

# CHAPTER – 1

## INTRODUCTION

### 1.1 Introduction

Nepal is small and land locked country with total area of 1,47,18159km. The average length is 885km (east to west) and width is 193km. (north to south). It lies between 26° to 22° to 30°27' north attitude and 80°4' to 88°12' east longitude. The country is bordered by (china in the North and India in the east, west and south ecologically. The country is divided in to three region, running east to west. They are the mountain, the hill and the Terai For administrative purpose, the country is divided into 75districts, 14 zone sand 5 development regions.

It has an asset of about 23 million people, 6,000 rivers and rivulets 5,000 species of plants, 175 species of mammals, 850species of birds and over 6,000 species of butterflies. Nepal's territory (147,00sq. km) is double the size of Sri-lanka, 3.5 times greater than Switzerland and 6.7 times bigger than Israel, on the one hand and 23 times smaller than India and 68 times less than the size of china, on the other Nepal's greatest advantage lies in Its diverse ecological zones the Terai, hill and mountain. It has four major river –system, Koshi, Gandaki,karnali and Mahakali that have been a perennial source of civilization nation from time Immemorial (DAHAL, 2000).

Forest is one of the most important natural resources of Nepal for its socio-economic development and people's live, hood. It plays a crucial role to the people of Nepal where most of the rural people are practicing subsistence farming. Forest resource is being used for fuel–wood, fodder, grasses, timber, bamboo, medicinal herbs, fibers wild fruits and many

other items by them. The rural people rarely get the facilities of bio-gas, electricity and stove so there do not have the alternative of firewood. Their about 81% of total domestic energy is being fulfilled from the forest specially people used fuel-wood to cook food and to warm their houses. They need fodder to feed the livestock and for bedding and composting. Timber is widely used for the construction of building shade for animals, agricultural tools, furniture and other purposes.

Forestry sector is important for Nepal's development because it support agricultural farming, tourism and provides enormous biodiversity resources and water. The nation therefore depends largely upon the forest resource. (GHIMIRE, 1998)

The forest act 1993 categorize the forest into two broad class National forest and private forest. National forest is further divided into five sub-classes-

1. Community forest National forest handed over to a user group for development, Conservation benefits of the community.
2. Leasehold forestry—lease land forest is a national forest of which degraded forest Lands are leased to an individual, a group of individuals or an organization for a maximum period of 40 years and is renewable for the same number of years.
3. Government forest- National forest managed by Nepal Government with the main objective of production of forest products. The department of forest manages these forests.
4. Religious forest – Apart of National forest which is being used on traditional basis or since ancient times is given to associates of a religious organization for managing and development is termed as a religious forests.
5. Protected forest National forests declared by Nepal Government as protected in consideration of their special environmental,

scientific or cultural significance. Forest in protected areas (PA) also fall under this category, which are managed either by the department of National parks and wildlife conservation (DNPWC) or authorized Non Government organization (NGO).

The latest documentation in forest department has shown that 12,19,111 hectares forest areas have already been handed over to 14,337 forest user group. The total Involvement of the household are 16,47,444.

In Nepal, out of the total land territory 14.7 million hectares, forest cover total 5.5 million hectares (HA) which equals to 37% of the land areas only 11% of natural forest are in Terai and high Himal zone, the remaining area is evenly distributed across the middle hill and Siwaliks if this land area 3.5 million hector 61% has been identified as potential community forest, which could be handed over to local people for management. According to department of forest (DOF, 2002), the total area of handed over CF is about 925,089 hector to about 11,749 user groups and Its has benefits about 1292184 families from the implementation of community forest operation plans in Nepal

Most of the rural people in Nepal depend on traditional agriculture and livestock for their live hood. Forest is the major component of farming system and plays a vital role in rural live hood as it provides fuel, construction materials and animal feed. Having an agro-based economy Nepal as to develop and manage the existing forest resources to achieve the national goal of poverty reduction as mentioned in tenth plan: (2002-2007/Kanel and Niraula, 2004:19)

Forest plays a vital role in maintaining ecological balance and economic development pristine forest are also a major attraction for foreign tourists major energy sources, animal fodder and timber are all found in the forest environmental forest catchments are the main sources of water used for hydroelectricity power generation, Irrigation and

domestic /household consumption. Rural people are very dependent on many non-timber forest product (NTFPS) for their subsistence needs (NBS, 2001).

Community forestry is a major management program implemented by the government of Nepal. It has been implemented for almost 30 years and is spread through out the nation. The principle aim of community forestry so to fulfill the basic need of local people the key issue today is how to support.

Forest User Groups (FUGS) in moving from protection and limited utilization to active management of their forest resources to get the dual objectives of forest condition Improvement and increased flower of benefits to the community (Poudel and etal,2006). In 1978, the Nepal government adopted a new strategy aimed at promoting the participation of local people in the regeneration, protection, management and utilization of forest, community forestry was initially designed to arrest development and to meet the basic needs of the rural poor.

People have been receiving direct and indirect benefits from the forest. Forest is renewable natural resources, which provides a wide range of socio-economic, environmental and cultural benefits and services to the people benefits and services to the people. CF helps to increase the employment opportunities and to save time for firewood and fodder collection. These benefits have, certainly, changes the life style of local people.

## **1.2 Statement of the Problem:**

Forestry sector plays a central role in economic and social life of Nepalese people. Forestry encircles many objective economical, rural development (poverty alleviation, employment and empowerment creation, self-reliant),tourism, natural bio-diversity and conservation

majority of Nepalese people depend on Nepal's immense natural resources for their live hood once green forest were national wealth of Nepal. But now the situation has greatly changed, with the growing population, the need and demand of forest have greatly increased. At present, the area of forest has estimated about 37% only. subsequently, there are very few forest that are not under severe pressure from the near by population. The responsible causes for this rapid deforestation, weak conservation system, unscientific cultivation and management system and uncontrolled population growth.

The community forestry programmed has solved many problem of villagers by the providing fuel-wood, fodder, timber etc.

Without damaging the forest the family size dictates the need of forest product. As the small family size need smaller quantity of forest products, the distribution pattern differ from proportionate group has influenced the decision or the over all users. At present there is a conflict among the users in the distribution of generated product by a community forest.

The concept of community forestry is based on the principle of people's participation. In other words, it is though that forest can be effectively managed under the responsibility or the local people rather than government control the users awareness level on the forest resources is importance as well as necessary element for their lively hood.

National forestry plan in Nepal emphasized the importance of improving the productively at forest and improving stressed the needs to initiate community forestry programmed to meet local demand pf fuel wood, timber, fodder and other products, community forestry program enacted in 1978 has become a viable strategy for reforestation in the country (Kayastha, 1991)

Deforestation is the main problem in our country and people were the main users of forest product and to stop the illegal activities it is very necessary to participate people in community forest management. In this study it is felt that in order to develop the forest or even to stop the rapidly increasing deforestation process only government efforts are not enough people themselves should be made conscious for their active participation in community forest management. So, people's participation plays a vital role of the forest product.

However there has only few study which examines the participation of people in the users committee and some recommendation to improve the organization and participation of people in forest resources management, so to fill the gap this study play a vital role for forest management.

Therefore, this study generates the problems associated to the community forestry application at the field level and to formulate the police of implementation sector for forestry professionals.

### **1.3 Objectives of the Study**

1.4 The general objective of this study is to assess the impact of community forest in the social-economic condition of the forest users group member of MCFUG

## **Specific Objective**

The specific objective are as of

1. To understand the range of beneficiaries and its distribution to the local people from the forest resources
2. To understand people's participation in community forest management system.

## **1. 4 Rationale of the Study**

In Nawaparasi district, very limited studies have been carried out about community forestry management system.

The major contribution is providing valuable information issues of participation, equity and management in community forestry development in district and national level.

The study is useful to policy makers, planners and professional in forestry to consider people's participation, roles and importance in forest management more seriously.

It helps to researcher to develop skill and confidence on the research purpose as well as enhance the scope of Sociological and Anthropological knowledge at the academic levels.

## **1. 5 Organization of the Study**

The present study consists of all together six chapters including introduction, literature review, research methodology, introduction of study area, people 's participation in community forest management summary, conclusion and recommendations respectively.

First chapter is about the introduction including background of the study statement of the problem, objective of the study, rational of the study and organization of the study.

In second chapter is review of literature including general review, community forest management and people participation in community forestry.

In third chapter is about the research methodology including rationale of the selection of the study area, research design, nature and sources of data, universe and sampling, data collection technique and limitation of the study.

Similarly, chapter four explain about the study area including location geographical setting and socio –economic profile of the Maulakali Community Forest User Group.

In chapter five discusses the source of forest product, collection of forest product, people's participation in community forest management and community development activities. It also analyses the participation of people in different level of community forest management and impact of community forest on the local users and community.

Summary, conclusion and recommendation are presented in the chapter six.



## CHAPTER II

### 2.1 Historical Background of CF in Nepal

Community forestry is now the main theme of Nepal's government forestry policy and it is aimed at providing basic needs and economies benefits to the rural population. The master plan for the forestry sector of Nepal 1988 has clear guidelines to place all community forestry management works under the control of user groups in order both to ensure equitable sharing cost and benefits among the users and encourage sustainable forest management. It is intended that this will ensure equitable sharing of cost and benefits among the stake holders and encourage sustain able forest management in Nepal. The government has introduced progressive " New forest Act 1993" and by-law 1995, In spite of these enlightened forest management systems, equitable cost and benefits sharing among users have become one of the most challenging issues in planning and development of community forest.

