

Chapter - One

INTRODUCTION

1.1 Background

Forest plays an important role in our daily lives and clearly. It is one of the country's most important national resources. Nepalese economy based on agriculture and livestock farming is greatly dependent on forest resources for its maintenance. For example the forests supply firewood, fodder, timber and compost manure. Forest provides 81% of the fuel consumption and more than 50% of fodder for livestock (WECS, 1997). Besides these, forest plays an important role in soil conservation and environmental balance. Forest has traditionally been used for cultural purpose. In recent years, some industries have developed, which use forest products as raw materials.

Before 1997, there was no strict rule and regulation for the protection and use of the forest and lot of area of Nepal were covered by forest and accordingly there was a popular saying "Hariyo Ban Nepal Ko Dhan" which literally meant "The green forest are the wealth of Nepal (Chettri 1994:19)." However this cannot be said as of today, when the country's total area 29% is covered by forest (WECS, 1994/95).

The government paid no attention to developing the forest and allowed forest use of continues at higher rate. Forest rehabilitation was similarly ignored. So deforestation was created rapidly. To solve this problem the government nationalized all forest to prevent the destruction of national wealth to nationalize private forests of their adequate protection (Regmi, 1978).

Unfortunately, the government was not prepared to assume the technical and administrative responsibilities of forest. Ownership villagers reached

negatively to nationalization and use had been curtailed and no one took responsibility of managing the forest resources. As a result, the forest was obviously depleting in steady pace. During 1978/79 to 1990/91 forest area has decreased at an annual rate of 1.3% in the Terai plains. In the Hilly area, forest area has decreased at an annual rate of 2.3% from 1978/79 to 1994, whereas forest and shrub together decreased at an annual rate of 0.2%. In the whole country, from 1978/79 to 1994, forest area decreased at an annual rate of 1.7%, whereas forest and shrub together have decreased at an annual rate of 0.5%. As R.B. Bista, Secretary with the ministry of Forests and soil Conservation notes the increase in the area of shrub cover indicates additional degradation of forests (DFRS, 1999).

Since last few decades the country has been suffering from the consequences of deforestation. In recent years, it has become one of the major environmental crises in Nepal. Deforestation leads to soil erosion, flooding, landslides, water scarcity, drought and loss of life. The loss of trees and ground covers affect the productivity of cultivated lands. Therefore agricultural and forest productions are both declining rapidly as a result of deforestation.

Deforestation threatens the supply of various forest products, particularly fuel. Eighty-seven percent of the country's energy consumption is in the form of fuel wood and it is estimated that 95% of all wood taken from the forest is used as fuel (Thompson, and Warburton, 1999: 115-135, 1999).

After the negative experience of private forest nationalization act, government's legislative efforts have been sharply towards forest resource management to combat deforestation as well as environmental problems. The government started to decentralize, which assigned the forest management to the local peoples a Panchayat Forest, Panchayat

Protected Forest and introducing the community forestry programs. These initiatives controlled deforestation to some extent and reserved these negative attitudes (nobody's forest) to positive attitude (our forest)

In the words of R.J. Fisher and D.A. Gilmour (1989) "while community forestry has been defined in many ways. The most contemporary definitions focus on the management of forest resources by the rural people who use them for domestic purposes and as farming systems." By this definition the people who carry out tasks of forest management should be the villagers themselves with technical assistance and guidance that are necessary from forest technicians.

After the emergence of the concept of community forestry, it is realized that for sustainable development in management of forest resources, women's participation is necessary. That is why the government of Nepal and various INGOs involved in CF are making women an internal part of these CF activities. More specifically, women started to involve in managerial aspect of the CF management. As a result of 33567 (21.5%) women have been working as executive committee member in different FUGs. Similarly 4.83% FUGs are being handled by all women groups (DOF/CFD, 2003).

As women are the primary users of forest product and also due to their traditional reliance on forest, they are often chief repository of knowledge concerning the use and management of trees and other plants. Their extensive and close contact with the forest give local women give more detailed understanding of forest resources than the local men (Frothingham, 1986).

In the rural areas women have much knowledge about forest resources such as fuel wood and medicinal herbs because they are the main collectors of these products. They have an indigenous knowledge about forest resources and its efficient use. Women exploit several different

forests. Thus, village women have the knowledge to identify species name, its uses, geographic location, availability and the techniques of conservation of the species (Saul, 1994).

For the hill women of the Nepal, the forest is the source of products vital to the household economy: firewood for cooking and heating and leaves for animals fodder and fertilizer. Since the impact of deforestation has profound effects on the lives of Nepali women. Women's role as users and preservers of forest areas crucial to the success of any program aimed at forest conservation (Molner, 1987).

Women in the Hills of Nepal have been involved in the management of community forests but despite this, they have not benefited equally. The participatory methodologies, which have recently gained popularity, emphasize the mobilization of women and the disadvantaged (the poor and occupational/lower caste) yet in reality they are excluded from planning and decision making process. If the whole process of community forest management is undertaken with the active participation of women and the disadvantaged, such a process should contribute not only to effective forest management but also to community empowerment and sustainable development as a whole (Tanaka, 1987).

Policy makers have acknowledged the important of women's activities in forestry. The master plan for the forestry sector emphasis an extension approach aimed at gaining the confidence of woodcutter and other particular women, who actually make the daily management decision (MPFSP, 1988). Karki and others (1994) show an example about women's participation in forest user committee, according to the master plan guideline "At least two thirds of the members of the user groups should be women". However it was found that a fixed quota system led to passive ineffective participation.

All the rule, acts and policies related to forestry sector insist on participation of women in the forest management but studies have shown that women participation in forest user groups still needs to be encouraged. In Nepal women play a vital role in the production as well as utilization of local natural resources. For countries women have used forests for its product. They are the ones who collect foul wood, fodder, leaf-litter and other non-timber products. But their work is not recognized and most often not documented.

According to the report published by the FAO in 1991, women and girls do 94% of the foul wood collection in Nepal. This makes it very necessary for women to participate in CFUGs. (Diniggelis, 1994) writes that women are usually not included in any decision making outside the household. She recommends that due to their enormous role in the collection and utilization of forest products women should be activity involved in all matters relating to CF.

Siddiqui (1989) views that rural women are amongst the most frequent and most important forest users in Nepal. However they play only a marginal role in forestry programs. Although the government policy is to empower women to participate in the CF planning and implementation process never the less, Nepali socio-cultural practices still seem to be reluctant to let women fore ahead.

The success of every phase of community forestry depends upon the devotion and participation of its women users, as they are the most frequent forest users. Therefore the can play a strong role in forest development and management due to the various existing social, barriers in our country (Dhungana , 1995).

Considering the multilateral significance of community forest (e.g. subsistence ecological balance etc) and vital role of women in of

management this research will conduct to address some common issues in these regards. The research is related to the case study of five VDCs of Bhaktapur district. This study focuses on case studies concerning the women's participation. Such study is crucial for understanding of success/failure of the local level interventions at CF management; such a study is useful for identifying the strength and weakness of women's mobilization and management practice of local societies.

1.2 Statement of the Problem

Nepal has been losing most of its forest cover and this problem is in a very critical condition and the people that are most affected by it's the women (Landis, 1984). Numerous researches conduct in Nepal have shown, time and again, that the Nepalese women's forestry related activities encompass fuel wood and fodder connection, farming, grazing cattle and other animals. Whether it is in use forestry activities or other domestic chores like fetching water and cooking, the women's participation is greater than their men counterparts. Hence loss of forest means more time has to be spent by women on these tasks, as they have to venture further from their homes (Landis, 1984).

Most of the development agencies recognize the importance of women in forest management. The study attempts to identify the community forest area in the district and analyses the achievement made by the women's participation in community forestry in comparison to achievements made without women's participation. The study also aims to study the factors which act as the varies for women participation in community forest.

1.3 Significance of the Study

Community forest is one of the much appreciated forestry programs in Nepal. Active involvement of the local people is the backbone of the

community forestry program and women are going the actual users their involvement is very essential. Nepalese women spent most of their time in the forest for the collection of fuel wood, fodder, and minor forest products so they are the real end users. Community forestry is about the management of the forestry by the villagers who use it. Women are the consumers as well as the managers of the forest as they have immense knowledge about the forest and this knowledge is a valuable resource of forestry development.

The role of women is in main specific areas, i.e., conservation of available resources protection of upcoming resources and education of the masses. To increase the involvement of women and to create interest toward CF program awareness is the foundation. In Nepal many community forestry to the users without identifying their actual interest. Nepal being a male dominating society, the women are very disadvantage and they also lack education so every outdoor meeting and gathering of the community are attending by men and women are leftover in the house looking after the house and the household work.

Nepalese women often lack confidence and skill and as consequence feel inferior to men and are reluctant to speak in public in social norms, also constrain them. Group discussion with village with village women have revealed that most of the men who attend FUG meeting do not communicate and discuss issues with their wives don't need any important to notify women so for the active involvement of women for the suitable management of the forest, it become very essential to firstly aware women as they are the main affected group and have linkage with forest and its products being the primary users.

Women's role in reforestation, soil erosion and water conservation is especially high because they are the principle sufferers from environmental degradation.

The above studies rightly point out that the intended beneficiaries of community forestry should be women because they are the primary consumers of the forest product, have good knowledge about better tree species to grow, suffer most with forest degradation, overwhelmingly disadvantaged the consistently over looked and under-valued but are the more permanent residents of the area. Thus, efforts have to be done to determine whether women have been the target or not and what problems they are facing.

1.4 Objectives of the Study

The general objective of this study is to examine the pattern of women's participation of forest management. The specific objectives are the following:

- i) To identify the community forest area in the district;
- ii) To describe the present condition of community forest committee; its management;
- iii) To determine the factors of women's participation in community forestry; and
- iv) To analyze women's role in utilization of forest resources and in management decision making.

