

CHAPTER – I

INTRODUCTION

1.1 Research Background

People and forest in Nepal have existed interdependent relationships for many years. The economy of Nepal largely depends on the use of its natural resources and is dominated by the agrarian sector (CBS, 2001). Dependency of rural population on forest is high for fuel wood timber and fodder forest accounts 85% of the total energy consumption by the residence sector in the country (CBS, 2002). The potential area of CF in Nepal is 3561600 hectares, which is 61% of the total national forests (MPFS, 1989), 1319115 ha of forest have been handed over to 15076 community forestry user groups (CFUGs), benefiting 1763825 households. Community Forestry is an institutional approach for providing rural households and communities with various forest products and sustaining of rural livelihoods as well as for poverty alleviations The rural people also have been involved in the collection or harvesting, processing and marketing of different forest product since ancient times (Baral, 2008).

It can play an important role to the people of Nepal where most of the rural people are participating subsistence farming. Forest being used fuelwood, fodder, grasses, timber, medicinal herbs, wild fruits and many other items and CF also work in Community Development Sector , and Poverty reduction is also one important agenda that's why forestry sector being very important for Nepal's development.

The government of Nepal has various rules, strategies to conserve, manage and to utilize its natural resources. Many traditional rules and

regulations did exist in the past to regulate the access and to use of forest. As consequence government realized the need of people's participation for the forest management which was implicitly expressed in the forest laws of 1961. The master plan for the forest sector MPFs 1989 emphasized people participation in the forestry development. A community policy was derived after democracy in Nepal 1990. The main principle of that policy was to meet the basic forest product needs of local through community forestry and private planting by phased handing over of all accessible hill forestry to the local communities to the extent that they are willing and able to manage them (Hobely, 1996).

In Nepal, the Forest Act 1993 defines the community forestry as the part of National forest, which has been handed over to the forest user's group (FUGs) by the district forest officer for development, protection, utilization, and management. The community forestry is the active and meaningful involvement of communities in forests management. The key characteristics of the community forestry are (1) Meaningful community involvement in or control of decision-making about forest management and (2) retention of benefits of forests use and management within the community (Uprety, D. 2006, quoted in Egan et al. 2002).

Community forestry being the largest forestry programme of the country has great contribution, directly or indirectly to forest products need of user household and local community development. It has been as an important renewable resource base for fulfillment of the basic of local people. From the successful implementation of the 30 years of this programme, most of the community forests are now in the stage of production of sufficient quantity of valuable forest product i.e. and non-timber forest products. Besides benefits from the consumption of products with in user group level, CFUG are also getting good income

from the sell of the surplus timber and other forest products outside their CFUGs. The fund collected from the sale of these products and other sources are utilized in the form of expense for different purpose at local level. Users of community forestry involve in different forest management activities and getting benefit from CF in the form of different kinds of forest products. Through there is a vital role of forest in their livelihood. They benefits that users feel important and get easily are the obvious direct benefits like timber, fuelwood, tree fodder and grasses, leaf-litter and many NTFPS (Kafle, 2008, Malla et al., 2003).

The CF programme has passed more than two decades of it's implementation in the century. It's focus couldn't be changed from conservation to the sustainable management for optimum return sustainable forest management for sustainable use should consider ecological economic and social aspect for the purpose, it is important to understand the connection between forest resources and the livelihood of the rural households. (Barham et al.1998, Karmer et al., 1995 in Ghimire, 2007).

1.2 Statement of Research Problems

Over the past twenty years, community forest has been developed in to an increasingly central component of Nepal's forest development strategy. The main plan of this strategy is to handover governmental land for management to community forestry user group. These are based on the community people who use particular forest for their daily and households needs.

The community forestry programme solved many problems of the village by providing fuel-wood, fodder, timber and even employment also. This programme is ranked as a highly prioritized programme among the

various highlighted programmes in Nepal. Several INGOs, NGOs and Nepal Govt. have laid stress to this for Nepalese people. The community forestry related projects are being implemented at present. Community forestry has been a changing process in Nepal since its initiation in 1970s. Master plan for the forestry sector 1989 as well as forest act (1993) and forest regulation 1995 have institutionalized the programme ensuring the active participation of local people. At the initial stage, CF programmes the major focus on conservation most of CF is now the stage of production of sufficient quantities of valuable forest products, i.e. fuelwood, timber and NTFPs with the advancement of community forestry, it has been increasingly realized as an attainable mechanism that can contribute to reduction poverty in Nepal (Gentle 2000, Kanel, 2004) As a result community forestry in Nepal has developed rapidly over the last decades.

Hobely (1981) stated that disadvantaged people in rural areas are more dependent on public or community forest for their basic forest products needs than wealth people of the same area. But Gentle (2000), found that CF programme is widening the gap between the poor and rich people involved in the management of forest. Elite group in this village dominant decision making and often neglect the interest of the other groups. The participation of poor and disadvantage groups in CF is very low and the local elites (high social status, wealthier and educate) are influential in local decision making process of CFUGs (Gilmour and Fisher, 1991).

Although the community forestry is successful programme in Nepal. It has play vital role to social development of society as well as economic development. In this context it is necessary to analysis, community forestry's economic contribution for users groups. For this, study is conducted in Lalitpur district. Lamatar VDC ward No 1, Patale

Community Forestry” it is located in about 10 km southeast of the Lalitpur Metropolitan City Lamatar VDC is one of the remote village of Lalitpur district. Patale community forest user group Fulfilled their many basic need from community forest such as: fuelwood for cooking and heating. Fodder for livestock, timber for house and furniture construction etc. Thus, the community forest has become as indispensable part of their livelihood, economy and which has been providing them several natural resources for their daily activities. Thus, it is evidence from above that the Patale community forest is playing or carving the socio-economic gain of a user groups.

This study has tried to seek the answer of following questions

1. What is the socio-economic condition of CF user group? Does this condition relates with community forest?
2. Do the CFUGs household dependent on CF resources? If so, What is the level of dependency?
3. What are the sources of income of CFUG?

1.3 Objectives of the Study

The objectives of this research are as follows:

1. To analyze the socio-economic characteristics of the users household.
2. To examine the economic contribution of CF on users households?

1.5 Significance of the Study

The study on Contribution of community forestry on users households has it's own important. This study has evaluated the economic

contribution of CF on Users HHs, mainly based on Caste and Ethnic groups, and their land holding, livestock patterns , patterns of resources from CF.. This research therefore will contribute to better understanding in the linkage between caste and Ethnic Groups, and forest resources and this study will also help to make policy for forest user in forest development activities, for extension community forest in successful way, for similar field workers and agencies who want to work in the field of forest management activities and it's utilization.

1.6 Organization of Study

This study is divided into six chapters. The first chapter covers background, statement of problems, objectives of the study, limitation of the study and organization of the study. The second chapter presents the review of literature it covers: community forest in Nepal, CF in Poverty Reduction and, CF and user's household. Third chapter presents Research methodology whole method and Technique of data collection, analysis

Fourth chapter presents setting of study Area and chapter five presents data analysis and presentation its covers socio-economic characteristics of sampled households/population. Chapter six presents Forest products distribution mechanism, contribution of community forestry on user's households, CF and community Development Programme etc. and chapter seven presents the summary of whole study, conclusion and some recommendation for further study. Finally the literature cited during research period, the questionnaires used for this research are attached in the end of this thesis.

CHAPTER – II

REVIEW OF LITERATURE

2.1 Community Forestry in Nepal

Nepal is one of the pioneer countries to handover the management responsible of government owned forest area to local community forming a forest user group as an autonomous body for forest management and utilization. Though leasehold forestry programme for the poor is the first priority programme of forestry section of Nepal CF had received the highest priority in the master plan for the forestry sector of Nepal (1989) and is regarded as the most successful (Acharya and Oli, 2004). The panchyat forest (PF) and panchyat protected forest (PP'F) rules allowed for the transfer of responsibility for forest management from the government to the local panchyat as PF and panchyat protected forest PPF (Joshi, 1993). The promulgation of PF and PPF Rules 1978 provided a convenient bench mark for community based forest management (Kafle, 2008). After democracy was restored in 1990, the government framed the forest Act 1993, forest regulation of 1995, the operational guidelines of provided the current legal and operational framework of Nepal's community forestry (Pokharel and Nurse, 2004).

A community forest is a part of national forest that has been handed over to a user group for its development conservation and utilization for the collective interest. The forest Act and it's regulation have provided opportunity for people to participate in the management of forests of Nepal. Basically through the provision of community and leasehold forests DFO has the authority to handover management of community forest to users groups. The new forest act 1993 and forest regulation 1995

have introduced with a clear provision about community forestry and forest handover process to the local communities. Nearly 1.5 million people have already been involved in community forestry and the figure is increasing day by day (Uprety, 2006). These people are working under the umbrella of nearly 133,000 community forest user's groups CFUGs of Nepal (Uprety, 2004).

