahmins* have obtained legal rights at the expense of the low caste *Sarkis* in the *Odarepakha* community. In the *Tutikhola* community, a group of poor people has obtained legal rights, but due to weak bonding networks, the legal rights and rules are not enforced, and hence legal access is not sufficient to ensure that the poor have actual access to the forest.

As noted earlier, the reduced importance of the *Bista* system in the *Odarepakha* community has negatively affected the traditional occupations of *Sarkis*. Because of this, most men of the *Sarki* families are forced to migrate to city areas searching for livelihood activities, leaving behind women and children in the village. These factors have made it more difficult for *Sarki* women to access forest resources to sustain their livelihoods. Being women of low castes who are socially dependent on the high caste *Bistas*, they have weak bargaining power to convert their customary rights into legal rights. The *Bistas* are well-off and have a higher social position. The *Sarki* women have to accept whatever the *Bistas* tell them to do. They have to keep quiet even though they are losing their customary rights because they fear that their social relationships with the *Bistas* may go wrong:

We, being low caste women, have to face much discrimination in this society. Nobody asks us even if they have to do something around us [our localities] which have an effect on us. It is normal...the forest near to our Bari [rainfed farming land] has been given as leasehold forest to the Brahmins who reside quite far from the forest. We have to just keep quiet...we had been collecting grasses and firewood from that forest in the past, but no more, we have now more difficulties in providing enough food to our children (LF-FGDK/Nonmember-4).

Although, *Sarki* nonmembers of the *Odarepakha* community tried to talk with their former *Bistas* about the problem of getting firewood after losing their customary rights over the leasehold forest, the *Bistas* just ignored them and did not even bother to listen to them. According to *Sarki* women, since they no more mend shoes for the *Bistas*, the *Bistas* do not help them in getting back their rights to access forest resources.

6.3.2 Regime factors

Membership for legal rights, membership selection process, decision-making structures and processes, enforcement of the rules, and roles of external organisations in the regime implementation have been identified as regime factors that influence access of the poor to forest benefits in the study areas. The impacts of the decision-making structures and processes on forest access are linked with the power and authority devolved to a FUG and its capacity to enforce the rules, which are both influenced by the sociocultural factors. These factors and the mechanisms by which they influence are reported in the following sections.

Membership for legal rights

The policy underlying the leasehold forestry regime targets a few selected poor households from within the community, and they are provided with legal rights to the degraded forest. Only a small proportion of the community is provided with the exclusive rights to the forest resource. Other forest users (both well-off and poor households) lose their customary rights. Twenty-five percent of the *Odarepakha* community have such legal rights through LFUG membership whereas only 13 percent of the *Tutikhola* community have obtained such rights (Figure 6.5). Seventy-five percent of the *Odarepakha* community have lost their customary rights whereas 87 percent of the *Tutikhola* community have lost such rights. Since the customary rights of the large section of the community have been removed, there have been conflicts between the LFUG and the rest of the community for forest access. As described earlier, the rest of the community are not following the leasehold rules. This is evident in both *Odarepakha* and *Tutikhola* communities.

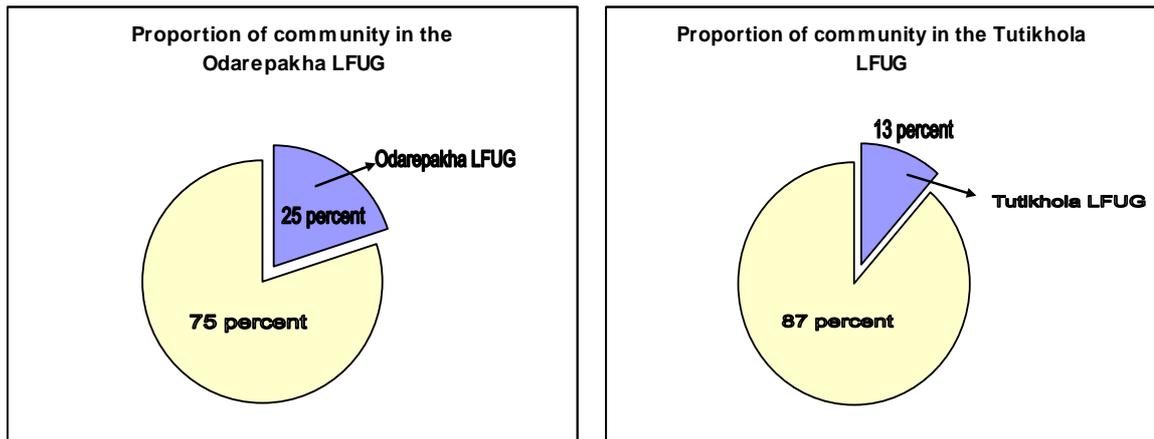


Figure 6.5: Proportion of the communities in the Odarepakha and Tutikhola LFUGs

Although, the LF policy specifies that the poor people should obtain the legal rights, the membership selection and group formation processes in the *Odarepakha* community in reality have permitted some well-off within the community to become LFUG members. The non-members of the LFUGs interviewed in both *Odarepakha* and *Tutikhola* communities said that due to poor consultation by the staff, they were excluded from the group formation process and they often were not aware that they had lost their rights. According to the well-off non-members interviewed in both communities, this was one of the reasons for ignoring the legal rights of the members. According to the poor members of both the LFUGs, this reduced their access because forest products that once were theirs were now taken by someone else who had no legal rights.

Membership selection process

The membership selection process used along with the membership policy of the LF regime in both the communities left many of the poor without legal rights to the forest, after having lost their customary rights. The identification of poor households and the formation of the *Odarepakha* LFUG did not happen according to what is outlined in the policy guidelines of the Department of Forest. The ADBN was initially responsible for identification of poor households and organising them into target groups. But the ADBN did not follow the criteria of 'poverty' mentioned in the leasehold forestry guideline (see Chapter 2). According to a staff member of a district-level agency, the Bank followed its own criteria of identifying small farmers (used in 'Small Farmers Development Programme'). Under the name of 'small farmers', ADBN selected those who had enough collateral and income to repay the loan that is given for agricultural production. Ten such

households were selected and the names of heads of those households were listed in consultation with three well-off *Brahmin* men from the community. Households that were neither poor nor resident near to the forest have obtained membership and legal rights. The *Odarepakha* LFUG consists of fewer 'poor' members (four households) compared to 'well-off' members (six households). Twenty-two poor households and eight well-off households were excluded from the LFUG.

The formation of the *Tutikhola* LFUG also did not follow the guidelines. The staff members of the Sindhupalchowk DFO were involved in the identification of poor households and the formation of the LFUG. According to members of the *Tutikhola* community, the staff visited two local elites' households (well-off *Danuwar*) in the village, and consulted men of these households to identify and select poor households for forming the LFUG. The DFO staff in consultation with them selected eight poor households who owned half a hectare of farmland as poor households. Thirty-eight poorer households, who owned less than half a hectare of farmland, were excluded from the LFUG. Seventeen well-off households were also excluded from the *Tutikhola* group. The excluded households were not happy with the process as they were not consulted when the group was formed.

In both communities, households were not selected in consultation with the community and groups were formed in haste without obtaining agreement from the community. The staff's target-oriented approach in forming groups in haste and their limited skills and experience in group formation have negatively impacted on the access of the poor to the benefits from leasehold forestry:

A staff formed about 50 groups in two months in different areas of the district. How can we expect that the staff has followed the process for group formation which he has to finish within a short time? (Interviewee, KIK-13).

Although the DFO staff members were supposed to obtain a consensus (or agreement) from the whole community to form a leasehold group, this was not normally the case. Moreover, the project document mentions that priority should be given to women and low caste people, the poor and women headed households, but the staff members did not follow this. According to a former staff member of the leasehold project, the LFUGs were not formed according to the criteria and processes of the leasehold programme. The household identification and group formation in general has not been done appropriately. The former staff member provided this example:

I came to know that when a ranger... went to identify households and form groups in the district. A group was formed at the house of a local elite family where the

ranger was offered lots of home-made beer. The ranger himself did not have any idea whether the selected households met the criteria (Interviewee, KIK-14).

According to the rangers, the process of selecting the poor by following the guidelines is ideal but very difficult to achieve in reality. It was difficult to complete group formation processes within the time stipulated by the DFO. The strategy of the DFO requires them to spend more time in the implementation of the community forestry regime than in the leasehold forestry regime. For easiness in group formation, they said that they had to consult the local elites for identification of poor households and formation of the groups.

In both communities, the DFOs did not make information available to all of the community members prior to group formation, nor to all group members once the group was formed. This led to conflict within the communities. Nonmembers, who had not been consulted, were unhappy with the activities being undertaken in the leasehold forest and the impact this had on their customary rights. Members of the group suffered a backlash from the rest of the community, and as a result the group members' rights were generally ignored.

The influence of property rights on access

Customary rights to access the forest, prior to the LF regime, were important to the livelihood of both members and nonmembers of the LFUGs in both communities. Although the purpose of LF regime is to target the poor and give them legal rights to use the forest, in practice the poor low castes are unable to convert their customary rights to legal rights. This is more evident in the *Odarepakha* community that is heterogeneous in caste, ethnicity and wealth than in the *Tutikhola* community that is more homogeneous, because power differentials between different caste and wealth groups are greater in the *Odarepakha* community than in the *Tutikhola* community.

In the *Odarepakha* community, customary rights were unequal due to inequities in power and discriminatory sociocultural norms. However, such inequities in customary rights were of lesser extent in the *Tutikhola* community due to fewer discriminatory norms than in the *Odarepakha* community. Prior to the introduction of leasehold forestry, both *Odarepakha* and *Tutikhola* forests were government forests. But in practice, the property rights under which these forests were held were not distinct. The rights were a mix of *de facto* common and open access property rights. People of the respective communities had customary rights to use these forests freely for grazing their livestock, and also to collect grasses, firewood, and a few timber trees. Their customary rights were transferred from their

forefathers. The well-off people of the *Odarepakha* community utilised more fodder and grasses through customary rights for their large livestock holding than did the poor. Although the poor were fully dependent on the forest for firewood (for cooking), only small quantities were available to them because the well-off utilised as much as they could, given the labour they had. These findings were similar for the *Tutikhola* community.

After the introduction of the LF regime in the communities, many customary users were excluded from the groups. Only those included in the groups have obtained legal rights to use and manage the leasehold forests. In reality, however, well-off people continue to access the forests regardless of membership, whereas poor people do not have access even though they are members due to inability of the LFUG to enforce the rules. The well-off customary users have greater access to forest resources than the disadvantaged customary or legal users.

In the *Odarepakha* community, the nonmembers, particularly well-off *Brahmins* have refused to give up their rights and access to the forest that they have been exercising from the time of their forefathers. According to the members, they still take livestock to the forest for grazing, and collect grasses and fodder plants from there: *those economically well-off elites generally behave boastfully and forcefully get the benefits from the forest* (Participants, LF-FGDK/Group-1). Likewise, the members of the *Tutikhola* LFUG complained that a few well-off nonmember households have expanded their farming land, encroaching on the forestland. They further added:

A nonmember of the group had cleared some parts of the forest bordering his farmland and started cultivation there. We [members] told him that this is illegal because that land is the group's land. But, he did not agree with this (Participants, LF-FGDS/ Group-1⁶⁰).

The customary rights of the majority of local people are not accommodated by the leasehold forestry regime. As a result, either the poor have lost their access, or increasing conflicts over forest resource use have negatively impacted on the poor's access.

In both the communities, the critical issue is that they do not want to follow these new rules that have removed their customary rights. But, who among them can obtain greater benefits is dependent on their power.

⁶⁰ Four men and two women participated in this focus group discussion.

Poor *Brahmin* women (who are from member households) in the *Odarepakha* community explained in the focus group discussion that the well-off *Brahmins* (who are nonmembers) often argue with them to show evidence of their legal rights over the leasehold forest, and they invade the land for the purpose of livestock grazing (though grazing is supposed to be prohibited according to the operational plan of the LFUG).

The influence of decision-making structures

The LF regime has introduced a decision-making structure for governing a forest at the FUG level, but in reality, FUG members have only limited influence on the access. There are a number of reasons for this. First, the implementation of the regime does not provide a LFUG the authority and capacity to govern the forest (capacity to decide the rules and enforce these rules). Second, the influence of sociocultural factors is dominant in governance of the forest at the community level.

The decision-making structures are the LFUGs, which have eight (*Tutikhola*) or ten members (*Odarepakha*), and three key positions (chairperson, treasurer, secretary) exist within each LFUG. All members of a LFUG belong to its decision-making structure. The process of selecting people for the key positions is dominated by the DFO staff and local elites who are consulted by the staff. During the formation of a LFUG, the staff members of the DFO in consultation with the local elites select and list the names of heads of households for different positions.

According to LFUG members, people for key positions are consulted for their interest in the positions but for general membership, they are only informed. Some members became aware of their membership after the formation of the LFUGs:

We did not know that we were members of the LFUGs until the chairpersons informed us three months after the group formation. We were thus unaware about what were our roles as LFUG members (Interviewees, LF-HK-5, LF-HS-4).

Make-up of the decision-making structures and representation in the structures are not a problem, because all LFUG members are part of the structures. However, the LFUGs lack the authority to decide who should be in which positions and who should be members. As a result of this, the *Odarepakha* LFUG lacks a chairperson to lead the LFUG.

After the names of the members have been listed in the operational plans of the LFUGs, there is a difficulty to formally add new members or replace the members for key positions. According to a social mobiliser in Kavre who had supported the *Odarepakha* LFUG in organising meetings and planning activities for forest use, the groups do not have the authority to add members on their own; instead they have to get permission from the DFO to include new members. The community development consultants, who were involved in the implementation of the leasehold regime in the past, also argued that the process of getting permission for addition or replacement of the members is so bureaucratic and long that it discourages the groups from going through it. The members of the *Odarepakha* LFUG were unaware of the process:

We wanted to replace the chairperson, who had migrated to Kathmandu. We could not take any action because we are unaware of the process. We contacted the ranger and told him about this several times, but have not received any support (Participants, LF-FGDK/Group-3).

A local key informant in the area pointed out that the rules written in the operational plan which the LFUG has to follow are no longer valid. He provided an example; the 2004 operational plan of the *Odarepakha* LFUG shows that the group can add new members only after getting permission from the 'Small Farmers Development Programme' of the 'Agricultural Development Bank'. The names should be proposed through an application letter to the Bank office. However, the Bank is no longer responsible for the leasehold programme activities. As such, this rule is no longer valid. In such a situation, the LFUG members are confused about the process and prefer not to go through this formal approach.

The influence of decision-making processes

In both groups, the LFUG members have no authority to make changes in the rules specified in the operational plans of the LFUGs, even though as specified, they are not beneficial for their livelihoods. The operational plans of the LFUGs are valid for five years. After five years, the DFOs can revise the rules in the plans based on the policy and implementation guidelines or just extend the same plans for the next five years. The DFOs then provide the plans to the groups for implementation.

A few decisions for implementation of the plans were occasionally made in the group meetings. However, these meetings were also dominated by the staff members. The LFUGs were supposed to meet every month, but in reality group meetings were irregular.

Both these LFUGs were dependent on the social mobilisers or the rangers to conduct their meetings. The process is supposed to be led by the group and the ranger, mobiliser or technician is invited depending upon the need. But in reality the process was led by either the mobiliser or the ranger. They fixed the date of the meeting in consultation with the chairperson or secretary of the group, and then informed the group members about it.

Both groups had rarely organised their own meetings without the leadership of the ranger or the mobiliser. In the group meetings, most of the time, either the ranger or social mobiliser proposed the issues and other participants accepted them. In this way, the decisions were highly influenced by the ranger or social mobiliser, so group members had no influence on decision-making processes and that had impact on the LFUGs. According to LFUG members, they have no feeling of ownership and are not interested in working together for the group. They felt that this was also one of the reasons why they could not follow and enforce the leasehold rules in the communities.

The influence of enforcement of the rules

The enforcement of the rules has limited influence on the access of the poor to forest benefits. No formal mechanisms exist in either LFUG whereby they can enforce their authority to exclude nonmembers from the forests. The DFO staff argued that even if the poor are entitled to exclude nonmembers, it is unlikely that the well-off will conform to their ruling. The DFO staff expressed the view that the LFUG tends to be the poorer and weaker group in the community, the LFUG itself lacks the power to enforce the rules imposed by the regime. This is evident in the *Tutikhola* community where LFUG members are poor and they are few in number. In this community, the leasehold forest seems to operate more under open access. People do not follow the leasehold rules; rather they do whatever they want in the leasehold forest. The rules-in-use⁶¹ are enforced, which are different from prescribed leasehold rules. Members of the *Tutikhola* LFUG said that the LFUG members rarely discuss forest use and management, because they do not believe and support each other. They do whatever they like to do. The well-off people were reported to have benefited more than have the poor people due to influence of sociocultural factors (see section 6.3.1). As mentioned earlier, the well-off people had also expanded their farmland to the parts of the forest, leaving less land for others.

⁶¹ The rules-in-use as defined by Ostrom and Ostrom (2004) are the rules that are in reality are practised.

However, the *Odarepakha* community has a slightly different situation. The well-off high caste members of the LFUG are unable to exclude the wealthier high caste non-members from using the resource. Though the high castes have strong networks and leadership capacity, these are not enough to enforce the rules in the community. Poor high caste members of the LFUG reported that since the LFUG cannot enforce the rules, the well-off high castes utilise fodder and grasses in greater quantities than do the poor high castes. According to the DFO staff, the group size as well as support from the community is thus critical for the enforcement of the rules. The LFUG members, however, could enforce the rules to the poor low caste non-members. The influence of discriminatory sociocultural factors is dominant. According to the low castes, they are now discriminated against by the high caste members even greater than they were in the past. They expressed the view that the high caste members intimidated them, saying only the LFUG members had legal rights to use the forest. As a result of this, the poor are unable to collect firewood and grasses from the leasehold forest, though they used to collect these before the LF regime.

Roles of the DFO and the ADBN in regime implementation

According to the legal framework and the policy guidelines, the LFUGs must be registered with the DFOs to obtain legal authority over the leasehold forests. The LFUGs are responsible for implementing a number of operational rules set out in their five-year operational plans. The operational plans are prepared by the DFO staff without consulting LFUGs. The LFUG members are not involved in the development of the rules outlined in the plans. The DFO staff members develop the rules and the LFUG members are given responsibilities to implement the rules. In this way, LFUGs are involved in the implementation of the plan but not in the planning itself. A community development consultant involved in the regime implementation argued that the 'planner-centred' approach used by the DFO staff does not motivate LFUG members to work together to manage the forest.

In both LFUGs, the DFO staff prepared the operational plans for the groups without consultation or input of group members. As the members were neither involved nor consulted in the development of the operational plans, the formal rules set out in the plans proved to be inappropriate for them:

I won't be able to solve my family's 'hand-to-mouth' problem by planting just fodder and grasses. I wanted to grow cereal or cash crops to feed my family, but I heard those are not permitted. I think the government makes rules and tells us to follow

these. These rules are not appropriate for us. But the government plans in its own interests and do not consider our needs (Interviewee, LF-HS-4).

The plans developed by the staff did not address the livelihood needs of the poor. The poor have to contribute more labour than the benefits they can obtain from the degraded forests. The plans specify the types of fodder trees and forages to be planted. The DFO staff provide saplings to the groups for planting in the forest. The group members of the *Odarepakha* LFUG also expressed that they have contributed a lot of voluntary labour for planting fodder and forage crops but they could not obtain any benefits from these plantations. A poor member expressed his dissatisfaction:

I had put much labour for that land but had not received benefits in return. Nothing has improved. I still have to search for waged labour to earn an income to feed my children (Interviewee, LF-HK-4).

According to the LFUG members the DFO staff led the district-level meetings where activities for implementation of the plans were decided, they did not have any influence on the decisions. They felt that the DFO staff did not effectively communicate the information to them. Further, they expressed the view that the plans and commitments made in these meetings were often not practiced after these events:

They said a lot of things in these meetings but nothing happened...after these. They never asked whether we understood or not. They rarely asked us what we need (Interviewees, LF-HK-2, LF-HK-3, and LF-HK-5).

The support from the DFOs in building the capacities of the LFUGs are inadequate. According to the members of the *Odarepakha* LFUG, their meetings have also been irregular because of irregular visits by the DFO staff. They felt that the support from the DFO staff has been inadequate for them:

The DFO staff took a long time to approve our second revised operational plan. This made us confused about the continuity of leasehold activities. We were discouraged from conducting meetings (Participants, LF-FGDK/Group-3).

Members of the *Tutikhola* LFUG mentioned that they had limited support from the DFO staff, which was not enough to build their capacity for conducting LFUG meetings.

The support from DFO staff members in linking LFUGs through inter-user group network committees has limited impact on the capacity to enforce the leasehold rules in both communities. The community development consultants, who were involved in the

implementation of the leasehold regime in the past, argued that the formation of the network committees was imposed by the government and so the committees lack commitment to enforce the rules. The committees were initiated without consultation with the community. Only members of the LFUGs were involved, but the customary nonmembers, who form a large section of the community, were not consulted. Due to this, well-off and powerful nonmembers did not recognise the committees as bodies to enforce the rules in both communities. The committees were largely dependent on the DFO staff members for organising their own meetings and planning activities.