1.5 Limitation of the Study

Social research can merely be done without limitation. The study mainly focuses the community area of district. The total community forests are 56

and the total area about 1832.4 ha. out of 1994.7 ha (DFO Bhaktapur 2006).

A sampling frame was prepared to all women participation in forest users committee, other forest users committee selected using 10% random sampling and for the non-user's only 5% sample was draw.

This research work has some limitation due to the lack of budget and limit time. The work has been carried out on the basis of field study within a short period of the time by researcher himself.

1.6 Organization of the Study

The study has been organized into nine chapters. Chapter one deals with background, statement of the problem, significance of the study, objectives of the study and limitation of the study. Chapter two discuss the research methodology, it includes, nature and sources of data collection technique and sampling. Chapter three discuss literature has been reviewed. Chapter four discuss about the setting of the study area. Chapter five describes about the distribution of the community forest. Chapter six describes about the present condition of forest committee. Chapter seven determine about the factor affecting participation in community forest. Chapter eight analysis about the women's participation in use and management of forest. Last and final chapter nine presents summary, concussion and recommendations.

Chapter - Two

RESEARCH METHODOLOGY

Bhaktapur is the one of the ancient, historical and cultural districts of Nepal. It is 119sq.km in area. There are 16 VDCs and two municipalities in the district. Forests cover 14.45% of the total land of the district. In Bhaktapur, there are 56 community forest committees. This district is bordered with three districts that are Kathmandu, Lalitpur and Karvepalanchok.

This chapter discusses the research method used of the present study. It covers the data collection approaches, and field survey.

2.1 Data Collection Approaches

This study was based on primary as well secondary, which was collected through the different sources. Moreover various methods of research technique were adopted in collecting the data from the study area, which can divide into two categories i.e. secondary and primary data collection.

2.1.1 Secondary Data Collection

The secondary data for the study was based on available literature on forest. Number of research documents and reports on this subject was gathered from various institutions and information centers. Those secondary data was collected mainly from DFO Bhaktapur, population record, documents, research, report, and journals.

2.1.2 Primary Data Collection

In collecting the primary data, it was required the researcher participation with the local people, old person of the village and VDC chairman.

2.2 Field Survey

A set of check-list had been made to collect information through field survey by using the following method.

2.2.1 Field Observation

Field observation was done through out the community forestry areas to observe the present condition and management practice. It was also observed whether the forest guards are performing their duties or not and at the same time the consumers is protecting the forest illegal uses.

2.2.2 Focus Group Discussion

Members of executive community were interviewed about their present condition of committee, rules and regulation, management and development practices function of committee and the past/present of community forest. It was also asked whether they (executive committee) have any problem of management or not due to large number of users.

2.2.3 Key Informant Survey

Interview with key informants (local leader, old person of the village and chairman) were taken to know the history of forest situation. The district forest officers and officials of district forest officers were interviewed through structure conversation to understand the problem of forest management and development.

2.2.4 Sampling

To fulfill the purpose specific objective, a sample survey was conducted to the users group as well as not user's group.

There are 16 VDCs in Bhaktapur. There are 56 community forest committee in Bhaktapur in 2007 June. I was selected 5 VDCs by lottery

method. There are 17 community forest committee in 5 VDCs of the district.

Table 1: Distribution of Community Forest Committee by VDC

VDC	No of committees
Nagarkot	3
Dadhikot	6
Chagunaryan	3
Tathali	3
Bageswori	2
Total	17

Sources: District Forest Office, 2007, June.

A sampling frame was prepared, all women's participation in forest user committee was taken and other users from each of the committee would select used random sampling (low percent) techniques. The distribution of the sample drawn from each committee is presented in Table 2.

Table 2: Distribution of Sample Respondents by FUGC

VDC	Ward	Name of FUG	Total number of members	No. of female members	Sample respondents
Dadhikot	2	Patletar	75	5	7
	2	Chemeli	175	5	17
	4	Birsinge Pakha	123	6	12
	9	Aswarya	201	4	20
	5	Nangopakho	103	6	10
	2	Ananta Linkeswor	132	3	13
Nagarkot	1,2&3	Yen Danda	54	7	5
	7	Kusum	123	4	12
	7&8	Lakhane	99	8	10
Changu	1	Chagunarayan	350	7	35
	4	Mane Dada	192	5	19
	1,2,3,4,5&6	Nayachopawa	277	11	27
Tathali	1,2&3	Wolotulo Pakha	120	12	12
	3&4	Aaitabare	70	7	7
	6	Kadelako Pakha	90	9	9
Bageswori	3,4&5	Bahal I	195	4	19
	5&6	Bahal II	123	8	12
Total			2502	111	245

Source: - Field Survey, 2007.

Whereas from the non-participation in the forest users group, samplings would take on the basis of community forestry ward. It has been determined to take 5 % household in each community forestry ward which has been taken randomly. The table below shows the sample household of non-participants forest user group.

Table 3: Distribution of Non-Participation Sample Respondents by Ward

VDC	Ward	Total no. of households	Name of FUG	No. of respondents
Dadhikot	2	49	Patleter	3
	2	174	Chemeli	8
	4	95	Birsinge pakha	5
	9	133	Aswarya	6
	5	84	Nango pakha	4
	2	117	Ananta linkeswor	6
Nagarkot	1,2&3	25	Yen Danda	2
	7	162	Kusum	7
	7&8	30	Lakhane	2
Changu	1	209	Changunarayan	10
	4	172	Mane Danda	8
	1,2,3,4,5&6	244	Nayachopouwa	12
Tathali	1,2&3	110	Wolotolopakha	5
	3&4	61	Aaitabare	4
	6	67	Khadelako	4
Bageswori	3,4&5	104	Bahal I	5
	5&6	120	Bahal II	6
Total		1956		97

Source: District Development Committee, 2006.

Chapter - Three

REVIEW OF LITERATURE

The relevant literatures regarding forest resource particularly community forest management, people's participation and women's participation in community forest mentioned in the published and unpublished documents were be reviewed in this chapter. For this purpose various books, magazine, working papers, plans, thesis, reports, web sites were used. On the whole, management issues on forest resources as well as people's participation were reviewed.

3.1 Concept of People's Participation

The world participation became public in the development sector after the Second World War. During late 1960s and early 1970s some development models (such as "growth in income" and "growth in social progress") failed to reach the poor and disadvantaged population in countries like Nepal. The increasing poverty and growing dissatisfaction among the large number of people in the society, and the failure of development initiatives forced development experts, planners and policy makers to re-examine the understanding of development. As a result, realization of people participation emerged (Regmi, 2002). After this concept, people's participation started and increased in various development projects/programs. Participation was expected from those people, who bear the consequences of success and failure of any development initiatives in their vicinities, as their right to involve.

Participation is a process that includes even poor and disadvantaged people in development process. In the process engage actively in all stages of development activities such as need identification, planning, designing and benefit sharing (Regmi, 2002), which strengthens the

capacity of individuals and communities. In this way, dependence on the state and other development agencies is minimized and ordinary people rediscover their potential for cooperation and mutual endeavor (midgley, 1986)

Process of people's participation is based on a completely people-centered approach in which the focus for development is on cultural, environmental, Political, economical, human and social aspects. Participation is nothing but a transformation in people's traditional attitude, perception, understanding and behaviour to development. In other words, participation has to be understood as a shift from "doing for people" to doing, by people" (Regmi, 2002). After the mobilization of people's participation in development projects, obviously, two out-put such as feeling of ownership and sustainability over project are achieved.

3.2 As the Development of Concept of People's Participation

Various approaches were adopted and experienced regarding the issues of women's involvement in development process. These approaches perceived women as passive recipients of development fruits/passive participant and recognized as social change agents respectively. These approaches are reviewed as:

The during 1950s-1970s the women in development (WID) approach emerged that encouraged women to integrate in development activities, reduce suppression and equal participation and improvement of life of women. The WID emphasized productive aspects of women's work instead of reproductive side. As a result it mobilized women's equal role in the development of education employment and health services. Likewise, women and development (WAD) approach emerged in late 1970s paid more attention to appreciation in development. The gender and development (GAD) approach emerged during the late 1980s

recognized the importance of social, economic and political agents of actors in women's life. The GAD is concerned with social construction (social relations between men and women) of gender equity and social justice (Shiraz, 1997). The GAD acknowledges women as agents of change rather than passive recipients of development services.

Along with WID, WAD and GAD approaches and women's experiences such as the Chipko movement, greenbelt movement, women for peace movement and eco-feminist movement, the women and environmental development (WED)" approach emerged. Eco- feminist action is aimed of the preservation of the life present and future generations, in a human perspective and in a wide biological and cosmic perspective. The WED approach covers a variety of areas including forestry, agriculture, irrigation and water systems. The WED includes women's relationship between harmful effects of environmental degradation and women's likes (Shiraz, 1997). The WED approach seems most relevant on because it is based on experiences and strengths of grassroots level women.

3.3 Forest Management Practices and People's Participation in the World

Forest of the major natural resource of the world. The forest is also caused mother of nature. Various environmental consequences such as Ozone layer depletion, global warming, acid rain, loss of biodiversity etc. are emerging with the depletion of forest resources. Realizing its seriousness international community has emphasized in forest resource management.

Like in the Europe and America, forest protection with the involvement of local people initiated since 1980s in south Asia. For example, under the joint forest management (JFM) in India, the degraded forests were given to communities for management and regeneration. Similarly, in

Africa (Gambia and Tanzania), attention was shifted to community-based natural resource management. The emerging trend in Africa was to support the custodial interest of the forest-adjacent community.

Involvement of communities in forest management is now a significant feature of national forest policies and practice throughout the world. Government of the various countries are increasingly decentralizing and turning to local communities to assist them in protecting and managing state owned forests. Governments of various countries have supposed greater reliance on resources at community levels is a political solution to a growing resource problem (FAO, 2001). Community based management system are still very much in a stage of evolution. In fact, community based approach is as major challenge in many places due to little experience in mobilization of people in decision making and implementation at local level.