Gilmour and Fisher (1991) define community forestry in terms of control and management of forest resources by the rural people who use them especially for domestic purposes and as an integral part of their farming system. Since Community forestry Constituted both Social and biophysical elements, they both are equally important. The “resources” can be managed effectively with a clear understanding of Forest management principles and knowledge of natural system and “social” part can be dealt with a clear understanding of a society and their relationships with the resources and institution related to it.

2.2. Community Forestry and Poverty Reduction

Many studies have been conducted and various dimensions of Community Forestry that the many focused on social and policy aspects. Studies on assessing overall contributions of CF in Nepal is limited (Acharya and Oli, 2004)

In many places CFUGs have become the vehicle for rural development and at present CFUGs are the main democratically selected local institutions in place For many poor rural people CFUGs also act as rural banks and sources of revenue and income

Pokharel et al (2006) describe CFUG as vehicle for rural development for the following reasons:

-) CFUGs manage their finances and give loans to villagers.
-) CFUGs support their members for income generating activities such as vegetation farming, livestock, horticulture, fishery and bee
- CFUGs contribute to the construction and maintenance of physical infrastructure such as irrigation canals, drinking water schemes, community buildings, wooden bridges, etc.
-) CFUGs invest in scholarships for poor children, teachers' salaries, school buildings and furniture.
-) CFUGs invest their funds and labour in the construction of roads and trails.
-) CFUGs promote eco-tourism and nature awareness by constructing picnic and recreational spots, temples and eco-clubs.
-) CFUGs invest in health posts and medical equipments.
-) CFUGs establish forest based enterprises.

The CF can play a significant role in reducing the rural poverty if the major part of CF Resources is mobilized with a focus on DAGs in CFUGs (Niraula, 2004).

CFUGs and their members have increased access to financial assets from group funds increased access to forest dependent households to basic services such as education and information has been shown. There is development of physical infrastructure at Community level and increased community awareness and ownership over policy making process and community development. However, these positive benefits have usually been disproportionately captured by wealthier CFUG members-often at the expense of more disadvantages members (Malla, et al., 2003)

Gilmour (2003) explained “Retrospective and prospective view of community forestry in Nepal. CF has gone through significant changes

since late 1970s on one hand, impressive gains have been made in terms of developing and applying methodology suitable, for conditions in the middle hills. On the other hand, major challenges remain in terms of achievable outcomes and in having community forests become significant engines for community development in forest rich communities.

Kharel and Niraula (2004) has made a nation-wide study on expenditure and income of CFUG . They have estimated that Rs.747 million has earned by 14000 CFUG in Nepal during F/y 2003. The figure of earning is 69% by the selling of timber, 18% fuelwood and 10% by bedding materials. The study has further shown that all CFUGs have made 28% expenses in forest protection, 36% in social infrastructure and only 3% in pro-poor programme, while total expenditure done 740 million and 7 million has as capital saving Pokharel,(2008) has mentioned in his working paper carried out in 100 CFUGs in three different mid Hill districts, Lamjung , Tanahu and Kaski this studies main objectives is to verify whether CF is indeed enabling the self financing of local public goods and to measure how much of the invested made through CF really reach the poor(though pro –poor programme). That study finds that the income from Community funds increase local development resource by about 25% and overall 74% of the annual benefits of CF funds accrue to non-poor while only 26% accrue to the poor.

In a developing country like Nepal, the role that Forestry has played or can play addressing poverty reduction is an important issue (Chhetri R.B. 2006) The critical role of Community Forestry particular and forestry in general in fostering social and economic development in Nepal's rural areas has already drawn some attention (Chhetri and Jackson,1995); similarly Chhetri and Jackson (1995) based on case study in Sindupalchok and Kabharel palanchok, have argued that employment

opportunities could be created through Community Forestry in the villages that may have implications on the social and demographic process too.

Pokharel et al (2011) describe positive impact for people living in poverty based on following areas

-) All CFUGs conduct a well being ranking of their membership when drawings up their operational plans, these rankings are followed by agreement to create pro-poor provision in their plans and the implementation of them. A considerable number of groups have created such provision with out outside support.
-) CFUGs are increasingly providing loans to poor and disadvantaged households from their funds.
-) CFUGs invest in building the capacities of the disadvantaged. They provide scholarship for the education of girls and children of poor and disadvantaged families, This has already made significant impact in assisting women and people of disadvantaged backgrounds to secure a voice in local decision- making and take up leadership positions.
-) CFUGs provided forest products to poor and disadvantaged households on the basis of positive discrimination .CFUGs have invested their efforts, time and funds in community infrastructure such as school, health post ,drinking water scheme, road and paths, community buildings, and so on This has helped increase the asses of the poor and the disadvantages people to education, health and drinking water.

-) CFUGs provided forest products to poor and disadvantages households on an equitable basis.
-) CFUGs provided humanitarian support to their poor and disadvantages member during times of calamities, shocks and sorrow. In particular, they support the provision of health care and shelter.

2.3 Community Forestry and User's Household

Most rural people in Nepal depend on traditional agriculture and livestock for their livelihood (HMG, 1989) and the forest is a major component that plays a vital role in rural livelihoods by providing income, construction materials and animal feed (Gilmour et. al, 2005) Nepal has been implementing CF programme to address the people's needs and to enhance the quality of natural resources. The forest management strategy ensures the participation of local people through CFUG that allow them to derive forest goods services and for their benefits (Cited in Kafle, M., 2008).

Forest based income is a major contribution to the livelihoods of rural people. CFUGs are operating the forest based micro-enterprises. Income generation (IG) from forest product like timber bamboo, medicinal plant, forest nursery, non-timber forest products (NTFPs) is started. Potentially of boomgrass, cardamom, turmeric and ginger in forests as a means of IG are explored incorporated in operational plants and started to implement by same CFUG (Upreti, 2002). Production and distribution of forest product such as fire-wood, grass, fodder medicinal herbs and timber from the community forestry are the direct benefits. Rural people, while getting sick use medicinal herbs to cure the disease that they suffer from they feel

more comfortable to cure the disease from available resources around them instead of going to the centre or hospital (Uprety, 2006).

The strong debate on potential contribution of CF's on poverty reduction among the actors is opportunities for local people but also greatly contributing to sensitize uses on the economic dimensions of forests to reduce poverty (Malla, 2000) has found that poor are able to get loan (without interest) for the income generation, several women groups on agriculture, income generating, saving, non-formal education and kitchen gardening are formed and working properly in addition to women CFUGs, Efforts at forest rehabilitation are anticipating minimum level of effects on the livelihoods of the poor in the initial period, the long term effects may expect to be more beneficial (Brown et al. 2002, cited from Kafle 2008).

The community forestry process is successful in handling over rights and duties of community forest management to the local communities expecting that the main stakeholders will give emphasis on very poor, advocates of community based management argue that community foresee offers the best prospect for the inclusion of the poor and marginalized in Nepalese society along with a method of promoting sustainable management harvested from the community forest contribute to overall household economy Baginski et al., 2003). In Nepalese CF there is reduced access to forest products and some poor households are facing significant problems in meeting their needs (Pokharel and Nurse, 2004).

Though the CF programme has passed more than two decades of its implementation in the country, its focus couldn't be changed from conservation to the sustainable forest management for optimum return,

sustainable forest management for sustainable use should consider ecological, economic and social aspects. For the purpose, it is important to understand the connection between forest resources and the livelihood of the rural households (Cited by Ghimire, 2007). These days, CF in Nepal has been as a holistic development (Khanel et al., 2004) and the major success of this programme is formation of livelihood capitals, governance reform and social empowerment (Pokharel and Nurse, 2004). These are a need to questions whether free collection of fodder and leaf litter favours the poorer household (Malla, 2000). However, inequality in community forestry in Nepal continues to exist in multi dimensional forms and different scales and intensities. (Hobley, 1996, Timisina, 2002, Banjada 2003, Agrawal, 2001).

Dependency of poor on community forest for their subsistence need is higher than that of other groups. (Hobley, 1987, Pandey, 1999) More than 75 percent of all households and 96 percent of rural households use wood for domestic purposes and almost all rural households raise some domestic livestock and feed them fodder and grasses obtained mainly from forest (Hobely, 1996). The participation of the poor in CF is very low and the local elites high social status, wealthier and educated are influential in local decision making processes of CFUGs (Glimour and Fisher, 1991).

Aryal (2000) in his case study on Pandy Gaon community forestry of Tuccha VDC pointed that community forestry in this village is now the main source of fuelwood, fodder for livestock and timber for seed and Fuelwood for villagers. He concludes that community forest has been a source to support development and social work in this village people's participation is active. The villagers have clearly understood that community forestry is their part of life, they cannot go against it. The

villagers got good returns from the forest and are always willing to expand and develop the forest.