6.3.3 Level of external support

The level of external support has some impact on access through support from external organisations in the conducting of LFUG meetings, provision of information to the LFUGs, and building capacity to enforce the leasehold rules. Such support has been through government, non-government or donor organisations.

There was donor support for the leasehold forestry implementation in terms of provision of social mobilisers in both districts. Both LFUGs were linked with the women social mobilisers who brought information from the district-level organisations to the groups. These social mobilisers are local women trained by an NGO (Society for Partners in Development) through financial support from the Netherlands Government to support the leasehold groups. Each social mobiliser is responsible for liaising with about 50 leasehold groups and six inter-groups. According to the social mobiliser of Kavre, it was not possible for her to attend to all these groups on a monthly basis. The support from the social mobilisers was discontinued once their jobs were terminated in 2004 because of the unavailability of salary support from the NGO. This has had a negative impact on the operation and development of both LFUGs. According to the members of the *Odarepakha* LFUG, one of the major reasons for discontinuing the group meetings was the absence of the social mobiliser who organised the regular meetings. This also indicates the dependency of the LFUG on the external support for its own meetings. The group members of the *Tutikhola* LFUG also said that they discontinued the group meetings for the same reason:

Once the social mobiliser stopped visiting us, we discontinued the group meetings. She used to tell us what to discuss, and she used to record minutes of the meeting (Participants, LF-FGDS/Group-1).

The District Livestock Services Office (DLSO) has improved the capacity of the LFUG members in terms of improvement in their awareness about technical knowledge and

skills of livestock and fodder production. This is evident in the *Odarepakha* LFUG but not in the *Tutikhola* LFUG. But, the well-off rather than the poor members have obtained such skills.

6.4 Summary

In this chapter, the key institutional factors that influence the access of the poor to the forests governed under the leasehold forestry regime were presented. Sociocultural norms and networks, and factors associated with the regime were identified as the main factors that influence access of the poor to forest benefits. Level of support from external organisations was identified as an additional factor that has some influence on access.

In the socially heterogeneous (*Odarepakha*) community, the sociocultural norms associated with the caste hierarchy and discrimination influence the LF regime implementation in ways that limit the access of the low castes to the leasehold forest. Although the *Tutikhola* community has fewer gender discrimination practices than has the *Odarepakha* community, the social norms in both communities generally view women as being inferior to men, and so women face more problems compared to men in forest access.

The bonding, bridging and linking social networks of different caste groups influence their access to forest benefits in the heterogeneous community whereas bonding social network of the single ethnic group in the homogeneous community influences their access to forest benefits. The social networks of the low castes are weaker than those of the high castes. As a result, the high castes have obtained legal rights at the expense of the low castes in the *Odarepakha* community. In the *Tutikhola* community, a group of poor people has obtained legal rights, but due to weak bonding networks, the legal rights and rules are not enforced.

The *Bista* system has eroded due to road and market access in the heterogeneous community (*Odarepakha*) but this system does not exist in the *homogeneous* community (*Tutikhola*). The reduced importance of the *Bista* system has a negative influence on access of the poor to forest benefits. The low castes lose their customary rights over the leasehold forest due to reduced support from the high castes.

Regime factors that influence access of the poor to forest benefits include membership for legal rights, membership selection process, decision-making structures and processes, enforcement of the rules, and roles of the DFO in the regime implementation.

Although, the LF policy specifies that the poor people should have legal rights, the membership selection process in both communities left many of the poor without legal rights to the forest, after having lost their customary rights. In reality, the poor are unable to convert their customary rights to legal rights. This is more evident in the *Odarepakha* community that is heterogeneous in caste and wealth than in the *Tutikhola* community that is more homogeneous, because power differentials between different caste and wealth groups are greater in the *Odarepakha* community than in the *Tutikhola* community. The customary rights of the majority of the community are not accommodated; as a result, either the poor have lost their access, or increasing conflicts over forest access have negatively impacted on the poor's access.

All the members of a LFUG are part of its decision-making structure. But, since both LFUGs lack the exclusion right that is the authority to decide who should be in which positions and who should be members, they cannot formally provide legal rights to the poor customary users who are excluded from the LFUGs.

The LFUG members are not involved in the development of operational plans for their forests, but they are given responsibilities to implement these plans. In both LFUGs, the DFO staff prepared the operational plans without input of group members. Due to this, the formal rules set out in the plans proved to be inappropriate for the poor. No formal mechanisms exist in either LFUG whereby they can enforce their authority to exclude nonmembers from the forests. Both leasehold forests seem to be under open access. Some poor members have obtained benefits from forest access when there is no enforcement of the rules in the *Tutikhola* LFUG. However, well-off people have obtained greater benefits than have the poor people. The supports from DFO in linking LFUGs through inter-user group network committees have no significant impact on the capacity to enforce the leasehold rules in both communities.

Both LFUGs are dependent on the external support for their meetings, and access of the poor to the forest was negatively impacted when the support of the staff members is discontinued due to unavailability of funding. In the next chapter, the results from cross-case analysis are presented.

CHAPTER SEVEN

CROSS-CASE ANALYSIS

7.1 Introduction

In this Chapter, the findings from the cross-case and cross-community analyses are presented. The results from the two cases are compared and contrasted in relation to the key institutional factors that influence access of the poor to forest benefits. First, the characteristics of the four communities that make up the two cases are compared and contrasted. Then the differences and similarities in key institutional factors that influence access of the poor to forest benefits under the community and leasehold forestry regimes are discussed. The institutional factors that influence access of the poor to forest benefits can be usefully separated into two groups, sociocultural factors and regime factors. One additional factor not included in these groups is the level of external support. Through this cross-case analysis, the reasons why the two regimes influence resource access of the poor in different ways are better explained. In particular, the complexity of different mechanisms through which regimes with different degrees of inclusivity influence the resource access of the poor is better understood.

7.2 A comparison of the case characteristics

The two case studies (community forestry and leasehold forestry) include two communities each (Table 7.1), which are all located in the hill region of Nepal. The quality of the forests is different between the two cases. The forests in the community forestry (CF) case are dominant in timber whereas the forests in the leasehold forestry (LF) case have few timber trees and consist primarily of shrubs and grasses.

Table 7.1: Characteristics of the Communities

Characteristics	Community forestry case		Leasehold forestry case	
	Dhuseni	Saparupa	Odarepakha	Tutikhola
Location	Hill region, Nepal	Hill region, Nepal	Hill region, Nepal	Hill region, Nepal
Quality of forest	Good	Good	Poor	Poor
Access to roads	Poor	Good	Good	Poor
Number of households	295	277	40	63

In both cases, forest users can obtain fuelwood, fodder, grass, and litter from the forests. However, the forest users in the CF case can obtain additional benefits that include timber, wild fruits, vegetables, and medicinal plants that are not obtainable in the poorer quality forests in the LF case.

One community in each case (*Saparupa* and *Odarepakha*) has better access to roads and markets than does the other (*Dhuseni* and *Tutikhola*). The sizes of the communities in the CF case (*Dhuseni* and *Saparupa*) are much larger (four to seven times the size) than the communities in the LF case (*Odarepakha* and *Tutikhola*). The communities in the CF case are more socially heterogeneous than the communities in the LF case (Table 7.2). In the CF case, each community has a mix of high caste, low caste and ethnic groups. In contrast, in the LF case, the *Odarepakha* community is a mix of high and low castes but no ethnic groups. The *Tutikhola* community comprises a single ethnic group with no caste structure. In the CF case, the low caste group is the minority (9 percent) in the *Dhuseni* community whereas the ethnic group is the minority (19 percent) in the *Saparupa* community. In one of the LF communities, the low castes make up the majority (40 percent).

Table 7.2: Caste and Ethnic Composition of the Communities (Percentages)

Castes and ethnic groups	Community forestry case		Leasehold forestry case	
	Dhuseni	Saparupa	Odarepakha	Tutikhola
High caste	48	48	60	0
Ethnic group	43	19	0	100
Low caste	9	33	40	0
Total	100	100	100	100

All four communities associated with the forests in both cases are heterogeneous in terms of wealth. In both cases, the majority of high caste households (63 and 78 percent) are well-off, and the majority of low caste households (80 and 100 percent) are poor (Table 7.3). The communities in the CF case contain a lower percentage of poor (42 and 61 percent) than those in the LF case (65 and 73 percent). More ethnic households are poor in the LF case (73 percent) than in the CF case (35 and 62 percent).

Table 7.3: Wealth Composition of the Communities (Percent of Households)

Wealth	Community forestry case								Leasehold forestry case					
	Dhuseni				Saparupa				Odarepakha			Tutikhola		
	HC	EG	LC	TO	HC	EG	LC	TO	HC	LC	TO	EG	TO	
Well-off	63	38	20	39	65	65	20	58	78	0	35	27	27	
Poor	37	62	80	61	35	35	80	42	22	100	65	73	73	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	

Note: HC, EG, LC, and TO indicate high caste, ethnic group, low caste, and total for each wealth group respectively.

The *Bista* system exists in the socially heterogeneous (in terms of caste) communities (*Dhuseni*, *Saparupa* and *Odarepakha*) in both cases. However, the system is eroding in the communities that have good access to roads and markets, resulting in the low castes losing their traditional occupations. The *Bista* system does not exist in the socially homogeneous community (*Tutikhola*) in the LF case. Discriminatory sociocultural norms and customs remain prevalent in all the communities in both cases.

In summary, the communities in the CF case are larger, wealthier and more socially diverse than those in the LF case.

The percentage of the community that are members of the FUG is much higher in the CF case (75 and 100 percent) as compared to the LF case (13 and 25 percent) (Table 7.4). In the *Saparupa* community in the CF case, all households are FUG members. In two communities (*Dhuseni* and *Tutikhola*, one in each case), the majority of nonmembers are from an ethnic group (80 and 87 percent). In the *Odarepakha* community in the LF case, the majority of nonmembers are of low castes (73 percent). The membership of the CF case is more heterogeneous in terms of caste and ethnicity than the membership of the LF case. The *Tutikhola* LFUG is homogeneous in terms of ethnicity, whereas the *Odarepakha* LFUG is homogeneous in terms of caste.

In three communities (*Dhuseni*, *Odarepakha* and *Tutikhola*), the majority of nonmembers are poor (69, 70 and 73 percent) (Table 7.5). Each case study includes a community where the majority of FUG members are poor (64 percent in *Dhuseni*, 100 percent in *Tutikhola*).

Table 7.4: Caste and Ethnic Composition of the Members and the Nonmembers (Percentage of Households)

	Community forestry case								Leasehold forestry case					
	Dhuseni				Saparupa				Odarepakha			Tutikhola		
	HC	EG	LC	TO	HC	EG	LC	TO	HC	LC	TO	EG	TO	
Members	48	43	9	75	48	19	33	100	100	0	25	13	13	
Non-members	20	80	0	25	0	0	0	0	27	73	75	87	87	

Note: HC, EG, LC, and TO indicate high caste, ethnic group, low caste, and total for each wealth group respectively.

The strength of the networks among the CFUGs is greater than among the LFUGs. The CFUGs have greater capacity for collective action in terms of resource management than do the LFUGs. The support from government and donors for regime implementation is greater in the CF case than in the LF case.

Table 7.5: Wealth Composition of the Members and Nonmembers of FUGs (Percentage of Households)

Wealth status	Community forestry case				Leasehold forestry case			
	Dhuseni		Saparupa		Odarepakha		Tutikhola	
	M	NM	M	NM	M	NM	M	NM
Well-off	36	30	58	0	60	27	0	31
Poor	64	70	42	0	40	73	100	69
Total	100	100	100	0	100	100	100	100

Note: M and NM indicate member and non-member of a FUG respectively.

7.3 Institutional factors that influence access of the poor to forest benefits

Two groups of institutional factors have been identified as important in relation to access of the poor to forest benefits in both case studies: (i) sociocultural factors, and (ii) regime factors. An additional factor identified that is not covered in these groups is level of support from external organisations. The sociocultural factors are those factors associated with the characteristics of a community. The regime factors combine the elements of property rights and governance that are imposed on a community through the introduction of a forestry regime. The impact of sociocultural factors and regime factors on access of the poor under the two regimes are compared and contrasted in the following sections and the mechanisms through which these factors influence the access of the poor to forest benefits are described.

Power is a function of sociocultural factors and the regime. The mechanisms by which power influences access of the poor to forest benefits differ between the two cases. In the CF case, the DFO devolves power to a CFUG, which comprises the majority of the community, to set the operational rules for forest access and to enforce these rules. The executive of the CFUG is the mechanism through which the operational rules for forest access are set and enforced. In contrast to the CF case, the DFO maintains the power to set the operational rules for forest access in the LF case. However, the DFO delegates the power to enforce those rules to the LFUG, which is made up of a small subset of the community.

7.3.1 Sociocultural factors

Sociocultural factors have a significant influence on access of the poor to forest benefits in both cases. The influence of sociocultural factors is exercised through the level of power and authority that various social groups hold within the community, which in turn shape access to forest benefits.

The power a social group holds within the community is characterised by wealth, caste, ethnicity, and gender. The power of an individual is a reflection of the power held by the social group to which the individual belongs. Sociocultural norms and social networks are key determinants of a social group's or an individual's power. The capacity of various social groups also reflects their power and authority within the community. External factors

such as the introduction of roading infrastructure influence the culture of a community, which has implications for access of the poor. Access to roading brings about development of markets, which erodes the *Bista* system. As a result, there is a change in power relationships within a community.

The definition of a 'community' which is relevant to the governance of a specified forest is that it 'consists of all those local people who influence and/or who are influenced by the governance of the forest'. In both case studies, two broad groups of people within a community can be distinguished. The first group includes members of the FUG, who are legal users of the forest. The second group includes nonmembers of the FUG, who have customary rights to the forest resource but are not legal users of the forest. A community consists of a mix of various social, wealth, and gender groups. Different mixes of these groups indicate the degree of heterogeneity of the communities, which reflects the level of power inequities and extent of prevailing discriminatory sociocultural norms within the community, which in turn influence the access of the poor to forest benefits.

Three distinct social groups that exist in the community are: (i) high caste, (ii) ethnic group, and (iii) low caste. The 'well-off' and the 'poor' are two wealth groups. Power is correlated with wealth and social group. Those who are powerful are most often well-off high caste people and those less powerful are poor low caste and ethnic people. Wealth is correlated with caste and ethnicity. However, there are exceptions; some low caste are well-off and some high caste are poor, for example. As mentioned earlier, 63 to 78 percent of high caste households were identified by the communities as well-off while 80 to 100 percent of low caste households were identified as poor. Wealth variation in the ethnic groups is high across communities; 35 to 73 percent of ethnic households were identified within the communities as poor (see Table 7.3).

The mechanisms through which sociocultural factors and power influence access of the poor to forest benefits differ across cases. In the CF case, the individuals who are selected for key positions in the executive committee have considerable influence over forest access of the poor. Because of the prevailing sociocultural norms and stronger social networks, well-off high caste men tend to dominate the key positions on the executive. In contrast, the poor tend to be excluded from the executive committees — as well as the decision-making processes that set the operational rules for forest access — because they lack power and influence due to the prevailing sociocultural norms and weaker social networks. The well-off high castes tend to flout the rules to obtain more benefits from their forest access because they are more powerful. As a result, fewer

resources are left for the poor. The poor low castes, in particular, have only limited access to forest benefits because they lack power and are fearful of defying the rules.

In the LF case, the LFUG does not have the power to set or change the operational rules for forest access to suit their own requirements. Because the LFUG comprises a minority of the community, it does not have the power to enforce the operational rules set by the DFO. The majority of the community who are not members of the LFUG do not recognise LFUG members' legal rights to the forest, and thus they continue to use forest resources illegally. Power differentials, largely derived from customary rights, within the community prevail over any authority given to the LFUG by the DFO. Powerful section of the community obtain greater access to forest benefits regardless of their rights (whether customary or legal) as compared to those with limited power.

The influences of sociocultural norms, social networks and capacity, and erosion of the *Bista* system on access of the poor to forest benefits for the two case studies are described in the following section.

The influence of sociocultural norms

Sociocultural norms have an important influence on forest access of the poor in both cases. The sociocultural norms guide social relationships and provide ability to exercise power in both cases. In the CF case, discriminatory sociocultural norms work primarily through the FUGs' decision making and rule enforcing to influence the access of the poor (Figure 7.1). However, they also influence how well the poor can take advantage of the access they are granted. Sociocultural norms are important in the LF case because the operational rules set by the DFO cannot be enforced. As such, the legal rights of the LFUG members are overruled by the customary rights of the community. Customary rights have evolved as a result of sociocultural norms which discriminate against the disadvantaged.

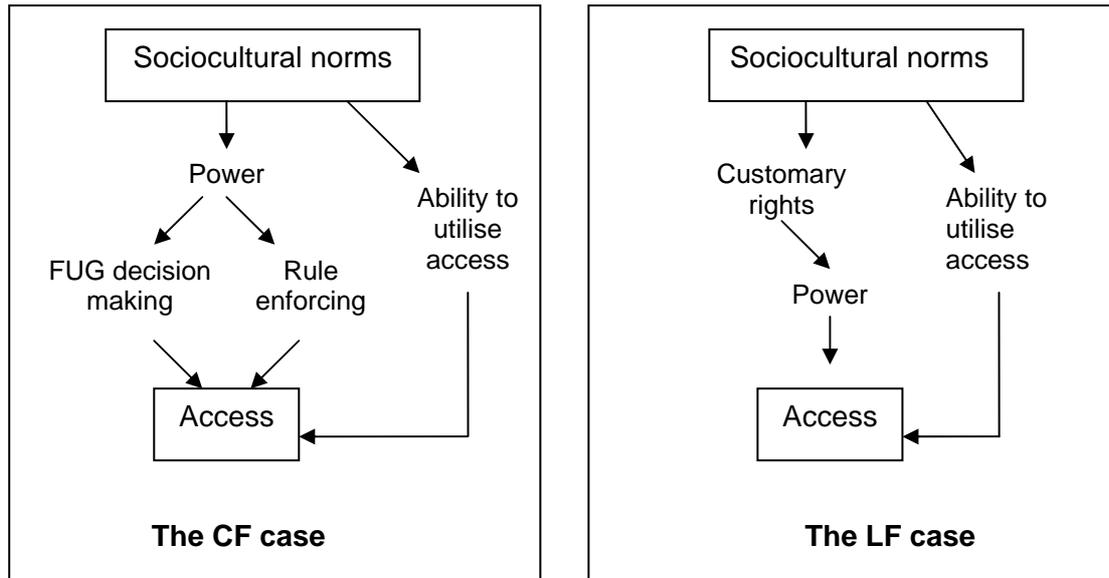


Figure 7.1: Mechanisms of influence of sociocultural norms in the CF and LF cases

The differences in the mechanisms are in part attributable to the nature of the regime and in part to the nature of the communities (degree of heterogeneity) in the two cases. Despite differences in the mechanisms of influence between the CF and LF cases, the poor and disadvantaged members within the communities obtain only limited access to forest benefits, though they have legal rights, because of sociocultural discriminations that are disadvantageous for them.

The differences in heterogeneity within the communities in each case determine the relative influence of different sociocultural norms. The influence of sociocultural norms seems to be stronger in the socially heterogeneous communities as compared to the socially homogeneous communities. The sociocultural norms are discriminatory in nature and tend to discriminate against the low castes and poor. Prevailing sociocultural norms in some communities mean that high castes are viewed as leaders within the community because they are better educated and have leadership skills. In contrast, low caste people are viewed as uneducated, and as lacking in skills and knowledge. The prevailing sociocultural norms in the communities in both cases were found to discriminate on the basis of wealth, caste, ethnicity and gender.

The communities in the CF case are more heterogeneous than those in the LF case. In the CF case, both communities have social groups that can be differentiated on the basis of wealth, caste, and ethnicity. Because of the patriarchal nature of the local culture,

important gender differences exist. These communities have sociocultural norms that discriminate on the basis of wealth, caste, ethnicity and gender. In contrast, the communities in the LF case are more homogeneous. In the *Odarepakha* community, the social groups can be differentiated on the basis of wealth and caste, but not ethnicity. As with the other case, the culture in this community is patriarchal in nature. As such, only sociocultural norms that discriminate on the basis of wealth, caste and gender exist in this community. The social groups in the *Tutikhola* community, the most homogeneous of the communities, can be differentiated only on the basis of wealth. As such, the sociocultural norms that prevail in this community are those that discriminate on the basis of wealth and gender.