3.4 Women's Participation in Community Forestry

Forest Act, 1993 defines “community forest means a national forest handed over to user group (pursuant to section 25) for its development, conservation and utilization for the collective interests.” The Act has given priority to the CF as “National forest suitable to hand-over to the user group as CF shall not be handed over as leasehold forest.” Similarly the Act has provided major status and role to the FUG. The FUG is a registered group in District Forestry Office (DFO). The user group is an autonomous corporate body having continuous session. It can prepare work plan for the development and conservation of the forest and utilizing selling and distributing the forest products by maintaining the environmental balance.

The CF approach has streamlined the users in FRM at local level. By following its unique philosophy, women came in frontline regarding

FRM in different parts of the country. First of all, women of 2.9 hectares of Balthali VDC of Kavrepalanchok district formed all women FUG and managed 2.9 hectares of land in Bisthodhar pakha at CF at 2046 BS. In 2046 BS, an all-women FUG of Chhahare Siureti Bokhim VDC of Bhojpur district, undertake 11.9 hectare forest for management. Successively, the rate of formation of all women FUG and women member in mixed group increased significantly. Women have managed smallest (0.22 hectare in Badikhel, Lalitpur) to biggest (527 hectare in Budhabare, Dhankuta) CFs capability (Gautam, 2059). Regarding women's participation, data (HMG, DOF 2003) shows that currently 613 (4.8%) FUG is handling by all women group.

3.5 Importance of Community Forestry

Some of the importance features forestry policies are as follows:

- All the accessible forest can be handed over the users (no area limit)
- The forest user group (FUGs) have to manage the forests as per the approved constitution and operational plan.
- Any National forests suitable to be converted into community forest (FR) will not be assigned to other such as leasehold forest.
- District forest officers (DFO) can hand over forest of FUG.
- FUGs can use funds in any kinds of community development works.
- The FUG can fix the price of forestry products irrespective of government's royalty.
- The FUG can plant-long term cash crops without disturbing the main forestry crops.
- FUG can transport any forest products simply by informing the DFO.

- FUG will not be disturbed by political boundary while handing over the forests.
- The FUG can establish forest based industries.
- FUG can punish mill-users who offered against the rules of CF (Adapted from Joshi, 1997).

3.6 Women's Participation in Forest Resource Management

From the very beginning women were as the real users of natural resources. As other natural resources, forest products such as a fuel wood, fodder, leaf-litter, herbals, wild vegetables so on are very much essential and need by women in their daily routine in subsistence economy. Besides this, various participatory approaches emerged the course of time, UN's provision regarding women participation etc. Boost up to the women's involvement in FRM in various countries. In order to describe women's relations to the forest products, some movement, which were organized by women for protection of the forest and environment, carried-out in neighbouring countries are emphasized as:

The Chipko Movement of India

The Chipko movement was against odd official's forestry policies of government and mainly concerned with local employment. Initially Chipko workers were both men and women. Later, more women joined the movement when they realized that the recurring floods and landslides form which they were suffering were caused by deforestation. When the forest department announced an auction of 2500 trees in the Reni forest was over looking the Alakanda Rivers, which has already flooded disastrously, then women started to embrace trees to prevent them being felled from the company they won the auction. They physically prevented the tree felling and thus forced the Uttar Pradesh Government to

investigate. Two years later, the government placed a ten years ban on all tree felling in the area. After that women prevented felling in many others forest all along the Himalayas. They have also set Co-operatives to guard local forest, and to organize fodder production at rates that will not harm the trees. Within the Chipko movement, women have joined in land rotation schemes for fodder collection, helped replant degraded land and established and run nurseries stocked with species they select. Actually the Chipko movement was a movement of subsistence economy, reaction of women against government's Unfavorable Policies and reunion of women with nature (Borg, 1989).

Plantation for Protection in China

In 1954, women planted a shelter-belt along the entire coastline of Kwangtung Province with the active participation of rural women. In this area, usually, men fish and women raise the crops. Women commune member led other in forming tree planting groups in order to protect their fields the sand that was regularly blown in from the coast. From this campaign, china's forested area increased and expanded 5 to 12.7% of total land area. Still rural Chinese women, regard tree growing as important as growing cereals.

3.7 Forest Management Systems and People's Participation in Nepal

Obviously, forest has been the major natural resource of the country, which is supplying fuel wood for consumption, fodder for livestock timber for construction and other non-timber products. As a part of economy and livelihood, the forest is being managed by giving high priority from both user and the state. Level of people's participation varies according to the nature of forest management practice adopted. Major forest practices adopted in Nepal is given below:

3.7.1 Traditional/Indigenous Practices and People's Participation

Conservation awareness and traditional of preserving of forest adjacent to place of worship or important source of water is deep rooted Nepalese societies (Green, 1993). Various traditional systems of resource administration have also evolved during the period. For example, Shingonawa (Forest caretaker) was practiced in Sherpa Society. Such indigenous systems were based on need of local people. Spontaneously, they appointed forest watchers from their internal sources. Later, in eastern hills the kipat system for commercial rights over large areas and Chitaidar (Local non-official functionaries) were responsible for the use of village forest.

During Licchhivi period, Panchali, a local authentic body, allowed people to harvest trees and other non-timber products for domestic purposes. However, trading and levying taxes of fanna, wood products and herbs were controlled by the state. During Malla period and later, forests were also preserved and used for security (strategic) purpose. The policy of strategic use of forest was continued up to the period of Prithivi Narayan Shah and afterward also. Later, King Ram Shah (Gorkha) promulgated provisions requiring people to maintain trees along the path of foot trails. More specifically he provisioned as "Maintain trees around water springs, in the absence of trees, water will not last all through the year and spring will run dry. If forests are cleared on a massive scale, there will be massive landslides will bring flood, that could wash away even Khet and forests. Thus fine rupees five who cuts trees around water resources" (Bhattarai, 2001). Provision mention above, indicates necessary attention was paid to forest as well as environmental management.

Fisher (1989) traced out that during the period of Ranas the forest in many areas were under the responsibility of local headman called

Talukdars. In addition responsible for controlling access to forest and distributing forest products. The Talukdar could employ forest watchers (Chitaidar and Chowkidar) for the protection of forest on behalf of him. From the situation mentioned above, we can say that during Rana period, there was no essence of people's participation on FRM.

3.7.2 Planned FRM Practice and People's Participation in Nepal

With the dawn of democracy in the country, government started to manage natural resources, specially the forest resource. Major interest towards the forest was its multilateral benefit for local user as well as state. After a half decade of democracy, the government started planned systematic interventions by formulating different Acts, in order to manage the forest available in the country. Major Acts are pointed out in this study as:

Initially, the government formulated "Private Forest Nationalization Act 1957", and controlled all private forest, which were provided to people for the protection, with a view to preserving this important natural resource. The Act was guided by the democratic idea of providing for a more equitable distribution of this wealth among the people of the nation (Mahat, 1985). However, due to development and other institutional constraints, forest area neither could established adequate control over forest nor mobilized people properly. As a result, the need to involve local people and committee in the forest conservation and management activities was recognized.

A rule regarding CF was enacted as the 'Panchayat Forest' (PF) in 1978 and 'Panchayat Protected Forest' (PPF) in 1988 by the HMG/N. However, only degraded forestlands were provided. On the other hand, community forests were registered on the basis of Panchayat territory that

could not include the real user, who was utilizing the forest from the next Panchayat.

With the evolution of the forest Act (1993) community forest came as a new approach in forestry development, which enhanced people's participation and ensured the utilization, conservation and management of local forest under respective community. The Act classified the whole national forest of the country into five categories such as government-managed forest, protected forest, community forest, leasehold forest and religious forest. Among those CF has been changed into successful and well-established forest these days.

Based on forest management practices described above, we can say that various indigenous forest management practices were generated spontaneously, as a result of continuous interaction between various ethnic groups. Gradually, government started to pay administrative attention to the forest resources management in order to collect revenue. Due to bureaucratic intervention from the state and lack of people's participation, the forest began to deteriorate at a steady rate. After long negative experiences at the local level and policy level and evolution of participatory forest management practices at global level, led to community forestry management practice and people's participation in Nepal.

3.7.3 Women's Participation in FRM in The Nepalese Context

Women have been engaging in FRM from the very beginning in Nepal. Despite their conventional involvement, they started to participate in various projects related with Natural Management. Women's involvement in FRM was guided to fulfill the immediate requirements of forest productions. Some cases are highlighted briefly as:

The Case of Ghorepani

With the concept of tourism and the dramatic increase in trekking, natural and cultural environment was damaged in Ghorepani, Myagdi. In 1989, a project started in the Ghorepani aiming to relieve the immediate human pressure on the environment through awareness and community participation. A women officer was appointed to get maximum acceptance and participation and to encourage village women to join in the decision making. Women were found more concerned about firewood and fodder and they knew that loss of forest could lead to severe erosion. Women not only discussed these problems but they conducted tree plantation to solve erosion.

Molnar (1992) studied the condition of women in different parts of Nepal. She found women under the burden of environmental degradation caused by erosion. During her study she gathered women's interest, successes and ambitions regarding participation in FRM from different hilly districts of Nepal. In Ilam, after the project intervention in a community, a woman became interested in forestry activities particularly, became enthusiastic in tree plantation. She started to campaign for membership of a local women's organization, approached both district office and project staff to request support for carrying out forestry extension, especially to increase female participation in forestry activities, which greatly increased the number of women taking seedlings from the nursery.

In the case from Kaski district also, a committee has planting of 3500 seedlings in one degraded area of their village. Besides this they collect fee as revenue for planting efforts and other planned community

improvements, such as piped water and new school facilities. An interesting aspect of the committees is that was started completely at the motivating of local village women. Moreover, the committees are highly regarded by the men in the village and the men are happy to abide by their decisions regarding village forest resources (Molnar, 1992).