During Rana Regime, the forest of Nepal has been strongly affected by the different external influences, such as land garrets, exploitation of forests for the purpose of building and smelling for national purpose, have all had a profound influence on land use and deforestation in particular. Further, the forested land is an integrated part of the agro-ecosystem but a significant proportion of the land, both government and privately owned is being over used or used sub-optimally. This is leading to severe ecological imbalances, which threaten the continued viability of the agro-ecosystem and could contribute to a major ecological disaster. The possible solution was the adoption of community based forestry activities as a means of raising the productivity of all the non-cultivated land and also for more drasic restructuring of the society to become one less dependent on the fragile ecosystem. By the

time of Rana Government was over throw in 1951 one third of the country farmland and forest were held under birta with 75 percent belonging to members of the Rana family. During the same period, private forest nationalization Act of 1937 strengthened the neaps forest. All the private forest lands of the country especially the birth and jaguar land grants became public domain and were largely nationalized and placed under the jurisdiction of the forest department. A major goal of the forest nationalization policy was end the feudal system of resource control that had evolved over a century of Rana government administration. Eliminating feudal tenure authority created opportunities. Devekota and Joshi remarked that the nationalization of the forest resource deprived local people the ownership rights of the resources, did not lead to its effective management due to the lack of governmental capacity for management culminating in a failure to arouse awareness among masses toward forest conservation.

Private forests were rationalized in 1957 by the government under “private forest national suction act 1957” the main objective was to manage and utilize the forest properly. Despite the positive mission, the outcome was not satisfactory. Instead human interference increased in the forest. In due course, government had implemented the forest Act, 1961 and forest protection special Act, 1967 to protect the forest desperately, similar judicial power was given to district forest officers. In the mean time government prepared national forest plan in 1975 which had emphasized people to strengthen community forestry program (CFP). Similarly, Terai community forestry program was also implemental in the Terai Districts. For further Improvement master plan for forestry sector (1988) which has conceived people’s participation as a major objective as well as to boost the economic standard in the rural area was implemented.

After restoration of democracy in early 1969 (PF and PPF) were renamed as community forest (CF) since in go's District forest officers in various districts took bold decisions in handing over national forest to real user groups through the new forest Act (1993) and forest regulations (1995) and forest regulations (1995) come in practices in 1995. The forest Act (1993) categorizes the forest into two broad

### **Classes**

1. Private forest
2. National forest
  - a. Community forest
  - b. Leasehold forest
  - c. Government forest
  - d. Religious forest
  - e. Protested forest

### **2.2 C. F as a Means of Promoting Rural Livelihood in Nepal**

Out of the total population of the country 80% of the people live in the rural areas and rest in the urban area (CBS 2002). The incidence of the poverty is 2.6 times higher than the urban areas (UNDP, 1998), it is relatively higher in the higher altitude, remote areas and among lower caste people and ethnic minorities. Similarly, operational households with agricultural workers are more prone to poverty (Wagle, 2002) Income is unevenly distributed among the regional and social groups. Analysis of national time series data suggested that poverty is lowering in urban areas compared with rural areas, although inequality is higher.

Subsistence level farming the major occupation of the more than 80% people in the country. It is intimately correlated with the livestock raising. Half of the population is experienced of deficit of more than 6 months (Shrestha, 1997). Ethnically Nepal is more diverse, poverty is more pronounced in mid and far western districts of the country (LFP, 2000). Caste based discrimination is higher in the rural areas and people becoming disadvantaged.

There is a bulk of literature available in the various aspects of community forestry and socio economic factors surrounding it, in Nepal is known as a country of community forestry because of its widespread adoption in the middle hills of Nepal formulated and enacted the most progressive policy documents (Pokharel, 2001). Community forestry programme is in favor of supporting subsistence rural economy, virtually Nepal's rural economy is based on the subsistence farming which is closely linked with the surrounding forest resource to a greater extent in increase in forest cover because of participation of community in the management of forests during last decade community forestry has been reported by various researchers (Malla, 2001) Supringate Baginski, 2002, Upreti, 2001, Fisher, 2000.

Community forestry as such is the control, management and use of forest resources by villagers. Forest Act (1993) recognizes community forests as any part of national forest handed over to an users group for its development, conservation and utilization for the collective interest it also places emphasis of increasing the level of awareness and involvement of villagers through an informal education and extension program. Community forestry is not concerned with protection of forest for its own sake but with providing sustainable source of forest products for the people of Nepal (Fisher and Malla, 1994).

Since community forests are basically serving the rural population of Nepal where people from all the castes, class, education and gender are by definition included in the CF process, involvement of poor and the land less people should obviously clearly be included in the program. However, reports towards the contribution of community forestry as a basis for livelihood are sketchy (Sharma 1990) have reported the increment of farm production due to positive impact of CF in eastern mid-hills and recommendable study must be extended over other region of Nepal.

The philosophies behind community forestry one quite simple but its practices is enormously compel due to compel socioeconomic, socio political and socio-cultural nature of the communities of the country forest policy 1988 ad forest act 1993 represent a historic opportunity to shift from traditional state owned management regime to people owned system which a way forward to recognize the need of people's participation in management of forest and utilizing the benefits of uplift their livelihood.

Dangi (1998) reported that forest development is long term investment ad CF development also aims to attain socio-economic goal in the long run Kayastha (1991) reported that community forestry is to just a continuous technology but rather process of socio-economic change that required a continuous participation of the community I planning, implementing and problem solving. The continued emphasis by the government of protection and utilization of communal forests (for subsistence needs only) means that the private tree growers currently benefit from the opportunities provided by the market (Malla, 1993).

Forest is important in rural economy from various aspects and is an important part of the rural livelihood forest provides fuel wood, which plays significant rote of wood energy in rural areas especially for the rural

people (Bajracharya, 1983). In remote villages with a closed subsistence agriculture economy the rural pattern of demand in order of importance is fodder, firewood and timber. In the areas with the higher access to market, the pattern changes as fuel wood, timber and fodder. Community forestry is increasing supplying fodder for the cattle, timber for construction and other purpose medicinal herbs leaf litter and other various products to the users to help sustain their living (Malla, 1993).

This is recognized by Maharjan (1995) that there is widespread realization of more than timber, fodder and fuel wood by FUGS who have aptly realized non-timber forest products (NTFPs). These NTFPs are playing an increasing important role in lives of forest users.

According to Byron (1991), community forestry and rural development in developing countries are clearly an economic matter, covering not only the efficiency of production of the forest products needed by the communities but also the equity of distribution of the costs and benefits amongst the local people Dahal (1996) reported that the overall aim of CF is to decrease the socio economic hardship of the people living in hilly area.

A better quality of life for the rural people especially for the lower income groups will result from the increased availability of firewood for cooking and having more feed for livestock which in turn will provide more milk, meat, hide and dunnage for food production, more timber for shelter (MPFS, 1988) community forestry is not just especial technology but rather a process of socio economic change that requires continuous participation of community in planning implementing and problem solving. This community forestry to be initiated both on government land and community land in which people in all stage from decision making to harvesting (Kajastha, 1991).

Malla (1993) found that there have been the rapid socio-economic change in Nepal and the development of domestic market. These change have been placed new demands on resources, including forest and open resources. In area with access to motor able to the market oriented. In addition, more rural people have been involved in off-Farm employment which has played a key role in rural household economy. These results have changed the economic resource management strategies of rural people, In some rural areas these changes have rapidly drawn the traditional agricultural system.

Wickramasingle (1994) pointed that without the benefit of women's knowledge, foresters could produce a plantation of quick growing wood that would both meet local needs and she further advocated, as equal patterns in the developments process women should have equal opportunities in the process of forestry development forest user groups one more sustainable to the degree that the communities of users are able and encouraged to participate, the mobilization of especial interest groups in the community should also be fostered user group that one are dominated by one troubled. If group with special interests in forest resource e. g. Livestock groups, black smiths, medical plant collectors, lodge owners, women and lower castes/porter classes) are excluded predictable problems may result (of 1994).

Maharjan (1997), in the case of Bhaktapur district has tried to find out the present condition of CF management with reference to women's participation. In her study she concluded that community forest area is not equally distributed. The people had been involved in the different activities of community forest programmer. In the executive committee, male participation were founded more then female. The role of male participants in decision making process in significant than female. Woman have participated in collection use of forest product. She has also

found that low participation of women is due to education and other cultural factors.

Khanal (1996), has mentioned that CF is a way of land protection with increase the productivity of the forests and reduces soil erosion and sedimentation. He has also pointed that community forestry is one of the land protection and management options which is gaining wide support in the hilly of Nepal. He has found out that the impacts of community forest management have been positive in terms of better forest management, socio-economic welfare and institutional performance.

Prasai (2000) has studied about 50% houses of this community forestry user groups. He found that community forestry fully fill the demands of forest products like fire wood, fodder, green grass, leaf litter, timber etc. Community forestry has a greater impact on other income generating activities by saving time to collect firewood, fodder and leaf litter, most of the people in the study are use their saved time of poultry farming and earn around 1,00,000 per household in average each year. It has been amply demonstrated in Bhagawan Thumki community forestry that communities are capable of organizing themselves and conserving local forest resource. Besides the monetary benefits, the people in study area are being entertained with benefit like co-operation among the people, environmental improvement etc. After the implementation programmed.