In the CF case, the power to set the operational rules for forest use and their enforcement are delegated to the CFUG. This power works through the executive, the CFUG governance structure, which makes the decisions in regard to rules and their enforcement. The prevailing sociocultural norms within the communities in the CF case influence who dominates the leadership (or key) positions in the executive and the setting of the operational rules. Sociocultural norms influence this. In the LF case, the power to set the operational rules for forest use has not been delegated to the LFUG. Rather, the DFO sets the operational rules without consultation with the LFUG. However, authority to enforce the operational rules has been delegated to the LFUG. Sociocultural norms do not act through the same mechanisms as in the CF case. As the LFUGs represent a small proportion of the community and are unable to enforce the rules, the mechanisms by which sociocultural norms influence governance of the forests are not within the FUGs (as in the CF case) but within the community.

The impact of these discriminatory sociocultural norms is that the executive is dominated by well-off, high caste men in both cases, except in the socially homogeneous community in the LF case (see Table 7.6 for the CF case). As described earlier this has significant influence on access in the CF case but in the LF case it has limited influence because the executive has little power to make decisions and implement them. In the CF case, the individuals who have the most influence over the decisions made by the executive on forest access are those in leadership or key positions (e.g. chairperson, vice-chairperson, treasurer, secretary, and assistant secretary). The process of selection of individuals for these positions (for details of this process, see 7.3.2) favours well-off, high caste men. The sociocultural norms posit the well-off, high caste as being socially influential and competent in leadership skills and hence they are selected for leadership positions by the CFUG and the DFO. The norms regard other social groups as less influential because

they have lower social status and are less competent in leadership skills. Low castes are also regarded as untouchables and have the lowest social status — therefore they are not selected for these positions. Patriarchy regards men as natural leaders and women as followers — thus men rather than women are selected for these positions.

Table 7.6: Representation in Respective Executive Committees of the CFUGs (Percentages)

Social group	<i>Dhuseni</i> CFUG			<i>Saparupa</i> CFUG		
	<u>LP</u>	<u>EM</u>	<u>CM</u>	<u>LP</u>	<u>EM</u>	<u>CM</u>
High caste	100	40	48	80	30	48
Ethnic group	0	50	43	20	50	19
Low caste	0	10	9	0	20	33
Women	0	50	5*	0	70	7*
Men	100	50	95	100	30	93

Note: LP, EM, and CM indicate leadership, executive membership, and CFUG membership

* indicates women-headed households (without adult men).

In *Dhuseni* CFUG, the leadership positions are dominated by well-off, high caste men and there is no representation from ethnic or low caste members, despite the fact that these groups make up 52 percent of the CFUG membership households. There are no women in these positions. The *Saparupa* CFUG is somewhat different from the *Dhuseni* CFUG. Although the ethnic groups in this community comprise only 19 percent of the CFUG membership households, they have representation in the leadership positions. This is because individuals of the *Newar* ethnic group⁶² are politically influential⁶³ in the community and have thus been selected for the positions. However, in the *Dhuseni* CFUG, the *Majhi* ethnic group makes up 43 percent of the CFUG membership households, but they are not represented in the leadership positions because the *Majhi* ethnic group is regarded as backward and are less influential than the *Newar* ethnic group. Similarly, although the low castes make up a third of the members, they are not represented in the leadership positions in the *Saparupa* CFUG due to the influence of

⁶² *Newar* ethnic group is regarded as most dominant among the ethnic groups, particularly in the fields of education and politics.

⁶³ Affiliated with one of the major eight national political parties as a party member.

discriminatory norms. Men dominate in the leadership positions despite there being a much high percentage of women (70 percent) in the executive.

In addition to five leadership positions, an executive committee consists of 10 membership positions. Among 10 executive members in both CFUGs, there is a high representation of the ethnic groups (five members) followed by high castes (three or four), and low caste (one or two). Fifty to 70 percent are women (30 percent are of high castes) in the executive membership, but the executives with leadership positions do not view them as members to be involved in decision-making processes. They are considered as being unable to contribute to the process.

The executive and, in particular, those in the leadership positions within this, set the operational rules. The domination of the leadership positions by the high caste men impacts negatively on access of the poor to the forest benefits. Because the high castes dominate the decision-making process, they tend to set operational rules that either favour them at the expense of the ethnic and low caste groups or disadvantage the ethnic or low caste groups and, in particular, the poor within these groups. For example, the high caste executives put a price on charcoal that is beyond the poor members' ability to pay and this constrains them from obtaining benefits from their access because they do not have either a strong voice or the ability to bargain. Rules which set a short time for collection of firewood from the forest disadvantage the poor.

Although the executives in leadership positions dominate the decision-making processes in relation to the setting of the operational rules for forest use, there are general assembly meetings where members who are not on the executive committees can put their point of view across, but discriminatory sociocultural norms impact on the self-esteem of the social groups which are discriminated against (ethnic, low caste, and women). As a result, individuals within these groups lack confidence. The impact of these sociocultural norms is greatest on these who are more discriminated against so that in the general assembly meetings, these groups lack the confidence to present their problems and needs for forest access to the executive. They are too scared to challenge or question the executive about the decisions that reduce their access. Thus they lack a strong voice in such meetings, and because of the prevailing discriminatory sociocultural norms, they are not listened to at the general meetings. Their views are not heard by the more powerful members of the CFUG and even if these are voiced, they are ignored. The CF case shows that as a result of discriminatory sociocultural norms, the disadvantaged are less likely to be selected for positions of the executive committee of the CFUG.

In the LF case, the mechanisms by which sociocultural norms influence the access of the poor differ between the two communities because of differences in the extent of heterogeneity. In the *Odarepakha* community, discrimination on the basis of caste, wealth and gender prevails, meaning that the well-off high castes — regardless of their membership in the LFUG — have greater access to forest benefits compared to poor low caste people. The LFUG members are all high caste (from both the well-off and the poor), but since they comprise a small proportion of the community, the LFUG cannot enforce the LFUG rules it sets. Community members continue to follow the customary rights they had before the regime — thus the prevailing customary rights are influenced by sociocultural norms that discriminate against the low caste, poor and women. Forest access is, therefore, a function of where one sits in relation to these sociocultural norms: for example, well-off high caste men are more favoured than are poor high caste men, followed by well-off high caste women, poor high caste women, well-off low caste men, poor low caste men and then poor low caste women.

Two issues emerged as important in relation to women in the *Odarepakha* community. There is an increasing number of low caste households (38 percent) whose men have left home for jobs in the cities. Women of these low caste households are the most discriminated against. As such, they have the least access to forest benefits. The other households (62 percent) comprise a husband and wife meaning that both are at home. In most of these households, since the wives are responsible for collecting fodder and grasses from the forest, they are the ones who have to face the discrimination that affects their access.

In the *Tutikhola* community of the LF case, discrimination due to sociocultural norms is less than in the other communities of both cases. Since this is a single ethnic community, discrimination on the basis of wealth and gender prevails, impacting on access of the poor to forest benefits. Also, similarly to the *Odarepakha* community, the LFUG is unable to enforce the rules governing forest access, as a result of which customary rights overrules the legal rights. Customary rights are influenced by the prevailing sociocultural norms that discriminate against the poor and women. Even though the well-off have no legal rights, they have expanded their farmland to parts of the leasehold forest, leaving less forestland for the poor members to use.

In both CF and LF cases, the sociocultural norms not only act through their influence on customary rights, but also impact directly on access to the benefits which can be derived from forest access. For example, sociocultural norms prohibit the low castes (poor and

well-off) from selling milk because of their 'untouchable' status. As such, the low castes (poor and well-off) cannot utilise fodder and forage to produce high value products such as milk. This disadvantages the low caste group relative to the high caste households.

The influence of social networks

Social networks impact on access of the poor to forest benefits in both cases. The influence of social networks on access of the poor is linked with the capacity of the various social groups within a community, sociocultural norms, and governance of the forest by the FUG. In both cases, the strength of bonding, bridging and linking social networks, leadership, and collective action capacity are interrelated characteristics of the social groups, which influence their forest access. In the CF case, the mechanism through which the networks and capacity influence access is the CFUG leadership and their influence in decisions concerning forest access. In contrast, the social networks influence access of the poor to forest benefits through customary rights and the capacity of the LFUGs to enforce rules in the LF case.

The bonding networks of a high caste group are reasonably strong because the high castes have strong social relationships through marriage, relatives, and friends, which provide them with trust, solidarity, and support for each other. The bridging networks of a high caste group with people of same caste groups in other locations (e.g. neighbouring villages and districts) or people of other caste and ethnic groups in the same location are also reasonably strong. The linking networks of a high caste group, the well-off in particular, with the DFO staff are also strong. The ethnic group has some level of these networks but they are weaker than those of the high caste group. Finally, the low caste groups have weak bonding, bridging and linking networks.

In the CF case, strong bonding and bridging networks provide the high castes in both communities with a number of advantages over the ethnic and low caste groups, which influence their respective access to forest benefits. Firstly, stronger bonding networks provide the high castes with strong support to be selected for the executive. Secondly, stronger bridging and linking networks (with the DFO) provide the high castes with better access to information about forest use and management, which in turn improves their access to forest benefits. For example, in the *Dhuseni* community, the high castes, after receiving information from their relatives about the investment of the CFUG funds in the renovation of schools and temples, decided to use the money earned from selling timber

for renovating a temple in their settlement. As a result, less money was left for other activities.

In contrast, because the ethnic and low caste groups in the community have weaker bridging and linking networks (with the DFO) they lack knowledge about forest use and management. This lack of knowledge limits their access in a number of ways. For example, they are often not aware of their legal rights. Due to discriminatory sociocultural norms and lack of awareness, they are bullied by the high castes into not exercising these rights. Low caste women are scolded by high caste women when collecting firewood. This bullying deprives the low caste women of their legal rights to forest resources.

The third advantage provided to the high castes through strong social networks is that because they have stronger linking networks with the DFO staff, this allows them to have greater influence over the DFO. Sociocultural norms and the differing capacities of the various social groups also contribute to this. The DFO staff members tend to defer to the high castes rather than to the low castes or ethnic groups. They also view the high castes as having much better leadership skills and experience with collective action (capacity) than the low castes — which means that they tend to consult with the high castes rather than the low castes and ethnic groups and are also more likely to appoint the high castes onto the executive of the CFUG.

The weak bonding and bridging networks of the low castes contribute to their lack of a strong voice in the community. They have little influence with the DFO and because they lack a strong voice in the community and their members make up a minority on the CFUG executive, the high castes tend to dominate the decision-making processes and set operational rules for forest use and management that often fail to take into account the livelihood needs of the poor.

In the LF case, the strength of the various social groups' social networks are not important in relation to governance and the setting of the operational rules for forest access because the DFO staff set the rules independently of the LFUG and the local community. Social networks influence access of the poor to forest resources through different mechanisms. Under the LF regime, a small proportion of the community is given legal rights to a degraded forest — while other members (the majority) of the community that had previously had traditional rights to it are legally excluded. In the more homogenous community that comprises a single ethnic group, under this regime it was found that because of weak bonding networks within the community, the legal rights of the poor

LFUG members are not recognised by the rest of the community. The poor LFUG members have lost their access to the forest because there are no means of enforcing their legal rights. The situation in the *Odarepakha* LFUG is quite different because the LFUG is made up of high caste members (both well-off and poor). Due to stronger linking network with the DFO, the high castes have strong influence over the DFO in selection of households for the formation of the LFUG. The high castes have kept the low castes out of the leasehold forest through the use of their social networks and sociocultural norms. Although the high caste members of the LFUG have strong bonding networks within the community, these are not sufficient to guarantee them exclusive access to the forest resource. The rest of the households in the community refuse to recognise the LFUG's legal rights and continue to use their customary rights. In part, this refusal to recognise the legal rights of a small proportion of the community by the majority can be attributed to the process by which the LFUG is set up. It was set up quickly to meet government deadlines with little or no consultation with the community and as a result there is little or no buy-in into the regime by the community.

The influence of erosion of the Bista system

The influence of the erosion of the *Bista* system on forest access of the poor is linked with the level of support provided to the low castes by the *Bistas* (most often high castes). The *Bista* system exists in the socially heterogeneous communities where there are high and low caste social groups. In the *Bista* system, the low castes (*Kamis*, *Damais*, and *Sarkis*) make a certain number of ploughing tools, clothes, and shoes annually for their high caste patrons (*Bistas*) for whom their ancestors have been working for generations. In return, the high castes provide the low castes with a fixed amount of grain after each harvest (called '*bali pratha*') on an annual basis.

The development of roads into a district has allowed the development of markets within communities that have access to such roads; for example, the *Saparupa* community in the CF case and the *Odarepakha* community in the LF case. In these markets, goods sourced from outside the district are sold and these goods have replaced the goods traditionally made by low caste households for their *Bistas* (high caste patrons). The high castes now tend to buy their goods from the market rather than from their low caste clients — therefore the low caste clients do not receive their annual grain allowance from their high caste patrons. This has led to the erosion of the interdependent relationships between high and low caste social groups. As a result, the level of support the high castes have

provided for the low castes in their community has declined and this has impacted negatively on the access of the poor to forest benefits. In the past, they had protected the customary rights of the low castes because access to forest resources (e.g. wood for charcoal to make farm implements) is required to produce the goods for the high castes. As they no longer need goods prepared by the low castes, they are less protective of the low castes' customary rights to the forest.

In the CF case, with the erosion of the *Bista* system, the high caste executive members have set operational rules for forest resource use that limit forest access of the low castes. For example, they put a price on collecting firewood from the forest that is beyond the low caste members' ability to pay. This price mechanism in effect acts as a barrier to access for the poor (not only low castes, but also others). They are unable to question the high castes about these discriminatory rules because they lack a strong voice in the community.

In the LF case, in the socially heterogeneous community with good access to roads and markets that has led to reduced bargaining power of the low castes with the *Bistas*, the low castes are less able to obtain access to the forest resources even though they have customary rights over that forest. The high caste *Bistas* are selected as members of the LFUG by the ADBN staff because they are the ones to be consulted by the staff. Due to the influence of sociocultural norms that discriminate based on caste, the high caste *Bistas* are more likely to be first visited by the ADBN staff as compared to the low castes. This case is complicated because high castes were made members of the LFUG. Due to erosion of the *Bista* system and the imposition of this new (LF) regime, the high caste members have used this membership as an excuse to restrict the access of the low caste members to the forest.

7.3.2 Regime factors

In this study, factors directly associated with the two regimes influence the access of the poor to forest benefits through regime policies and implementation, and governance of the forest at the community level. The regime factors are membership for legal rights, the membership selection process, decision-making structures and processes, and rule-enforcing mechanisms. The impacts of these factors on the access of the poor to forest benefits are compared and contrasted across the two cases in the following section.

Membership for legal rights

As the natures of the CF and LF regimes are different, the property rights provided to the members of the communities are also different between the cases. The CF policy states that all users of the forest are to be given equal property rights to the forest. As such, equal legal rights were to replace the customary rights of the members of the community. Prior to the introduction of the regimes, the customary rights of community members were not equal. The well-off high castes had greater access to forest benefits through their customary rights as compared to the rest of the community. If the CF regime had been implemented as intended, all individuals who use the forest resource would have had equal rights to the forest. In contrast, the LF policy directs that a few selected (8 to 10) poor households from within the community obtain legal rights to the degraded forest. As a consequence of introducing the regimes, forest users (both well-off and poor households) with customary rights have lost their access.

There are some important policy differences underlying the two regimes. In the CF case, the underlying policy of the forestry regime can be viewed as inclusive. This means that the rights of all forest users are recognised and their customary rights are replaced with legal property rights. However, unlike the customary rights where forest users obtained differential access to forest benefits on the basis of their social status, under the new regime, all forest users are expected to have equal access to forest resources. In this case, if the policy is fully implemented, the access of the poor will be improved, but the access of the well-off high castes will be reduced. In contrast to the CF case, the policy underlying the leasehold forestry regime can be viewed as exclusive. A small subset of the community is given exclusive rights to the forest resource, and other users lose their customary rights. If the policy were to be fully implemented, the forest access of a subgroup of the poor would improve. However, the access of other poor and the well-off in the community would be reduced.

In both cases, the policy creates the potential for conflict within the communities under each regime. The customary rights within the communities prior to the introduction of the regimes were not equal, but tended to favour the well-off high castes. In the CF case, the introduction of “equal” property rights has created some tension in the community. For example, in the *Dhuseni* community, well-off high castes are opposed to the customary rights of poor ethnic groups being replaced with legal rights. In the LF case, the provision of exclusive legal rights to a small sub-group of the community and the removal of the customary rights of other users of the forest have created tension between the LFUG and

the rest of the community. The case studies also demonstrate that the membership selection process influences who actually obtains legal property rights. This is presented in the next section.

Membership selection process

Both CF and LF regime policies specify the nature of property rights and who should obtain them. However, implementation of these policies deviated from what was intended. To obtain legal rights to the forest resource, the community members in both cases are required to obtain membership of the associated forest user groups (FUGs). It is through the membership selection process that the community members obtain legal rights to the forest resource. In both cases, there are problems with the membership selection process.

The process of selecting forest users for membership differed between the two cases. In both cases, the government staff members initiated the process. In the CF case, the DFO staff members visited a small number of high caste men in the villages and in consultation with them prepared a list of heads of the households, who were given membership of the CFUGs. The DFO staff prepared the operational plans, and also selected people for the executive committees in consultation with high caste men, who then arranged a meeting with local people and informed them about the formation of the CFUGs. After this, the DFO staff members registered the CFUGs in the DFO offices located in the district headquarters. Once the operational plans and constitutions (prepared by the DFO staff without consulting local people) had been signed by the DFO chief, these documents were given to the executives of the CFUGs.

In the LF case, the DFO or ADBN staff initiated the process. In the *Tutikhola* community, the DFO staff visited some local elites (well-off *Danuwar* men) in the village, and consulted with them to identify and select poor households for forming the LFUG. Eight households who owned half a hectare of farmland were selected as the poor households. In the *Odarepakha* community, the ADBN staff visited high caste men and consulted with them to select farmers, who had enough assets to payback the loans the ADBN would provide for buying livestock. Ten such households were selected, the names of the heads of these households were listed, and three among them were selected for the positions of chairperson, secretary and treasurer. The DFO staff prepared operational plans for both LFUGs and the names of heads of selected households were specified as members in the plans. Apart from a few high caste men, the communities were not consulted about the

group selection or rules. The operational plans were given to the chairperson of the LFUGs for implementation.

In the CF case, a CFUG can use a local process to include the excluded community members even after the formation of the CFUG. In contrast, a LFUG on its own cannot replace any members or include any new members after group formation.

For both communities in the CF case, the implementation of the regime resulted in some households who were customary users of the respective forests failing to gain membership in the CFUG. Importantly, all customary users (72 households) of the *Saparupa* forest who had failed to obtain initial membership of the CFUG in 1999 obtained membership in 2005. This occurred because there was continuous feedback from the staff of the donor project (e.g. NACRMLP) on the need to identify those customary users and include them in the CFUG. For this purpose, financial support was provided to the CFUG to conduct discussions in each settlement in the community and to identify and include all customary users in the revised operational plan in 2005.

In contrast, many customary users (50 households) of the *Dhuseni* forest who had failed to obtain initial membership of that CFUG in 1996, have yet to obtain membership. There are a number of reasons for this. First, the nonmembers reside in a location (distant village) far from the forest and the executives of the CFUG believe that they would gain benefits from the forest but they would not be able to contribute to the forest's management. Secondly, they were not aware that assembly meetings were occurring, so they did not have the opportunity to participate in the meetings and put forward their request for membership to the executive of the CFUG. The third reason is that they (most are poor women) lack the confidence to convey their problems with forest access to the executive. Lastly, there is no mechanism or entity that is ensuring the CFUG includes all customary users who were excluded from membership.

For both communities in the LF case, implementation of the regimes resulted in poor as well as well-off households who were customary users of the respective forests failing to gain membership to the LFUG. In the socially (in terms of caste) heterogeneous community (*Odarepakha*), those who were well-off and of the high caste were given legal rights over the degraded forest because of the selection criteria used by the local Bank (ADB) staff, who had been asked by the government to select households that would form the LFUG. The Bank staff used the same criterion that they used to select farmers eligible to receive a loan for agriculture and livestock farming. The criterion was not

consistent with the regime's pro-poor policy. Therefore, farmers who had the ability to pay off a loan were given membership in the LFUG, because the LFUG members were supposed to also obtain a loan for livestock enterprises. In the single ethnic community (*Tutikhola*) where the majority (73 percent) are poor, poor people obtained legal rights over the degraded forest. However, the DFO staff selected poor households on the basis that they owned half a hectare of land. Consequently, many (38) of the poorest households, who owned less than half a hectare of farmland, were excluded from the LFUG.

The way in which the two regimes were implemented meant that the poor in the communities in both cases missed out on their legal rights to the forest and were, therefore, legally excluded from the resource. In the *Dhuseni* community eight years after the CFUG was set up, these households still do not have legal access to the forest, because the mechanisms for dealing with people who were initially excluded from group membership when the CFUG was set up were not put in place. However, in the *Saparupa* community, these households were given membership in 2005 as a result of strong donor support for the process. In the *Odarepakha* community of the LF case, where only the well-off obtained membership, this cannot be rectified because of the nature of the regime. In the *Tutikhola* community of the LF case, poorest households, who are legally excluded, were not included in the LFUG because of the nature of the LF regime.