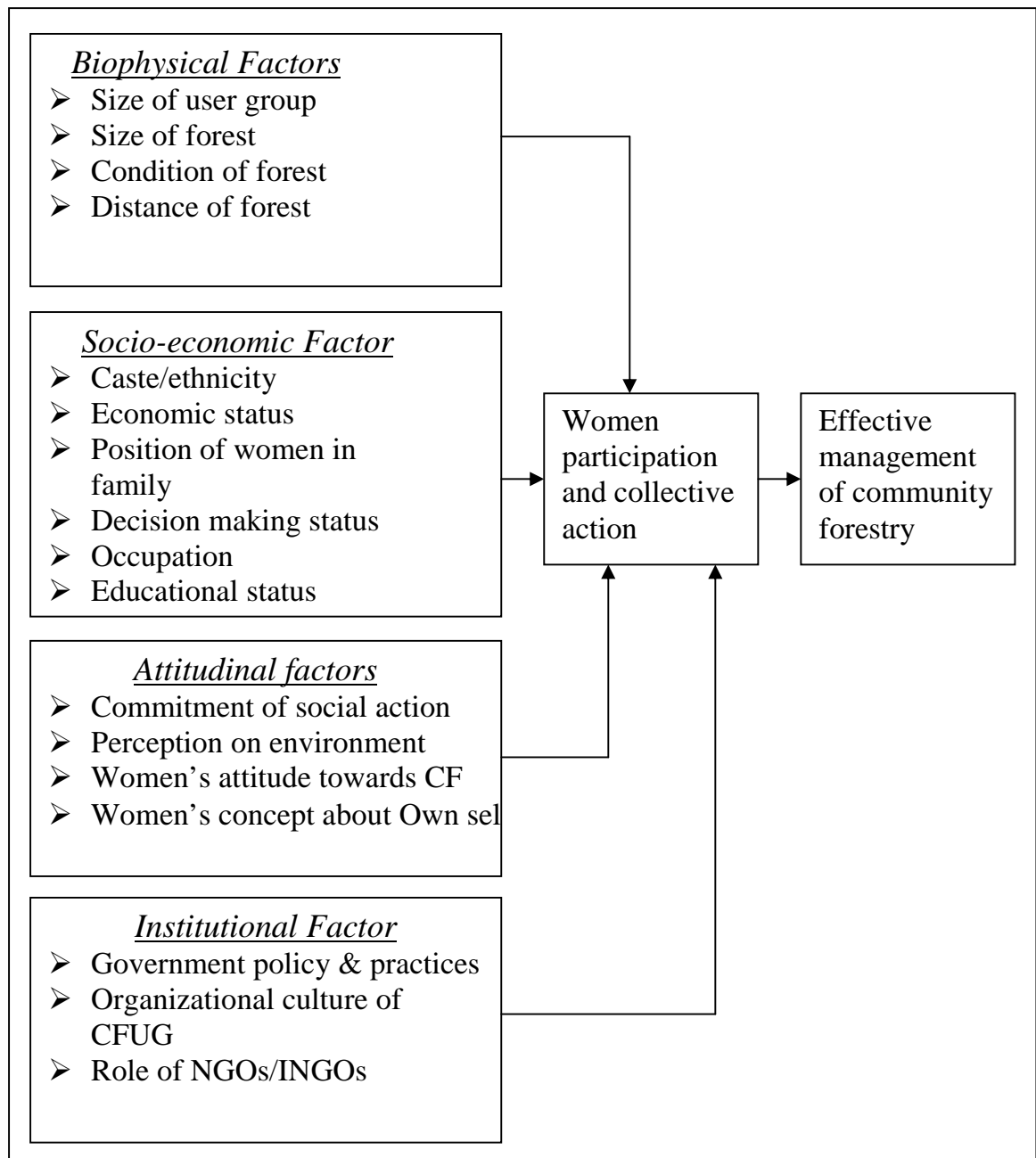
Conceptual Framework

Women's participation in community forest management itself is a vague, multidisciplinary and interrelated phenomenon. Among various independent factors; physical, socio-economic. Institutional and attitudinal influences (positively/negatively) to the frequency and intensity of involvement of women in CF management. Sub-factors of each factor and diagram of conceptual framework of the study is presented in Chart 1 below.

Chart 1: Conceptual Framework for the Study

Independent Variables

Dependent Variables



Chapter - Four

SETTING OF THE STUDY AREA

4.1 Geographical Setting

Bhaktapur is one of the three districts of Kathmandu valley. It is bordered to the east by Kabhreplanchok district and its west and north by Kathmandu while Lalitpur and Kabhreplanchok district border on the south. The spatial location of the area lies between 85-21'-85-32' east longitude and 27-37'-27-44' north latitude. The district has a total area of 119 sq.km. About there are altogether 16 VDC including Bhaktapur municipality and Madhyapur thimi municipality. This is located in the southern part of Bagmati zone.

4.2 Bio-physical Condition

4.2.1 Landform

Table 4: Landform Structure

Elevation zones (in m.)	Area (sq. km.)	Percentage
Below 1300	4	3.37
1,300-1,500	86	72.27
1,500-1,700	19	15.97
1,700-1,900	8	6.73
Above 1,900	2	1.68
Total	119	100.00

Source: DFO, 2006.

The land form of the district is quite Homogeneous. Elevation is gradually lowering down west-ward. Distribution of area is term of altitude is not uniform. Most of areas are valley floor which is flat. This area lies below 1,500 meter, covering an area about 90 sq.km (75.64% of the total land) most of the Area of the district falls on the gentle to steep

slope categories and only small portion of the district has very steep slope. The elevation of the district ranges from 1290 meter to 2150 meter. Similarly, the remaining part of the land are located in hill 1500 meter to 1,900 above meters, covering an area of about 29 sq.km. (24.38% of the total of the land)

4.2.2 Geology and soil

The west and central part of the District are composed of alluvium deposit of quaternary period. The Mountains including foot slopes in the east are composed of four different formations of Pulchoki

Sub- group from Precambrian to late Paleozoic period. The upper part of Godavari range in the southeast is composed of slates with thin Limestone .The foot slopes including the whole range of Changudanda are composed of dull green grey colored phylites. A narrow strip near Nagarkot is composed of massive to medium grained marbles whereas the North eastern part of Nagarkot ridge is composed of fine green, dark and quartzite mica schist's.

4.2.3 Climate

Climatically, the study area range from warm Temperature valley in the west to cool Temperature hill slopes in the east and south East. So, this district presents two climatic zones.

1. Warm Humid (1,000-2,000m)

Usually this type of climate prevails within 1,000-2,000 meters altitude. Mean annual temperature in warm temperature zone range from 15 degree Celsius to 20 degree Celsius. Temperature decrease with the increase in altitude.

Slope and altitude play an important role in precipitation. The volume of precipitation increases south west to north east with an increase in Altitude. Kathmandu airport receives only 1,383 mm of rain where as average annual precipitations are 1,544 mm at Bhaktapur and 1862 mm at Nagarkot. Nearly 84 percent rainfall occurs in summer month (June to September) only 5 percent rainfall occurs in the winter month (October to February).

2. Cool Humid (2,000-3,000m)

Cool temperature per humid climate prevails between 2000-3000m altitude zones. In this climatic region mean annual temperature is less than 15 degree Celsius .Annual precipitation in this zone is more than 1700mm.

4.2.4 Drainage

Bhaktapur district is drained by two major sub-system of Bagmati system. They are Manohara khola and Hanumante Khola is about 333.55 km.

The trunk stream Monohara Khola originates from the north–east corner of Mahadeve Pokhari and arts as a district boundary between Bhaktapur and Kathmandu and joins with Bagmati River. It has no major tributaries originating in this district.

Hanumante Khola Originates from South east corner of Mahadev Pokhari flow in south west direction and joins with Monohara. There are altogether seven trunk stream segments in this district. Major tributaries of this river are Tabyakhusi khola, Khasyang Khesung Khola, Chakhu Khola, Gundu Khola, Lower Hunumante khola, Charkhande khola and Mahadev Khola.

4.3 Socio-economic Setting

4.3.1 Population

The population recorded in 2001 census is 2, 25,461 in 41,253 household in the district Bhaktapur shares about 8 percent of the total Zonal population. Its population in 1991 was 1, 72,952 and it has increase to 2, 25,461 in 2001 population density in 1991 in Bhaktapur was 1417.3 person per sq.km. Where as in 2001 it reaches to 1895 person per sq.km. About 53.36 percent of total population lives in municipalities .Five VCD (Sirutar, Tathali, Sudal and Bageshori have densities greater than 1,500 person per sq.km. Other four VCD namely Katunje, Duwakot, Jhawlakhel and Challing have densities between 1,400-2,100 persons per sq.km. About similarly four VCD namely Balkot, Chittapol, Nankhel and Sipadol have densities between 1,000-1,500 people per sq.km. Population density is less than 3000 person per sq.km. Are Nagarkot, Dadhikot, Gundu and Changunarayan. The municipalities Bhaktapur and Madhyapur Thimi densities are 11058 and 4298 respectively

4.3.2 Occupation and Employment Structure

The main occupation of the people living in this district is agriculture. About 40.08 percent of the total economically active population in engaged in agriculture 59.92 percent of the total population is engaged in tertiary activities such as service, sales, clerical and professionals.

4.3.3 Road Network

Bhaktapur has five different types of road i.e. highway, bitumen road (feeder road or broad).gravel road (district and other road), cart track and foot trail. Total road length is 177 km, in the district. Araniko high way with a length of 14.069 km. Gravel road has length of 819.47 km.