The prudential area of community forest in Nepal is 35,61,600 hectares (61%) of the total National forests. The handing over process of community forestry has achieved a considerable process. As of January 1, 2003, 1,42,003,940,491 (26.41%) hectares of forest area has been handed over to 11,860 forest user groups which benefit 13,11,771 household (ICFD, 2003)



Community forestry has a great potentiality to generate sustainable economic benefits to the local communities at household level and also to support community development. But, they are in the small scale. If the market develop this situation could be changed. There fore there is a need to plan such activities in a large scale that could shift them form subsistence level to market level. As community forestry program was launched two and half decade ago to facilities people in participation on various forest activities. People, no doubt, have been receding direct and indirect benefits from the forests. Forest is a renewable range of socio-economic environmental and cultural benefits and services. This is common that the rural people are dependent on forest for various products to fulfill their basic needs such as firewood, pole, fodder, it leaf-litter, fruit and medicinal plants and to provide other services that are essential imputes into the forming system. Forest provides mineral nutrients and energy that are essential for farming system. He has suggested that 2. 8 hector of farmland to sustain the farming system. Farther, there may have raised increase in employment opportunities and time saved after the formation of CF. These would, certainly change the life style of local people (Roy, 2003).

Forest is a complex renewable natural resource. This complexity has two important characteristics. The first one is that a forest is corn posed of a number of ecosystem components such as land, soil, water, florid and fauna, none of which is simple in nature. The second characteristic is that these components interact among themselves as well as with the physic-environmental and socio-economic systems in a very compel manner (Dahal and Dahal, 2005).

One major lesson learnt from the CF programmer is that. There exists a causal relationship between the trinity of good government conditions namely, stakeholder participation, transparency of

management and accountability of leaders and the successful conservation and management of forest products like fodder, fuel wood and timber are now easily available mobilized for local development. (The Himalaya Times, Nov 13, 2006).

Nepal is one of the rich biological treasure chests of south Asia containing many real gems of plants and animals kingdom. Although there is no single exclusive method for conserving biological diversity it is accepted that Nepal plays a significant role in the protection of some key flora and fauna of regional significance (MOFSC, July 2005).

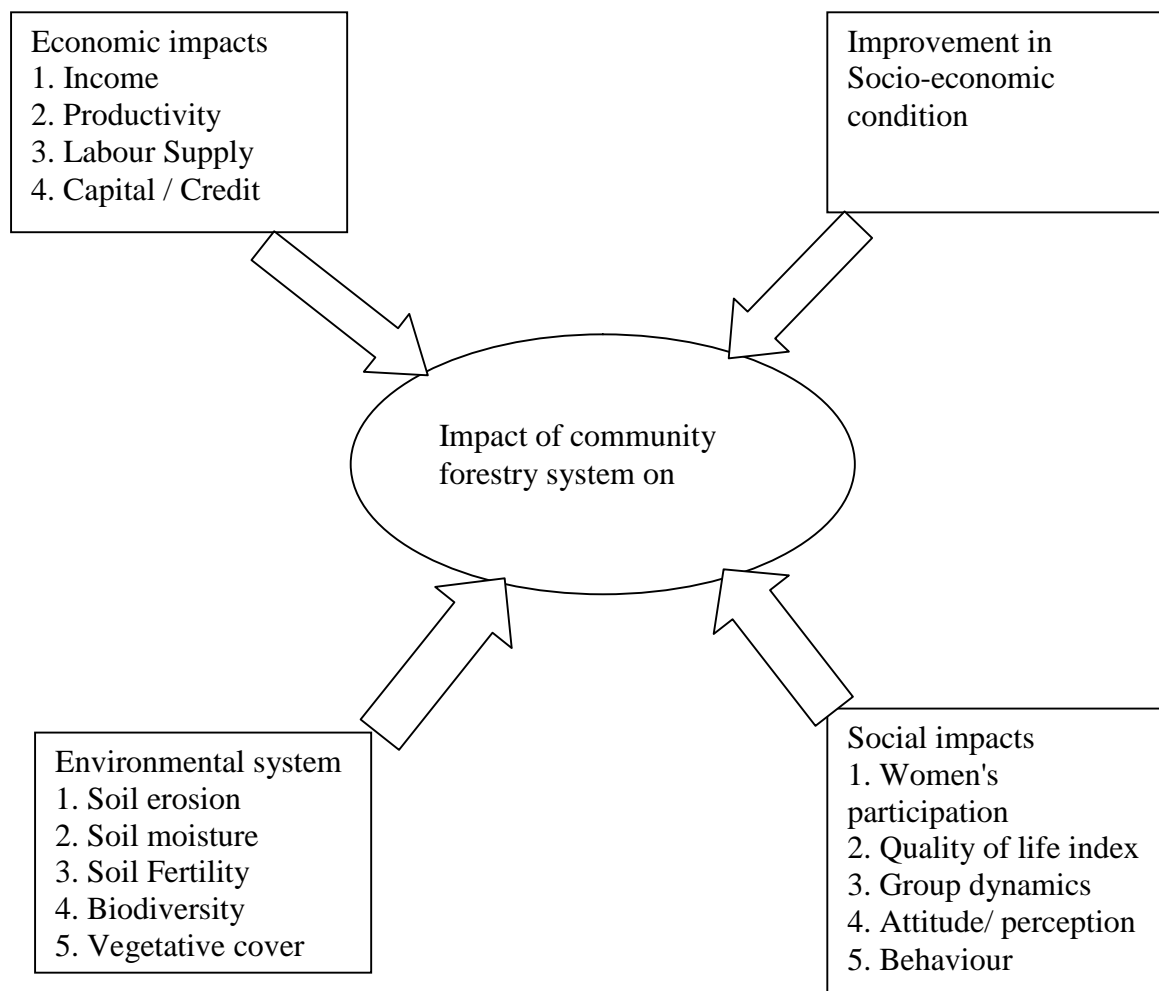
The term biological diversity or biodiversity is used to describe the diversity of life forms on earth. Commonly three levels of biodiversity are acknowledged, namely ecosystem diversity, species diversity i. e. diversity i. e. variability among the population and individuals of the same species (Paudel 2006).

Eco-tourism has been and is one of the prime driving forces in improving their natural environment. The importance of tourism development for biodiversity conservation and socio-economic development, the industry had struggled to sustain this in the recent past because of political instability with prevailing peace in the country and proactive tourism management approaches in place, Nepal now has tremendous potential to benefit from eco-tourism (The Kathmandu Post, Dec 11, 2007).

### **2.3 To Evaluate Impact of Community**

The three important components that are key to evaluate the impact of CF as an outreach system of social transition to words sustainable rural livelihood. It is expected that with the effective community forest management we can achieve the three aspects of economic impact socio-cultural impacts and environmental impacts. Each

impacts comprise a number of indicators which form the composite of overlapping factors and conditions on obtaining sustainable livelihood through effective CF management. This study, however, seeks to explore those impacts from the perception of users themselves. Through users have indicated that they give importance to environment and social cultural component it is well to evaluate the role of community forestry, their main driving force is in the economic gain for that they have some future vision and schemes. Which are mentioned below as:



**Source :** *Impact analysis framework of community forestry*

The combination of three economic impact, social impacts and environmental system on CF programmed ultimately leads to the improvements in socio-economic conditions.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter focuses the overall methodology and limitation of the present study. It explains the procedure of the study from beginning i. e. selection of the study area to the end i.e. analysis of the data and presentation. It includes research design, nature of data, sampling procedure, data collection technique used for the study and data analysis. It also defines some variables and terms used in the present study.

#### **3.1 Sampling of the Respondent Household**

This study is carried out in Nawalparasi district of Gaidokot VDC word no 1 and 2 of named as “Maulakali Community forest user group”. The main reason for the selection of this group is that this community forest is located in the accessible area loosed to the foothill of Curia range linked by the motor able road, the study is also aim to include different ethnic groups and it is considered as the best FUG in its protection system and implementation of operation plan among other Forest in the Nawalparasi because of good safeguarding of the forest by its users from fire protection, Woodcutters and timely performed the cilviculture activities (Thinning. Pruning, Weeding and Cleaning of the forest area). The total household of the study area are 1030 (included both permanent and temporary settler). It’s forest area 381 ha. Different ethnic groups such as Newer, Gurung, Kumal, Dami, Brahman and Chhetry etc. are the main habitants in the target area. Majority of the people in these areas depends on agriculture, business, services and forest resources.

### **3.2 Research Design**

Descriptive and exploratory research design was used in this study. The emphasis is given on the qualitative rather than the quantitative aspect of the information relating to the management condition of forest as well as role and activities of people's participation in forest management system.

People participation is the most essential feature of community forestry. It should be the principal aim of the community forestry to involve people in all stages from decision making to harvest (Kayastha, 1991).

The active participation of villagers should be encouraged in the different activities of community forest. Accordingly, implementation of the operational plans, which were developed by the users in conjunction with Forest Department field staffs, has shown that there is a continuing role of the Forest Department field staff after the plan has been approved. Where the villagers do not have experience in harvesting green forest products training may be required. When conflicts arise the field staff of DFO may be requested to act as an arbitrator. It is preferable that the villagers be given the opportunity to solve their own conflict before the field staffs take an active role. It must also be recognized that in many cases the first Operational Plan negotiated with the users groups may not be perfect and it may need to be modified as the users gain experience. The composition of the user group may change over time and the users may wish to vary the rules and management prescriptions (Acharya and Barlett, 1991).

Rural people perception of social forestry, cost and benefit of social forestry is a prerequisite for the study of people participation.