Summary: The influence of property rights on access

In the CF regime, legal rights have replaced customary rights, whereas in the LF regime, customary rights tend to override legal rights. However, in the CF regime, the legal rights of the disadvantaged (the poor, the low castes) members are subverted by the elite members. This occurs due to the interaction between sociocultural factors (power, sociocultural norms and networks) and governance.

In the CF regime, the legal rights of the disadvantaged members to participate in and influence governance of the forest are undermined by the elite members, both because the elite members are powerful and because of the existence of sociocultural norms and strong networks. As a result of these, the disadvantaged members have limited access to the forest benefits. In the LF regime, the customary rights are effective, whereas the legal rights are ineffective. Legal rights cannot be enforced. In such a situation, since customary rights are also unequal due to inequities in power and discriminatory sociocultural norms,

the elite customary users have greater access to forest resources than do the disadvantaged customary users.

The degree to which legal rights reflect customary rights differs between the cases. In the CF case, legal rights reflect customary rights to a greater extent than in the LF case. However, legal rights have given more legitimate power to the elite members and they have more access as compared to the disadvantaged members in the CF case. In contrast, legal rights have limited impact in the LF case. In the LF case, the impact of property rights on access cannot be separated from the influence of sociocultural norms and hence customary rights.

The property rights under which the community forests are governed are a mix of state and common property rights. But the property rights under which the leasehold forests are governed allow open access, though these forests are supposed to be under a mix of state and common property. This difference reflects the nature of the regimes and the regimes' implementation. Differences between types of property rights do not have a clear-cut impact on the access because there are other important factors such as sociocultural factors that have a dominant influence. For this reason, the disadvantaged members have limited access to forest benefits in both cases.

The influence of governance mechanisms

In the preceding section, the impacts that the regimes have on the property rights of forest users and also their access, have been described. The other way that the regimes influence forest access is through the decision-making structures and processes the regimes put in place at the FUG level. The impacts of these structures and processes on forest access are linked with the power and authority devolved to an FUG and its capacity to govern, which are both influenced by the sociocultural factors described earlier.

The level of authority a FUG has to make decisions on rules for forest access differs between the cases. A CFUG has authority to make decisions on operational rules and a few collective rules in consultation with the DFO (but the DFO makes constitutional rules and most collective rules). In contrast, an LFUG lacks authority to make decisions on any type of rule. The DFO, not the LFUG, makes the decisions in relation to forest access.

The authority a FUG has to enforce the rules within the community is relatively similar in both cases. However, the capacity of an FUG to enforce the rules in reality differs across cases. A CFUG has greater capacity to enforce the rules than does an LFUG.

The decision-making structures used in the two cases are relatively similar. For the CFUG, the structure comprises the executive committee, consisting fifteen individuals of which there are five key positions (chairperson, vice-chairperson, treasurer, secretary, assistant secretary). The LFUG consists of eight to ten individuals and within this body there are three key positions (chairperson, treasurer, secretary). Important differences between the cases relate to the decision-making power of the individuals within these structures.

In the CF case, the person who holds the position of leadership in the executive is significant in terms of influencing the forest access of the poor. In contrast, he has limited influence on the forest access of the poor in the LF case. In the CF case, the executive is selected from the members of the CFUG, and these fifteen executive members act on behalf of 200 to 300 group members (Figure 7.2).

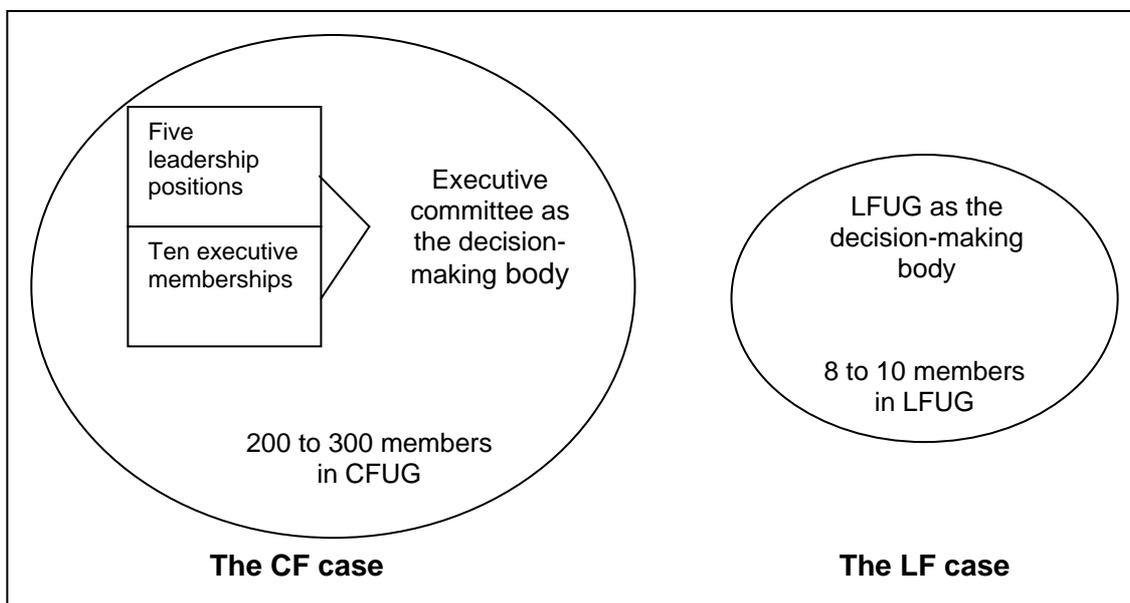


Figure 7.2: FUG decision-making structures in the cases

In contrast, the whole LFUG is part of the group decision-making structure in the LF case. In the CF case, the majority of the members rely on a small subset of their population to put their views across and ensure that they obtain adequate access. The processes used to select the executive for the decision-making structure and then to make decisions in

relation to forest access are biased towards the elites within the community. In contrast, the inclusive nature of the LFUG structure ensures that it does not have the problems of the CFUG because the entire group is part of the decision-making structure. The decision-making structure of the LFUG, however, has limited influence on access, but the decision-making process, which is externally dominated, and the capacity of the LFUG to enforce the rules have a significant influence on access.

In both CF and LF cases, the decision-making structure of the FUG, what key positions will exist in the FUG decision-making body, and who will hold these positions are decided by the DFO in consultation with local elites when the FUG is set up. People in key positions may be changed at five-yearly intervals (at the time of revision of the operational plan) and approval from the DFOs is required for new committees to initiate activities in the forests. The degree to which an FUG can negotiate with the DFO in deciding who holds the positions differs between the cases. A CFUG has a greater role in this regard, whereas an LFUG has a limited role. As a result of this, the decision-making structure that the regime specifies at the FUG level has an important impact on forest access in the CF case, but it has a more limited role in the LF case.

In the CFUGs, only group members are eligible for selection for the executive committee. The rules require that the election of group members to these positions is to occur in a general assembly meeting, in which at least 60 percent of members are present. However, in reality, this process has not been followed in either of the CFUGs, with implications for the level of representation of some social groups on the executive committee. The process is dominated by existing executive members who tend to be well-off high caste men. This reflects both a lack of confidence of some to speak out and challenge these people and the unwillingness of these men to recognise or acknowledge other people's perspectives. For example, in the *Dhuseni* community, the selection of the executive members was done nearly at the end of the general assembly meeting when 50 percent of the participants (women and low caste) had left the meeting.

The leadership positions of the executive committees in both CFUGs are dominated by well-off high caste men due to sociocultural factors, as described earlier (see subsection of 7.3.1 on 'power', 'sociocultural norms' and 'social networks'). Therefore, only a small number of the low castes are members of the committees. However, those occupying leadership positions make decisions on operational rules for forest access. Although women and low castes are present on the committees, they have limited power to

influence the decision making; thus even if they are represented on the executive, sociocultural norms continue to favour high caste well-off men.

The presence of women on the committees differs between the committees. In the *Saparupa* CFUG, women members of the committee have enhanced their own access to forest benefits. They are able to obtain loans for livestock from project-initiated local saving and credit groups, and they can utilise increased quantities of fodder and grasses from the forest. This is due to their improved access to information on loans through their participation in the meetings as executive members. However, this is not the situation in the *Dhuseni* CFUG, because no such project-initiated groups exist at that community.

In the CF case, there are two parts to the process through which operational rules are established and implemented. First, a small group of executives, who are in decision-making positions, establish these rules and then inform the members of the executive committee. Second, the rules are then announced in the general assembly meeting, where group members also participate and sign their approval. Because decision-making positions are occupied by well-off high castes, they dominate the process and set rules that limit the access of the poor to forest benefits. The processes in the general assembly meetings generally ignore the presence of poor members and their problems and needs.

In the LF case, the DFO set operational rules without consultation with the poor. Such rules do not reflect forest access needs of the poor. The operational rules are set out in the five-year operational plans that are prepared by the DFO staff. These plans are then given to the LFUGs for implementation. The process excludes LFUG members and they are expected to implement what is written in the plan. The forest protection rules (e.g. restriction on collecting products for long periods, fodder and forage plantation etc.) set by the DFO do not address how the poor can benefit from the leasehold forest.

The FUG's capacity to enforce the rules is linked with the regime characteristics and sociocultural characteristics of the community. Differences in enforcement mean that the influence of sociocultural factors, while strong in both cases, works through different mechanisms. In the CF case, the mechanism is through the formal rules because they can be enforced. In contrast, the mechanism is through customary rights and power because formal rules cannot be enforced in the LF case.

7.3.3 Level of external support

The external support is more effective in the CF case than in the LF case because of the better working of the CFUGs relative to the LFUGs. In the CF case, level of external support is linked with the characteristics of the community. There is more support from donor projects to the CFUGs in the more accessible community as compared to less accessible community. The impact of external support on access is through capacity building for CFUG members and creating more information-sharing forums for them.

7.4 Summary: Key findings

The case studies highlight that the regime (formal) and sociocultural (informal) factors are two key categories of institutional factors that influence access of the poor to forest benefits. Another factor is the level of support available from external organisations but from a cross-case perspective, this factor is closely related to regime implementation. In the CF case, formal institutional factors play a significant role, but they are also influenced by informal institutional factors, and this interaction has a significant influence on the forest access of the poor. In contrast, informal institutional factors play a significant role and they also influence the formal institutional factors in the LF case. This also indicates that the CF regime has a greater role in governing the forest in relation to access of the poor — the LF regime has a limited role only.

In both cases, mechanisms of influence work through the levels of power (or authority) that are determined through regime and sociocultural factors. The degree of heterogeneity in the communities is directly linked with the level of power inequities and extent of prevailing discriminatory sociocultural norms within the community. In the CF case, the DFO devolves power to a CFUG to set the operational rules for forest access and to enforce these rules. This power works through the executive, the FUG governance structure, which makes the decisions in regards to rules and their enforcement. The result of the discriminatory sociocultural norms (Hindu caste-based norms) and the strength of social networks is that the executive is dominated by well-off high caste men. The rules set by these people generally disadvantage the poor.

In contrast to the CF case, the DFO maintains the power to set the operational rules for forest access and delegates the power to enforce those rules on the LFUG in the LF case. Because the LFUG comprises a minority of the community, they do not have the power to

enforce the operational rules set by the DFO. Power within the community dominates the power given to the LFUG by the DFO. The influence of power inequities on access of the poor is greater in the socially heterogeneous (in terms of caste) community (*Odarepkaha*) than in the single ethnic community (*Tutikhola*). Those who lack power derive less benefit from access than do powerful people.

In both cases, the erosion of the *Bista* system (customary caste-based network) has negatively impacted on the access of the poor in the socially heterogeneous (in terms of caste) communities. In the CF case, the *Bistas*, who are in the powerful positions on the executive committee, tend to set the rules that restrict low caste members' access to the forest resources because they no longer need to support the forest access of the low castes. In the LF case, the influence of the *Bista* systems is not through the LFUG (as LFUG members have no power to set rules and are unable to enforce rules), but through the power relationships within the community. The access is restricted because the poor people are too scared to stand up for their rights.

The case studies also demonstrate that the CF and LF regimes influence the access of the poor through two major mechanisms, property rights and governance. The membership selection process determines who actually obtain legal property rights. Due to ineffective governance processes, the poor (though they were customary users) in both cases miss out on their legal rights to the forest and as such are legally excluded from the resource in both cases. In the CF case, legal rights replace customary rights, but the legal rights of the disadvantaged members are dominated by the elite members due to the influence of sociocultural factors on governance. In contrast, customary rights override legal rights in the LF case. Since customary rights are unequal, the elites obtain greater access than do the poor and low castes in both cases.

The other effects the regimes have are that they influence forest access through decision-making structures and processes put in place at the FUG level. The impacts of these structures and processes on access are linked with the nature of the regimes and the sociocultural factors. In the CF case, a CFUG has the power to set its own operational rules through a decision-making structure (executive committee), which is dominated by well-off high caste members. But in the LF case, the members do not make operational rules because these have already been set out by the DFO. Unlike the CFUG, the LFUG has no role in forest governance. As the LFUG is a small subset of the community and the regime has not been established as intended, the members are unable to implement the rules. Therefore, the forest tends to be under open access. In this situation, the dominant

influences of sociocultural factors prevail, and the access of the poor is negatively impacted.

With regard to governance processes, access of the poor is influenced by the operational rules set by the executive in the case of the CFUG and by the operational rules set by the DFO in the case of the LFUG. In the CF case, the low castes are a minority on the executive committee. Furthermore, because of sociocultural factors, they do not question the high castes about the rules that disadvantage them regarding forest access. Though women are involved as members on the committee, impact on their access is linked with external support (technical training, women's literacy programmes) which builds their capacity to present their problems in the meetings. Such support also improves their access to information and increases their attendance in the assembly meetings. But their influence in the meeting is still limited due to discriminatory sociocultural norms. However, in the LF case, the DFO set operational rules without consultation with the poor and, therefore, these limit the access of the poor to forest benefits.

In the next Chapter, the institutional factors influencing access and the mechanisms of influence, which are identified in the Chapters 5, 6, and 7 are compared to the literature.

CHAPTER EIGHT

DISCUSSION

8.1 Introduction

In this chapter, the institutional factors that influence access of the poor to the forests governed under the government-initiated community-based forestry regimes, and the mechanisms by which they exert influence, are discussed in relation to the existing body of knowledge. First, the characteristics of the two cases are summarised. Then, the range of institutional factors and mechanisms that influence access of the poor to the forests in the case studies are discussed.

8.2 Classification of the cases

Before discussing the findings arising from the case study, it is important to categorise the two cases based on their internal characteristics. Such a description provides the basis for comparison with other cases (Ragin, 1992; Hartley, 2004). More detailed explanations of the points included in this description have been presented in Chapters 5, 6, and 7.

The cases are examples of two types of government-initiated forestry regimes (Gautum et al., 2003; Singh, 2004). The cases can be classified based on their sociocultural and regime characteristics (Table 8.1). The sociocultural characteristics are associated with the defined communities for each case study. A community includes all local people who influence and/or are influenced by the governance of a particular forest (Agrawal, 1999; Tyler, 2006; Vandergeest, 2006).

In both cases, sociocultural norms have a significant influence on the level and process of community development. Local people in the communities had customary rights over the forests prior to the introduction of the regimes, and traditionally had free access to firewood, fodder, grasses, and grazing land, with these rights being passed on from their ancestors. The communities in the community forestry (CF) case are socially heterogeneous with a mix of high caste, low caste and ethnic groups. In the leasehold forestry (LF) case, one community is more socially heterogeneous with a mix of high and

low caste groups, and the other community is socially homogeneous comprising a single ethnic group.

Table 8.1: Characteristics of the Cases

Characteristics	Community forestry case	Leasehold forestry case
Sociocultural characteristics		
Influence of sociocultural norms on community	Strong	Strong
Customary rights over the forest existed	Yes	Yes
Degree of heterogeneity within the communities	Both socially heterogeneous	One is socially heterogeneous, the other is more socially homogeneous
Strength of the <i>Bista</i> system	Strong in one, weak in the other	Weak in one, non-existent in the other
Access to roads and markets	Good in one, poor in the other	Good in one, poor in the other
Poverty (percent of total households)	42% and 61%	65% and 73%
Regime characteristics		
Resource (forest) quality	Good	Poor
Property rights structure	A mix of state and common property rights	A mix of state, common and open access property rights
Degree to which legal property rights acknowledge customary rights	Higher	Lower
Level of devolution	Less restrictive	Restrictive
Membership policy	Inclusive	Exclusive
Percentage of the community involved in the FUG	High (75% and 100%)	Low (13% and 25%)
Mix of membership profile in the FUGs	Mix of social and wealth groups	Only poor in one FUG, but poor and well-off in the other FUG
FUG capacity	Stronger	Weaker
Manner in which networks formed among FUGs	Allowed to evolve	Imposed
Role of regime in forest governance	Greater	Smaller
Level of government and donor support	Higher in one, lower in the other	Lower in both

The strength of the *Bista* system (as discussed in the Chapters 5 and 6) is directly linked to the extent of road and market access in the communities. The relationships associated with the *Bista* system are stronger in the communities with poor access to roads and markets and weak in the communities with good access to roads and markets. In the CF case, one community has a strong *Bista* system and the other community has a weak one. In the LF case, one community has a weakened *Bista* system, while in the other, the *Bista* system does not exist. Poverty is comparatively higher in the LF communities (65 and 73 percent) than in the CF communities (42 and 61 percent).

Certain characteristics external to the communities are associated with the CF and LF regimes. Forests provided to the CFUGs are of good quality while those provided to the LFUGs are of poor quality. The community forests are governed under a mix of state and common property rights whereas the leasehold forests are governed under a mix of state, common and open access property rights. The legal property rights acknowledge customary rights to a greater extent in the CF case than in the LF case. The level of devolution in the CF case can be characterised as less 'restrictive' than that in the LF case. The membership policy of the CF regime is reasonably inclusive, whereas that of the LF regime is exclusive. A CFUG represents a large percentage of the population of the community whereas a LFUG represents only a small percentage. A CFUG has members of various social and wealth groups. In the LF case, one LFUG consists of only poor as members, whereas the other LFUG consists of poor and well-off as members. The CFUG has a greater role in governing the forest in relation to access as compared to the LFUG; a CFUG has greater capacity to govern the forest than does a LFUG. Networks among CFUGs are stronger than those among LFUGs. Levels of government and donor support are high in one community within the CF regime, but are low in the other three communities.

8.3 Institutional factors and mechanisms influencing resource access

From the literature reviewed in Chapter 3, access to resources governed under CBNRM arrangements is the outcome of interactions among property rights factors, sociocultural factors and resource governance factors (Ostrom, 1990; Agrawal & Ostrom, 2001; Meinzen-Dick & Knox, 2001). The findings from this research concur that the relationships between these factors influence resource access of the poor. Further, this research provides a detailed example of the complexity of the interactions among these factors and their influence on resource access, when a new governance regime is introduced into an

existing, informal governance arrangement. In the context of the hill communities of Nepal, access to forest resources by the poor is influenced by the outcomes of the interrelationships between the 'sociocultural factors' and 'regime factors'. The former include customary property right factors, sociocultural norms and traditional informal governance factors, while the latter include legal property right factors and governance factors imposed by the government CF and LF regimes (Figure 8.1).