4.3.4 Land Use

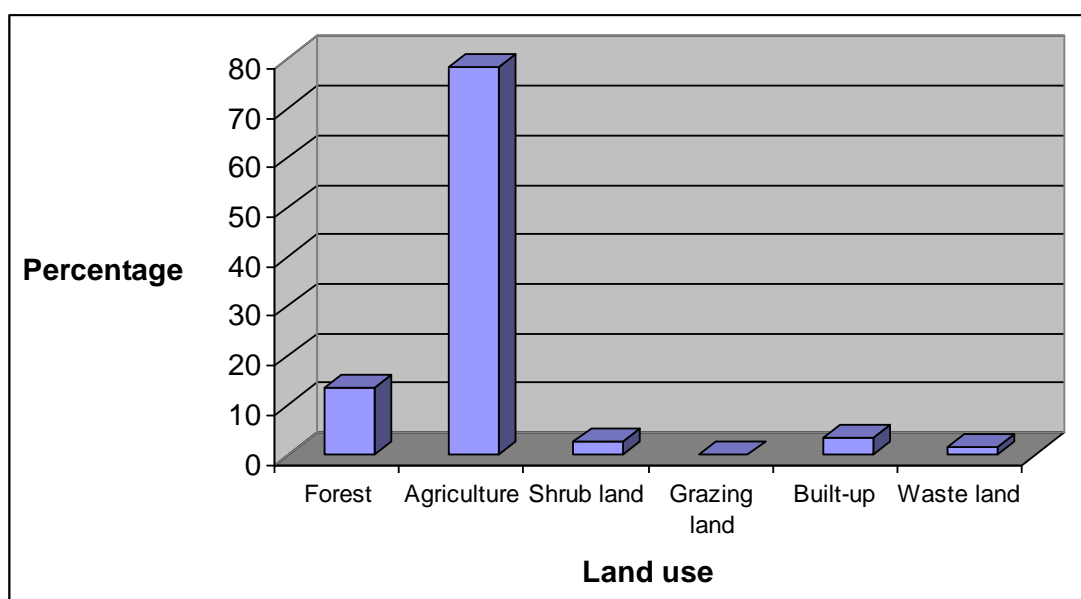
Bhaktapur district had only 1.27 % of the total area of Bagmati Zone. Out of the total (119 sq.km).About area of the district, agriculture land covers more than 7.37 percent (93.25 sq.km).the second largest area is covered by forest which is 13.62 percent (16.20 sq.km). The shrub land and Grazing land cover 2.83 and 0.08 percent (3.36 and 0.09 sq.km) respectively. The waste land include river bank, landslide covers 1.59 percent (1.89 sq.km) and built-up area covers 3.54 percent (4.21 sq.km).

Table 5: Distribution of Land Use Pattern (2006)

Land Use	Area(sq.km.)	Percentage
Forest	16.20	13.62
Agriculture	93.25	78.37
Shrub land	3.36	2.83
Grazing land	0.09	0.08
Built-up	4.21	3.54
Waste land	1.89	1.59
Total	119.00	100.00

Source: Computed From Topographic Map (2006).

Figure 1: Distribution of Land Use Pattern (2006)



Source: Table 5

Chapter - Five

DISTRIBUTION OF COMMUNITY FOREST

5.1 Existing Forest Situation

Because of altitudinal variation, Nepal has diversity of forest types ranging from Sal. Forest in low land called the Terai to the alpine meadows in the mountains. In case of Bhaktapur, vegetation which is found sub-tropical type and most common species are Alums Uttish Katush, Chilaune, Sal,

Out of the total forest area of the 1994.7 ha, 1832.4. is covered by community forest (CF), 162.30 ha are other forest which includes government management, protected, religious and private forests. Distribution of forest area is shown in the following table.

Table 6: Existing Forest Situation

Forest type	Area (in ha)	Percentage
Community Forest	1832.4	91.87
Other Forest	162.3	8.13
Total	1994.7	100

Source: District Forest Office, 2006.

5.2 Distributions of Community Forest is by VDCs

Community forest is the forest managed by user groups for conservation as well as utilization of forest products. Community forestry programmed has changed the physical structure of the district which solves the problem of fuel wood, fire word of the people.

Out of 16 VDC of the district only five VDC have selected community managed forest which have been already handed over to the users group and rest are in process. According to the Bhaktapur district forest, the

total coverage area of community forest in Bhaktapur district is 1832.4 ha. (91.87 percent) DFO 2005.

Table 7: Distribution of Community Forest Area

VDC	Community forest	Forest Area (ha.)	Percentage
Dadhikot	Patletar	11.5	12.61
	Chameli	13.16	
	Birsinge	22.00	
	Aswarya Udhan	1.50	
	Nango Pakha	3.25	
	Anata Linkswor	7.25	
	Total	58.66	
Nagarkot	Yen Danda	34.00	32.22
	Kusum	112.00	
	Lakhane	3.96	
	Total	149.96	
Chagunarayan	Changu	47.00	11.07
	Mane Dada	2.48	
	Nayachopauwa	2.03	
	Total	51.51	
Tathali	Wolotulo Pakha	34.56	10.71
	Aaitabare	13.75	
	Kadelako Pakha	1.50	
	Total	49.81	
Bageswari	Bahal I	92.00	33.41
	Bahal II	63.50	
	Total	155.50	
Total		465.44	100.00

Source: DFO, 2006

According to the above table the forest of Dadhikot VDC are mostly community forest. The VDC has the largest community forest committee

in number. There are six community forest committee which comprises 58.66 ha. (12.61 percent) of the total forest of Dadhikot. But the largest area occupied by the community forest is seen in Bageswori VDC. There are two committee comprising of 155.50 ha. Of the total forest of Bageswari VDC, this is 33.41 percent.

The second largest community forest is Nagarkot, Changunarayan and Tathali VDC with three community forest committee, occupying the total areas, regularly 149.96, 51.51 and 49.81 ha. This is regularly 32.22, 11.07 and 10.71 percent.

5.3 User Group by Community Forest

The forest user group is one of the most important tasks to be conducted dening community forestry investigation. User group has not been uniformly distributed. The following table shows the distribution of user group by community forest area.

Table 8: User Group by Community Forest

S.N.	Community Forest	Area(ha.)	User	Density
1	Patletar	11.50	75	6.53
2	Chameli	13.16	175	13.30
3	Birsinge Pakha	22.00	123	5.59
4	Aswarya Udhan	1.50	201	134.00
5	Nango Pakha	3.25	103	31.70
6	Ananta Liskeowor	7.25	132	18.21
7	Yen Danda	34.00	54	1.59
8	Kusum	112.00	123	1.10
9	Lakhane	3.96	99	25.00
10	Changu	47.00	350	7.45
11	Mane Dada	2.48	192	77.42
12	Nayachopauwa	2.25	277	123.32
13	Wolotulo Pakha	34.56	120	3.48
14	Aaiabare	13.75	70	5.09
15	Kadelako Pakha	1.50	90	60.00
16	Bahal I	92.00	195	2.12
17	Bahal II	63.50	123	1.94

Source: DFO, 2006.

The density of user group in this CF area is 5.38 people per hectare. The density of user group in Aswarya Udhan is 134 people per hectare and the density of user group per hectare range from 1.10 people in Kusum.

Chapter - Six

PRESENT CONDITION OF FOREST COMMITTEE

The district is limited within only one ecological belt of middle mountains and does not contain a wide range of forest type as found in other district. Significant forest patches such as Suryavinayak, Telkot, Changunarayan Ling Gudhi and Nagarkot forest are of historical and religious importance. But in 1956-1970 forest are badly destroyed by the local people because of the lack of awareness toward conserving forest. Then after the local people encountered with the great problem like severe shortage of water and forest production Realizing this again local people with the help of District Forest Office launched the at forestation programme in the various part of district after 1970s together with NGO like Community Forestry Development Project (CFDP) (since 1979-1980), Hill Forestry Development Project (HFDP) (1984). Bagmati Watershed Project (BWP) (1981) and Forest Development and Utilization Project (since 1990-1991) started forestation programmed in district, as well as aroused the consciousness among local people for participating in community forestry activities. Due to all these efforts, the community forestry programmed is introduced in the district. At present there are 56 community forest committee.

6.1 People's Forestry Committee: An Overview

Among the 16 VDCs and two municipalities of Bhaktapur district. I had selected five VDCs. There were 17 community forests, till the date of 2006 collection of the information for this study. There were patches of forest and FUG was formed on the basis of these forests. Its user's periphery committee varies in number form village to village.

Dadhikot VDC

There are altogether six FUGs in the VDC and forest covers about 58.66 ha. Of land. They are patletar, Chameli, Birsinge Pakha, Aswarya, Nango Pakha and Ananta Linkeswor. These committee were during the period between 2051-2052 B.S. and 2052-2053 B.S. The following table shows the formation of forest committee.

Table 9: Formation of Forest Committee of Dadhikot VDC

FUG	Establish year	Executive			User group			Area (ha)
		Male	Female	Total	Male	Female	Total	
Patletar	051/52	11	-	11	75	5	80	11.50
Chameli	051/52	9	2	11	175	5	180	13.16
Birsinge Pakha	051/52	11	-	11	123	6	129	22.00
Aswary	051/52	9	-	9	201	4	205	1.50
Nango Pakha	052/53	13	2	15	103	6	109	3.25
Ananta Linkeswor	052/53	9	2	11	132	3	135	7.25
Total		62	6	68	809	29	838	58.66

Source: Field Survey, 2006.

The community forest of Dadhikot VDC is relatively better managed among the community forest of Bhaktapur district. Chameli forest has received award (2054) due to its better management and diversity of species.

Nagarkot VDC

There are three FUGs in this VDC; they are Yen Danda, Kusum, and Lakhane, which covers the area about 149.96 ha. The committee was formed between 2052-2053. The following table shows the formation of forest committee.