### **3.3 Nature and Sources of Data**

In this study, both primary and secondary sources of information were used. Primary data were collected from the field survey with the help of interview schedule, observation, group discussion. Secondary data were collected through published and unpublished books, reports, thesis, journals, papers, records etc for required quantitative and qualitative information.

### **3.4 Universe and Sampling**

The study area is homogenous in terms of membership in FUG however they are different and varying in terms of cast/ ethnicity/ economic and other socioeconomic attributes. A systematic sampling has been used for selection of the respondents. There are total 1030 beneficiaries households in universe divided in 3 clusters of settlements based on community settlement pattern of ward no 1 and 2 Gaidakot VDC. It is hoped that a sample size of 10% of sample frame from each cluster could represent the status of the whole community. 25, 36 and 42 number of respondents from 250, 260 and 420 households from the respective cluster. So the interview was taken with 103 beneficiaries households. However, the study focussed to both the male and female respondents. Respondents were selected from economically active age group (15-60 Yr) from the member of CF. Out of total 103 respondents 56 were male and 47 were female.

### **3.5 Data Collection Technique**

Both primary and secondary data collection methods were used in this study. Primary data is a major factor to fulfill the objective of the study. Some of the standard tools and techniques were used in order to

collect primary data from the study area. Interview schedule, observation, focus group discussion have been especially taken as tools for the study.

### **3.6 Interview Schedule**

In interview schedule is consider to collect information regarding personal information, family background, socio economic status, related to the forest, people's participation in different activities and its role in community forest management as well as in utilization of forest product. A sample of Schedule is annexed to this report.

### **3.7 Observation**

Observation is also a method of primary data collection in which the researcher observes various phenomena by involving himself in a number of groups. Observation is useful in observing the forest resources, performance of forest users group, forest management system, sharing of forest products, role and responsibility of the user group in forest management process, decision making in user groups, function of the forest user groups.

### **3.8 Focus Group Discussion**

Focus Group discussion is used to obtain basic information regarding community forest condition, management, protection, development and conflict with the beneficiaries' households and executive committee members. 6 to 10 persons were in focus groups discussion and 5 focus groups held at the time of field work.

### **3.9 Data Presentation & Analysis**

The collected data through various sources using different data collection techniques were put together, processed and analyzed

manually. The present study attempts to present or describe the data in very simple and communicable terms and language as far as possible. The presentation of quantitative information in tabulated form is carried out by simple mathematical tools such as percentage, graphs, charts etc. Where as qualitative data were analyzed and presented in descriptive manner. Maps, diagrams and photographs are prepared as far as possible.

### **3.10 Limitations of the Study**

This study was carried out only in one FUG in Nawalparasi district. Thus a very small area of study cannot represent the whole country as well as district. The sample sizes are not probabilistic in this study. The study covers only a few selected variables, which is limited to in depth analysis. This study is mainly based on only 10 percent of the total user households.

Being dissertated not a professional researcher, detail study is possible then the budget and skill. This research is dealt people's participation in decision making community level only at the household level and benefit sharing indicate only forest products and forest management and it can not generalized in other natural resource management process. Simple statistical tools (i. e. diagram, table percentage, ratio etc) will be used to analysis the data.

### **3.11 Operational Definition of Variables/Words**

In the present study different terms and variables has been used to describe the related topic and issues. Some of the most common and frequently used in the present study are described as follows:

Assemble/Meeting: It refers to the gathering of people to discuss in some issue or to prepare plan for the betterment of CF.



- Benefit sharing:** In this study benefit sharing refers in the distribution of harvested material, particularly green firewood during the period of Ban godne.
- Community forest:** The forest protected, managed and utilized by Local Forest User groups.
- Conflict:** It refers to a disagreement to argument between two or more views in a single issue.
- Entire member:** It refers to the inhabitant of social group or community of authorized FUG who regularly uses the particular forest area for grazing and collection of different forest products.
- Executive committee:** It refers to the representative member of FUG who are selected by the entire members to operates and manage the different activities in CF.
- Forest Products:** In this study, forest products mainly represent grass/fodder, leaf-litter, firewood and timber.
- Forest Users Group:** It refers to the legally formed group, which authorized for the protection, management and utilization of the particular area of forest.
- Hectare:** Measurement used to measure land. 1 ha=10000 sq m.
- Household:** This term has been used to point an individual house, which has selected as a sample house for the interview for the present study.
- Load/Bhari:** A simple measurement generally used to measure firewood and grass/fodder in local area. 1 load/bhari=35Kg.

- Management: It refers the systematic and planed way of operation or conducting different activities in CF.
- Operation plan: participation indicates the both men and women in different activities i. e. , decision making to implementation of CF and in the sharing of benefits.
- Settlement: A group of individual households in a particular area distributed in scatter or cluster form.
- Silviculture: This indicates weeding, cleaning, shrub cleaning of the forest.

## **CHAPTER IV**

### **INTRODUCTION OF THE STUDY AREA**

This chapter discusses the location, geographical setting, biophysical setting of the study area and the socio-economic profile of the community forest user group.

#### **4.1 Ecological Setting**

#### **4.2 Geographical Setting**

Nawalparasi district is situated in Lumbini Zone of Western Development Region of Nepal. This district is adjacent with Chitwan in the east, Rupandehi in the west, Tanahu and Palpa in north and India in the south. The geographical location of the district lies between 26° 72' - 27° 47' north latitude and 83° 36' – 84° 35' east longitudes. The district is situated at altitude ranging from about 100m to 1936m above the sea level. It is an area of 2016.16 square kilometer. The total area covered by the forest is approximately 1117.56 square kilometer.

The study area (maulakali Community Forest) is situated in ward No. 1 and 2 of Gaidakot VDC of Nawalparasi district. It is bounded by Narayani river and Jukti Khola in the east, Sano Dhara and Jaya Shree Community Forest in the west, Tinkhole or Kavredhap's Siran and National Forest in the north and Cultivated land and village settlement in the south. The forest covers the total area is approximately 381 hectares.

#### **4.3 Biophysical Setting**

The specific biophysical setting of the study area is based on the biophysical condition of the district.

#### **4. 4 Climate**

The study area is located between subtropical and warm temperature with mean annual temperature 36 c and 15. 5 c in summer and winter respectively. Average annual rainfall in Nawalparasi district in 2145 mm.

#### **4. 5 River**

The Nawalparasi district is famous for water resources. The mojour rivers of the district are Kaligandaki and Narayani River.

#### **4. 6 Land Type**

The landform of the study area is gently plain and terrace. The cultivated land of the study area can be divided into three types on the basis of landuse: Khet, bari and pakho. Khet are the fertile wet land where rice can be cultivated. Bari is the terrace land where maize and other vegetables can be produced and the pakho is the unfertile land.

#### **4. 7 Forest and Vegetation**

Forest is the most peculiar, valuable and renewable natural resources of this village and for this reason; it has to be preserved carefully and honestly. Approximately 381 hectares of land is under the forest in this village. The product of the forest, which the people of this village use, includes fuel wood, timber and some fruits and vegetable. Besides this, the forest also provides shelter to the large number of wild animals such as rabbit, jackal, tiger, monkey, fox, leopard and wild birds. Similarly, it provides leaf litter and fodder for large number of domestic animals in this village area.

It has different types of natural vegetations. Some types of vegetations are found in the high elevation and some are in the low.

A list of vegetations that are found in community forest and private agricultural land are given below:

SN	Nepali Name	Botanical Name
1	Sal	Shorea robusta
2	Chilaune	Schima Wallichii
3	Katus	Castanopsis indica
4	Saj	Terminalia alata
5	Jamun	Syzygium cumini
6	Dhaairo	Woodfordia fruticosa
7	Asare	Lagerstroemia flosreginate
8	Bayar	Zizyphus jujube
9	Amala	Emblica officinalis
10	Chiuri	Madhuca butyrea
11	Imali	Tamarindus indica
12	Sisau	Dalbergia sissoo
13	Utis	Alnus nepalensis
14	Champ	Michelia champaca
15	Aamp	Mangifera indica
16	Daalchini	Cinnamomum tamala
17	Bans	Dendrocalamus spp
18	Koiralo	Bauhenia variegata
19	Khanayo	Ficus cunia buch
20	Gunyelo	Elaragrus parvifolia wall
21	Bhalayo	Semicarpus anacardium
22	Amriso	Thysanolaen maxima

*Source: Operational Plan 2003*

#### 4. 8 Cropping Pattern of the Study Area

Common crops and their planting and harvesting times are shown in table 4. 1 Cropping pattern of this area is divided into three-time period. In different time period different crops are grown. In irrigated area people preferred rice. Millet is only grown in un-irrigated land. Wheat and mustard are grown according to their requirement. All the people of this area grow maize.

**Table No. 4. 1 Cropping Pattern**

<b>Crops</b>	<b>Months</b>	<b>Seed Sowing</b>	<b>Harvesting</b>
Rice/Millet	June-October	June	October
Wheat/Must arid	November- March	November	March
Maize	April-July	April	July

*Source: Field Survey 2008*

#### 4. 9 Social Setting

##### 4.9.1 Socio-economic Profile of MCFUG

In order to analyze and describe the socio-economic status of the respondents, different indicators such as ethnic group, gender, level of education, occupation and main source of income were used.