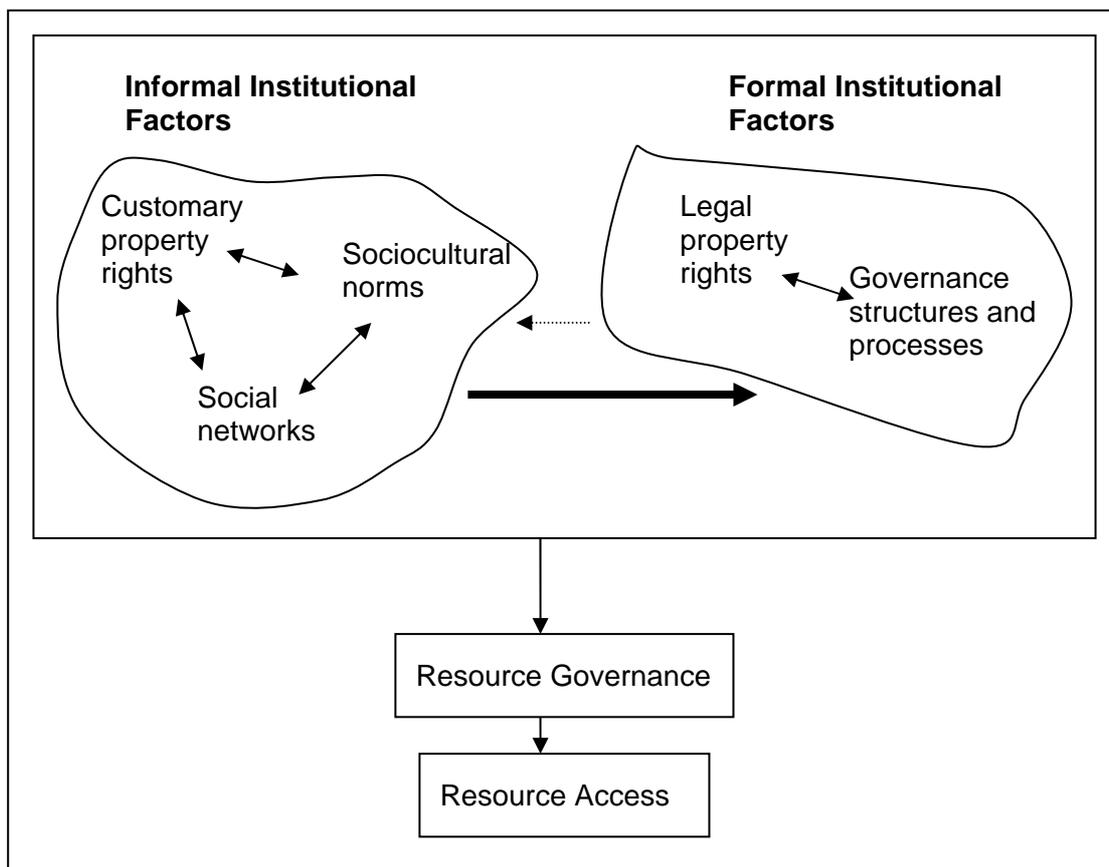


Figure 8.1: Key formal and informal institutional factors that influence resource access

As a result of the mix of factors that was identified as influencing resource access in this research, it was found to be relevant to differentiate between the traditional arrangement of customary property rights, sociocultural norms and social networks as 'informal institutional factors', and the legal property rights and governance arrangements of the regimes as 'formal institutional factors'. This distinction is in line with that made in the literature (Berkes, 1995; Nee & Ingram, 1998; Uphoff, 1998; Platteau, 2000). Social networks are included as informal institutional factors because they are informal governance structures (Mantescu & Vasile, 2006) through which the process of governance occurs under the traditional arrangements in the hills of Nepal. These social networks are intimately interlinked with sociocultural norms and customary property rights.

The mechanisms through which institutional factors influence resource access are affected by community characteristics, in particular degree of social heterogeneity and road accessibility.

This research highlights the influence of informal institutional factors over formal institutional factors, the impact that this has on access of the poor⁶⁴ to forest benefits, and the mechanisms through which this influence occurs. In addition, this research identifies the characteristics of formal institutions for forest governance that influence access of the poor when they exist in the context of strongly embedded discriminatory informal institutions, and the mechanisms through which this occurs. The mechanisms of influence in this research context are not previously described in the literature.

The structure of the following discussion is organised around the informal and formal institutional factors and the mechanisms through which these factors influence access of the poor to forest benefits. Finally, the influence of formal institutional factors on informal institutional factors also is discussed.

8.3.1 Key informal institutional factors influencing resource access

Sociocultural norms, networks, and customary property rights are key informal institutional factors that were found to have a significant influence on access to forest resources irrespective of the regime under which the forest is governed. Ostrom (2000) and Meinzen-Dick and Knox (2001) also highlighted these as key institutional factors influencing governance of a natural resource.

Discriminatory sociocultural norms, type and strength of social networks, and customary property rights linked to sociocultural norms were found to be the basis of differential access of social groups to the resources in the communities studied. Sociocultural norms and networks are the basis for differential levels of power within and across social groups, as suggested by Platteau (2000) and Kothari (2004). Agrawal (2001) argues that power differentials play a significant role in resource governance and resource access. Following Agrawal's (2001) proposition, differential access of social groups to the resource in the hill

⁶⁴ Here, the term 'the poor' is used to indicate all those households with lower wealth and social status, as defined by the hill communities of Nepal (see Chapter 4, pp. 91-92, for details).

communities in Nepal can be attributed to their different levels of influence on resource governance due to their power differentials.

In the hill communities of Nepal, the social groups are primarily defined by caste, which is closely correlated to wealth, with the majority of high caste being well-off and the majority of low caste being poor. The high caste groups have better access to the resource as compared to the low caste and ethnic groups. High caste women have better access to the resource than have low castes or ethnic women. The complex interaction of the three aspects — caste, wealth, and gender — mean that people have different levels of influence on resource governance and consequently, resource access. Lupton (1992) suggested that wealth gives power to people; however, in the hill communities studied, power differentials are a result of complex interactions of caste, wealth and gender, as suggested by Giuijt and Shah (1998) and Beck and Nesmith (2001). The high castes are more powerful due to their caste and wealth status as compared to the low castes and ethnic groups. Across all social groups, women face more sociocultural discrimination than men.

The differential access of the social groups is also a result of the types and strength of social networks within and between these groups. The high castes, who are generally wealthier than other social groups, also have stronger and a greater variety of social networks. Further, these groups have greater capacity for leadership and collective action, and have greater confidence to participate in the resource governance processes. People with stronger social networks are more powerful and are also better leaders (Granovetter, 1973; Putnam, 2000; Woolcock, 2001). As suggested by Bista (1991), the high castes in the hill communities studied have prior experience in cooperation for common work, which is linked with the capacity to take leadership for collective action in local resource management. Consistent with Sharma (2004), the ethnic groups in Nepal lack prior experience in collective action and the feeling of collective solidarity within the groups is rudimentary in the ethnic communities. There is a correlation between the experience in collective action and the access by groups to forest resources. The low castes have the weakest bonding networks of the three social groups, and they lack leadership ability, a point highlighted by Chhetri (1999). In addition, this research highlights the low caste's lack of prior experience in collective action along with their weak social networks and poor leadership ability, characteristics that are linked with their relatively limited access to forest resources. The capacity for leadership and collective action together with the discriminatory sociocultural norms and customary property rights favour one social group over others where more than one social group exists in a community.

It was found that in a socially homogeneous community, the well-off had greater access to the resource whereas in a socially heterogeneous community, the well-off high castes had greater access to the resource. The degree of social heterogeneity in the communities defines what sociocultural norms influence resource governance and consequently resource access. For example, a socially heterogeneous community with a range of social groups has a greater number of discriminatory sociocultural norms (e.g. untouchability, patriarchy) in operation as compared to a socially homogeneous community. This results in greater power differentials in the former than in the latter community, as suggested by Platteau (2000) and Kothari (2004). Baker (1998) reported in his study in India that the heterogeneity in terms of wealth influenced resource governance. Varughese (1999) and Varughese and Ostrom (2001) found in their studies of Nepalese CFUGs that the influence of social heterogeneity on resource governance was unclear. As suggested by Agrawal (2001), power is important in determining who governs the resource. In the CF case, the well-off high castes, who are more powerful in socially heterogeneous communities, dominate CFUG governance structures and processes. In contrast, in the LF case, the more powerful exercise their power through informal institutional factors that existed prior to the regime.

Differential capacities (or lack of capacities) of people also contribute to their differential access to the resource. In the hill communities of Nepal, the capacities that people have are a reflection of their social networks and the discriminatory sociocultural norms that they face. When the capacities of people are improved, they have better access to the resource. For example, in one community studied (*Saparupa*), there was improvement in access of women to the resource as a result of enhancement in their literacy skills. Bebbington (1999) and Johnson (2004) report that capacities that people have are a component of power, which enable them to improve their resource access. This is true for the high castes in the socially heterogeneous communities, whose greater capacities as compared to the low castes and ethnic people gave them more power and thus greater access to forest resources.

In the next sections, the influence of the individual informal institutions, sociocultural norms, social networks and customary property rights on access of the poor to forest benefits are discussed in detail.

Discriminatory sociocultural norms

As indicated above, the discriminatory sociocultural norms confer more power to certain social groups than others. The norms that discriminate against people on the basis of caste and gender, which are strongly linked with wealth, are significant in terms of their influence on forest access in this research, as reported by Ghimire (2000) and Lama and Buchy (2002).

The influence of caste-based norms (e.g. untouchability) on access of the poor to forest benefits remains significant even when new community-based forestry regimes have been introduced, and little until now has been reported in the literature about this. In the CF case, the low castes did not participate actively in FUG governance structures and processes since they lacked power and were dominated by powerful groups due to the influence of caste-based norms. As a result, the low castes feel they are less powerful and have limited self-esteem and self-confidence to participate in the FUG governance and influence decisions. Consistent with Lama and Buchy (2004) in their study of Nepalese CFUGs, limited self-confidence by women is identified as one of constraining factors for their participation in CFUG decision making. The high castes in the Nepalese hills have greater self-confidence due to sociocultural norms that favour them. Further, they have greater capacities to participate actively in governance of the resource. As a result, in the CF case, they dominate the FUG governance structures and processes, and obtain resource benefits. Sinha (2003) argues that greater self-confidence and self-esteem lead to greater capacities for influencing resource governance. In the LF case, in the socially heterogeneous community studied, the well-off high caste members of the LFUG gained greater self-confidence and they discriminated against low caste nonmembers to a greater extent than they would have done in the past. As a result, the poor who were low caste nonmembers lost their customary access to forest resources.

The influence of patriarchal norms on access is evident in situations where women-headed households are more discriminated against and have relatively limited access to resources and resource benefits as compared to male-headed households. In the CF case, patriarchal norms had a negative influence on the participation of women in the FUG decision-making processes, a situation similar to that reported by Campbell and Denholm (1992), Dahal (1996), Ghimire (2000) and Lama and Buchy (2002).

The influences of patriarchal as well as caste-based norms are evident in the socially heterogeneous communities in both CF and LF cases. The well-off high caste men are

most favoured by these norms and the poor low caste women are least favoured. There was an example in one LF community (*Odarepakha*) where the discrimination was exacerbated in the case of the low caste households whose men were away from home for jobs. The women of these households were bullied and were prevented by the high castes from using the resources from the forest.

An important finding from this study is that sociocultural norms not only limit physical access of the poor to forest resources, they also limit how those resources can be used. Although different types of access have been reported (Mosse, 1997; Ribot, 1998), this research highlights the roles sociocultural norms have in defining this in Nepal. The differentiation between 'access' and 'property rights' made by Ribot and Peluso (2003) is particularly important for this research where the benefits one can obtain from the prescribed legal rights and customary rights are significantly influenced by social relationships guided by sociocultural norms. The 'prescribed legal rights' are the ones set out in the policy document before it is implemented and they differ between the regimes (Meinzen-Dick et al., 1997, 2006). The rights that emerge as a result of the process of implementing the prescribed rights and the factors that affect this are 'actual rights' and, as in other studies, differ from the prescribed rights. Actual rights are those that reflect the social access determined as a result of the governance process, as highlighted by Larson (2005). An example of this, evident in the socially heterogeneous communities, is that the low castes are unable to utilise forage and fodder for milk production, a highly profitable enterprise, because other members of the community refuse to buy milk from them because of their 'untouchability'.

Nature and strength of social networks

This research found that the different types of social networks (bonding, bridging and linking) used by different social groups and the differential strength of these networks influenced forest access of the poor. Supporting the prescriptive work of Meinzen-Dick and Knox (2001) where they argued that social networks influence resource governance, this research also identified that the types and strength of social networks of social groups were critical determinants of access.

Previous studies reveal that individuals with wider and stronger linking social networks have greater awareness of information as compared to individuals with weaker linking networks (Bebbington, 1999; Thin & Gardingen, 2004; Bodin et al., 2006). This research

provides empirical evidence from Nepal that the high castes, who have stronger linking networks with the staff of the government agencies implementing the regimes, have greater access to information and have more knowledge about the benefits they can gain from being members of the FUGs. Due to their weak linking social networks, the low castes have limited knowledge and information about the benefits that they can obtain from the resource.

The well-off high castes have relatively strong bonding, bridging and linking social networks and have greater access to resource benefits than do the others. In the CF case, the well-off high castes dominate the FUG governance structures and processes and hence obtain greater access to resource benefits. The findings of this research support the work of Bebbington et al. (2006), who reported that the powerful people who were well-off in rural Indonesia had strong bonding networks and they dominated the resource governance structure and obtained greater access to resource benefits than did others⁶⁵.

The link between strong social networks and resource access is not explicit in the CBNRM literature. However, the general social science literature identifies the link that greater capacities due to stronger social networks facilitate people in gaining access to the resource (Granovetter, 1973; Putnam, 2000; Woolcock, 2001). The capacities of the well-off high castes are enhanced by their awareness and knowledge about the ways to obtain resource access and benefits from the resource.

Although the erosion of traditional social networks is recognised as a consequence of greater access to roads and markets in the literature (Anderson, 2000; Blaikie, 2000; De Silva et al., 2005), the impact of this on access of the poor to forests governed under a community-based regime in Nepal has not previously been highlighted. This research showed that the low castes' access to forest resources was negatively impacted when this social network was weakened as a result of increased accessibility to roads and markets. This negative impact is the result of the high castes (the *Bistas*) removing their support for the low castes to access the forest resources. This was evident in the heterogeneous communities in both cases. Anderson (2000), Ellis (2000) and De Silva et al. (2005) describe how when the traditional social networks are eroded, the social relationships among people within the networks are also weakened. The study of Nepalese hill

⁶⁵ The Indonesian regime is different from the CF regime, and is associated with the decentralisation of forest governance authority to local government structures.

communities revealed that the *Bista* system was linked with the hierarchical caste structure. When this system was eroded, the low castes obtained less access and/or were excluded from certain types of access to forest resources (e.g. charcoal, firewood).

Customary property rights

Customary property rights to forest resources were found to be important for access for two main reasons. First, consistent with Banana and Gombya-Ssembajjwe (2000), customary property rights are strongly interlinked with sociocultural norms. Second, customary property rights are challenged through the imposition of a community-based forestry regime. When customary property rights and rights to participate in the governance of forest resources are challenged, the community members, the powerful in particular, respond in ways that significantly influence their access as well as access of others to the resource. The findings from this research revealed that in the context of Nepal, the response by a community to a new regime that has been imposed on them and impacts on their access was not simply a response to customary property rights being over-ruled by legal property rights as reported by Nagothu (2001), Sarin et al. (2003), and Thongphanh (2003). Rather, it was whose (the powerful or the less powerful) customary property rights were acknowledged, and whether the rights to participate in the governance of the forests were challenged.

Prior to the initiation of both regimes, the forests were accessed under customary property rights through governance mechanisms that informally exist in the communities. However, customary property rights were not “equal” and community members who were more powerful and had higher social status had greater access to forest benefits, a situation not unique to this research context (Platteau, 1996; Banana & Gombya-Ssembajjwe, 2000).

Under the CF regime, because the powerful could gain the control of the governance process and set the rules and enforce them (because of their power), the customary property rights were replaced with legal property rights and operational rules set were pro-elite and anti-poor. In this case, the powerful were better off and the poor were worse off in terms of access. The regime provided a mechanism for the powerful to obtain greater control over the resource than they had previously enjoyed under customary property rights. In contrast, the LF regime excluded the majority of the powerful from the forest resource. In this case, the powerful used their power to overrule the legal property rights of the LFUG members, and replace them with the previous customary property rights.

Because the LFUG members did not have the power to enforce their legal property rights and operational rules, customary property rights, particularly of the high caste and powerful, prevailed in the LF communities.

8.3.2 Key formal institutional factors influencing resource access

In the sociocultural context of the hill communities in Nepal, the governance of forest resources is complex when governance processes imposed by the regimes and the informal processes guided by sociocultural factors interact and shape governance of the forest resource and access. The role that formal institutional factors play in the governance of the forest resource differs substantially between the CF and LF regimes. However, irrespective of the regimes, the informal institutional factors tend to dominate the formal institutional factors and hence, play an important role in defining access of the poor to the resource. This supports the work of Smith et al. (2006) and Thanh and Sikor (2006) who reported that new formal institutional factors imposed by the regimes are highly influenced by the informal institutional factors that prevail within the communities, and interactions between these factors guide governance of the resource.

A key characteristic of the regimes that influence resource access is the level of inclusivity of the regime. The level of inclusivity determines the extent to which the formal institutions play a role in the governance of the resource, as proposed by Mosimane and Aribeb (2005). The mechanisms through which the level of inclusivity affects resource access are through legal property rights, membership rules, decision-making structures and processes and enforcement of rules. These are discussed in detail in the relevant sections.

A key finding from this research is that whether the most powerful social group is included or excluded in the FUG is an important determinant of whether the formal institutions imposed by the regime are effective for forest governance. This study of the hill communities in Nepal revealed that when the powerful were included in the FUG, along with the poor, there was less resistance to the shift in property rights and the improved access of the poor to forest benefits that the regimes are intended to achieve. These are not discussed in previous research.

However, inclusion of the poor in the FUGs and FUG governance structures does not guarantee them better access than they had prior to regime implementation. This is in contrast to the work of Varughese (1999) who found that the access of the poor to forest

resources is positively correlated with their inclusion in the FUG and the FUG governance system. Under the more inclusive CF regime, both the powerful and the less powerful within a community obtained membership of the FUG, but the powerful are more involved in the FUG governance. In this case, the FUG is the main local organisation that shapes the governance of the resource and it is viewed by government organisations and donors as a legitimate organisation for governance of the resource by the community. The informal institutional factors ensure the powerful obtain control of the governance of the resource. However, the poor are still disadvantaged due to the influence of informal institutional factors within the FUG governance framework (see Section 8.3.1). In the other more exclusive regime, the LFUG imposed by the regime is ignored by the community and thus plays a very minor role in the governance of the resource and resource access. Consistent with Thoms et al. (2006), the poor did not improve their access to forest resources under the LF regime, and in fact they were further disadvantaged, even though this regime was supposed to specifically target them.

The FUG governance structure provides mechanisms through which the high caste groups can consolidate power to further dominate decision making, as suggested by Malla et al. (2003), and the implications of this on the access of the poor are highlighted here for the first time. The study of CF communities (under the inclusive regime) highlights that the social groups have different capacities that enable them to use more effectively the power and authority that is conferred through membership of the FUG. The high castes have greater capacities which relate to their greater self-confidence and stronger social networks, which favour them over other social groups. With their leadership capacity, the high castes obtain positions of authority in the FUG governance structure, which enables them to participate actively in the FUG decision-making process. The low castes lack these capacities, and the leadership by the high castes in the FUG governance appears to have been accepted by the community.

Legal property rights and FUG governance structures and processes are identified as key formal institutional factors that influence the governance of the resource in the literature (Varughese, 1999; Meinzen-Dick et al., 2004; Ostrom, 2004). In this research, FUG governance structures and processes were identified as important influential factors, whereas legal property rights had a more limited influence on access. The key formal institutional factors are discussed in the following sections below.

Legal property rights

It is argued that membership of a resource user group gives people legal rights to the forest resources and hence access to the resources (see for example, Meinzen-Dick et al., 2004; Mosimane & Aribeb, 2005). However, this study of Nepalese hill communities revealed that the legal property rights provided by the two regimes did not guarantee the poor access to forest resources and benefits. Thanh (2003) found in the case study in Vietnam that legal rights prescribed by a CF regime alone had little impact on forest access of the poor. In the Nepalese hill communities, it was found that the access of the poor was dependent on the actual rights they obtained for access to forest resources. Actual rights are those rights that reflect the social access determined as a result of the governance process, which is significantly influenced by sociocultural factors.

Theory suggests that resource user groups who have legal use, management and exclusion rights are successful in forest protection and in improving forest access of group members (Ostrom, 1992; Meinzen-Dick & Knox, 2001). The findings of this research, however, highlight that such a proposition for access⁶⁶ is an oversimplification for the sociocultural context of Nepal. In this case, having legal rights does not mean that they are translated into access. As with the findings of Tachibana et al. (2001) in Nepal and McKean (2000) and Meinzen-Dick et al. (2001) in other developing countries, although the forests are formally held under specified legal rights, in reality, people access the forests under overlapping and conflicting combinations of different property rights. These property rights comprise a mix of rights associated with the customary use of the forest and the ones imposed by the regimes. In the CF case, although a community forest is legally held under state and common property rights, in practice it is held under an overlapping combination of a mix of property rights associated with the prescribed legal and customary use. In contrast, though a leasehold forest is also legally under similar property rights to a community forest, it is in fact governed under a mix of property rights associated with the customary use.

The critical matter is whose rights are formally acknowledged as legitimate rights. In both CF and LF communities, the actual rights that define access of the poor are principally governed by customary rights that existed prior to the regimes, which cannot be separated from the discriminatory sociocultural norms. The extent to which the legal rights

⁶⁶ This research can only comment on access but not forest protection.

acknowledge the customary rights emerged as important in shaping resource access, as suggested by Nagothu (2001) and Sarin et al. (2003). However, as highlighted early in this research, it is difficult to discern the impact of legal rights versus customary rights from their link to the right to participate in the governance of the resource. The mix of property rights under which the forest in reality is managed and accessed reflects the extent to which the regime's imposed rights recognise and accommodate the customary rights of, in particular, the more powerful customary users in the community.