Table 10: Formation of Forest Committee of Nagarkot VDC

FUG	Establish year	User group			Executive			Area (ha)
		Male	Female	Total	Male	Female	total	
Yen Danda	2052-053	54	7	61	13	-	13	34.00
Kusum	2052-053	123	4	127	10	3	13	112.00
Lakhane	2052-053	99	8	107	11	2	13	3.96
Total		276	19	295	34	5	39	149.96

Source: Field Survey, 2006.

Changu VDC

There are three FUGs in this VDCs they are Changunarayan, Mane Danda and Nayachaopauwa, which covers the area about 51.51 ha. The committee was formed between 2052-053 and 2058-059. The following table shows the formation of forest committee.

Table 11: Formation of Forest Committee of Changu VDC

FUG	Establish year	User group			Executive			Area (ha)
		Male	Female	Total	Male	Female	Total	
Changunarayan	2052-053	350	7	357	11	-	11	47.00
Mane Danda	2058-059	192	5	197	9	4	13	2.48
Nayachopauwa	2058-059	277	11	288	11	6	17	2.03
Total		819	23	842	31	10	41	51.51

Source: Field Survey, 2006.

Tathali VDC

There are three FUGs in these VDCs; they are Wolothlo Pakha, Aaitabare and Kadeloko Pakha, which covers the area about 49.81 ha. This committee formed between 2054-055 and 2057-058. The following table shows the formation of forest committee.

Table 12: Formation of Forest Committee of Tathali VDC

FUG	Establish Year	User group			Executive			Area (ha)
		Male	Female	Total	Male	Female	Total	
Wolotulo Pakha	2054-055	120	12	132	9	-	9	34.56
Aaitabare	2054-055	70	7	77	11	2	13	13.75
Kadeloko pakha	2057-058	90	9	99	-	11	11	1.50
Total		280	28	208	20	13	33	49.81

Source: Field survey, 2006.

Bageswori VDC

There are two FUGs in the VDC; they are Bahal Ban I and Bahal Ban II, which covers the area about 155.5 ha. The committee was formed between 2051-052. The following table shows the formation.

Table 13: Formation of Forest Committee of Bageswori VDC

FUG	Establish Year	User Group			Executive			Area (ha)
		Male	Female	Total	Male	Female	total	
Yen Danda	2051-052	195	4	199	19	-	19	92.0
Kusum	2051-052	123	8	131	11	-	11	63.5
Total		318	12	330	30	-	30	155.5

Source: Field Survey, 2006.

6.2 User Group Characteristics

6.2.1 Ethnic/Caste Group

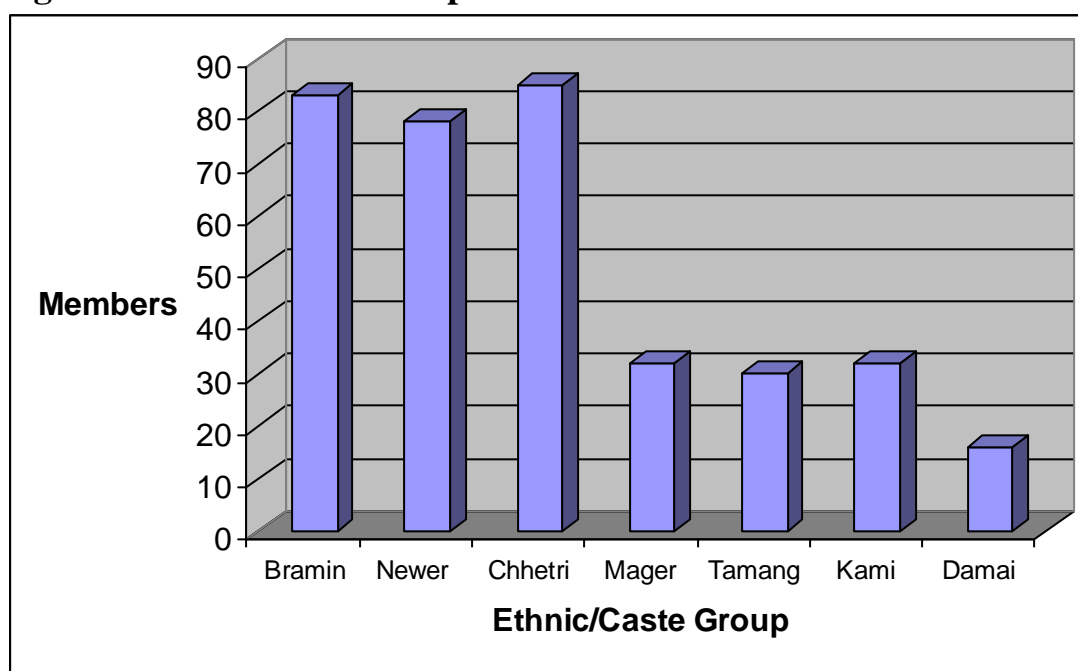
Among the user groups under this study, there is composed of different ethnic/caste groups with different language, religions and culture. The ethnic breakdown of the FUG by members is given Table.

Table 14: Ethnic/Caste Composition of FUG

Ethnic/Caste groups	Members	Percent
Bramin	83	23.31
Newer	78	21.91
Chhetri	85	23.87
Mager	32	8.98
Tamang	30	8.42
Kami	32	8.98
Damai	16	4.49
Total	356	100

Source: Field Survey, 2006.

Figure 2: Ethnic/Caste Composition of FUG



Source: Table 14.

According to table out of the total 2502 user in different FUG and 356 FUGs respondents were selected. The Chhetri are the dominant group constituting 23.87 percent of the total user household. They are followed by Brahmin 23.31 percent, Newer 21.91 percent, Tamang 8.42 percent, Mager 8.98 percent, Kami 8.98 percent and Damai 4.49 percent.

6.2.2 Occupations

As in another parts of the country most of the FUG member are agriculturists. Although a large member of the sampled respondents process different types of occupation, they primarily engage in agriculture. The occupation of the respondents is shown in following table.

Table 15: Types of Occupation of FUG Members

Types of work	Respondents	Percent
Agriculture	290	81.46
Business	21	5.89
Service	10	2.80
Labours	25	7.02
Others	10	2.80
Total	356	100.00

Source: Field Survey, 2006.

Above table shows that the respondents are basically agricultural community. Percentages of the household in some other occupation such as business, service, labor and others are 5.89 , 2.80 , 2.80 , 7.02 , and 2.80% respectively.

6.2.3 Population and Gender Composition

Most of the user respondent's males above 68 percent in FUG. Female user respondents constitute less than 32 percent of the total. More than 70 percent of user respondents are 30 years old. Similarly, more than 8 percent of the total user respondents are above 60 years and they have knowledge of the forests history over the last 50 years.

Table 16: Age/Gender of the User Respondents

Age group	Male	Female	Total
Below 19	5	-	5
20-29	76	25	101
30-39	68	37	105
40-49	45	21	66
50-59	35	16	51
Above60+	16	12	28
Total number (%)	245(68.82%)	111(31.18%)	356(100.00)

Source: Field Survey, 2006.

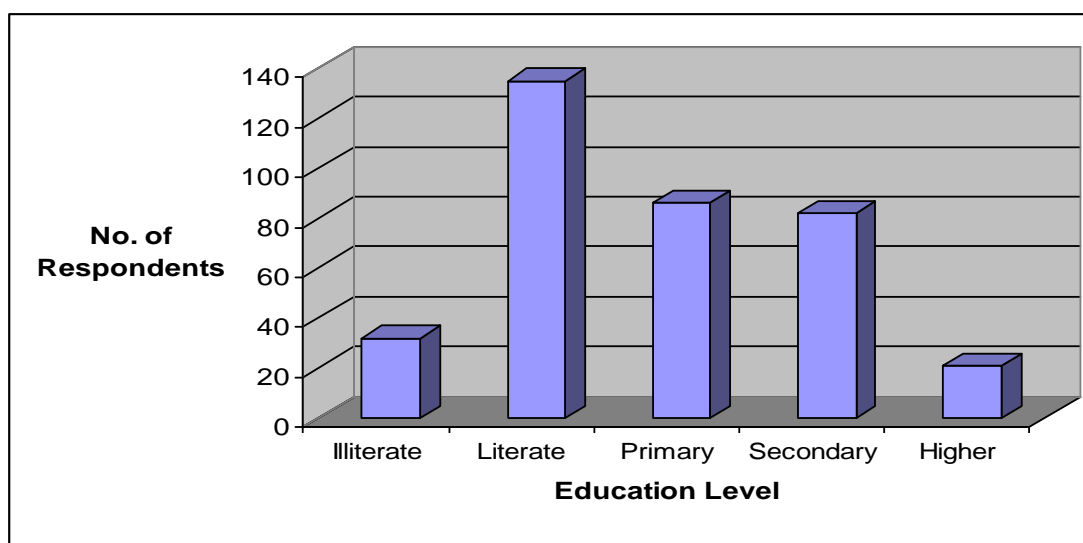
6.2.4 Education

Table 17: Education Level of the User Respondents

Education level	No. of respondents	Percent
Illiterate	32	8.98
Literate	135	37.92
Primary	86	24.15
Secondary	82	23.03
Higher	21	5.89
Total	356	100.00

Source: Field Survey, 2006.

Figure 3: Education Level of the User Respondents



Source: Table 17

According to above table 75 percent of the total respondents are literate. However, females are mostly illiterate. Only 8.98 percent respondents are illiterate of sample household. Similarly 5.89 percent users have higher educations that have a good knowledge of forest management and protection.

Chapter - Seven

FACTOR AFFECTING PARTICIPATION IN COMMUNITY FOREST

7.1 Concept

In Nepal more than 50 percent of the total population is female and they are lagging behind in almost every activity and opportunity. Unless women are empowered and given equal opportunity, the Nepalese socio-economic situation will not gain momentum in obtaining higher equitable growth.