##### 4. 9.2 Population Composition

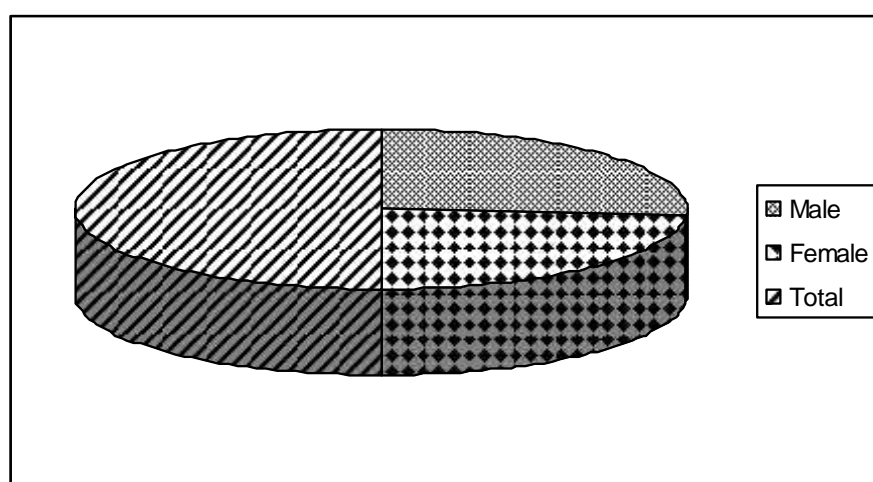
The total population I ward no 1 & 2 of Gaidakot VDC is 7878 comprising 4041 make and 3864 female in 1248 households. In MCFUG, there are total 1030 member household with total population is 6492 out of them 3391 male and 3101 female. The average family size of the study area is about 6 persons. Table no 4.2 shows the sample household population composition according to sex.

**Table No. 4. 2 Population of Sampled HH.**

SN	Description	No	Percentage
1	Male	319	52. 73
2	Female	286	47. 27
3	Total	605	100. 00

*Source: Field Survey 2008*

**Figure No. 4.1 Population of Sampled HH**



*Source: Field Survey 2008*

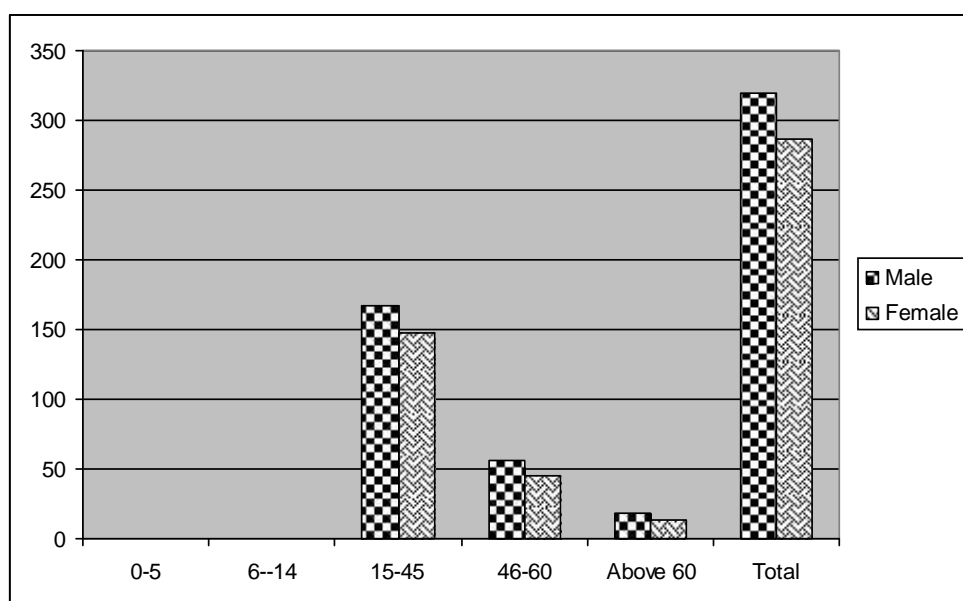
Similarly, with reference to field survey the age-wise population composition out of the total sample households about 25.95 percent is below 15 years and that of above 60 years of age is only 5.9 percent. The economically active population, i.e. age between 15 and 60 years is about 68.76 percent of the total sampled population. Above the Table shows the population composition of sampled households according to age.

**Table No. 4.3 Family Member of Respondent distribution By Age and Sex**

SN	Age group (in Yr.)	Male	Female	Total	Percentage
1	0-5	24	32	56	9.26
2	6-14	54	47	101	16.69
3	15-45	167	148	315	52.07
4	46-60	56	45	101	16.07
5	Above 60	18	14	32	5.29
	Total	319	286	605	100.00

*Source: field Survey 2008*

**Figure No. 4.2 Family Member of Respondent Distribution by Age and Sex**



*Source: Field Survey 2008*

#### **4.9.3 Distribution of Respondent by the Caste /Ethnicity**

In the study area, there are Brahmin, chhetri, Gurung, Magar, newar, Kama 1, Bote, Kami, Damai and chepang caste/ethnic groups. According to household the cast and ethnic distribution of the study area is Brahmin/chhetri 42 Gurung/magar 32, Newar 10, Kumal 10, Bote 4,



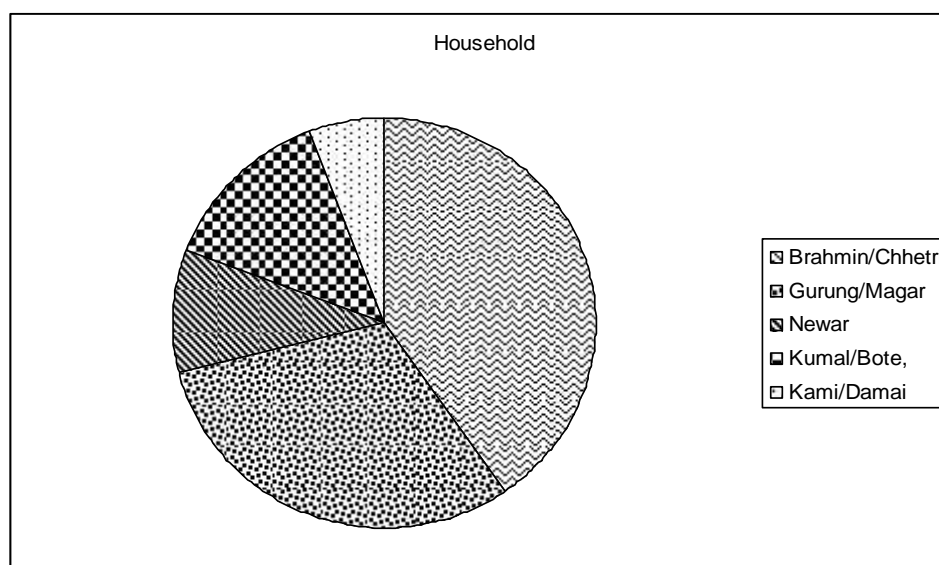
Kami 2, Damai 2 and chepang 1. Table no. 4. 4 shows the caste/ethnic distribution of the study area.

**Table No. 4. 4 Distribution of Respondent by Caste/Ethnicity**

SN	Caste/Ethnicity	Household	Male	Female	Total Population	Percentage
1	Brahmin/Chhetri	42	122	115	237	39. 18
2	Gurung/Magar	32	98	92	190	31. 41
3	Newar	10	30	26	56	9. 26
4	Kumal/Bote,	14	50	40	90	14. 87
5	Kami/Damai	6	20	13	31	5. 12
	Total	103	7	286	605	100. 00

*Source: Field Survey 2008*

**Figure No. 4.3 Distribution of Respondent by Caste/Ethnicity**



*Source: Field Survey 2008*

From the above table it is clear that Brahmin and Chhetri caste are the majority in the study area followed by Gurung, Mager, Newar and Kuaml.

#### 4. 9.4 Education

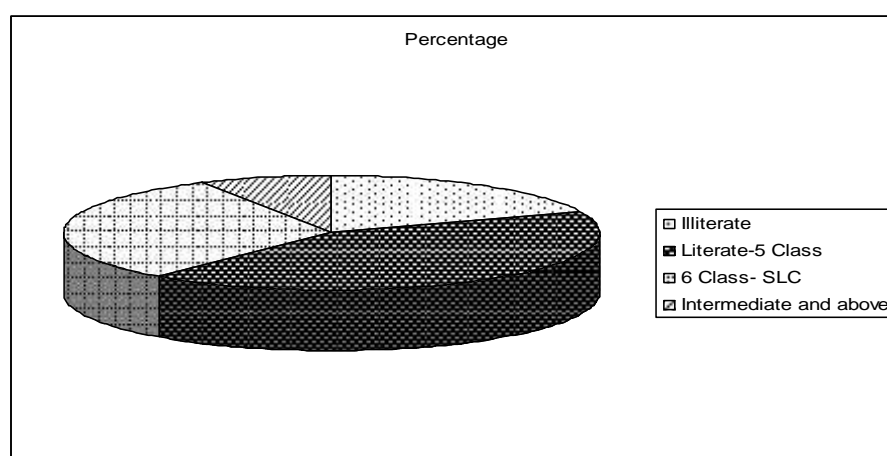
Education status of the community people has an important role for the participation in different CF activities. In This subject the researcher has tried to show the educational status of the respondents. Here the level of education have been divided into four categories like illiterate, literate-5 class, class 6- SLC, intermediate and above. Table 4.5 shows the educational status of the respondents.