Thus, the proportion of customary users, and the powerful in particular, who obtain legal rights and rights to be involved in the FUG was identified as a key to access of the poor. Benda-Beckmann (1995) and Hildyard et al. (2001) suggested that the greater the proportion of customary users in the resource user group, the more positive the impact on the resource access of the poor. This research, in supporting this finding, however, highlights that a simple correlation between proportion of the customary users in the FUG and its positive impact on the access of the poor cannot be made. There is a complex relationship between who among customary users are present in the FUG and how they influence governance of the forest. In turn, this depends upon the nature of the regimes and characteristics of the communities. A FUG under the CF regime comprises the majority of the customary users, including the powerful, whereas the FUG under the LF regime has only a small proportion of customary users. In this LF case, one FUG has a small percentage of high caste people and the other FUG has small percentage of poor people (but not the poorest). The powerful customary users have greater influence in governance of the forest in both regimes as compared to the less powerful. Platteau (1996) and Banana and Gombya-Ssembajjwe (2000) also found in other developing countries that more powerful customary users had greater involvement in the governance of the resource and had greater access to the resources. This finding is not unexpected in the communities where power differentials exist and where local people's right to forest access is important for them, irrespective of the quality of the resource.

The ways the powerful customary users influence governance of the forest are different between the regimes. Under the CF regime, the powerful customary users dominate FUG governance mechanisms and govern the resource according to their interests, since the FUG has authority to decide and enforce the operational rules. In contrast, they informally govern the resource according to their customary rights under the LF regime, since most of them are not part of the FUG. In the socially heterogeneous communities, there is more complexity in governing the resource since two or more social groups exist and the extent of influence of discriminatory sociocultural norms is greater as compared to the socially

homogeneous communities. As a result, it reinforces the findings of Agrawal and Gibson (2001) and Tyler (2006) that the level of heterogeneity affects the processes around resource governance and shapes the resource access of different households (social groups).

FUG governance structures and processes

In this section, roles that FUG governance structures and processes play in the resource governance and consequently, resource access are discussed. This research found that the FUG governance structures and processes had a role to play in forest access of the poor under the inclusive regime (the CF regime). But, they had a very limited role in influencing access under the more exclusive regime (the LF regime). The more 'inclusive' regime (CF regime) facilitates the inclusion of the majority of the community in the FUG and has a significant role in the governance of the resource and therefore access. The more 'exclusive' regime (LF regime) results in a large proportion of the community being excluded from the FUG and has a very limited role in the governance of the resource and therefore access. Specific components of the FUG governance — membership rules, decision-making structures and processes, and enforcement of rules — that influence resource access are discussed below.

Membership rules

Membership rules applied during the group formation process guide who within a community can obtain the rights to be involved in the governance of the resource at the local level. Graner (1999) noted that membership is an important component of the FUG since it is required to secure legal rights to the resources. From this research, the authority allocated through CFUG membership is critical for access in the CF case, whereas in the LF case, LFUG membership has only limited influence on resource access. Only in one community (*Odarepakha*) did LFUG membership affect resource access of the poor (negatively), whereas it appears to have no influence in the other community (*Tutikhola*). In the CF case, the membership to a CFUG is important for resource access for three reasons. First, the CF regime acknowledges people's rights to access the forest resources. Second, membership allows individuals the opportunity to be selected onto the CFUG governance structure and through this they can influence access. Third, members can attend CFUG assembly meetings and have a voice in the setting of operational rules.

In the LF case, membership in a LFUG confers few benefits in terms of influencing access for two reasons. First, the LFUG does not have authority to set the operational rules. Second, the rules of the LFUG are not enforceable because key community members are excluded from membership. However, in the socially heterogeneous community (*Odarepakha*), membership in the LFUG gave some high castes (but only few) the confidence to bully the poor low castes to a greater extent than they would have normally done. As a result, the poor low castes lost their limited customary access to forest resources with the imposition of the LF regime.

This study of the hill communities in Nepal found that although each regime set out the rules for membership of an FUG and then through this the provision of legal property rights to the forest, poor implementation of the membership rules often led to households who were legally entitled to membership being excluded. Although the purpose of both inclusive and exclusive membership rules aim to include the poor in the FUG and the FUG governance, the inclusive regime was better than the exclusive regime in terms of including the poor, as highlighted by Thoms et al. (2006) in their study of FUGs in Nepal. Thoms et al. (2003) also reported from their case study in Nepal that the rules of exclusion and small group size (maximum of 10 members in a group) of LFUGs in reality tend to exclude the well-off as well as the poor.

Research undertaken in Nepal and in other developing countries revealed that poor people often do not obtain prescribed legal property rights to forest resources (Beck & Nesmith, 2001; Adhikari et al., 2004; Mosimane & Aribeb, 2005). A membership fee was reported by Clark (2000) and Adhikari (2005) as a key factor that constrained the poor in obtaining legal property rights. However, this was not identified as important in this research. The membership criterion, requiring that households be resident near to the forest was reported by Hobely (1996b) as a main factor contributing to exclusion of certain sections of the community. Although there was an element of this in this research, it was the way the staff of the external organisations responsible for the regime implementation⁶⁷ selected members and formed FUGs that was key.

In this research, how the staff implement their responsibilities for FUG formation has an impact on access of the poor to forest benefits. The regimes specify that the staff should

⁶⁷ Hereafter the term 'staff' will be used to indicate the staff of the external organisations responsible for implementation of the regimes.

involve the community, including the poor, in the membership selection and FUG formation processes. However, the staff failed to fulfil these responsibilities as specified by the regimes in both cases. Thoms (2004) argued that although the CBNRM literature has recognised that the staff have important roles to play, the impact of the way the staff implement the regimes on forest access of the poor has not been dealt with. In the hill communities studied, there are examples of exclusion of the poor as a result of the ways the regimes are implemented. Under the CF regime, the poor who have traditionally used the forest fail to obtain membership to a CFUG in the *Dhuseni* community, whereas under the LF regime the households who are not poor are given membership to a LFUG in the *Odarepakha* community.

In both regimes, the government agencies (e.g. the DFO) or their proxies (e.g. the ADBN) are responsible for assigning community households with membership in a FUG. How the organisation implements their responsibilities is influenced by a number of interrelated factors, some of which are highlighted in the literature. Skills of the staff and the time made available to them to complete the tasks are discussed in the literature (see for example, Pokharel, 1997; Acharya, 2003). This research confirms the findings from other developing countries (Thompson, 1995; Kumar & Kant, 2005) that the staff often lack skills to identify the poor, which contributes to exclusion of the poor from the FUG, even under the regime specifically targetted to the poor. Consistent with Winrock (2002) and Acharya (2003), when there is pressure to complete the FUG formation process within a limited time period, the staff who are responsible for regime implementation fail to follow the process effectively.

The social group that the staff are aligned with and the degree to which the organisation's agenda conflicts with or complements the regimes' aims also emerged as important; these have not been identified in the literature. The staff are generally from high caste groups and they tend to discriminate against the other social groups, the low caste in particular. This contributes to further exclusion of the poor in the process. The staff tend to seek advice from those members of the community with whom they have the better social networks, or they tend not consult at all. In both cases, all the required social consultation processes for FUG formation were not completed. Some customary users were neither identified nor were involved in the process. In the context of Nepal, those who had higher social status and stronger linking networks with the staff were consulted with for the selection of members and formation of the FUGs.

The agendas of the implementing organisation also influence who within the community the staff choose for FUG membership. When the implementing organisations responsible for group formation have agendas that differ to those of the regime, the staff are likely to ignore the requirements of the regime for FUG formation and emphasise the agendas of their organisations. By doing this, the staff tend to exclude the poor from membership even though the regime is specifically targeted to the poor. This was evident in the socially heterogeneous community in the LF case. In this community, the criteria used by the staff from the ADBN for selecting members were not consistent with the supposedly pro-poor policy. The staff selected for membership small farmers who had the ability to pay off a loan since the agenda of their organisation was the development of small farmers through provisions of loans for farming and livestock enterprises.

FUG decision-making structures and processes

In this section, the ways the regimes influence forest access through the decision-making structures and processes⁶⁸ that the regimes put in place at the FUG level are discussed. In this research, when the role of the FUG in the governance of the forest is significant (e.g. the CF case), then who obtain the positions of authority in decision-making structures (e.g. executive committees) and to what extent group members participate in decision-making processes are critical determinants of access for the poor, as argued by Baral and Subedi (1999). Similar to Malla et al. (2003), Gauli and Rishi (2004), and McDougall et al. (2007), it was found that the elites were the ones who had authority through the key positions in the decision-making structures of the CFUGs. The elites, who were already powerful, gained additional power through the positions they secured in the decision-making structures of the CFUGs and the LFUGs. A number of factors contribute to the well-off high caste men attaining key positions in the CFUG decision-making structures (see Section 8.3.1, for detail). Despite the fact that the poor constitute a significant proportion of the total users in the CFUGs (42 and 64 percent), their presence in the executive committees of the CFUGs is minimal (1 or 2 people). Limited representation of the poor in the CFUG governance structure in the hills of Nepal has also been reported elsewhere (Timsina, 2002).

It was found that the ways the rules are implemented, which is obviously influenced by sociocultural norms and power differentials, is critical for access in the hills of Nepal. Key

⁶⁸ Decision-making structures of the CFUGs are executive committees whereas LFUGs do not have such separate committees. Processes employed by the CFUGs in making decisions for forest access are referred to 'decision-making processes' (see Chapter 5, for detail).

rules specified by the CF regime often are not followed. These include rules for proportional representation of the poor and the low caste groups, and for participation of at least 60 percent of FUG members in the decision making in general assembly meetings were not followed. However, enforcing rules for representation and participation in the decision-making structures and processes is important for resource access (Wollenberg et al., 2001; Gauli & Rishi, 2004).

It is argued that there exists a complex interface between local informal and formal decision-making processes, which influence people's participation in NRM decisions (see for example, Nemarundwe, 2004). This study of CFUGs in Nepal supports this finding. Informal processes are guided by sociocultural factors, and formal processes are imposed by the regime. The CF regime specifies that the rules should be made in the CFUG general assembly meetings with the presence and the active participation of at least 60 percent of all members. However, the meetings were generally organised even though less than 60 percent of the FUG members attended. The signatures of the members who attended were obtained as an evidence for their presence in the meetings. The powerful members generally dominated in the process, whereas the less powerful members indirectly provided their approval by keeping quiet to the decisions made by the powerful members.

Different levels of participation of the FUG members in the CFUG decision-making processes are linked to the influence those members have on decisions (Chowdhary, 2004). This research confirms the proposition of Chatterji (2001) that although the poor, low castes and women are present in the CFUG decision-making structures, they have limited or no influence on decisions. Although the CFUG decision-making structures provide the forum where the poor, low castes and women have the right to participate in decision making, their participation is constrained by discriminatory sociocultural norms. Their level of participation can be classified as 'passive' or 'non-participation' as they have no or limited impact through their participation on decisions (Creighton, 1986; Pretty, 1998; Rowe & Frewer, 2005) (see Chapter 3 for detail).

Theory says that the decision-making processes play an important role in access of the poor, because the processes dictate whether the problems and needs of the poor are considered or not (Wollenberg et al., 2001; Ribot et al., 2006). This study of CFUGs in the hills of Nepal does not contradict this, but revealed that the CFUG decision-making processes dominated by the well-off high caste men had addressed the needs of the poor to only a very limited extent. The communication process (e.g. executives informing FUG members) through which the low castes and women are supposed to receive information

about the meeting is not effective. Consistent with Lama and Buchy (2002) in their case study of CFUGs in Nepal, lack of or very late knowledge of the date and venue of the meetings by low caste and women members limit their attendance in the meetings.

Additionally, this research identified that when the agenda of the meetings are fixed by the executives, they reflect the executives' agenda rather than the concerns of other social groups. Since the agendas of the poor, low caste and women members are not discussed, the meeting has little relevance to them. In line with Shah (1998) and Kandel and Subedi (2004) in their studies of CFUGs in Nepal, the members who have limited or no influence in decisions also have limited access to forest benefits. The well-off high castes invoke new operational rules that provide the poor with less access than they had prior to the regime introduction.

Enforcement of the rules

A critical requirement for governance of a resource emphasised in the literature is the enforcement of rules (Meinzen-Dick et al., 2004; Ostrom, 2004; Gibson et al., 2005). Although this is clearly a contributing factor to the governance of the resources studied in this research, under both the formal and informal governance arrangements, the importance of enforcement in itself to access of the poor is limited. What did emerge as important was what rules are in practice enforced, and who those rules favour. It is relevant to make a distinction between three types of rules in understanding the influence of enforcement of these rules on resource access of the poor. These are: (i) rules imposed by the regimes, (ii) rules that can be defined by a FUG and (iii) rules that are in practice enforced (or rules-in-use (Ostrom & Ostrom, 2004)).

Under the LF regime, the rules-in-use primarily originate from the informal rules in place prior to the regime. In the socially homogeneous community studied (*Tutikhola*), the LFUG members are poor, and are unable to enforce the rules, which is similar to findings by Thoms et al. (2006) in their study of Nepalese LFUGs. In this community, the poor were less favoured by the enforcement of the rules-in-use. However, in the socially heterogeneous community (*Odarepakha*), the well-off high castes who are LFUG members utilise a mix of rules (e.g. rules imposed by the regime and informal rules that existed prior to the regime) to prevent the poor low caste nonmembers from accessing the resource. The formal institutions allow the LFUG members to impose discriminatory sociocultural norms on the poor low castes to a greater extent than they did prior to the regime. But, the LFUG members are unable to prevent the other wealthier high caste non-

members accessing the resource. As suggested by Gilmour (1990) and Chhetri (1992), in a socially heterogeneous community, people's shared cultural and religious practices based on Hindu religion and caste hierarchy guide their social relationships and their access to the resource, and people do not challenge these norms.

Under the CF regime, the CFUG has a significant role in governance of the resource and in defining the operational rules. In this case, a mix of all three types of rules is in operation, and these rules are enforced by a mix of formal (as stated by the regime) and social (linked with the sociocultural norms) mechanisms. The CFUG's capacity to enforce these rules is comparatively greater than that of the LFUG. Thoms (2006) reported that Nepalese CFUGs were able to enforce rules that led to successful conservation of the forests. However, in this study of hill communities in Nepal, ability to enforce rules has not led to improved resource access of the poor. Interpretation of the rules and the mechanisms of enforcing the rules are manipulated by the well-off high castes who are also executives of the CFUGs. As in the LF case, the existing discriminatory sociocultural norms are dominant in the CF case as well.

Pagdee et al.'s (2006) review of empirical literature suggests that the enforcement of rules depends upon the collective action capacity of the resource user groups. Collective action capacity depends upon the trust among people (Agrawal & Goyal, 2001; Poteete & Ostrom, 2004). This study of CF communities in Nepal highlights the fact that there is little trust across social groups in the CFUGs. Rather, it was revealed that the collective action capacity was guided by characteristics of social groups within the CFUGs. For example, the high caste groups had relatively greater trust amongst themselves as compared to the ethnic groups and low caste groups, and thus they had greater capacity for collective action. Moreover, the low caste groups' lack of trust amongst themselves means that they do not challenge the rules that the high caste groups have decided on.

It has been suggested that the FUG has to be small in size, not more than about fifty households, in order to enforce the rules ensuring equity in resource distribution (Banerjee, 2000). This research argues that in the context where power inequities associated with discriminatory sociocultural norms prevail, a simple correlation between group size, rule enforcement and equity cannot be made. There exists a complex link between group size, social makeup of the FUGs, and leadership capacity and prior experience of cooperation of the various social groups, and all of these aspects influence collective action and rule enforcement.

Summary: Access, property rights and governance

In this research, it has been learnt from analysis of the institutional factors' impacts on access, that property rights cannot be separated from governance. The governance structures and processes and who are able to dominate these were more important than the property rights for access. This has not been highlighted in other research, which tends to focus on the roles of property rights on access (Hanna & Munasinghe, 1995; Di Gregorio et al., 2004; Adhikari, 2005). This was evident in the CF case where the regime has a significant role in governance of the forest. The regime introduces a new concept of governance that gives all social groups legal rights to forest resources and the right to participate in governance of the forest. Prior to the regime, there was a traditional governance arrangement that was guided by sociocultural norms, under which there was limited opportunity for discussion to challenge existing arrangements and norms. After introduction of the regime, people's awareness of their customary property rights increased. Further, CFUG governance structures and processes provide a forum where FUG members can participate in defining the rules for forest access and management. The FUG members who dominate the CFUG governance structures and processes allocate forest resources. These circumstances are all new for certain social groups (e.g. low caste and ethnic groups) within the CF communities studied.

8.3.3 Influence of formal institutional factors on informal institutional factors

This research identifies examples where formal institutional factors also tend to influence informal institutional factors, but the impact of this on resource access is not yet clear. However, this is evident only in the regime that has a significant role in governance of the resource (the CF regime). The imposition of a new FUG governance structure as a forum where all community members have the right to participate and negotiate resource access opens up the possibility of not only discussing aspects of resource governance and access but also other social issues.

There are some positive impacts as a result of the rules that are imposed by the CF regime, although they can not be directly linked with the access. The rules for at least 30 percent women to be represented in the FUG governance structure (e.g. executive committee) contributed to an increased number of women in the executive committee. The presence of such rules and communication about these rules raised awareness of the

forest users that this should be the case (Andersson & Hoskins, 2004; Shrestha, 2004). An example is the community (*Saparupa*) where there was greater inclusion of women in the recent executive committee of the CFUG than in the previous executive committee. The CFUG governance structure also provides a forum through which access to information is improved, which indirectly helps to build the capacity of women and the poor to gain benefits from forest access.

Gaining external support by FUGs also results in enhancement of capacity and the confidence of women, as proposed in the literature (Martinez, 1997; Robinson-Pant, 2000; Weinberger & Jutting, 2001). Gaining external support for CFUGs is linked with the accessibility of the communities and recognition of CFUGs as legitimate organisations by donors. In this research, the relatively more accessible CFUG had support from a donor, and this facilitated an increase in number of women in the CFUG governance structures. There is an indication that this is leading to changes in the roles of women in the CFUG, with an increase in the number of women attending the meetings.

8.4 Summary

The case studies comprising four communities in the hills of Nepal resulted in the identification of the informal and formal institutional factors that influence the access of the poor to the forests governed under the community and leasehold forestry regimes. The usefulness of the distinction between informal and formal institutional factors when the new regime is imposed in the community where strongly embedded institutions prevail is explained. The 'regime factors' are described as formal institutional factors to highlight the significance of the interconnectedness of new legal property rights with the governance imposed by a regime. The sociocultural factors, which include customary property rights, sociocultural norms and traditional informal governance factors are described as informal institutional factors. This study enhances existing understandings by providing detailed analyses of the complex interlinkages between formal and informal institutions in the sociocultural context of Nepal.

Formal institutional factors are clearly influenced by the informal institutional factors, regardless of the regimes, but the mechanisms of influence vary depending upon the nature of the regimes and the characteristics of the communities. How the informal institutional factors are influenced by the formal ones is less clear. The extent of social heterogeneity in the communities has a greater significance in this research than is

suggested in the literature. The capacity for leadership and collective action along with the discriminatory sociocultural norms and customary property rights favour one social group over others. Social heterogeneity is associated with multiple interacting aspects of power that disadvantage the poor's access to the resource in both the CF and LF cases. In the communities where traditional dependency networks (the *Bista* systems), which had traditionally facilitated customary access of the poor to forest resources, are being eroded, the high castes' support for forest access of the low castes is removed, irrespective of the regime.

This research identifies three different mechanisms by which informal institutional factors influence formal ones, impacting on the access of the poor to forest benefits. First, the influence is through which social groups participate, and the extent to which they participate in the FUG governance structures and processes. This is particularly true in the CF case where the (more inclusive) regime has a significant role in governance of the resource. The second mechanism for influence is primarily through social mechanisms, and this is explicit in the LF case. In this case, people access the resource depending upon the traditional arrangements associated with discriminatory sociocultural norms. The third mechanism occurs through removal of support by the elites for access of the poor in the situation where traditional dependency networks are being eroded. In the hill communities studied, a certain mix of these mechanisms operates and influences resource access of the poor.

Even under the more inclusive regime, access of the poor is constrained due to their limited participation and influence in decision making, favouring the elites for positions of authority in the CFUG decision-making structures, and setting rules that disadvantage the poor in obtaining resource access.

In conclusion, this chapter provides a greater understanding of the key formal and informal institutional factors and the mechanisms by which they influence forest governance regarding access of the poor to the forest benefits under government-initiated community and leasehold forestry regimes. In the next chapter, conclusions and implications of the findings of the case studies are provided, and the key areas for future research are outlined.

CHAPTER NINE

CONCLUSIONS

9.1 Introduction

This research has explored the questions of “what institutional factors influence the access of the poor to the forests that are governed under different government-initiated community-based forestry regimes in Nepal, and what are the mechanisms through which these factors have that influence?” The theoretical argument underpinning community-based forestry (CBF) assumes a positive contribution to poverty reduction through the devolution of forest use and management rights from the state to local user groups. It is assumed that the devolution of such rights promotes democratic decision-making processes whereby local users, including the poor, can influence the decisions on forest use and management, and improve their access to forest benefits. However, this assumption often has not been met in reality. Community-based forestry faces many challenges in improving livelihoods of the poor in Nepal and elsewhere in developing countries.