In the context of community forestry, women participation is very active in utilizing the resource, but they are almost excluded or their presence is neglected in the decision making process. Because women being illiterate and conservative, lack the confidence to participate and are not interested in any kind of development activity. It is found that in Bhaktapur district there are 56 community forest user groups. In this user group most of them are male but only few 111 women are participating in user groups. A policy on the participation has been lacking until now in Bhaktapur district. When the women involved and the development activities are conscious of the different opportunities in the area of participation, they will also pay attention to the factors that might influence this participation.

7.1.1 Committee Level Factor

One thing that enhanced women's participation was their familiarity with the work that needed done. They were already involved in the tree planting, collecting fuel wood and fodder and grazing animal. This familiarity with the task of the programmers encouraged a high level of participation.

Another factor which encouraged the women to participate was the fact that they did not have to provide any substantial inputs in the form of land or capital, instead that give labor, occasional cash and time contribution.

The clear prospect of benefits accruing was another reason for women's participation in committee work. They expected their participation to improve their and their families lives, for instance by shorting the time spent collecting fuel wood and fodder, obtaining a source of drinking water, furnishing the school and improving the trials.

It is not tangible such as easy collecting of fuel wood and fodder, better trails and so on as mentioned above that matter but intangible benefits too, personal satisfaction gained through increased self-confidence, interaction with government officials outside the village.

7.1.2 Economic Factor

Economic factor also hinders women's participation. Because of the poorness of the country, a lot of times have to be dedicated to earn two times meals, which greatly hinder participation in the shortage of time. Adequate time can't be dedicated for community forestry development. Nepalese women's economic activities are related to household production including agriculture work collecting fuel wood, animal grazing and others. Rural girls also work harder along with the senior women.

During the field survey, it was reported by lower caste women that they do not work for community forest but to earn bread in the form of wage labor, rather to work for community forestry development activities. This seriously hampers their active participation. It aroused the controversy

that poor women who have no land of their own and who had to perform their household activities.

7.1.3 Social Factor

The traditional perceptions of women's role and obligations and customary practices in family and property relations do not permit women to participate in the public domain .in other words, Nepali culture does not permit women to participate in forestry activities. Forests belong to the public domain in which male participates, whereas women are perceived as belonging to the domestic sphere i.e. household.

The Nepali cultural model is strictly hierarchical ever today. The positional of female is lower than that of male. Lack of education and knowledge in reality is the most crippling impediment to the participation of women in the community forestry programmed. In most cases women of study area have express their need for more adult education emphasizing acquisition of information and knowledge as the strongest base for bringing about their active participation in community forestry management.

People participation in community forestry resources management in Bageswari (Bahal Ban I) has been a positive with good response from male and female , specially women in the form of mother group (Aama Samuha) which have assumed full lead ship is carrying out their activities related to community forestry, in constructing floor trail, fancying etc.

Absences of man will certainly increases women's role in the mother group (on M.G. member committee member Sita Adhikari of Bahal Ban I in Bageswari) commented. But many of women interviews felt that though they could do much through mother group, women had not

completely built up the capacity to management system. Some women members confessed that they felt that their husband understand forestry development bitterly and could make more suitable decision. The management skill and decision making capacity of women in community forest, need to be further strengthened through lead ship training and consultation process.

Involvement of women in community forestry is crucial for its success. They are major participation, so they should not consider in isolation, if it is done, it will certainly effect community's participation.

7.1.4 Political and Administrative Factors

Political factor also affected participation. Given their generally lower political power, the women often found it difficult to express their ideas in public meeting. As a result, they sometimes stayed mum even through they were dissatisfied with the decisions made by local leaders some of whom are their close and senior relatives.

The other important factor affecting women's participation was the nature of local village politic i.e. who participates, how they participate and what decision are taken.

The degree of support given by the district and local government offices was also important. The support of the DFO gave the women member's confidence and enhanced their status in the village.

One of the factors often mentioned as affecting the operation of local organizations is the extent to which the government favors and assists them. It may be presumed even more strongly that if the government oppose local organizations, their prospects of success are greatly

diminished. Thus, it can be concluded that the more constant the support of the concerned agencies, the greater the chance of generating maximum participation from programmed beneficiaries.

Chapter - Eight

WOMEN'S PARTICIPATION IN USE AND MANAGEMENT OF FOREST

8.1 Women Participation in Forest Product Collection

In Bhaktpur district, rural women are the major collector of forest product. Since, they know which species should be given highest priority for fuel wood and which for fodder collection, which species should have an impact of form/subsistence agriculture, which can be used for food but they never expose themselves. So they should be acknowledged as users and managers of forests. During FUGs household and field observation (2006) it was found that female participation on forest product collection is unequal in both community forestry and non-community forestry area, which include private forest, protected forest and government management forest. The following tables show the female participation in forest product collection.

Table 18: Participation in Forest Product Collection Form Different Sources

Forest product	Community forestry		Non-community forestry	
	No. of respondents	Percent	No. of respondents	Percent
Fuel wood	48	31.6	112	50.4
Fodder	45	29.6	46	20.8
Tree leaves	59	38.8	64	28.8
Total	152	100.0	222	100.0

Source: Field Survey, 2006

According to the above table the women participation in forest product collection from community forestry as well as non community forestry are 374 in numbers. Out of these 356 women's of community forestry use group collect form community forest and 18 women do not collect in

community forest. The data shows that a total of 160 women collect the fuel wood from both forests, which is 48 (31.6%) participants are collected from community forestry and 112 (50.4%) participants are collected from non-community forestry.

Fuel wood is supplemented by 3 or 5 bundles of wood every week. Between March to June they go and collect 25 to 30 Dokos of green wood to store for the rainy season.

Such respondents have to use firewood economically. The female respondents expressed that they have realized the importance of consumption of firewood. So, the fuel wood is not the dominant energy of cooking in this area.

Likewise in fodder collection, total participation of women from Non-community forestry 46 women, which comes to 20.8% of the total non-community forestry, whereas from 45 (29.6%) participation of total community forestry forest collection. The fodder collections were found almost equal in both forests. The main reason behind this is, because most of the people in the modern society are literate, because of less number of grazing land, people in the rural areas of the Bhaktapur district are keeping less number of Cattles. For the reason it is found that there is less number of fodder collectors.

The total numbers of participants in collecting of tree leaf in both the forests are 123 participants. Out of these 59 women participants collect the tree leaf from community forestry which is 38.8% of the total participation of collection tree leaf from community forestry. Whereas 64 people collect the tree leaf from Non-Community forestry which comes

to 28.8% of the total Non-Community forestry tree leaf collect participates. Most of the respondents told that compost manure is better than chemical fertilizer, so most of the used compost manure is made from the tree leaf. Sometimes if there is a shortage of loose materials in their over used forest, they have to use agriculture residues like hay and private fodder. For this season the participates number is collecting tree leaf is higher in the study area.

8.2 Women's Role in Management Decision Making

It is commonly in the literature that women are the major collectors of forest products in Nepal hence they should be acknowledged as users and managers of forests. It is argued that women know which forest resource to give highest priority to collection, which will have an impact on farm/subsistence agricultures, its food value etc. however this is only partially true. In the case study seventeen community forestry user groups with a 246 sample respondents only 111 were recorded as users. The following table shows the participation of female in the CFUG

Table 19: Participation of Female in the FUF

FUG	Total User Household			Executive Committee		
	Male	Female	Total	Male	Female	Total
Patletar	75	5	80	11	-	11
Chemeli	175	5	180	9	2	11
Birsinge Pakha	123	6	129	11	-	11
Aswarya	201	4	205	9	-	9
Nango Pakha	103	6	109	13	2	15
Ananta Linkeswor	132	3	135	9	2	11
Yen Dada	54	7	61	13	-	13
Kusm	123	4	127	10	3	13
Lakhane	99	8	107	11	2	13
Chagunarayan	350	7	357	11	-	11
Mane Dada	192	5	197	9	4	13
Nayachapauwa	277	11	288	11	6	17
Wolotulo Pakha	120	12	132	9	-	9
Aaitabare	70	7	77	11	2	13
Kadeloko Pakha	90	9	99	-	11	11
Bahal I	195	4	199	19	-	19
Bahal II	123	11	124	11	-	11
Total (%)	2502 (95.00)	111 (5.00)	2613 (100.00)	277 (89.00)	34 (11.00)	311 (100.00)

Source: Field Survey, 2006.

The above table shows that female constitutes only 34 persons users executive committee. In reality, however only 11% participated in the executive committee. Only four FUGs have female member in executive committee. The representation of female, both as users and executive members is quite in Bhaktpur district. Because of some women respondents said that they are not invited to make a FUG member and when we asked the question for member's women. Most women were simply nominated, and had no idea that they were, participating as

member of an executive committee. Some women members said that they were there because their husband or fathers had forced them to participate. There is no doubt that in all FUF, women spend the most time in home collecting firewood and fodder and tree leaves.

Chapter - Nine

SUMMARY, CONCLUSION AND RECOMMENDATIONS

9.1 Summary

Bhaktapur lies in the middle Hills of central Nepal. It has a total area of 119 sq. km. It consists of sixteen VDCs with two municipalities. This district is directed by number of streams. The elevation of district ranges from 1290 meter in west and above 1900 meter in the east. In these area, natural vegetation ranges from sub-tropical deciduous forest in the lower altitude (below 2000 meter) to cool temperate broad leave forest (above 2000 meter) in higher altitude. In the study area we find the total area of forest area of 1994.7 ha. The total community forest area recorded as 1832.4 ha. Out of the total forest land.

The distribution of community forest area is not equal. The largest community forest area is occupied by Bageswari which is one of the oldest community forest areas of the district with the total area of 155.5 ha. (DFO, 2003) Likewise the second largest area is occupied by Nagarkot VDCs the total area of 149.96.

Similarly, Dadhikot is the third largest community forest area of the district with an area of 58.66 ha. This is the only one VDC with largest community forest committee with six committee.

Similarly Changu is the fourth largest community forest area of the district with the area of 51.51 ha.

Similarly Tathali is the smallest community forest area of the district with the area of 49.81 ha.