Community forestry of Nepal has been contribution to the rural livelihoods mainly in two

- (1) Flow of forest products in an easy and an accessible way, and in a sustainable manner
- (2) Contributing in the development of livelihood assets. The livelihood assets include natural capital (Relationships of trust and reciprocity groups, networks customary law)
- (3) Human capital (skills, knowledge, beliefs attitudes labour ability and good health, physical capital (basic infrastructure) and financial capital Monetary resources) with improved access to and control over different types of assets; the poor are better able meet basic needs and to create different livelihood options. These asserts are the building of livelihoods of the people. Arrange of assets is needed to achieve positive livelihood outcomes (cited by Uprety, 2004)

Chhetri BBK (2005) conducted a research he has found that the community forest income contributed an average of 7% of the total households income, which is equal to 50% of the total forest income of the user households the main sources of community forest income are fuelwood, fodder ground grass and leaf liter. The middle class households derived more than twice as much community forest income compared to the rich and the poor households. Household shows own more livestock and have access to larger area of community forestry income. As the income levels raised the dependency on community forest income

declined cash income agriculture income and other forest income have increase relation both with community forest resources use and dependence. The community forest income is more important for the poor and had a strong equalizing effect on local income distribution. There is a need to establish the approach of community forestry with further emphasis on socio-economic objectives.

CHAPTER – III

RESEARCH METHODOLOGY

3.1 Rationales of the Site Selection

There are many Community Forestry Group in Nepal, on the basis of purposive sampling Patale Community Forestry, Lamatar, Lalitpur district is selected for the field study CFUGs was done taking support from District Forest Office(DFO), staff member and the other related organization such as Forest Action Nepal/ ERI . The community Forestry is selected based on following criteria:

-) CFUGs having heterogeneous, user's included from all caste, Ethnic groups, and well- being categories.
-) CFUGs having more then 100 HHs
-) The researcher is already familiar with CF and CFUGs regarding the social connection.

3.2 Research Design

This research attempts to analyze the contribution of community forest on user's household. On the basis of the specific objectives of this research. Mainly, the analysis is based on the result of the collected data where the specific area is defined in the case study. Hence, the researcher has adopted descriptive research design the researcher has used primary and secondary data also, the researcher has selected two cluster than applied simple random sampling technique for household Survey.

3.3 Sampling

There are 162 user household in the Patale community forestry user group. Out of 162 household 40 households had been selected for the purpose of study where the researcher was divided CFGUs Toles in four Cluster then selected two cluster (that can presents all caste and Ethnic group have been living in the community) then applied simple random sampling technique for household survey.

3.4 Nature and Sources of Data

This study is mostly rely on the primary information generated from field work, however some secondary information also are used. As a secondary data has been collected by consulting various published and unpublished literatures officials records. Ministry of forestry, DFO office records, CBS, Operational Plans, Patale Community forestry's minute register, Journals of Forest Action Nepal, websites records, various records issues from the NGOs, INGOs

3.5 Technique and tools of Primary data collection

3.5.1 Interview Schedule

Interview Schedule is the kind of information collection in a short time. The information has taken from target population; personal interview has taken from CFUG member key informant and local people of the community (male, female, ethnic, caste) it is very useful for collection of data to fulfill the objectives of the study. Semi structured question are used for interview.

3.5.2 Household Survey

The most common used method of data collection in sample survey is personal interview. This procedure required the interviewer to prepared questions and to record the respondent's answers (Baral,2008, quoted in Schaeffer et al., 1990).

Structured questionnaire has applied for household survey. The research has gone 40 household of the study area. The researcher has selected two cluster than applied simple random sampling technique. The household survey has conducted to collect socio-economic status of respondents, forest product, household size, land and livestock holding, quantity of forest produced collected from CF etc. Quantitative as well as qualitative data were collected from household survey.

3.5.3 Observation

The researcher was involve in data collection in user's households and field level to know the real context at that time Researcher has Observed many thing. This method helps to get information like quantities of forest products in a local unit, pattern of forest products use etc, the Researcher has seen that most of the HHs have storages fuelwood, feeding materials for livestock

3.5.4 Informal recording of Information

Informal recording was done during household survey, field visit. Information was recorded on the condition of house, farm, livestock, some additional aspects which are not included in household survey, interview, the Researcher also participated in informal discussion in the tea shop on village, also participated in re-plantation programme with AFO, Ranger and Local people

3.6 Secondary Data collection

This study also used secondary data has been collected by consulting various published and unpublished literatures officials records. The major sources included: Ministry of forestry, DFO office records, CBS, Operational Plans, Patale Community forestry's minute register, Journals Of Forest Action Nepal, websites records, Various records issues from the NGOs, INGOs

3.7 Data Analysis

In this Research qualitative and quantitative tools were used foe data analysis. The data collected from the field through household survey, interview were grouped and classified and also presented in written text as necessary and so as to meet the objectives of the study. The systematic analysis is made using quantitative techniques. To analysis the quantitative data fundamental operation along with simple statistical tools such as percentage ratio, average etc have been used beside these tables, are also used for the presentation of the findings. The study is mainly descriptive and analytical.

3.8. Limitation of the study

Every study does have its limitations. This study is also not exception. It has following limitation:

1. This study focuses only Patale community forest of Lamatar VDC in Lalitpur District.
2. Generalization made in this study may not be equally applicable to other community forestry groups of Nepal and simple statistical tools are used.

CHAPTER – IV

SETTING OF STUDY AREA

4.1 Lalitpur District

The Lalitpur district is situated in the southern part of Baghmati zone, the central development region of Nepal. The district has a total area of 393 square km. It lies between, Latitude 27°22'N to 28°50' and longitude 84°14' e to 82.26 e. It is bordered to the east by Kabhreplanchok district and to its west by Makawanpur and Kathmandu districts, to its west by Makawanpur and Kathmandu district, to its south lies in Makawanpur district while Kathmandu and Bhaktapur district, boarder it on the North. It has a total 41 VDC and one (1) sub-metropolitan city. The southernmost part of Lalitpur, is sub-tropical city siwalik range middle part is temperate Mahabharata range with sub-tropical deep and narrow river valley Warm temperature tectonic valleys of Kathmandu lies in the northern part of district. The climate various from sub-tropical to cool temperate because of the altitudinal various, most of this district fall under warm temperate climate region. The average temperature here ranges form 23.6 C (maximum to 0.7 'C (minimum) the average temperature in some parts of the District could be high as 37.c and minimum as low as -4. c. the average rain fall of the district like Godavari. Lamatar where the precipitation is high then other places of the district. Most of the rainfall occurs during the summertime from May to September (source DFO profile 2009).

The total population of this district of this district is 331212 where male 167000(50.7%) and female 164,212(49.3%) according to DDC profile Lalitpur 2001. The density of population is 6678 per Sq. km and average

family size is 5.6 persons, population growth rate is 3%.The district has multi caste and multi ethnic groups, multi-cultural and multi-linguistic people (DDC profile 2001)

4.2 Lamatar VDC

Among 41 VDC of Lalaitpur District Lamatar VDC also one of them, it is lies 10 km southeast of the district headquarter of Lalitpur. In the east of Lamatar VDC lies Royal VDC of Kabhreplanchok, in the west Luvu VDC, to the north lie Dadhikot, sirutar and Gundu VDC of Bhaktapur, Bishakhunarayn VDC lies to the south of Lamatar VDC. It has typical climate feature as of Kathmandu valley with slightly low temperature. The VDC has total 7572 population out of which 3805 are male and 3767 are female, there are 1497 households (census 2001)

4.3 Historical Background and Description of Patale Community

Forestry

Patale forest is located in ward number one of Lamatar VDC. It has covered 104.6 ha. Land. It is surrounded by Kafle CF, Mathilo Patale Lakuri Banjh in east part. In west Patali community forest Chisapani CF in north and in south Aabadiland and Bisakunaryan VDC. The forest is generally sub-tropical in nature, spread from approximately 1400-1800 meter altitude from sea level.

Since 1903 the forest had been continuously degrading as indeed to satisfy the ever growing demands of the expanding local settlement the productive forestry. With gib-trees were covered into barren elands. Such deforestation continued aggressively till mid 1970s denuded forest had nothing but the stumps of the trees and scattered shrubs. Such reckless destruction of the nearby forests had many adversities, rampant land slips, soil loss, drying up water springs and scarce forest products availability.

The shortage of firewood had been pressing problem for the people for sustaining their livelihoods.

They realized that no alternative remained but the protection of Forest for substance of the livelihoods but protection of forest for substance of the livelihoods and the community welfare of the local people. In 1991 the local people for made a forest users committee and started to protect the forest with tow major intention to restore the lost productivity of the forest and to supply daily forest product needs of the people. Forest guard was promoted to control the forest destruction. Each and every households (HHs) contributed. Specified amount of financial resources to pay the salary for the forest guard. Later on the CFUG was officially registered in district forest office Lalitpur on 3 June 1993 and group constitution got approved on 30 Jan 1997. As a result the uncontrolled grazing and condition of the forest restored this CF is primarily dominated by the broad leaved species. The following table 4.1 gives a glimpse of some common species of plants and animals.