In this research, the institutional factors that influence forest access of the poor were explored through a collective case study of two theoretically different cases. Case one was a community forestry regime and case two was a leasehold forestry regime. Within each case, two different communities were investigated for this research. To understand the influence of institutional factors on forest access of the poor under the two regimes, the researcher drew on the perspectives of forest user group (FUG) members and non-members, and forestry and community development professionals. Institutional theory with an embeddedness perspective provided a theoretical foundation for this study. Fieldwork was carried out during mid October 2005 to mid April 2006 in Nepal. Qualitative research methods were applied for data collection and analysis.

This study has addressed both research questions by providing descriptions of the influence of institutional factors on resource access of the poor in the specific context of the two regimes in Nepal, and also by providing explanations of the mechanisms through which these factors have that influence. In particular, the relationships between formal and

informal institutional factors and the impacts of these relationships on resource access have been explained.

In this chapter, the research conclusions are presented. Implications and recommendations based on the research findings for the Nepalese government, the donors and the CBNRM discipline in general are described. Reflections on research methodology are provided and some final thoughts from this research are given.

9.2 Summary and conclusions

In this study of Nepalese hill communities, three key interrelated informal institutional factors that influence resource access of the poor were identified. These are: (i) discriminatory sociocultural norms, (ii) nature and strength of the social networks and (iii) the customary property rights when they are challenged. The key influential formal institutional factors identified are legal property rights, and the formal governance structures and processes imposed by a regime.

The imposition of a CBNRM regime on its own does not significantly change existing informal institutional factors that determine resource access. Thus, the informal institutions must explicitly be considered in the design and implementation of CBNRM regimes for them to be successful in improving livelihoods of the poor.

This study revealed that where there is more than one social group co-exist in a community in Nepal, the capacity for leadership and collective action together with the discriminatory sociocultural norms and customary property rights favour one social group over others. As a result, certain social groups have greater access to resources and benefits from the resources than do other social groups.

This study finds that the ways the regimes are implemented and resource access is impacted differ in communities with different characteristics. In a more socially heterogeneous community, governance of the resource at the local level is complex. The presence of more than one social group introduces a range of factors associated with discriminatory sociocultural norms that affect the relationship between the social groups that does not exist in a more socially homogeneous community. The differences between social groups are reflected in differentials of power that are expressed also in the type of access to the resource social groups attain. As suggested in the literature, power

differentials are a result of complex interactions of caste, gender and wealth in a socially heterogeneous community. The findings of this study reinforce the work of Agrawal and Gibson (2001) and Tyler (2006) who report that the level of heterogeneity affects the processes around resource governance, and results in differential access of social groups to the resource.

Implementation of CBNRM regimes needs to address the influence of patriarchal and caste-based norms for improving livelihoods of the poor. In the context of Nepalese hill communities where hierarchical caste structures exist, the caste-based norms favour high caste groups more than the other social groups. The low castes are least favoured by these norms. A finding highlighted by this study is that caste-based norms not only limit physical access of the poor to forest resources, they also limit how those resources can be used. For example, the low castes are unable to utilise forage and fodder for milk production, a highly profitable enterprise, because other members of the community refuse to buy milk from them because of their 'untouchability'. As a result of prevailing patriarchal and caste-based norms, the poor low caste women are least favoured. The discrimination against women of the low caste households (whose men are away from home for jobs) appears to be exacerbated where well-off high caste men are given legal rights to manage the forest resources and to enforce the rules. As a result, women of these low caste households lose their customary access to the resources.

This study demonstrates that there is a great need of building and enhancing capacities of the low caste and ethnic groups for improving their resource access under CBNRM regimes. As expected, greater capacities due to stronger social networks facilitate people in gaining access to the resource. Importantly, it is due to the strength of various social networks — bonding, bridging and linking — that the well-off high castes have greater capacities to attain resource access and benefits from the resource. This study identified a correlation between prior experience in collective action and the access by social groups to forest resources. Of particular significance, and not previously reported, the lack of prior experience in collective action of the low castes along with their weak social networks and poor leadership ability is highlighted as being directly linked to their relatively limited access to forest resources.

An important finding of this study, which previous (CBNRM) research has not identified, is the impact of the erosion of a traditional bridging social network (due to road accessibility) on resource access of the poor. The *Bista* system, a specific type of social network that exists in socially heterogeneous communities in Nepal, is strongly linked with the hierarchical caste structure. When this system is eroded, the low castes end up with less

access and/or are excluded from certain types of access to forest resources (e.g. charcoal, firewood). The reason for this is that the high castes remove their support for the low castes to access the forest resources.

When customary property rights and rights to participate in the governance of forest resources are challenged, the more powerful community members in particular respond in ways that significantly influence their access as well as the access of others to the resource. A situation not unique to this research context is that under customary access, the key community members, who are more powerful and have higher social status, have greater access to resource benefits. When this situation is challenged by the imposition of a CBNRM regime, the key community members tend to use their power to override the legal property rights of others to be involved in resource governance. As a result, previous customary access, which favours the key community members, continues to prevail.

This study reveals that for the poor, having legal rights does not translate into resource access because access is determined by the actual rights the poor have. This is where the differentiation between 'access' and 'property rights' as previously proposed is important. Actual access is determined as a result of the resource governance processes, which are significantly influenced by discriminatory sociocultural norms, strengths of various social networks and capacities of social groups. Providing legal rights to the poor without building their capacities to participate actively in the resource governance processes do not improve their resource access.

This study shows that a more inclusive regime (e.g. CF regime) is likely to lead to more effective outcomes for the livelihood of the poor as compared to a more exclusive regime (e.g. LF regime). An exclusive regime appears to be inappropriate for reducing poverty through community-based forestry. The more inclusive regime facilitates the inclusion of the majority of the community in the FUG, whereas the more exclusive regime results in a large proportion of the community being excluded from the FUG. When the powerful are included in the FUG, along with the poor, there is less resistance to the shift in property rights and the improved access of the poor to forest benefits that the regimes are intended to achieve. For improving resource access of the poor, the CBNRM regimes must include the well-off as well as the poor in the resource governance structures and processes.

This study of both CF and LF regimes highlights that the importance of the membership in a FUG for resource access depends upon two factors. These are: (i) the degree of inclusivity of the regimes and (ii) the ways the implementing staff select FUG members

and form FUGs. In the CF case, the membership is important for resource access since membership allows individuals the opportunity to be selected onto the CFUG governance structure and through this they can influence access. In contrast, in the LF case, membership confers few benefits to the poor in terms of influencing access since the rules of the LFUG are not enforceable because key community members are excluded from membership. However, it was also identified that membership in the LFUG tends to give some well-off high castes the confidence to further prevent the poor low castes from accessing the resource.

A number of interrelated factors contribute to the ways the implementing staff select members and form FUGs. Some of these factors, as highlighted in the literature (Pokharel, 1997; Thoms, 2006), are skills of the staff and the time made available to them to complete tasks. The lack of skills to identify the poor and pressure on the staff to complete the FUG formation process within a limited time period contributes to exclusion of the poor from the FUG. Two additional factors that influence the way regime implementation affects resource access are: (i) the social group staff are aligned with and (ii) the degree to which the organisation's agenda conflicts with or complements the regime's aim.

As expected, the staff tend to consult those members of the community with whom they have better social networks. In the sociocultural context of Nepal, it was found that the staff are generally from high caste groups and they tend to discriminate against the other social groups, the low caste in particular. When the implementing organisations responsible for FUG formation have agendas that differ to those of the regime, the staff are likely to ignore the requirements of the regime for FUG formation and emphasise the agendas of their organisations. In this situation, the staff tend to exclude the poor from membership even though the regime is specifically targeted to them.

It is generally assumed that the inclusion of the poor in the FUG and the FUG governance system improves their resource access. However, this study demonstrates that the inclusion in the FUG does not necessarily translate to participation. Active participation is a better determinant of resource access than is a specified set of property rights granted by right of FUG membership. Active participation of the poor, low castes and women is required for them to influence decision-making processes so that pro-poor rules are developed. Although the CFUG governance structures provide the forum where the poor, low castes and women members (of the CFUGs) have the right to participate in decision making, their participation is constrained by discriminatory sociocultural norms.

The elites, who have leadership capacities and are already powerful, gain additional power through the positions they secure in the CFUG decision-making structures. As a result of this, it was identified that the elites appear to have opportunities to invoke new operational rules that provide the poor with less access than they had prior to the regime introduction. Further, this study revealed that the decision-making processes dominated by the elites tend to address the needs of the poor to only a very limited extent. In addition, the low castes' lack of capacities and acceptance of the elites' leadership in the processes limit their influence on decisions. This study also highlights that improving capacities (e.g. literacy skills and knowledge on resource benefits that can be obtained from participation in the forum) has the potential to enhance participation of women in the forum.

This study identified that what rules are enforced in practice and who those rules favour are important for resource access of the poor under CBNRM regimes. In the sociocultural context of Nepal, making the distinction between three types of rules is relevant: (i) rules imposed by the regimes, (ii) rules that can be defined by a FUG and (iii) rules-in-use. A certain mix of these rules and also a mix of formal and informal mechanisms to enforce these rules are in operation under CBNRM regimes. This indicates that simple conclusions cannot be made regarding impacts of enforcement of the rules on resource access of the poor.

9.3 Implications and recommendations

The findings from this study have implications for the Nepalese government, donors that facilitate regime implementation in Nepal and the CBNRM discipline in general. The research findings suggest that the Nepalese government should reform the leasehold forestry policy and address the present difficulties of the regime to enhance the livelihoods of the poor. The reform of this policy needs to take into account the negative impacts on the access of the poor as a result of excluding key community members. Further this research would suggest that the policy needs to take into account a community's specific challenges, particularly the power differentials and prevailing sociocultural norms. The implications of giving responsibility for governance of the resource to the poor (who have limited capacity for collective action and leadership) by removing the rights of the powerful community members need to be considered. This is particularly important where neither the LFUGs nor the government can enforce the rules imposed by the regime.

The community forestry policy appears from this research to have greater potential than the leasehold forestry policy for achieving improvements in the livelihoods of the poor. However, the community forestry policy needs to explicitly address certain aspects to establish this as a policy that works for the poorer section of the society. This study highlights that in the sociocultural context of Nepal, the dominant influence of sociocultural norms limits the possibility of changing quickly the unequal power relations that characteristically disadvantage the poor. Consequently, those developing policy need to take into account the specific challenges and changes that are influencing different communities, particularly the degree of heterogeneity and road accessibility.

For the government organisations involved in the regime implementation (e.g. the Department of Forest and the District Forest Office), this study argues for the need for the organisation to address a number of specific issues in order to facilitate more effective implementation of pro-poor regimes. The staff need to have enough time and adequate skills to facilitate the communities' identification of the poor, a more careful formation of forest user groups (FUGs), the active inclusion of the poor (including low castes and women) in the FUG governance structures and processes, and the inclusion of pro-poor rules in the constitutions and the operational plans of the FUGs. These government organisations need to provide training and support mechanisms for the staff, particularly those who belong to high caste groups, to help them change their attitudes and behaviours to those that are more favourable to the social shift that the regimes are intended to bring. In addition, prior to regime implementation, the implementing organisation needs to be well oriented regarding the agenda of the regime and the ways in which that agenda can be adequately addressed.

The CFUG governance structures appear to provide the forum where the poor, low castes and women members (of the CFUGs) have the right to participate in decision making, but more work is required to ensure their active participation is not constrained by their limited capacities, discriminatory sociocultural norms and dominance by the elites. This study suggests that the District Forest Offices (DFOs) need to regularly monitor and evaluate the effectiveness of the regime in terms providing better resource access for the poor. Further consideration is needed on the mechanisms that are put in place to enable the governance structures and processes of the regime to be changed in response to the outcomes of monitoring and evaluation. It is unlikely that the present number of DFO staff will be able to implement this regular monitoring and evaluation. Two things can reduce this problem. First, mechanisms of bringing in the district-level non-government organisations for these roles are promoted. Second, mechanisms to strengthen capacities

of the CFUGs for their regular self-monitoring and evaluation are introduced. Mechanisms for networking of the CFUGs with other government organisations need to be promoted. This will provide the CFUGs more opportunities for their poor members to be trained and enhance their capacities (e.g. literacy skills, articulate ideas in the forum). Regular facilitation for the CFUGs is required for motivating the CFUG executives to make decision-making processes participatory enough so that pro-poor rules are developed.

This study highlights that the more exclusive regime has at best only a limited role in poverty reduction. Implementation of the more exclusive LF regime that is specifically targeted to the poor tends to challenge the customary rights of key nonmembers in the community to the forest resource. It also appears to challenge the sociocultural norms that favour the more well-off community members. Thus, the formation of small LFUGs without ensuring support from other community members, the key ones in particular, does not improve resource access of the poor LFUG members. In order for a small exclusive LFUG to work, it needs the support of the rest of the community, and in particular the key members of the community. A way to improve the community's support can be by forming the LFUG as a sub-group of a pre-existing local organisation (can be community forest user groups, or community organisations) that is accepted by the community, rather than forming a separate minority LFUG. Another way is to include key community members and expand the size of the LFUG, which would require the size of the leasehold forest to be increased. Initiatives for designing pro-poor rules need to be from within the community so that the community members feel responsible and motivated to implement the rules developed by them.

This research suggests that a donor organisation can play an important role in providing support for building capacity of the FUGs, which can influence the forest access of the poor. Donors prefer to work with viable community organisations so that they bring benefits to the community through these organisations. The focus therefore should be on establishing FUGs that are viable and legitimate community organisations that encourage the involvement of donors in their functioning. This support helps the poor members of the FUGs enhance their awareness of the forest governance and management rules, and build their skills through training so that they can be more involved in the FUG governance structures. However this takes time. The FUG governance structures provide a forum for only the members of the FUGs. Donors need to promote wider platforms and forums allowing community members to question and reflect upon on-going issues of local governance and practices regarding participation of the poor, low castes and women. This can provide opportunities for reducing the tendency for local elites to control the flow of information and monopolise the decisions regarding forest use and management. Training

and capacity building for communities need to incorporate procedural questions of representation, accountability and transparency within the FUGs.

This study has also implications for CBNRM as a discipline. There is little written on the impacts of more inclusive and more exclusive CBNRM regimes imposed by the government on the resource access of the poor. The results from this study provide descriptions of what institutional factors influence resource access of the poor and how these factors influence that access under the two types of regimes. This study has demonstrated the advantages of adopting collective case study approach for understanding effectiveness of different CBNRM regimes. However, there is a need for more in-depth case studies to build on the findings from this study.

9.4 Methodological reflection

This study demonstrates that making the distinction between formal and informal institutions is necessary for understanding the influence of institutional factors on resource access of the poor in contexts where discriminatory sociocultural norms still prevail under the imposition of new CBNRM regimes.

While most studies in the past have focused on the community forestry regime, this collective case study demonstrates the usefulness of studying comparatively the leasehold and community forestry regimes. The study of two different regimes provides greater understanding about the complexity of institutions, governance and resource access of the poor. Most often the influence of the informal institutional factors dominates that of the formal ones in the context where power inequities and discriminatory sociocultural norms prevail. The formal and informal institutions interact and the mechanisms by which they influence access are complex. Understanding this complexity requires a researcher's long time involvement in understanding original data, interpreting them in a meaningful way, and relating the data with the contexts. It has been learnt that this process can be enhanced through a series of discussions, and questioning and challenging by other persons (in this case, supervisors and colleagues). The reviewing of the literature through to the end of the thesis has added to the confidence of the researcher as to what specifically this research contributes to the body of knowledge.

Most studies on common property resources (CPRs) confine their analysis to resource user group levels, and focus on factors to improve user groups' performance. This

collective case study explores the ways in which government-initiated user groups exclude the poor within communities from attaining access to resource benefits. Further, this study demonstrates the importance of the interactions between informal community-based institutions and formal institutions in determining the effectiveness of government-initiated community-based forestry regimes for improving resource access of the poor. This study highlights that since the resource user groups are parts of larger communities, differences in characteristics of the communities result in differential impacts on the regimes' implementation in relation to improving resource access of the poor. A community for the governance of a particular resource is larger than a resource user group itself, particularly when customary users within a community are excluded from the group. This study highlights the need to include the perspectives of those excluded customary users in data collection and analysis for better understanding of the institutional factors that influence resource access of the poor.

Researchers who have to translate the raw data into English face difficulties in maintaining the original meanings in the translation. In such situations, the researchers need to be transparent about their potential bias in data analysis and interpretation. Four key actions of researchers to reduce such bias can be: (i) repeat readings of the original fieldnotes and check the interpretations with the fieldnotes, (ii) repeat discussion of the results with supervisors and colleagues, (iii) present the results in wider forums such as conferences, and (iv) be ready to accept and reflect others' comments.

9.5 Final thoughts

This study has identified gaps in the implementation of community-based forestry regimes in shaping the resource access of the rural poor. While the local factors have much influence on resource access, the influences of the external factors such as the donor strategies and interfaces between the government and donors are also important areas for future research. The support by the donor project NACRMLP to the user groups for bottom-up planning initiatives has been recognised as influential in the integration of pro-poor strategies at the group level. The NACRMLP has experimented with this type of support for only a few community forest user groups in Kavre and Sindhupalchowk districts for about five years (2002-2006). Several other donor projects such as DFID/LFP, NSCFP, and CARE forestry projects have also contributed in this aspect in other districts of Nepal. These projects may have different lessons on poverty reduction in relation to the different contexts of the communities. What are those lessons and how can those be

incorporated in the state policies and implementation in improving the contribution of community forestry regimes to poverty reduction? This is an area for future research.

This study focuses on the context of hills in Nepal. The *terai* (lowlands) have different community characteristics. The *terai* communities are better than the hill communities in terms of road accessibility (Bhattarai, 2006). Degree of heterogeneity can also differ across these communities. A study of community-based forestry regimes in the *terai* communities would add further understanding about the impacts of various community characteristics on the mechanisms through which institutional factors influence resource access. Further, such studies would provide a powerful means of understanding the factors for improving the contribution of the regimes to poverty reduction.

This research has clearly explained the significant influence of the informal institutions on the formal ones, which has impacted resource access, but the influence of formal institutions on informal ones is less clear. The influence of formal institutions on informal institutions would likely be clearer in more accessible communities where greater support from the government and donors is available. A study of such communities would add to the understanding of how informal institutions can be influenced by formal institutions, shaping the resource access.

This research shows that the formal and informal networks that FUGs have with other local groups or local organisations influence governance of the resource and consequently resource access. The FUGs also have linkages with local administrative structures such as Village Development Committees (VDCs). The Local Self Governance Act (LSGA) 1999 confers the rights and roles onto the local government bodies, such as District Development Committees (DDCs) and Village Development Committees (VDCs) to manage forest-related tasks in Nepal (Springate-Baginski et al., 2003b). Under this act, the DFOs are required to work closely with the local governments to develop and implement forestry activities, and the autonomy of local user groups is limited. The linkages of the FUGs with the VDCs would also influence the resource access of the poor; the mechanisms of this influence could further be investigated.

Greater support from the government and donors for the CF regime as compared to the LF regime has also made the contribution of the regimes to poverty reduction different. The CF regime is regarded as a successful programme and donors have more interest in financing the successful programmes rather than the less successful programmes. A study that explores in detail why donors and the government have limited support for the

LF regime would also add to the understanding of why the LF regime has limited role in poverty reduction through forestry.

This study identifies that access to markets and roads erodes the *Bista* system (traditional caste-based bridging network), which negatively impacts on the access of the poor to forest benefits. There exist many traditional networks (e.g. labour exchange network, land and livestock sharing systems) that might be changed due to access to markets and roads. The impacts of these changes on access of the poor to forest benefits could be studied in detail in future.

This study of the hill communities in Nepal shows that the forests differ in their quality in terms of products available from these forests. The study that focuses on exploration of different forest qualities on resource access would add to the understanding of what factors influence access of the poor to the forests with different qualities, which are governed under different CBNRM regimes.

Finally, while CBNRM regimes have a potential to improve the livelihoods of the poor, they have not really achieved this aim. It is, therefore, vital to continue research for further understanding of how CBNRM regimes can improve the livelihoods of the poor.

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Annex 4.1 List of experts, whose feedback received through emails

Experts	Organisations
Dr.N.N. Joshi	Institute of Agriculture and Animal Science, Nepal
Dr. E. Ostrom	Indiana University, USA
Dr. G. Varughese	The Asia Foundation, Nepal
Ms. Helen Wedgewood	DFID, Nepal
Dr. G.B. Thapa	IFAD, Italy
Dr. Brian Belcher	CIFOR, Indonesia
Three anonymous experts	Through IFS, Sweden
Dr. G. Weber	Helvetas Nepal
Mr. Peter Neil	Livelihood and Forestry Programme, Nepal
Mr. Anupam Bhatia	ICIMOD, Nepal
Dr. R.K.Shrestha	DANIDA Forestry Programme, Nepal
Mr. Nick Ledgard	Forest Research, Christchurch, New Zealand

Annex 4.2 Information sheet and participant consent form

4.2.1) Information Sheet for an individual household

You are cordially invited to participate in the research project entitled “The Influence of Institutional Factors on the Access of the Poor to the Forests Governed under Community and Leasehold Forestry Regimes in Nepal”. This research aims to identify the key institutional elements of a community-based forestry management approach for Nepal which might contribute significantly to improved livelihood security for the poor.