**Table No. 4. 5 Educational Status of Respondents**

SN	Academic Qualification	Male	Female	Total	Percentage
1	Illiterate	8	12	20	19
2	Literate-5 Class	23	20	43	42
3	6 Class- SLC	20	12	32	31
4	Intermediate and above	5	3	8	8
5	Total	56	47	103	100

Source: Field survey 2008

**Figure No. 4.4 Educational Status of Respondents**



*Source: Field survey 2008*

The above table shows that educational status of the respondents is not bad. About 73% of the respondents are from literate to SLC. Where as 19% from illiterate and 8% are in intermediate and above class.

The demographic summaries of the household sample shows the about 76 percent of the total population are literate and about 18 percent are illiterate. Out of total literate population, 44. 63 percent are male and 32. 23 percent are female. Above the table shows the population composition of sampled household according to education level.

**Table No. 4. 6 Educational Status of Family Members of Respondents**

SN	Academic Qualification	Male	Female	Total	Male (%)	Female (%)	Percentage (%)
1	Under Age (0-4 Yr. )	14	17	31	2. 31	2. 18	5. 12
2	Illiterate	37	72	109	6. 12	11. 90	18. 02
3	Literate- Class5	125	97	222	20. 66	16. 03	36. 69
4	Class 6- SLC	87	60	147	14. 38	9. 92	24. 30
5	Intermediate & Above	58	38	96	9. 59	6. 28	15. 87
6	Total Literate	270	195	465	44. 63	32. 23	76. 86

*Source: Field Survey 2008*

#### **4. 9.5: Occupation**

Economy is the pre prime factor of any society. Without the study of economy in any society we cannot understand the whole system. The study area is very near to the market area. Thus, it can e said that, there is

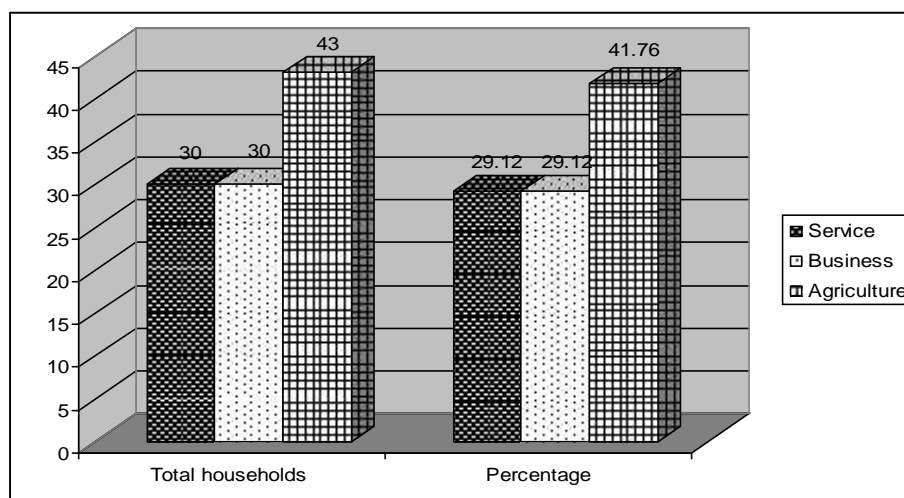
good opportunity of business and service. Directly or indirectly most of the populations are engaged in agriculture. It is already mentioned that there are 68.78 percent of economically active population in the study area. The demographic summary of the household sample shows that about 29.12 percent population is engaged in service, about 29.12 percent in business, about 41.76 percent in agriculture. Below the table shows the population composition of sampled households according to occupation.

**Table No. 4.7 Occupational Status of Respondents**

SN	Occupation	Total households	Percentage
1	Service	30	29.12
2	Business	30	29.12
3	Agriculture	43	41.76
4	Total	103	100.00

*Source: Field Survey 2008*

**Figure No. 4.5 Occupational Status of Respondents**



*Source: Field Survey 2008*

#### 4. 9.6 Cooking and Lightening

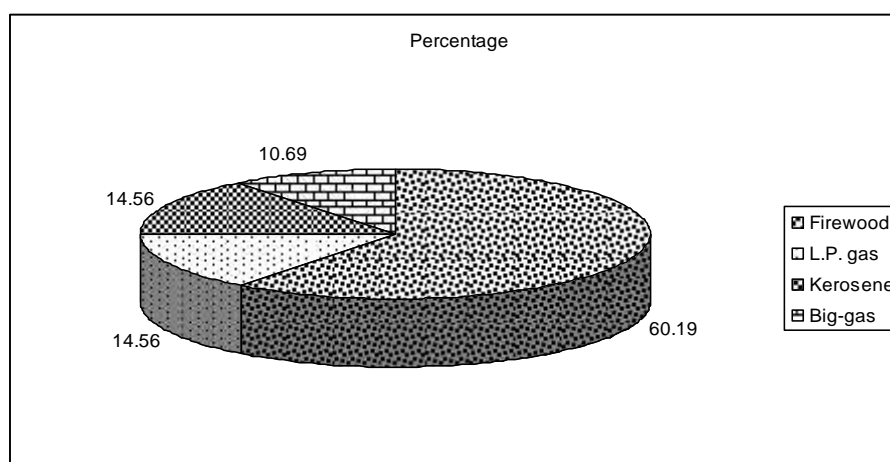
The house survey shows that electricity is used all households for lightening in the study area. For cooking, different materials like gas, kerosene and firewood is used. Bellows the table shows that about 60. 19 percent of the households use firewood for cooking. Similarly, about 10. 69 percent of households use bio-gas, about 14. 56 percent and 14. 56 percent of households use L. P. gas and kerosene respectively.

**Table No. 4. 8 Cooking Materials Currently used by the Respondents**

SN	Cooking materials	Sampled households	Percentage
1	Firewood	62	60. 19
2	L. P. gas	15	14. 56
3	Kerosene	15	14. 56
4	Big-gas	11	10. 69
		103	100. 00

*Source: Field Survey 2008*

**Figure No. 4.6 Cooking Materials Currently used by the Respondents**



*Source: Field Survey 2008*

#### 4.9.7 Livestock composition of the Sampled Household

The table shows that livestock play an important role for the upliftment of their socio-economic status of the study area. The cow/buffalo which play an important role for the benefit of majority of ethnic group in the study area. They get directly the cash by selling milk and milk products and manure from their products. Other livestock too assist for their income generating sources.

**Table No. 4.9 Livestock Composition of the Sampled Household**

SN	Ethnic group	Cow/ox	Buffalo	Goat	Other	Total
1	42	58	39	35	30	162
2	32	42	33	30	23	128
3	14	17	11	12	-	40
4	10	30	25	9	15	79
5	5	11	7	5	10	33
	103	157	115	91	78	442

*Source: Field Survey 2008*

#### 4.9.8 Land holding pattern of the Respondents

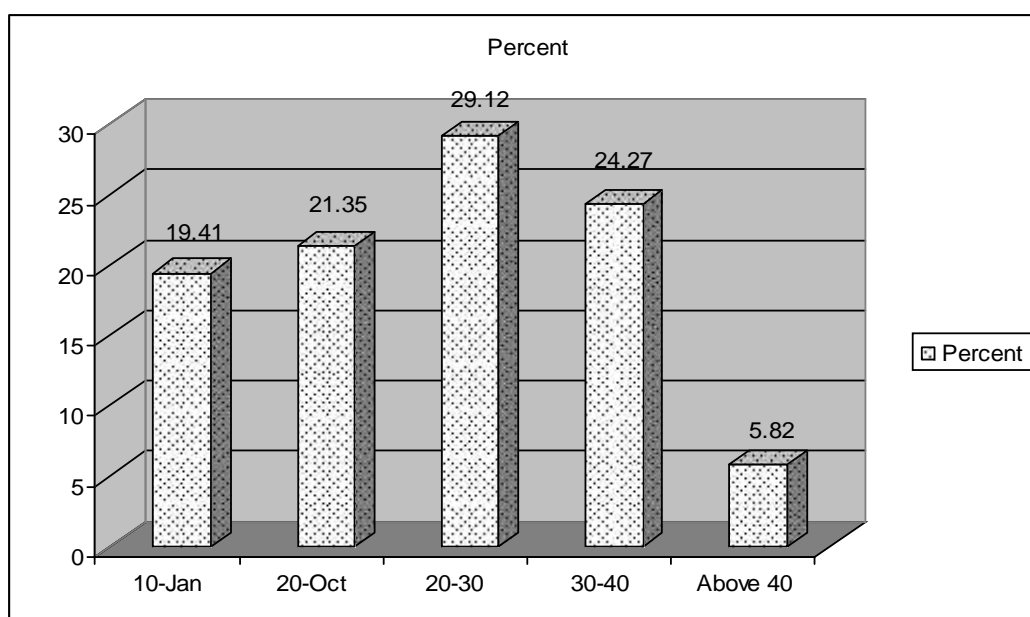
Land holding is one of the most important determinants of the most important determinants of the income and food sufficiency. There is variation in the amount of landholding of the respondents in the study area. The man who is rich he has large area of land and the poor has small area of land.

**Table No. 4.10 Land Holding Pattern of the Respondents**

SN	Land size in Kattha	Number of HH	Percent
1	1-10	20	19.41
2	10-20	22	21.35
3	20-30	30	29.12
4	30-40	25	24.27
5	Above 40	6	5.82
	Total	103	100

*Source: Field Survey 2008*

**Figure No. 4.7 Land Holding Pattern of the Respondents**



*Source: Field Survey 2008*

The above table show that 19.41 percent of the respondents have less than 10 kattha land. It shows that they are in the poor categories. The respondents having land 40 kattha and above is 5.82 percent and they are in the rich categories. The other respondents are in the medium categories.