Table No. 4.1: Common Plant and Animal Species Found

Main trees Species	Wildlife species		
	Mammals	Birds	Reptiles
Katus (<i>Catampsis indica</i>)	Leopard	Dove	Snake
Chilaune (<i>Schima Wallichii</i>)	Porcupine	Crow	Lizards
Sallo (<i>pinus Wallichiana</i>)	Monkey	Quail	
Lapsi (<i>Choerospondias auxiliaris</i>)	Wild pig	Owl	
Uttis (<i>Alnus nepalensis</i>)	Hare	Peacock	
Lokta (<i>Daphne bholuwa</i>)	Chinese Pangolin		
Kurilo (<i>Asparagus, recemosus</i>)			
Kafal (<i>Myrica esculanta</i>)			

Source: Forest Action Nepal Report and Patale FUG Report 2011.

4.4 Representation of HHs in Patale CFUGs and Forest User Committee

4.4.1 Representation of HHs

At present 162 household are involved in this community forest user groups. They have been managing 104.6 ha. of forest. From each house one person has taken CFUGs membership. Most of which are from Brahmin/Chhetri. 96 members are from Brahmin/Chhetri, 38 from ethnic groups and 28 from dalits.

Table No. 4.2 Representation of HHs in Patale CFUGs

S,N	Caste/Ethnic groups	Number of HHs
1	Upper Caste	96
2	Ethnic groups	38
3	Dalits	28
4	Total	162

Source: Patale CFUG report, 2011

Above table shows, dominant caste is Upper Caste in CFUGs, secondly Ethnic groups Lastly Dalits.

4.4.2 Community Forestry User Group Committee

There is a provision to selection Exclusive Committee member at least two (one male and one female) from each tole including dalites. Forest user group committee is comprised of 11 members.

Table No. 4.3: Community Forestry User Group Committee

S.N	Caste/Ethnic group	Number of people
1	Upper Caste	6
2	Ethnic Groups	4
3	Dalits	1
4	Total	11

Source: CFUG report, 2011

Upper Caste is found dominant group in Ex-Committee, but there is weak participation of Dalit in Ex-Committee. Women in the committee represent about 45.45%(5) of total member.

CHAPTER - V

DATA ANALYSIS AND PRESENTATION

5.1 Socio-Economic Characteristics of the Sampled Study Households

Socio-economic features such as ethnic composition, sex, occupation age structure, land holding size, household head. Family size, livestock pattern of sampled households presented of these features can helpful to understand the socio-economic profile of the sampled households.

5.1.1 Caste/Ethnic Composition of the Sampled Households

The caste and ethnicity plays important roles for the socio-economic development of every society. The village where forest user has been living are inhabited by various caste/ethnic groups. They are Brahmin, Chhetri, ethnic community and the Dalit the major ethnic groups are Magars, Newar and while the dalits are – Sarki, and Kami

Table No. 5.1: Caste Ethnic Composition of the Sample Households

Name Of Caste/Ethnic	Number of households	Percentages
Upper Caste	20	50
Ethnic groups	15	37.5
Dalits	5	12.5
Total	40	100

Source: Household Survey 2011

Above table shows that Brahmin/Chhetri (Upper caste) (50%) are dominant followed by ethnic group (37.5%) and Dalits (12.5%).

5.1.2 Family Size of Sampled HHs.

The average household size was 5.6 in the study area, with minimum 2 and maximum 17 members. Family size of the sampled population is found slightly larger than average HHs size. National Family size of country's i.e.5.4 (CBS 2003), it is also found slightly larger than district average household size of 5.3(CBS2001). The Family Size are divided in to three size i.e. up to 4 members (small) 5-8 member (medium) and >8 members (large) in the study area more than half of the sampled households are of medium sized (55%) followed by small (35%) and large (only 10%) More family members' means more households labour available for forest products collection and other work directed to support household economy.

Table No. 5.2: Household Size of Sampled HHs

Family Size	Number of HHs			Total
	Upper caste	Ethnic groups	Dalits	
Small	5	5	1	11
Medium	12	9	4	25
Large	3	1	-	4
Total	20	15	5	40

Source: Household Survey, 2011

Above table shows that medium family is the dominant family in all caste and ethnic group.

5.1.4 Land Holding Patterns

In the Nepalese context, land holding is one of the most prestigious things as well as determinants of the income and food sufficiency of the people.

The more land more income less land less income because more household depend upon agriculture, in the study are more land holders are from Upper Caste.

Table No. 5.3: Land Holding Pattern

Land holders	Land in Ropani	Percentage
Upper Caste	67	65.37
Ethnic groups	34	33.17
Dalits	1.5	1.46
Total	102.5	100

Source: Household Survey, 2011.

Above table shows most of the land is holding by upper caste, dalits are holding less land.

5.1.6 Livestock Holding Status

Livestock Holding plays important role in Agriculture production and it is also indicates pressure on the forest from the livestock in terms of consumption of fodder, grass, in other hand livestock is considered as a liquid asset as it can easily be converted into cash selling According livestock plays multifunctional role in Nepalese farming system. They provide milk meat, ghee and draught power for filling the land and nature for maintenance of soils. Livestock plays an important role for the upliftment of their socio-economic status of related household. Similarly, the number of unit of livestock and type of livestock determines the wealthy status of the household in the rural community In the study area percentage of the goat is found dominant in terms of number and then followed by cattle and lastly buffalo.

Table No. 5.4: Livestock holding pattern

Caste/ethnic groups	Animal size			Total
	Cattle	Goat	Buffalo	
Upper Caste	31	48	3	82
Ethnic groups	24	40	2	66
Dalits	02	15	-	17
Total				165

Source: Household Survey, 2011

Above table shows that Upper Caste are holdings(82)more animal so they need more fodder for livestock, secondly Ethnic groups holding 66 animal and lastly a few animal are in Dalits household so they need less fodder for livestock

5.1.7 Major Income Sources of Sampled Study Households

Agriculture is the major sources of livelihood of rural people of Nepal. So the case is in this study area most of the households are depended on agriculture the main livelihood sources is agriculture beside this households are depend – on services, business, wage labour etc.

Table No. 5.5: Major Income Sources of sampled Study HHs

Sources of Income	Upper Caste (No of HHs)	Ethnic groups(No of HHs)	Dalits(No of HHs)	Total
Agriculture	10	6	-	16
Services	6	3	1	10
Daily Wage	1	2	4	7
Business	2	3	-	5
Foreign Job	1	1	-	2

Source: Household Survey, 2011

Above table shows that agriculture dominant income sources of livelihood in Upper caste and Ethnic HHs. 40% household's are primarily

depend on agriculture, 10 households are depend on services, 7 HHs have to live on the daily wages most of the dalits household are dependent on daily wage, 5 households depend on business lastly 2 households are depend on foreign employment.

5.2 Socio-economic Profile of Sampled Study Population

5.2.1 Sex and Age Composition

Sex and Age composition of sampled study Population are the major components in social study. The total population of the sample households consists of %50.45 are female (113), and49.55 % (111) are male, for the purpose of analysis the age of the sampled population is classified in 5 categories that is 0-4,5-15,16-30,31-60 and above 60

Table No. 5.6: Age and Sex Structure of Sampled Population

Age group	Sex group		Total
	Male	Female	
0-4	5	6	11
5-15	18	15	33
16-30	30	34	64
31-60	54	52	106
Above 60	4	6	10
Total	111	113	224

Source: Household Survey 2011

Population seems to be balanced in terms of sex and most of the people are from young age.

5.2.2 Educational Structure

Education is an important indicator in determining the status of the community and its development. It plays a crucial role in all sector of the society. Educational structure of the community people has played important role for the participation in different CF activities. If the entire person has household is educated; their participation on any development activities is more effective. For this study level of education is classified into four classified into four categories:

- i. Illiterate
- ii. Primary
- iii. Secondary
- iv. College

Table No. 5.7: Educational Structure of Sampled population

Level	Number of people		Total
	Male	Female	
Illiterate	9	23	32
Primary	44	41	85
Secondary	34	28	62
College	19	15	34
Total	106	107	213
Under age	5	6	11
Total	111	113	224

Source: Household Survey, 2011.

Above table shows that 15.04% people are still illiterate. 40.27 percent people have got primary education. 29.27 percent people have got secondary education and 15.49 percent people have access to college

level education. Most of the Brahmin/Chhetri's respondents family are found educated, they have got secondary and college level education, and most of illiterate is found in Dalits and in the context of female about (out of total 15.04 percent) 72 percent are found Illiterate. (This percentage is from only illiterate level not in whole educational level).