The density of user group has not been uniformly distributed. The highly dense 134.00 Aswary Udhan Community forest area has been located in Dadhikot VDC which is 1.50 ha. Similarly the lower dense 1.94 Bahal I CF areas in Bageswari VDC which is 92.0 ha.

Among the 17 community forest committee (both executive and user's group) most of the participants were found male. Out of 2613 User's group only 111 female participants in committee were found.

Committee member of all community forest were highly participative in these activities. They were the one who made decision on the organization along with the user group members. They were the one who selected project site and contributed for infrastructure development rule with community forestry protection.

Government and NGO community forest programme involving the reorganization or establishment of forest user groups and the development and implementation of operational plans for management of community forest by user group has been highly successful in all VDCs. The village people were found to be meeting many of their forest products needs, from various sources but by far were not fully dependent on community forest.

According to the result of the study, 85% of work in collection and use of forest product are performed by women. These include cutting of grass, collection of forest litter and dead branches. Due to the successful conservation and management people started keeping less number of livestock, these days, they mainly keep improved breeds with still feeding.

Regarding the forest development activities it is found that individually or community wise, male have taken the major role in decision making. We

did not find a single woman participating in decision making mainly because of our culture which does not permit to join meeting and also because of illiteracy. Sometime in FUG meeting too, we find male as the dominant with very few women participants.

9.2 Conclusion

Women can play a vital role of the protection of forest. Gradually they could be involved in different level of management and may be able to contribute positively in this sphere.

- i. The less defined the division of labour between male and female in a community, the more women will participate in development programme.
- ii. Most of the women are illiterate. Because of the lack of education and knowledge, they aren't able to participate.
- iii. Economic condition also plays a fundamental role in participating. The women, who have low economic standard, are compelled to think about their own problem only. They do not have chance to participate in forestry development activities economically well to do person of the village dominate the poor people.
- iv. The more the support form external agencies for programme/activities and the more enhance the women's confidence and self esteem are in consequence, the greater the chance of their continuing to participate in programme activities.

9.3 Recommendations

After analyzing the overall situation, some recommendations have been put forwarded or proposed to improve women participation in community forest management practices either for government officials, especially forest officials while formulating and implementing new plans and

policies or for interested executive committee members and other local persons.

9.3.1 Recommendations for Improvement

- i. People's awareness and their participation should be raised even more before handling the forest to local community and convenience them that the CF is their own property and they have to utilize and manage it sustainability.
- ii. Meeting of FUGs and executive committee should be regular. So that users can get chance of making comment and giving suggestions. Women should be encouraged for making comment and suggestions.
- iii. The study reveals that the aspect of decision making a matter as species selection so and so forth, female members of the community do not have grater say which they should have. So, the female member of the community should not be sidelined form the sphere of decision making and be involved in management and conservation activities.
- iv. Executive committee members and male person should be invited the women participants regular in meeting. More and more women should be encouraged to participate in FUGs meetings and asked to make comment and suggestion about effective management and development of CFs. Women's participation in executive committee should be make equal. Equal opportunities should be provided on seminar, training and tour programme.
- v. Village level training should be to both head of households (man and woman) jointly. So that there should be proper understanding

between each other for participating in management decision making.

- vi. Parents should be encouraged to give equal education opportunities to son and daughter. Adult education campaign should be introduced weekly or twice a week by the educated village women. Because education will not only enhance the present condition of CFs, but also improve the overall environment of the community.
- vii. Since women are the major collectors and users of forest products, it is recommended to provide them a separate CF to product and manage by them, so that they can fully participate in management and introduce now and more sustainable method for the utilization and management of forest resources.

9.3.2 Recommendations for Further Study

Finally, it is suggested that other more studies should be carried out to examine women's participation and their role in forest management and protection activities so that other definite and effective strategies can be formulated for border application. This is implementing period for our country. New research will strengthen these observations and lead better recommendation to involve women in forest committee to protect and develop the existing forest resources.

REFERENCES

- Chettri, R.B., 1994, "Indigenous and Community Forestry Management System: Reviewing their Strength and Weakness". *Journal of Anthropology of Nepal*, Kathmandu.
- Daniggelis, E., 1994, "Jungle Resource Use Adaptive Strategies of Rains and Sherpas in the Upper Arun Valley of Eastern Nepal", *Anthropology of Nepal: People Problems and Process*, Manual Book Point, Kathmandu.
- Dhungana, P., 1995, A Mini Report on Women Community Participation on Forest held at Taplejung, 21-24th November, 1995 Submitted to Eastern Regional Forestry Training Center, (DANAIDA).
- Fisher, R.J. and D.A. Gilmour, 1986, Villagers, Forests and Foresters: *The Philosophy, Process and Practice of Community Forestry in Nepal*, Sahayogi Press, Kathmandu.
- Lendis, G., 1984, "Women's Utilization and Attitude Towards the Forest and Forest Products in Suspan Chhembeti Panchayat", a Part of College year in Nepal Program, University of Wisconsin.
- Maharjan, S., 1996, "Women's Participation in Community Forest Management: A Case Study of Bhaktapur District, Nepal", Geography Thesis, T.U., Kathmandu.
- Molnar, A., 1987, "Forest Conservation in Nepal: Encouraging Women's Participation in Seeds", New York, the Population Council.
- MPFSP, 1988, Master Plan for the Forestry Sector Nepal, main report, GoN/ADB/FINNIDA, Kathmandu.

Regmi, S., 2002, "Participation", *A Nepalese Journal of Participatory Development*, No.4 pp. 9-12.

Thompson, M. and M. Warburton, 1999, "Uncertainly on a Himalayan Scale", *Mountain Research and Development*, Vol. 5, No. 2, pp. 115-135.

Yamiko, T., 1987, "Guardians of the Forest: A Report on Some of the Findings of the GoN/JICA," Community Development and Forest/Watershed Conservation Project in the Western Hills of Nepal.

Appendix - A

Questionnaire for User Group

1. Respondent identification:

Name:

Age:

Gender: Male () Female ()

Religion:

No. of household members:

Ward No:

VDC:

2. Socio-economic status of respondents.

Education	Number	
	Male	Female
Literate		
Primary		
Secondary		
Higher		

3. What is your main occupation?

Occupation	Primary	Secondary
Agriculture		
Service		
Labour		
Firewood selling		
Cottage		
Business		
Others (specify)		

4. If you are a member of CF user group, what do you feel?

(a) Positive

(b) Negative

(c) Neutral

5. Do you know the actual land cover of CF in your village?

6. Do you know about CF plantation in your Village?

7. What is the present condition of this CF as compared to 10 years ago?

(a) Better

(b) NO change

8. For what propose do you utilize the forest?

Forest Product	Tick-off
Fuel wood	
Fodder	
Tree leafs	
Raw materials	

9. How many times do you collect forest product type of forest?

Product	Weekly	Monthly	Amount	Distance
Green grass				
Tree fodder				
Fire wood				
Leaves littler				
Timber				
Others (Specify)				

10. Who cuts or collects the forest product?

(a) Male

(b) Female

(c) Children

11. Do you know how many times the meetings of forest user group are held?

(a) Once a week

(b) Once a month

(c) Once a year

12. Do you think that CF could be utilized of income generating purpose?

a) Yes

b) No

13. How frequently do you participate in the meeting?

Frequency	Male	Female
Regularly		
Frequently		
Occasionally		
Once a year		
Rarely		

14. How do you participate in forest management?

Method	Tick-off
Moral support	
Giving suggestion	
Discussion	
Decision making	

15. Whether you were requested to make some comment and suggest in regard to management and decision making?

16. Being a member of user's group, you have made some contributions to develop and manage the forest?

17. If yes, what method of management do you adopt?

Method of management	Tick-off
Nursery preparation	
Seedling plantation	
Thinning	
Cleaning	
Taking care of forest	

18. If no, why?

19. Do you know the forest executive committee member?

a) Yes () b) NO ()

20. If yes, what type of relationship they make with common user member like you?

21. Give some examples of the committee initiatives in forest management?

Method	Tick-off
Reforestation	
Forestation	
Seeding distribution	
Prize of guard management	
Promote agro-forestry	
Fencing	
Fine for illegal use of forest	
Formation of rules and regulation	
Promoting of improved store	
Seeking external financial technical assistance	
Provision of training forest efficient management	

22. Is there any system of forest conservation in the village?

- a) Yes () b) No ()

23. Do the district forest offices provide support, financial incentives, advice and suggestion to manage CF effectively?

- a) Yes () b) No ()

24. If yes, what are they?

25. Please suggest how the forest management can be improved?

26. Are you satisfied with the activity of the CF user group committee?

a) Yes ()

b) No ()

c) If yes, how?

27. Any other comments about it?

Appendix – B

Questionnaire for Non- Participation in CF

1. Respondents identification

Name:

Age:

Gender: Male () Female ()

Religion:

No. of household members:

Ward No:

VDC:

2. Socio-economic status of respondents

Education	Number	
	Male	Female
Literate		
Primary		
Secondary		
Higher		

3. What is your main occupation?

Occupation	Primary	Secondary
Agriculture		
Service		
Labour		
Firewood selling		
Cottage		
Business		
Others (specify)		

4. Are you a member of community forest user group or not?

5. If not, why?

6. What are the factors that constrain you for participation in CF?

7. What type of forest exists in your village?

a) Government forest ()

b) Community forest ()

c) Private forest ()

d) Others ()

8. Where forest products do you get?

Types of forest product	Government	Community	Private	Market	Other
Green grass					
Tree fodder					
Fire wood					
Leaves litter					
Timber					
Other					

9. How many times do you collect forest products?

Types of forest product	Week	Month	Bhari	Frequency	Distance
Green grass					
Tree fodder					
Fire wood					
Leaves litter					
Timber					
Other					

10. Who cut or collects the forest products?

a) Male () b) Female ()