#### 4.9.9 : Crop Production Pattern in RHH

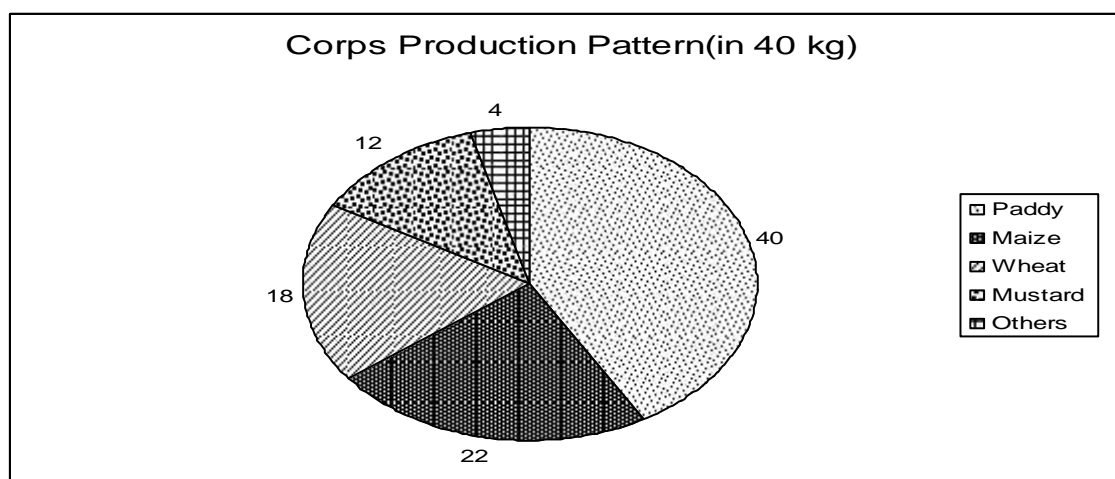
Most of the people of the study are depend upon agriculture and most of them are engaged on agriculture production. The main crops of the study area is paddy and the other crops are maize, wheat, mustard and other. There is variation in crops production between food crops and cash crops. Most of the people allow their land for the production of food crops. Less land is sued for the production of cash crops

**Table No. 4.11 Crop Production Pattern in RHH**

Crop	Paddy	Maize	Wheat	Mustart	Other	Total
Average production (in 40 Kg)	40	22	18	12	4	96
Percentage	41.66	22.91	18.75	12.5	4.16	100.00

*Source: Field Survey 2008*

**Figure No. 4.8 Crop Production Pattern in RHH**



*Source: Field Survey 2008*

According to the above table the main crop production is of paddy which is in average 40 man ( 40 K. g in 1 man) out of total



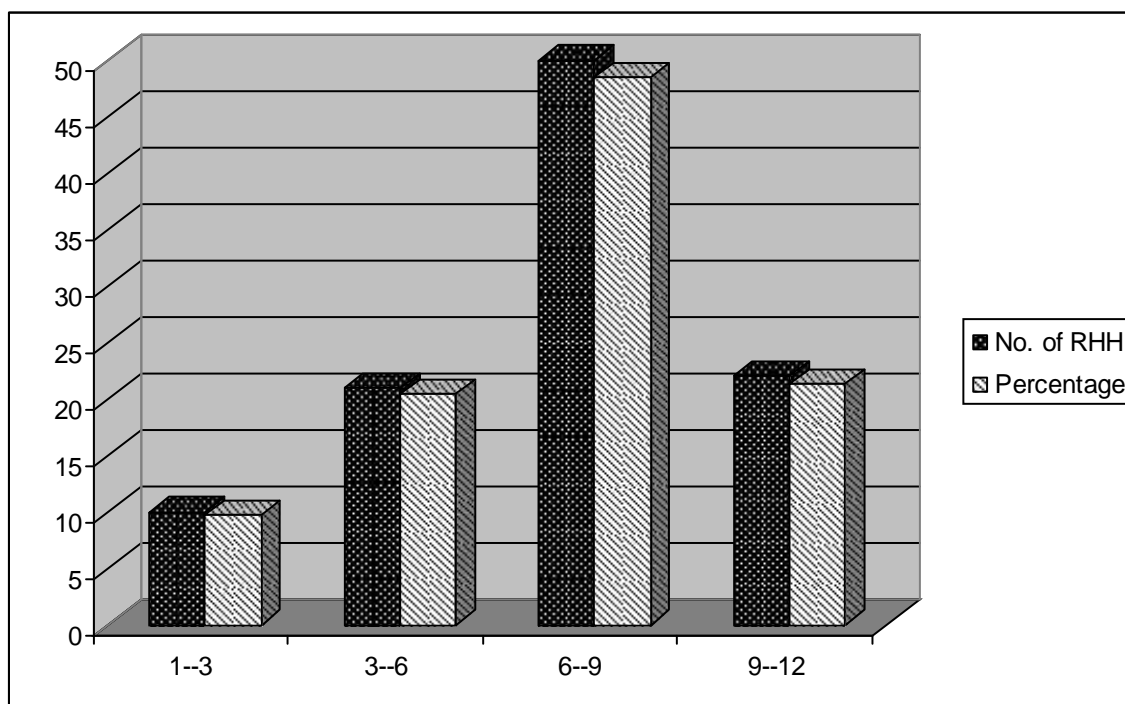
sampled house hold. Out of total production paddy covered 41. 66 percent which is approximately half of total production. The lowest production is of other covering 4. 16 percent in total production. It shows that food crops is the main crops and paddy is main among them in the study area.

**Table No. 4.12 Food Sufficiency in RHH**

S. N.	Food sufficiency (In months)	Number of RHH	Percentage
1	1-3	10	9. 72
2	3-6	21	20. 38
3	6-9	50	48. 54
4	9-12	22	21. 36
Total		103	100. 00

*Source: Field Survey 2008*

**Figure No. 4.9 Food Sufficiency in RHH**



*Source: Field Survey 2008*

Above the table show that (9. 72 %) of the poor households do not have sufficiency food because they do not have sufficiency land and they have food for only 1-3 month (48. 54%) of the medium category house hold have food sufficiency for 6-9 months and the rich household (21. 36%) have food sufficiency for the whole year the other poor households have to buy food to sustain their life.

#### 4. 9.11 Feeding Pattern of Livestock

Some people of the sampled households keep their livestock by stall-feeding and some people take their livestock for grazing. Table bellows shows that the feeding pattern of livestock in the user group.

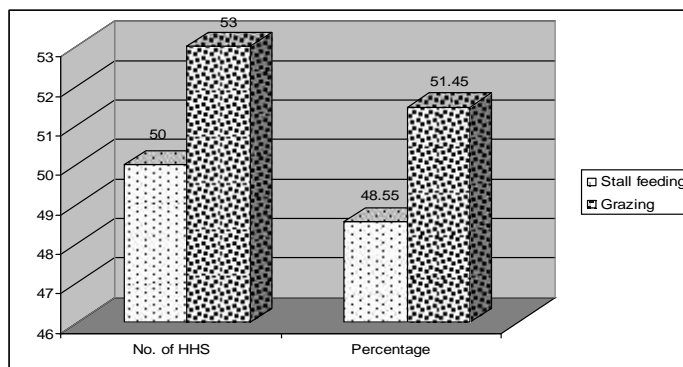
**Table No. 4.13 Feeding Pattern of Livestock in MCFUG**

Feeding pattern stall feeding Grazing	N. of HHS	Percentage
	50	48. 55
	53	51. 45
	103	100

*Source: Field Survey 2008*

Tables above shows that 48. 55 % house hold practices stall feeding and 51. 45% house hold practices grazing.

**Figure No. 4.10 Feeding pattern of livestock in MCFUG**



*Source: Field Survey 2008*

#### **4. 9.12 Status of Crop Production**

More surplus food or crop production is one of the indicators of economic welfare of rural farmer. In the study area, people grow mainly cereal food & vegetables in farm are confined to produce paddy, wheat, maize, millet, mustard, potato, tomatoes all the crops and the vegetable some user sell surplus.

However, the exact data on crops and vegetables in not available from FUG. People are unable to quantify exactly of their past and present crop & vegetable production in amount but more or less they estimated.

In fact there has been some changes occurred during the last ten years. Truly, CF is considered a manure provider to farm whether directly by compost or indirectly by fodder, grass to livestock in turn change to cow dung. Compost & cow dung are prominent sources of farm fertility. Increase in forest trees also helps to increase in water sources. Farmers through irrigation increase their crop and vegetable productions. Farmers are benefiting these facilities from MCF. But what amount of crop production has been increased? The respondents could not quantify exactly the difference. The replies came in 3 forms. Some said the crop and vegetables have increased, some said it is constant and some even said it is decreased.