5.2.3 Occupational Structure

Occupation refers to all the activities earning by people for their livelihood and daily requirement fulfillment. Agriculture is the main occupation Nepal. So the case is in this study area most of the sampled study population are depended on agriculture the main livelihood sources is agriculture beside this study population are involved in variety of occupation like- services, business, wage labour etc. In this study student, infant and inactive persons are not included.

Table No. 5.8: Occupational Structure of Sampled Study Population

Occupation	Number of people			Total
	Upper caste	Ethnic group	Dalits	
Agriculture	39	25	2	66
services	13	8	2	23
Wage labour	2	4	9	15
Business	4	5	1	10
Foreign services	2	1	-	3
Total	53	37	14	117

Source: Household Survey, 2011

Above table shows, Agriculture is the dominant Occupation of sampled study population, it is a major occupation of upper caste and Ethnic groups, But wage labour is the main occupation of dalits.

5.2.4 Religion Composition of the Sample User population

Religion is one major component of every society, it's away of social control and direction. Malinowski defined: "Religion is a mode of action as well as system of belief and a sociological, phenomenon as well as a person experience."

So we can say that Religion is one of the major factors to know socio-economic character of the people.

In the study area most of the people are Hindu, or we can say Hindu is dominant followed by Buddhist and lastly Christian.

Table No. 5.9: Religion Composition of the Sampled Population

Religions	Number of People	Percentages
Hindu	185	82.60
Christian	05	2.23
Buddhist	34	15.17
Total	224	100

Source: Household Survey, 2011.

Above figure shows that about 82.60% of people are Hindu and 15.17% of people are Buddhist and 2.23% of people are Christian.

CHAPTER SIX

CONTRIBUTION OF COMMUNITY FORESTRY ON USERS HOUSEHOLD

6.1. Forest Product distribution Mechanism of Patale community forestry and Economic Value of Major Forest Products

6.1.1 Forest Product distribution Mechanism

Every CFUG has their own constitution and operation (OP) as guiding documents for forest products distribution and their executive committees are responsible for the implementation of these documents. In the Patale CFUG has provision for distribution of Timber, Fuelwood, Fodder, leflitter, etc

Distribution of Timber is one of the most needed resources of study population. Any household of the Patale CFUG, which require timber for the purpose of house construction and renovations, can get after paying NRs 400 per cubic feet as mentioned in OP. But the users can not sell the timber to any person inside or outside the group. However, there is a special provision for poor users that they do not have pay any charge to get timber to construct or renovate their house. Furthermore there is also a provision of providing timber at free of charge to victims of a natural hazards.

Fallen and dried wood which can not be used as a timber can be used as fuel wood and can be collected through out the year. In Patale CFUG to get fuel wood Rich Family must pay NRS 5 and poor Family must pay NRS 2 from per Bhari. Sometimes CFUG provides fuel wood without charge. Patale community forest allowed to harvest fuel wood Mangsir to

Falgun at 10 am to 4 pm. There is no any provision of any kind of fee for fodder, leaf litter and medicinal plants in Patale community forest. There is allowed to harvest fodder, leaf litter, medicinal/herbs anytime. Forest product is distribute on an equitable basis.

6.1.3 Economic Value of Major Forest Product

Economic value of fuel wood, timber and fodder leaf litter were estimated by market price method of values of these products were available in local market. At the local market values of fuel wood, timber and fodder were NRS 125/Bhari, NRS 2000 cubic feet, NRS 25/Bhari respectively. Leaf litter which has neither market price nor substitute product opportunity cost. The time spent was compared with wage rate of village which was NRs 500 per day. (8 hours).

Table No. 6.1: Local market price of the forest product

Forest products	Unit	Local market price NRS
Fuel wood	Bhari	125
Fodder	Bhari	25
Timber	CFt	2000
Leaf Litter	Bhari	time to travel and collect form second nearest forest NRs 62 per hour

Source: HHs survey and interview, 2011

6.2. Patterns of Use of Resources From CF

The majority of rural in Nepal depend on forest to support their livelihood, agriculture and livestock system. Community forestry is also one of the major sources of fodder for feeding for livestock, fuel wood especially for household to cooking as well as protecting from cold;

similarly timber for building construction and furniture, leaf litter for bedding materials for livestock and also preparing compost manure for agriculture land and NTFPs used as many kind of medicine, Besides community forestry provides indirect benefit to users household such as water, fresh cool air, fertilizer etc.

In this study area it is found that most of the forest products derived from community forest and NTFPs used as many kind of medicine (Paniamala, Churaito, Nundhiki, Gure kafal etc.) Patale community forestry has contributed in supplying (fodder, fuelwood, timber, leaf litter,) these essential products to needy users in a needy time. These are the crucial example of direct benefits from community forest. CF also provides indirect benefit also.

6.2.1 Fuel Wood

Fuel wood is a major direct income sources for user household. The villagers of the study area, fuel wood are main sources of energy. In the sampled 40 households 32 households have the fuel wood as main sources of energy. There is some practice of using alternative sources of energy like electricity LP Gas etc. Patale community forest allowed to harvested fuel wood Mangsir to Falgun at 10 am to 4 pm; Fallen and dried wood which can not be used as timber can be used as fuel wood and be collected through out the year. Patale CF is the main sources of fuel wood most of the required fuel wood is derived from there. Sometimes they used private forest also. Users have been utilizing directly fire wood for cooking and heating.

Table No. 6.2: Fuelwood from CF

S.N	Caste/Ethnic (No of HHs)	Fire wood in Bhari (Total)	Average of (1)HHs
1.	Upper Caste (20)	2487	124
2.	Ethnic groups (15)	1950	126
3.	Dalits (5)	651	130
4.	Total (40)	5088	

Sources: Household Survey 2011

Above table shows that Upper Caste 2487 bhari fuelwood , Ethnic group harvested 1950 bhari fuelwood and 651 bhari fuelwood have harvested from dalits. In average 1 HH of Upper Caste harvested 124 Bhari , 1 Ethnic,s HH harvested 126 Bhari and 1 Dalit,s HH harvested 130 bhari fuelwood from CF during a year. the household of the study are dependent upon community forest for fuel wood., some times Upper caste and Ethnic groups are harvested fuelwood from PF also. So, it is clear that CF is playing important role for rural household's livelihood similarly they have got indirect benefit also. CF has proved fuelwood for Dalits and poor people in minimum prices and sometimes without charge. The market price of fuel wood's Bhari NRS 125, they have not invested money for fuelwood from outsides. Most of required fuel wood is derived form Patale CF.

6.2.2 Fodder for livestock

Forest is the main sources of fodder for bedding livestock. Fodder trees are important for hill communities as they provided quality food for livestock from Patale CF most of the demand of fodder for livestock can fulfilled and private forest are also used for livestock. There is no

provision of any kind of fee for fodder. There is allowed to harvest fodder any time so, they need more fodder for livestock they harvested more fodder from CF. In study area it is found that mainly women has harvested fodder. In average weekly one household has harvested 4-5 Bhari from CF.

Table No. 6.3: Fodder for livestock from CF (During One Year)

S.N	Caste/Ethnic group(No of HHs)	Fodder in Bhari	Average 1 HHs
1.	Upper Caste (20)	3656	182
2.	Ethnic groups (15)	2715	181
3.	Dalits (5)	877	175
4.	Total(40)	7248	

Source: Household survey 2011

Upper Caste have more livestock they have harvested 3656 bhari fodder from community forest, In average one household of Upper Caste has harvested 182 bhari fodder from CF and secondly ethnic groups have harvested 2715 bhari fodder from CF, In Average one Ethnic HHs has harvested 181 bhari fodder lastly Dalits have harvested 877 bhari fodder from CF, In average one Dalit HHs have harvested 175 bhari fodder from CF. Dalits HHs are harvested less fodder comparison to the Upper Caste and Ethnic Groups.

6.2.3 Use of Timber

Timber is also one major product of Patale community forest. It is used for building construction and furniture. Patale CF has been providing 1 tree to each poor and Dalit household for house renovations and construction. From it poor household are directly benefited and similarly,

Patale CF has provided required timber to household in per CUF it Rs 400. It is very minimum rate in comparison to the market price. There is also provision of providing timber at free to charge to victims of the natural hazards for house construction.

6.2.4 Use of leaf litter

Leaf litter is generally used as bedding materials for livestock and also for preparing compost manure for agriculture. The major occupation of the household is agriculture and livestock. Therefore, they required a high quantity of leaf litter. It helps to improve quantity and quality growth of agriculture product. CFUGs are directly benefited from leaf litter. Upper Caste are holding more land and livestock also so we can say upper Caste are highly benefited, Secondly Ethnic groups are getting benefited but there is not more land and livestock in Dalits house so they are less benefited from CF.