The researcher, Bijaya Bajracharya, is a doctorate student of the Institute of Natural Resources, Massey University, New Zealand. This research project is conducted in order to fulfill one of the requirements for Doctor of Philosophy in Rural Development. The researcher is under the supervision of Dr. Terry Kelly and Dr. Dave Gray, who are affiliated with the Institute of Natural Resources.

Please be aware that households for this research have been selected based on the criteria such as forest user group membership and socioeconomic characteristics. The purpose has been to include member and non-member households, and poor and non-poor households in the research.

You are kindly requested to participate voluntarily in the interview for not more than 2 hours. You are kindly requested to provide information on existing rules and regulations for forest management applied by forest user group in your community. You are further requested to provide information on your participation in decision making and management, and on access and benefits you get from forest. At the end of the interview, you will be given the opportunity to edit, retract, or add to any of the comments you have made.

You are under no obligation to accept this invitation. If you decide to participate, you have the rights to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any time during your participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded
- ask for the audio tape to be turned off at any time during the interview.

The information provided by you will be used for analysis and interpretation. A summary of findings, written in Nepali, will be sent to your Forest User Group in February 2008.

If you have any query with regard to this research, please contact the researcher or her supervisors in the address mentioned below:

Researcher's address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number: 0064 6 3505799 ext 7208*

Researcher's contact telephone in Nepal

00977 1 4425060

Supervisors' address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number (Dr Terry Kelly): +64 6 350 5517
Telephone number (Dr Dave Gray): +64 6 350 5799 ext 7758*

This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/73. If you have any concerns about the ethics of this research, please contact Dr John O'Neill, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5799 ext. 8635, email humanethicspn@massey.ac.nz

4.2.2) Information Sheet for a local key informant

Your organisation is cordially invited to participate in the research project entitled "The Influence of Institutional Factors on the Access of the Poor to the Forests Governed under Community and Leasehold Forestry Regimes in Nepal". This research aims to identify the key institutional elements of a community-based forestry management approach for Nepal which might contribute significantly to improved livelihood security for the poor.

The researcher, Bijaya Bajracharya, is a doctorate student of the Institute of Natural Resources, Massey University, New Zealand. This research project is conducted in order to fulfill one of the requirements for Doctor of Philosophy in Rural Development. The researcher is under the supervision of Dr. Terry Kelly and Dr. Dave Gray, who are affiliated with the Institute of Natural Resources.

Please be aware that forest user groups have been selected based on the criteria such as performance in terms of poverty targeting. The purpose has been to include both good and poor performing groups in this research.

Members of your organisation are kindly requested to participate voluntarily in focus group discussions for not more than 2 hours. You are kindly requested to provide information on planning, functioning and impact of the institutional arrangements associated with community or leasehold forestry on the access and decision making capacity of forest-dependent people in the community. At the end of the discussion, you will be given the opportunity to edit, retract or add to any of the comments you have made.

You are under no obligation to accept this invitation. If you decide to participate, you have the rights to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any time during your participation;

- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded
- ask for the audio tape to be turned off at any time during the interview.

By participating in the focus group discussion, you agree to keep confidential all of the information discussed in the group. The information provided by you will be used for analysis and interpretation. A summary of findings, written in Nepali, will be sent to your organisation in February 2008.

If you have any query with regard to this research, please contact the researcher or her supervisors in the address mentioned below:

Researcher's address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number: 0064 6 3505799 ext 7208*

Researcher's telephone number in Nepal

00977 1 4425060

Supervisors' address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number (Dr Terry Kelly): +64 6 350 5517
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This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/73. If you have any concerns about the ethics of this research, please contact Dr John O'Neill, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5799 ext. 8635, email humanethicspn@massey.ac.nz

4.2.3) Information Sheet for a key external informant

You are cordially invited to participate in the research project entitled "The Influence of Institutional Factors on the Access of the Poor to the Forests Governed under Community and Leasehold Forestry Regimes in Nepal". This research aims to identify the key institutional elements of a community-based forestry management approach for Nepal which might contribute significantly to improved livelihood security for the poor.

The researcher, Bijaya Bajracharya, is a doctorate student of the Institute of Natural Resources, Massey University, New Zealand. This research project is conducted in order to fulfill one of the requirements for Doctor of Philosophy in Rural Development. The researcher is under the supervision of Dr. Terry Kelly and Dr. Dave Gray, who are affiliated with the Institute of Natural Resources.

Please be aware that the staff of agencies have been selected based on the criteria such as the relevant experience and skills. The purpose is to interview relevant staff having experiences and skills on poverty targeting in community and leasehold forestry.

You are kindly requested to participate voluntarily in the interview for not more than 2 hours. You are kindly requested to provide information on existing rules and regulations for community and leasehold forestry, and the roles and mechanisms of your organization on improving access and decision making capacity by forest-dependent people. At the end of the meeting, you will be given the opportunity to edit, retract, or add to any of the comments you have made.

You are under no obligation to accept this invitation. If you decide to participate, you have the rights to:

- decline to answer any particular question;
- withdraw from the study;
- ask any questions about the study at any time during your participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded
- ask for the audio tape to be turned off at any time during the interview.

The information provided by you will be used for analysis and interpretation. A summary of findings will be sent to your organisation in February 2008.

If you have any query with regard to this research, please contact the researcher or her supervisors in the address mentioned below:

Researcher's address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number: 0064 6 3505799 ext 7208*

Researcher's contact telephone in Nepal

00977 1 4425060

Supervisors' address in New Zealand

*The Institute of Natural Resources, PN 433
College of Sciences, Massey University,
Private Bag 11-222, Palmerston North.
Fax number: +64 6 350 5680
Telephone number (Dr Terry Kelly): +64 6 350 5517
Telephone number (Dr Dave Gray): +64 6 350 5799 ext 7758*

This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/73. If you have any concerns about the ethics of this research, please contact Dr John O'Neill, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5799 ext. 8635, email humanethicspn@massey.ac.nz

4.2.4) Participant Consent Form

Project Title

The Influence of Institutional Factors on the Access of the Poor to the Forests Governed under Community and Leasehold Forestry Regimes in Nepal

This consent will be held for a period of five (5) years.

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to not disclose anything discussed in the Focus Group.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:..... Date:

Annex 5.1: References for data from the field case study

Reference	Technique used and participant/s	Date
<u>Dhuseni community</u>		
CF-FGDS/EC-9	Focus group discussion, local key informants (8 men, 2 women)	Feb-06
CF-FGDS/EC-8	Focus group discussion, local key informants (6 men, 2 women)	Nov-05
CF-FGDS/Non-member-7	Focus group discussion with non-members of Dhotar, Bhimtar (2 men, 8 women)	Dec-05 Feb-06
CF-FGDS/Kami-6	Focus group discussion with Kami member (7 men, 2 women)	Nov-05
CF-FGDS/Damai-4	Focs group discussion with Damai member (4 men, 3 women)	Nov-05
CF-FGDS/Brahmin-1	Focus group discussion with Brahmin member (8 men, 3 women)	Nov-05
CF-FGDS/Women-5	Focus group discussion with Women member (9 women)	Dec-05
CF-FGDS/Majhi-3	Focus group discussion with Majhi member (3 men, 4 women)	Nov-05
CF-FGDS/Poor-2	Focus group discussion with poor member (3 men, 5 women)	Nov-05
CF-HS/Kami-1	Household interview with poor Kami member	Jan-06
CF-HS/Majhi-2	Household interview with poor Majhi member	Jan-06
CF-HS/Damai-3	Household interview with poor Damai member	Jan-06
CF-HS/Damai-4	Household interview with poor Damai member	Jan-06
CF-HS/Majhi-5	Household interview with poor Majhi member	Jan-06
CF-HS/Kami-6	Household interview with poor Kami member	Jan-06
CF-HS/Brahmin-7	Household interview with poor Brahmin member	Jan-06
CF-HS/Brahmin-8	Household interview with poor Brahmin member (EC member, woman)	Jan-06
CF-HS/Kami-9	Household interview with well-off Kami member	Jan-06
CF-HS/Majhi-10	Household interview with well-off Majhi member	Jan-06
CF-HS/Brahmin-11	Household interview with well-off Brahmin member	Jan-06
CF-HS/Brahmin-12	Household interview with well-off Brahmin member	Jan-06
CF-HS/Non-member-16	Household interview with well-off Tamang non-member	Jan-06
CF-HS/Non-member-13	Household interview with poor Majhi non-member	Jan-06
CF-HS/Non-member-14	Household interview with well-off Brahmin non-member	Jan-06
CF-HS/Non-member-15	Household interview with poor Kami non-member	Jan-06
CF-HS/Brahmin-16	Household interview with well-off Brahmin member	Jan-06

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CF-HS/Damai-17	Household interview with poor Damai member (EC member, man)	Jan-06
CF-HS/Brahmin-18	Household interview with well-off Brahmin member	Jan-06
CF-HS/Brahmin-19	Household interview with well-off Brahmin (Vice-chairperson, EC)	Jan-06
CF-HS/Majhi-20	Household interview with well-off Majhi member	Jan-06
CF-HS/Non-member-21	Household interview with Majhi non-member	Jan-06
CF-HS/Non-member-22	Household interview with Kami non-member	Jan-06

Reference	Technique used and participant/s	Date
<u>Saparupa community</u>		
CF-FGDK/Women-1	Focus group discussion with Women, member (8 poor women from different low castes)	Dec-05
CF-FGDK/Low caste men-2	Focus group discussion with low caste men, member (7 men)	Dec-05
CF-FGDK/Damai-3	Focus group discussion with Damai member (3 men, 6 women)	Dec-05
CF-FGDK/Sarki women-4	Focus group discussion with Sarki women, member (8 women)	Dec-05
CF-FGDK/Tamang-5	Focus group discussion with Tamang member (3 men, 5 women)	Dec-05
CF-FGDK/Brahmin women-6	Focus group discussion with Brahmin women, member (15 women)	Dec-05
CF-FGDK/EC-7	Focus group discussion with local key informant (8 men, 2 women)	Dec-05
CF-FGDK/EC-8	Focus group discussion with local key informant (9 men, 2 women)	Jan-06
CF-HK/Damai-1	Household interview with poor Damai	Dec-05
CF-HK/Brahmin-2	Household interview with poor Brahmin	Dec-05
CF-HK/Kami-3	Household interview with poor Kami	Dec-05
CF-HK/Tamang-4	Household interview with poor Tamang	Dec-05
CF-HK/Sarki-5	Household interview with poor Sarki	Dec-05
CF-HK/Sarki-6	Household interview with well-off Sarki	Dec-05
CF-HK/Newar-7	Household interview with well-off Newar	Dec-05
CF-HK/Brahmin-8	Household interview with well-off Brahmin	Dec-05
CF-HK/Damai-9	Household interview with well-off Damai	Dec-05
CF-HK/Brahmin-10	Household interview with poor Brahmin	Dec-05
CF-HK/Kami-11	Household interview with poor Kami	Dec-05
CF-HK/ Newar-12	Household interview with Newar Woman Member of the EC	Dec-05
CF-HK/Damai-13	Household interview with poor Damai	Dec-05

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CF-HK/Sarki-14	Household interview with poor Sarki	Dec-05
CF-HK/Tamang-15	Household interview with poor Tamang	Dec-05
CF-HK/Newar-16	Household interview with poor Newar	Dec-05
CF-HK/Brahmin-17	Household interview with well-off Brahmin	Dec-05

Reference	Technique used and participant/s	Date
KIK-1	Interview with a staff of DFO Kavre (Officer)	Feb-06
KIK-2	Interview with a staff of Dept. of Forest	Feb-06
KIK-3	Interview with a staff of NSCFP Project (Project Chief)	Oct-05
KIK-4	Interview with a staff of NSCFP Project (Officer)	Mar-06
KIS-5	Interview with a staff of DFO Sindhupalchowk (Chief)	Oct-05
KIS-6	Interview with a staff of DFO Sindhupalchowk (Ranger)	Feb-06
KIK-7	Interview with a local resource person of Sagarupa community	Apr-06
KIK-19	Interview with a staff of NACRMLP	Jan-06
KIK-20	Interview with a staff of LFP	Oct-05
KIK-21	Interview with two staff members of FECOFUN	Jan-06
KIK-14	Interview with a staff of DFO Kavre (Ranger)	Nov-05
KIK-22	Interview with a staff of SPD	Feb-06

Annex 5.2: Specification of legal rights of the CFUGs

Withdrawal rights

- The forest products may be distributed or sold to the members (users) for fulfilling their demands of timber, firewood, litter, grasses etc.
- The group is restricted to sell or buy the timber without taking permission from the DFO.

Management rights

- The group has to follow the operational plan and constitution only approved by the DFO.
- The group has to accept the directives provided by the DFO and the Range Post Office.
- The plans for forest protection, management, and utilisation should be prepared with the help of the DFO staff (the ranger).
- The group can decide the rights, authorities and responsibilities of the executive committee.
- The group fund should be used for community forest development, and part of the fund may also be used for the community development activities.
- The group has to submit the annual progress report of the activities including the fund management details and the condition of the community forest.

Exclusion rights

- The group has right to exclude any non-members of the group in using the forest resource.
- The group can decide whether to approve or not the membership application lodged by the users excluded during the group formation.
- The group has right to exclude those persons from membership disobeying the rights and rules mentioned in the formal documents.

Source: The constitution 1996 of the *Dhuseni* CFUG, and the constitution 1999 of the *Saparupa* CFUG

Annex 5.3: Collective rules of the CFUGs

Types of rules	Specification of collective rules
Position and authority rules	<p><u>FUG members</u></p> <ul style="list-style-type: none"> • FUG can form or expel the executive committee • FUG has to monitor whether the committee follows approved plan or not <p><u>Executive Committee</u></p> <ul style="list-style-type: none"> • Executive committee has to organize general assembly meeting at least once per year. • Chairperson has to chair the meeting. He/she can make decision if people have conflicting ideas. • Secretary has to organize the meeting with the permission of chairperson. He/she has to send information for the meeting. • Treasurer has to inform the activities of the committee to the FUG. He has to keep the details of account of FUG. • Members have to attend the committee meeting regularly. They have to implement activities decided in the meeting. They have to inform the activities of the committee to the FUG members. • A person to be selected in the committee has to be a listed member of FUG. • A person having inadequate capacity to fulfill his/her responsibilities is inappropriate to be selected for the positions of the committee. • A person of the committee, who cannot attend meetings continuously for three times, should leave the position.
Information rules	<ul style="list-style-type: none"> • Annual progress of the activities including financial record of FUG has to be presented in the general assembly. • Executive committee has to organize meeting monthly to share the information about activities.
Procedural rules	<ul style="list-style-type: none"> • Executive committee has to organize general assembly any time if at least one third of FUG members demand. • Amendment of operational rules can only be done through decisions in the meeting with participation of at least 60 per cent of FUG members and then approval from DFO.

Source: The constitution 1996 of the *Dhuseni* CFUG, and the constitution 1999 of the *Saparupa* CFUG

Annex 5.4: Operational rules of the CFUGs

Types of rules	Some examples of operational rules
Boundary	<ul style="list-style-type: none"> - One has to pay entrance fee to be the member of FUG, and a member has to pay membership fee annually to keep continue their membership status. - Forest products are subsidized and some are free of cost for the members. - Non-members can buy some selected forest products at government price rate
Allocation	<ul style="list-style-type: none"> - Leaf litter and ground grasses can be collected by members free of cost. But they should not collect those from the Sal (<i>Shorea robusta</i>) blocks. Non-members are prohibited to collect those products. - A member as well as non-member can collect firewood only for making charcoal at the rate of Nepali Rupees 20 (roughly about half of a New Zealand Dollar) per backload. Burning of wood to make charcoal inside the forest is prohibited. However, provision of charcoal is not mentioned in the case of the <i>Saparupa</i> CFUG. - Members can collect firewood at a price of NRS 5 per backload during silvicultural activities (<i>Kantchara Jhadisudhar</i>) in December-January. Non-members are prohibited to collect firewood. - Demand for timber has to be made by member in October to the committee. Upon approval by the committee, member can buy timber (different price rate apply to different species) in December-January.
Input	<ul style="list-style-type: none"> - Each member has to pay NRS 10 monthly for managing salary to forest guards. No monthly payment mentioned in the case of the <i>Saparupa</i> CFUG.
Penalty	<ul style="list-style-type: none"> - Different rates of fines for cutting timber, collecting litter from Sal block, encroachment of forestland, grazing goats and cattles, making coal in the forest, setting fire in the forest and hunting inside the forest. The rates increase if the members do not obey the rules for second and third time. Members, who do not pay fines, are expelled from membership status. - Members, who do not pay monthly for salary to forest guard, are expelled from membership status. Members have to pay annual membership fee of NRS 120 in the case of the <i>Saparupa</i> CFUG.
Output	<ul style="list-style-type: none"> - CFUG community development fund is formed with the collection of incomes from sale of forest products and fines. Some amount is allocated for administrative work, and other is spent on community development activities mentioned in operational plan and constitution.

Source: The operation plans 2001 and 2005 of the *Dhuseni* and *Saparupa* CFUGs respectively.

Annex 6.1: References for data from the field case study

Reference	Technique used and participant/s	Date
<u>Odarepakha community</u>		
LF-FGDK/Group-1	Focus group discussion with group members (4 men)	Nov-05
LF-FGDK/Women-2	Focus group discussion with women (5 women)	Nov-05
LF-FGDK/Group-3	Focus group discussion with group members (4 men)	Nov-05
LF-FGDK/Non-member-4	Focus group discussion with Sarki non-members (2 men, 7 women)	Mar-06
LF-FGDK/Inter-group-5	Focus group discussion with inter-group committee (5 men)	Mar-06
LF-HK-1	Household interview with well-off Brahmin member	Nov-05
LF-HK-2	Household interview with poor Brahmin member	Nov-05
LF-HK-3	Household interview with well-off Brahmin member	Nov-05
LF-HK-4	Household interview with poor Brahmin member	Feb-06
LF-HK-5	Household interview with poor Brahmin member	Feb-06
LF-HK-6	Household interview with poor Sarki non-member	Mar-06
LF-HK-7	Household interview with poor Sarki non-member	Mar-06
LF-HK-8	Household interview with well-off Brahmin, Non-member	Mar-06
LF-HK-9	Household interview with well-off Brahmin, Non-member	Mar-06
<u>Tutikhola community</u>		
LF-FGDS/Group-1	Focus group discussion with the group (4 men, 2 women)	Mar-06
LF-FGDS/Inter-group-2	Focus group discussion with the inter-group committee (6 men, 1 woman)	Mar-06
LF-FGDS/Group-3	Focus group discussion with the non-members (4 men, 3 women)	Mar-06
LF-HS-1	Household interview with poor Danuwar, member	Mar-06
LF-HS-2	Household interview with poor Danuwar, member	Mar-06
LF-HS-3	Household interview with poor Danuwar, member	Mar-06
LF-HS-4	Household interview with poor Danuwar, member	Mar-06
LF-HS-5	Household interview with poor Danuwar, non-member	Mar-06
LF-HS-6	Household interview with poor Danuwar, non-member	Mar-06
LF-HS-7	Household interview with well-off Danuwar, non-member	Mar-06

Annexes

Reference	Technique used and participant/s	Date
KIK-1	Interview with a staff of DFO Kavre (Officer)	Feb-06
KIK-2	Interview with a staff of Dept. of Forest	Feb-06
KIK-3	Interview with a staff of NSCFP Project (Project Chief)	Oct-05
KIK-4	Interview with a staff of NSCFP Project (Officer)	Mar-06
KIS-5	Interview with a staff of DFO Sindhupalchowk (Chief)	Oct-05
KIS-6	Interview with a staff of DFO Sindhupalchowk (Ranger)	Feb-06
KIK-7	Interview with a local resource person of Saparupa community	Apr-06
KIK-8	Interview with a staff of DLSO Kavre (Officer)	Feb-06
KIK-9	Interview with a staff of Dept. of Livestock (Officer)	Jan-06
KIK-10	Interview with a former staff of leasehold project	Apr-06
KIK-11	Interview with a staff of Dept. of Forest (Leasehold Division)	Nov-05
KIK-12	Interview with a staff of NGO (SPD)	Mar-06
KIK-13	Interview with a former staff of leasehold project	Nov-05
KIK-14	Interview with a staff of DFO Kavre (Ranger)	Nov-05
KIK-15	Interview with a Woman Social Mobiliser (Kavre)	Dec-05
KIK-16	Interview with a mid-level technician of Dept of Livestock	Mar-06
KIK-17	Interview with a staff of Dept. of Forest (a female staff)	Apr-06
KIS-18	Interview with a Woman Social Mobiliser (Sindhupalchowk)	Apr-06