6.2.5 Impact on household by Time Saving

These types of impact could be measured of time to collect fodder, fuel wood, leaf litter and other available and necessary forest resources. They are getting sustainable products from nearby forest. I come to know about it by interview informal discussion (with study population) that more time being saved now days. It helps to engage them to their other work like as: agriculture, household work, business, wage labour etc, which is direct positive impact on economic aspects for user's households.

6.3 Contribution on user's household through community development activities under taken by Patale CF.

6.3.1 Community building and Road construction

The Patale CFUG has provided timber free of cost and regular maintenance of community Building similarly; it has also support to constructed rest house and road construction. It has helped for transportation and mobility of people in easy way.

Table No. 6.4: Investment of CF fund in community development

S.N	Specification	Amount (NRS)
1.	Road Gravelling	3500
2.	Rest house construction	5500
	Total	90000

Source: Patale CFUG annual report 2066/067(B.S)

Above table shows the investment pattern of Patale CFUG fund in the community development activities (Road construction, Rest house construction). In this sector approximately Rs 90000 has spent. This fund has immense role to develop community. The transportation is being easy and it helps to expand agriculture sector the user groups and villagers are highly benefited from transportation.

6.3.2 Education Sector

CFUG has been contributing to the educational sector in many ways, Patale CFUG has provided required timber for the construction of school building with out charge. It has also helped poor students to providing stationary items.

Table No. 6.5: Investment of CF fund in education sector

S.N	Particular	Amount (NRs)
1.	Building construction	8000
2	Building construction cash	7000
3	Stationary item	21500
4	Total	36500

Source: Patale CFUG annual report 2066/67

Above table shows the fund of CF is also utilized in the sector of education, which helps to increase literacy rate of Lamatar VDC and also helpful to those people who can not invest money for their children's education furthermore it helps to opportunities for education, to create employment etc. From it poor households are directly benefited.

6.3.3 Drinking Water Scheme and Water bodies

CFUG has also invested their fund in supplying of drinking water and it's maintenance. Water is basic needs of people. Without water no one can live. Approximately Rs 102500 has invested in this field. From which all users household are getting fresh drinking water regularly .After management of Forest User Group , it can be seen that the land productivity has increased due to an increase in Water bodies. Which helps to increase agricultural production, due to this more land holding HHs are more benefited in the comparison to the less land holders.

6.3.4 Skill Development Training/Programme and Employment Creation.

Patale CFUG with their internal fund and also in coordination with other GOV and I/NGOs is conducting various, skill development programmes. It has launched many training like pickle making training, bio-briquette

training to develop people's skill. It helps to empowerment of the people and make self dependence. It has created opportunities and vital role to reducing unemployment. Patale CFUG has approximately NRS: 13262 spent in this field. Similarly in the process of cutting, thinning of timber, forest at least 5 (2 from ehnnic group, 3 from dalits HHs) person got employment and 2 person have been getting employment(2 From Upper Caste) approximately Rs 29300 has invested for salary and wage from which poor households have been benefited.

6.3.5 The Fund Generation of the Patale CFUGs.

CFUG collects money received form various sources in its group fund. The major sources of income of CFUG fund constitutes sell of timber of fuelwood, entry fee from users, interest from Bank, penalty on a abuse of rules, charge from water supply (outsiders), other sources is such as kind of support's, donations etc. Among them most of the fund is collected from water.

Table No. 6.6: Fund Generation Structure of Patale CFUGs

S.N	Particulars	Income (in NRS)
1	Timber	33630
2	Fuel wood	2650
3	Water	321600
4	Membership Renew fee	2700
5	Shakari interest	3761.25
6	Bank interest	1339.79
7	Fine and penalty	5510
8	Support, donations	12500
9	Other fee	10000
10	Bank balance (previous year)	12188.92
	Total	NRS 406109.96

Source: Patale CFUG annual report 2066/067

Above table shows that, the majority of the income of the CFUG comes from the charge of water supply NRs 324600 collected from water supply to outsiders and secondly charge received from the users for the use of timber products for construction works.

6.3.6 Fund Utilization of the Patale CFUG

The fund of the Patale community forest users group has been spent in different forest management activities like pruning, thinning cleaning, cutting timber and plantation. The fund has also spent in the community development like road construction, rest house construction, school building construction, stationary item for poor students and skill development training/programme, drinking water supply and maintenance etc.

Table No. 6.7: Fund Utilization Structure

S.N	Particular	Expenditure in NRS
1	Salary and wage	29300
2	Skill Development programme	13262
3	Drinking water supply and maintenance	102500
4	Educational sector	21500
5	Rest house and road construction	90000
6	Cultural protection	10672
7	Poverty alleviation support	7000
8	Other	3335

Source: Patale CFUG annual report 2066/067

Above table shows that the Patale CFUG has spent highest amount in planning and community development activities like educational sector, poverty Reduction sector, NRs 26500 was spent, Road and Rest house construction NRs 90000 was invested, for forest management activities NRs 29300 was invested. In supply and Maintenance of Drinking water most of the amount was invested.

CHAPTER VII

SUMMARY, MAJOR KEY FINDINGS, CONCLUSION AND RECOMMENDATION

7.1 Summary

Community forestry is considered to be one of the most important programmes in Nepal in terms of providing equitable distribution of forest resources on user's household and reducing poverty. The dependence of the household on community forest is mainly based on the benefit derived by fuelwood, fodder, timber and leaf litter. Besides forest products, community forest provides several indirect benefits to the users household such as: water, fertilizer, cool, fresh air etc.

The study *contribution of community forestry on user's household* was conducted in Lamatar VDC on patale community forestry user group. 162 households are involved in CFUGS. The objectives of this study are to analyze the socio-economic characteristics of the user's household and to examine the economic contribution on user's household. To fulfill the objectives out of 162 users household 40 households are selected where the Researcher has selected two clusters than applied simple Random sampling technique for household survey, interview was also taken. Primary and secondary both type of data are used for study.

The community forest user groups are heterogeneous in terms of caste and ethnicity. There are different ethnic groups. Maghar, Newar. Main castes were: Brahmin, Chhetri, Thakuri Dalits (Sarki, Kami). Upper Caste were dominant class in the study area. Among sampled users household 50% households are Brahmin/Chhetri's. Secondly 37.5% households are ethnic group and lastly 12.5% households are Dalits. In terms of sex the

population seems to be balanced. The average family size is 5.6 in the study area it is slightly larger than average family size(5.4) and district average household size(5.3).The attainment the formal education is higher among the youngster. Most Brahmin/Chhetri are educated. Approximately 15.4% population are still illiterate, among them most were women and dalits. Most of the people's were Hindu, followers by Buddhist lastly Christian. Agriculture is the main occupation in the study area in Upper Castes and Ethnic groups HHs. Secondly services and business, wage labour and lastly foreign services but wage labour is main occupation among Dalits.

It is also found that Upper Castes is holding more land, Ethnic groups are holding lastly Dalits are holding less land, similarly Upper caste are holding 82 livestock , Ethnic groups were holding 66 livestock only 17 livestock are found in Dalits household. In general they have been harvested require fodder from CF. In average One HH of Upper Caste harvested 182 bhari fodder, Ethnic,s HH Harvested 181 bhari fodder and one Dalit,s HH harvested 175 bhari fodder from CF in during a year, they got fodder free of cost. Furthermore In this study area main source of energy is firewood. Most of the required fuelwood provided from (Patale) CF. In average one HH of Upper Caste has harvested 124 bhari , ethnic group 126 bhari and Dalit 130 bhari fuelwood has harvested from CF during a year. Fuelwood not only important to house for cooking but also protecting them from cold. It's direct benefit from fuelwood. Similarly they have got indirect benefit also the users paid minimum cost for collect fuelwood; sometimes they have got free of cost, so the CFUGS have not paid money to buy fuelwood from outsides they have got it from CF.

On the basis of the study it is concluded that Patale Community forest fulfills demands of forest product like fuelwood, fodder timber, leaf litter

and medicinal plants etc. Practically this is required for day to day lives. In Patale Community forest products are distributed proportionally on the basis of requirement. In general its users perceive that they are getting an equitable share of products current available from their forest. Similarly, Patale CF has helped the user to save their time from day to day activities by making available of fuelwood, fodder, leaf litter in the nearby area. The women had spent a lot of time in walking just to get Bhari of firewood and fodder. These days they do not have to walk a long distance since they get it from community forestry. The saved time has been used for other purposes such as business, agriculture, child rearing caring, and livestock caring.

They have got required timber from CF per cu. fit 400. Dalit and Poor households have got timber without charge for house construction. Furthermore it is also a good opportunity to enhance their livelihood by developing a skill oriented training, programme in the area and for this special focus should be given to poor, and Dalits. It's helps for employer. and 2 people were got employment in CF, they are from uppercast. And while the processes of thinning and cutting tree at least 5 people were got employment they were from ethnic group and dalits similarly CF fund has spent in education sector which has also helped for dalit poor student for better education, to increase literacy rate and to create employment.

7.2 Major Key Findings

-) The study area is found heterogeneous in terms of caste and ethnicity, The large number of household of Brahmin/Chhetri about 50% has involved in this CFUGs
-) Hindu is a dominant religion about 82% people are Hindu

-) The average household size is found 5.6 in the study area.
-) Agriculture is the major occupation of upper caste and ethnics household but wage labour is the major occupation among dalits
-) The attainment of the formal education is higher among youngster About 15.4% population are illiterate among them about 72% are female.
-) It terms of sex the population seems to be balanced.
-) There is a weak participation of Dalits in executive committee.
-) Upper Caste have are holding more land secondly Ethnic group Lastly dalits.
-) Community forest fulfills demands of forest product like fuelwood, fodder timber, leaf litter and medicinal plants etc.
-) It is also found that Upper caste and Ethnic groups are holding more livestock so they have been harvested more feeding materials for livestock in comparison to the dalits HHs
-) Main source of energy is firewood. Most of the required fuelwood provided from (Patale)CF. Dalits HHs have been harvested more fodder in comparison to the Upper cast and ethnic groups.
-) It is also found that major occupation of the (Upper Caste and Ethnic groups) HHs is Agriculture and there are also more livestock in Upper caste and Etninc groups so they have need more leaf liter. From leaf litter Upper Caste are more benefited, secondly ethnic group but there is less land and livestock found in dalits HHs so they are less benefited.

- J Most sampled study households are getting fresh drinking water regularly .After management of Forest User Group , it can be seen that the land productivity has increased due to an increase in Water bodies, it has helps to increase agricultural production due to from it most land holders are more benefited in comparison to the less land holders.
- J CF has created employment also , 2 person of the study area are getting employment they are from upper caste, and in the process of cutting and thing of Timber/Forest at least 5 persons had got employment (2 person were from Ethnic groups and 3 from Dalits)
- J CFUGS funds is utilized in skill development training community development programme like as, rest house construction, road construction, education sector etc but in terms of poverty reducing it seems that there is a lack of effective programme, lack of income generation programme.
- J The forest products have consumed in household level not sold in market.
- J The main sources income of CF is timber selling, fuelwood, supply charge from water, fine and penalty, membership fee, renew fee etc

7.3 Conclusion

Patale Community forestry has played utmost role on Users Household directly and indirectly. Most of the households are depend on CF to support of their livelihood, livestock and agriculture system as well as NTFPs used as medical herbs (Pani amala, Churaito, Nundhiki, Gure kafal etc)

The study area is found heterogeneous in terms of caste, the large number of households of Brahmin/Chhetri are involved in CFUGs. And secondly Ethnic group. and lastly Dalits . Religion- wise predominantly, the people of sampled HHs are Hindu, followed by considerable Buddhist and very few Christians. In terms of sex population seems to be balanced. The average Family size is 5.6 in the study area it is slightly larger than average family size (5.4) and district average family size (5.3). The attainment of the formal education is higher among youngster. Approximately 15.4% population is still illiterate among them most are found female and dalits. About 40% HHs are depend on Agriculture, Agriculture is the main occupation in the study area in Upper Castes and Ethnic groups HHs. Secondly is services and business, wage labour and lastly foreign services but wage labour is main occupation among Dalits. In the exclusive committee there is weak participation of Dalits .

Upper Castes have more land secondly Ethnic groups lastly Dalits are holding less land, similarly Upper caste and Ethnic groups were holding more livestock so they have been harvested more feeding materials for livestock in comparison to the dalits HHs . In general they have been harvested equitable fodder from CF. In average One HH of Upper Caste harvested 182 bhari fodder, Ethnic's HH Harvested 181 bhari fodder and one Dalit,s HH harvested 175 bhari fodder from CF in during a year, they got fodder free of cost. There are also more land and livestock in upper caste and ethnic groups HHs so they were more benefited by leaf litter and dalits are less benefited, after management of CFUG it can be seen that land productivity also increase due to an increase of water bodies. It has supported to increase in agricultural product.

Furthermore In this study area main source of energy is firewood. Most of the required fuelwood provided from (Patale) CF. dalits HHs have

harvested more fodder in comparison to the Upper cast and ethnic groups. There is also alternatives energy sources like LPgas, Govergas, in upper caste and ethnic groups HHs, and some times they used PF also Fuelwood not only important to house for cooking but also protecting them from cold. It's direct benefit from fuelwood. Similarly they have got indirect benefit also the users paid minimum cost for collect fuelwood, sometimes they have got free of cost, so the CFUGS have not paid money to buy fuelwood from outsides they have got it from CF. CF also provided required Timber in minimum cost. Poor and dalits HHs have got timber for house construction free of cost.

The women had spent a lot of time in walking just to get Bhari of firewood and fodder. These days they do not have to walk a long distance since they get it from community forestry. It is clearly seen the user can perform such activities easily taking less time. The saved time has been used for other purposes such as business, agriculture, child rearing caring, and livestock caring. It is one most important thing. The forest products have consumed in household level not sold in market.

CFUGS funds is utilized in skill development training, maintenance and supply of water from it most sampled HHs are getting fresh water regularly. CF fund is also utilized in Community development programme like as, rest house construction, road construction and education sector. It has helped to increase of literacy rate of sampled study population , , CF also supported to employment creation, 2 people have been getting employment in CF ,they were from upper caste. And while the processes of thinning and cutting tree at least 5 people were got employment they were from ethnic group and dalits but in terms of poverty reducing it seems that there is a lack of effective programme, Community development programme also helped to improvement the

economic condition of forest user group, so we can easily say that Patale community forest has been played immense role to users households.

7.4 Recommendations

7.4.1 Recommendations for the Patale CFUGs and CFUGC

Based on the fact household survey, general observation, interview come points were identified which should be improved for betterment of the Patale Community Forest User Group and similar forest.

-) **Skill development activities:** To improve the Economic Status of HHs, CFUGs should invest most of their fund in different type of skilled development activities and provides loan for dalits and poor HHs.
-) **Land allocation:** If CF land allocate to the dalits and poorer member of the Community Forest, it increases livelihood of the dalits and poor
-) **Open herbal purifying center:** There are lots of herbal plants that will help to open herbal purifying center which increase employment opportunities, CF fund and help in poverty reduction
-) **Fund Mobilization Training for CFUG committee:** Provide fund mobilization training for CFUGC for effective mobilization of fund

7.4.2. Recommendation for Further Research

It is better to study based on well being ranking, further studies investigating total indirect benefits including ecosystem services, it is also better to based on multiplier effects of CF, Role of CF on poverty alleviation.

REFERENCES

- Acharya, B. and Oli, B.N. (2004), *Impacts of community Forestry in Rural livelihood of Nepali Mid-hill: A Case Study from Bharkhore Community Forest*, Parbat District. Banko Janakari 14 (1). Department of Forest Research and Survey, Kathmandu, Nepal.
- Agrawal, B.(2001), *Participatory Exclusion, Community, Forestry and Gender: An Analysis for South Asia and a Conceptual Framework*. World Development 29(10).
- Aryal A. (2000), *Importance of Community Forestry in Nepal: A Case Study of Pandey Gaon Community Forestry of Tukucha VDC Kabhrepanchowk* M.A. Thesis Submitted to Central Department of Economic Tribhuvan University, Kirtipur, Kathmandu.
- Baginski, O.S; Dev, O.P., Yadav, N.P and Soussan, J. (2003), *Impacts of Community Forestry on Livelihoods in the Middle Hills of Nepal*. Journal of Forest and Livelihood 3(1).
- Banjade, M.R. (2003), *Local Perception and Use of Information in Community Forest User Groups of Nepal*. M.Sc Thesis Submitted to the Wageningen University and Research Center. The Netherlands.
- Baral, S. (2008), *Contribution of Community Forestry to Rural Households: An Economic Analysis*, M.Sc Thesis, University of Natural Resources and Applied Life Science (BOKU), Vienna, Austria.
- CBS (2000), *Central Bureau of Statistics Pocket Statistics Book of Nepal*
- CBS (2001), *Populations Census Report*. Central Bureau of Statistics, Kathmandu.

- CBS (2002), *Statistical Year Book of Nepal*, Central Bureau of Statistics, Kathmandu, Nepal.
- CBS, (2001), *Statistical Year Book*. Kathmandu, HMG/National Planning Commission Secretariat, Kathmandu, Nepal.
- Chhetri, BBK (2005), *Community Forestry Programme in the Hills of Nepal: Determinants of user participation and household dependency*, M.Sc Thesis Norwegian University of Life Science (UMB).
- Chhetri, R. B. (2006), From Protection to Poverty Reduction: A Review of Forestry Policies and Practices in Nepal, *Journal of Forest and Livelihood* .February vol. 5(1).
- Chhetri, R. B. and Jackson, W. J. (1995), Community Forestry for Rural Development in Nepal: Some Prospects and Problems. In H. Schreir, P.B shah S. Brown (Eds),challenges in the Mountain Research management in Nepal:Pocess,Trends,and Dynamics in Middlehil Mountain Watersheds. Kathmandu; ICIMOD.
- Gentle, P. (2000), *The Flow and Distribution of Community Forestry Benefits: A Case Study from Pyuthan District*, Nepal. MSC. Thesis University of Canterbury Christchurch, Newzeland.
- Ghimire, G. P. (2007), “*Contribution of Community Forestry in Community Development and Household Income: A Case Study From Kavrepalanchowk District*,” Nepal. Master thesis, Tribhuvan University, Institute of Forestry, Nepal.
- Gilmour, D. A. (2003), *Retrospective and Prospective view of Community in Nepal*, *Journal of Forest and Livelihood* 2(2) February

- Gilmour, D. A. Fisher, R. J. (1991), *Villagers, Forests and Foresters. The Philosophy, Process and Practice of Community Forestry Nepal*. Sahayogi Press, Kathmandu, Nepal.
- Gilmour, D.A. Malla, Y., and Nurse, M. (2005), *Linkages between Community Forestry and Poverty, Impact of Community Forestry Policy on Rural Livelihood and Security in Nepal* On <http://www.iucn.org/theme/ceeps/publication/SL>.
- HMG/N, (1989), *Master Plan for the Forestry Sector of Nepal*. Ministry of Forest and Soil Conservation, Kathmandu, HDB/FINNIDA/HMGN.
- HMG/N, (1993), *Forest Act 1993. Kathmandu Law Books Management Board, FDP/HMGN/USAID/HMG/N, 1999. Nepal Gazette Part 2:48 (69). Kathmandu, Nepal*.
- HMG/N, (1995), *Forest Act 2049 (1993) (Official Trans Lotion), Law Books Management Board/HMGN May 22, 1995*, Ministry of Forest and Soil Conservation, Forestry Development Project, HMGN/USAID.
- Hobley, M. (1987), *Involving the poor in Forest Management: Can it be done? The Nepal Australia Project Experiences: Social Forestry Network Overseas Development Institute, London, U.K.*
- Hobley. M. (1996), *Participatory Forestry: The Process of Change in India and Nepal*, Rural Development Forestry Study Guide 3, Rural Development. Forestry Network, Overseas Development Institute, London.
- Kafle, M. R. (2008), *Contribution of Community Forestry to user's Household income: A Financial Analysis*, M.Sc. Thesis, Tribhuvan University, Institute of Forestry Pokhara.

- Kanel, K. R. and Niraula, D. R. (2004), *Can Rural Livelihood be Improved in Nepal Through Community Forestry?* Banko Janakari 14 (1) Department of Forest Research and Survey. Babar Maha, Kathmandu, Nepal.
- Malla, Y. B. (2000), *Impact of Community Forestry on rural Livelihood and Food Security in Nepal*. Unasylua 202(51).
- Malla, Y. B. Neupane, H. R. and Branney, P. (2003), *Why aren't Poor People Benefiting More from Community Forestry?* Journal of Forest and Livelihood 3 (1).
- Niraula, D. R., (2004). "Integrating Total Economic Value for Enhancing Sustainable Management of Community Forests: A Forward Looking Approach." (eds.) K. R. Kanel et al., *Twenty Five Years of Community Forestry, Proceeding of Fourth National Community Forestry Workshop*, Department of Forest (DoF), Community Forestry Division (CFD), Kathmandu
- Pandey, T. R. (1999), *Local Strength and Institutional Limitations: Issues of User Group Conflict in Community Forest Management*. In R.B. Chhetri and O.P. Gurung (eds.) *Anthropology and Sociology of Nepal: Culture Societies, Ecology and Development* Sason Kathmandu.
- Pokharel, B. K. and Nurse, M. (2004), *Forests and Peoples' Livelihoods. Benefitting the Poor from Community Forestry*. Journal of Forest and livelihoods 4(1).
- Pokharel, B. K., Mahat, A. and Thapa, S. (2011), *Impact of Community Forestry in Nepal*, Kathmandu to Jiri photo journey, Review edition, Nepal SWISS Community Forestry project, Swiss Agency for Development and Cooperation SDC

- Pokharel, B. K., Paudel, D. and Gurung, B. D. (2006), *Forests, Community Based Governance and livelihoods: In sights from the Nepal Community forestry project in capitalization and sharing of Experiences on the Interaction between Forest politics and Land Use patterns in Asia, Linking people with Resources,*” Vol. 2 Technical paper. SDC and ICIMOD.
- Pokharel, R. K. (2008), *Nepal’s Community Forestry Funds; Do They Benefits the Poor?* SANDEE: South Asian Network for Development Economics
- Timilsina, N. (2002), *Empowerment or Marginalization: A Debate in Community Forestry in Nepal.* Journal of Forest and Livelihoods 2(1).
- Upreti, D. R. (2004), *Role of Community Forestry in Sustainable livelihoods: A Case of Some CFUGS in Nepal,* Unpublished Ph.D Thesis Submitted to Central Department of Economics and Social Sciences. (BOKU), Feistmantelstrasse 4, A-1180, Austria.
- Uprety, D. R. (2006), *Community Forestry, Rural Livelihoods and Conflict; A Case Study of CFUGS in Nepal.* Ph. D. thesis university of Natural Resources and Applied life sciences (BOKU), Vienna, Austria.

Appendix I

Questionnaire for household Survey

Household Survey Form

Interview No.

Date of Interview

Name of CFUG

1. General Information of the respondent

a. Name

b. Age

c. Cast/Ethnicity

d. Gender

Family size.....

2. Demographic information of sampled study Population

S.N.	Name of Family members	Sex	Age	M.S	Edu	Rel.	Occ.	M. Income
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

4. Do you have own land?

i. Yes []

ii. No []

Type of land	Aana	Ropani
Bari		
kheta		

5. Agriculture Income of household

Type of crop	Total production	Selling Unit	Bought	Price per kg
Rice				
Maize				
Wheat				
Millet				

6. Income from livestock and sources for a grazing

(During one year)

Animal type/ Product type	Num/Quan	Earned Rs.	Months for Each sources	
			CF	PF
Cattle				
Buffalo				
Goat				
Sheep				
Chicken				
Milk products				
Fish farming				

7. For how many months do you have enough food for your family from your own production?

..... Months

8. How do you cope in times of shortage?

i. Buy food.

ii. With draw from previous saving

iii. Borrow foods from neighbors

iv. Borrow money

v. Hire out labour

vi. Other specify

9. If you need loan, from where do you get?

.....

10. How much interest rate you have to pay?

.....

11. How far is the location of C. Forest from your house? km.

12. What is the distance of house to the market? km(about).

13. How many bharies (doka) of fodder/grass do you need to feed your live stocks for a week.

.....

14. From where do you collect the fodder?

i. Community Forest

ii. Government Forest

iii. Private Forest

iv. National Forest

15. Who collect fodder?

.....

i. Women []

ii. Children []

iii. Men [] iv. Both mean women []

16.

a. What are the sources of your energy need?

i. Firewood [] ii. Electricity []

iii. Govergas [] iv. Kerosene []

b. If firewood from where do you get?

i. Government forest ii. Private Forest

iii. Market iii. Community Forest

c. How much bhari /doka of firewood you need weekly?

.....

d. Who collects firewood in your family?

i. Women [] ii. Men []

iii. Children [] iv. Both men and women []

17. a. Hove you used timber recently?

i. Yes [] ii. No []

b. If yes for why?

i. House Construction [] ii. Furniture's []

iii. Animal shed construction [] iv. Tools []

c. From where do you get timber?

i. Government forests [] ii. Community forest []

iii. Private forest [] iv. Market []

Appendix II

Guide Questionnaire for Interview

1. Major forest product collect from the CF.
2. Major forest products consumed in household and sold in the market.
3. No of month in the year allocated products collection from CF.
4. Rate of the major forest products in local and near market.
5. Local rate of the major agriculture products.
6. Wage of local labour for different works.
7. No. of meeting and assemblies and other actives activities of the CFUG where the users generally participate in a year.
8. Major Sources of CFUG income.
9. Actual needs of the users they expected from their group fund.
10. Major areas of investment of CFUG fund.
11. Employment in CF enterprise.
12. Overall benefits from the CF.
13. What is the main sources of fuel energy in your community?
14. Is there equal access in C.F. sources?
15. Who does decision making in your C.F.?
16. Are you satisfied in decision?
17. Is there have any community based enterprises in your community forestry?
18. If yes how many in Number?
19. What types are they?
20. What are the positive affects of community forest? (in point)
21. What are the negative affects of community forest?
22. What are the suggestion you would like to share in order to make community forestry more beneficial and sustainable in future?