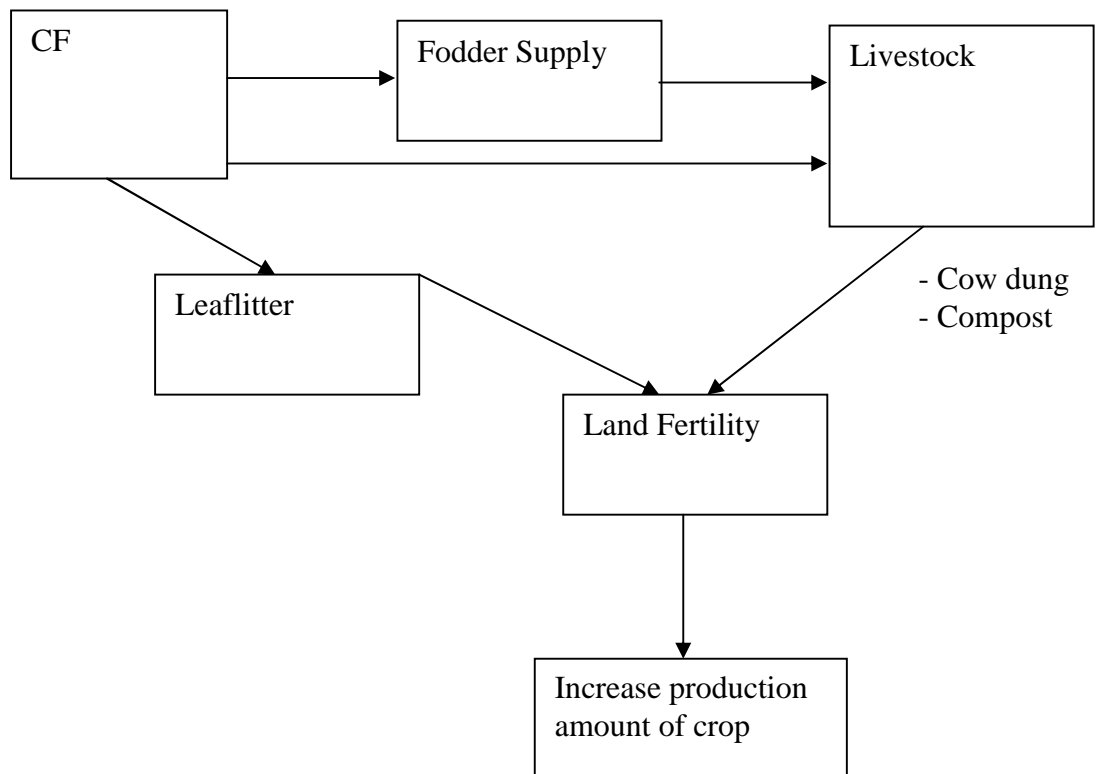
#### **4. 10 The Role of C. F. on Upliftment of Socio-Economic Condition of Forest Users**

Nepalese economy is based on agriculture. More than 60% GDP comes from agricultural sector of Nepal. The major products are cereal crops, livestock and forestry products and CF is playing a major part in growing livelihood of farmers and contributing in farm production.

Poverty in rural society is common phenomenon. More farmers live in poor condition. They have less land, less livestock and less access

to several economic commodities. How the living condition of these farmers be increased and how the poverty can be reduced? This question is arising continuously. Several National Plans have been launched in this context, i. e. Five-year National Plan, Agriculture Perspective Plan, Poverty Alleviation Plan etc. Many plans have considered Agriculture production to be prioritized. Farm production is required to increase to enable to break serious poverty chain in the rural area. Government has considered supply of four agro-inputs i. e. improved seed, improved technology, fertilizers & irrigation. These four factors are considered primary as well as highly prioritized component to supply in the farming system.

Fertilizer is a single determinant component of farm input, which can effect positively in land productivity. CF is hence considered that it will supply more bio-manure & fodder of farm level. Which ultimately uplifts production amount of food crops, then contributes in poverty alleviation in rural areas.



HMG/N has expected through Green Revolution that there may be a high level of agriculture production in cultivated land by 20 years. Therefore, the government is giving high priorities to supply basic four elements i. e. manure, seed, technology & irrigation to the agriculture land (HMG/MoA/ Winrock, 1996)

The assessment of crop production and livestock situation and the contribution of CF on crop production is required to analyze to know the overall economic condition of forest user groups.

#### **4. 11 Income Generating Activities and Distribution of Forest Product of the Study Area**

Maulakali CFUG conducted various programs to generate Income to the local people. People in the community generate their income mainly from agriculture. The contribution of CF in local people income is very low but income generating activities of CF contribution is also something to the poor people. Income generating and Forest product distribution programs conducted by the user committee can be described as follows.

##### **4. 11.1 Penalties and Reward System**

The operational plan has some provisions regarding penalties and rewards in the comes of the forest management.

1. In case forest has been destroyed, all the cut products will have to be returned to the executive committee and the punishment according to listed below:

Cut timber without permission.....	Rs. 5000. 00
Copy or change of free demarcation.....	Rs. 5000

Setting fire..... Rs. 500. 00

Change of demarcation of

forest.....Rs. 500-1000

2. Any person who will be involved in any forest destruction activities like animals grazing in prohibition area of numbers if interaction with respondents and executive committee. The list of penalties are shown in below table.

### **Animal Wise Details of Penalties**

Serial. No	Animal	First time	Second time	Third time
1	Goat, Sheep	5. 00	10. 00	15. 00
2	Buffalo, Cow	10. 00	20. 00	30. 00
3	Others	5. 00	10. 00	15-00

*Source field survey 2007*

In the case of non- users the penalties charge is double the of the users. Individual who helps to carry out different activities regarding forest protection management and development will receive motivated to protect and participate in forest management for the prizes and not misuse or avoid the forest rules due to the fear of penalties. One who delays the renewal of the membership is also charged penalties.

#### **4. 11.2 Grass /Fodder**

Grass /fodder is an income source for user group mainly grass/fodder product are harvested in manshir, poush, falgun. Grass cutting is not strictly controlled in forest area besides recently planted area and Sal generation area. But green branches are strictly prohibited to collect. During the period of

‘Jahdi safai ’ users can collect green leaves of trees and branches at free of cost if any users need green leaves in off time then they have to take permission from the committee and have to pay a certain amount. During ceremonial function they can take these products at free of cost.

#### **4.11.3 Fire Wood**

Fire wood is another major and direct income source for user group. Fire wood is now being harvested as running, singling or thinning and as dry products from all of the community forestry, when the forest is open for firewood collection the entire users can collect dry firewood at free of cost. Generally forest is open during the special festival like dashain and tihar for firewood collection. The distribution of firewood is not depending on family size.

During the social occasion like marriage, saptaha, funeral function etc. the entire member can easily get the required amount of firewood at free of cost. Besides ceremonial occasion. if any users need large amount of firewood they have to take permission from the committee and to pay Rs. 30.00 per load ( bhari)

#### **4. 11.4 Timber**

Timber has been found the major income source of community user groups. According to operation plan, committee can harvest about 58.69 m<sup>3</sup> woods per year from old and damage tree. Generally sal and ajar trees are used for timber wood. The entire members have to drop

application to buy timber wood from community forest, Because of status of forest, the amount of timber in community forest is very limited, so the committee select the household according to the need assessment. They give first priority for those who have to build up the house and then only other purpose one considered. CFUG are free to fix prize of timber. however the rate fixed by CFUG is to be informed to the DFO. Forest user group is free to sale the surplus forest product elsewhere in the competitive market within the country where better price could be obtained. The FUGs has been Sal to maximize returns from timber sales, as there are high chances for the timber market. While the committee should not rush into activities, a more active management would be benefits from the FUG without destroying the resource base.

#### **4.11.5 Forest Guard**

The forest should be protected from fire, grazing, encroachment and illegal cutting and collection of forest products. They have appointed and arranged 3 number the Guard to protect and watch the forest everyday. They are paying Rs.3000. 00per month to the forest Guard

#### **4.11.6 External Source**

The sources included grants from government and projects aid, prizes, donation and bank interest the community forestry program. DDC, forest department and NARMSAP ( Natural Resource management sector Assistance programs) are providing some money when asked.



## CHAPTER V

### PEOPLE’S PARTICIPATION IN COMMUNITY FOREST MANAGEMENT

This chapter discussed participation of people in community forest management and community development activities. It also analyses factors affection the women participation in community forest management and impact of community forest.

#### 5.1 Sources of Forest Products

The people of the study area have been utilizing forest and forest products to fulfill some parts of their basic need such as fodder, firewood, leaf-liter and timber. It was observed that both community forest and private land are used to satisfy the requirements of forest products. Most of the people also use forest area for animal grazing. According to field survey, it was found that about half of the population of user group depends on CF for grass and firewood where as all of the population of user group depends of C F for timber.

**Table No. 5. 1 Sources of Forest Products (Grass and Firewood)**

S.N.	Collection Area	Total Household	Percentage
1	Private land only	11	10. 68
2	Community forest only	52	50. 49
3	Private + Community forest	37	35. 92
4	Other	3	2. 91
	Total	103	100. 00

*Source: Field Survey 2008*

Above the table shows that 10. 68 percent of the population collects grass/fodder and firewood from private land, 50. 49 percent

population depends on community forest, 35. 92 percent population depends on both private and community forest for grass and firewood. It was also found that 2. 91 percent population neither depends on community forest nor private land or these forest products. This population collects these products either from other nearby CF/National forest or buys from market. It was found that the firewood and other products collected from the CF are only used for domestic consumption.

## 5.2 Forest Products Collection

Forest resource is one of the most essential natural resources and the people depend on the forest resource for fuel wood, fodder/grass, herbs, timber etc. Timber is widely used for house construction, shed for animal, furniture agriculture tools and other various purposes. Fodder/grass needed in the rural area to feed the livestock. Fuel wood is needed to cook food and other various purposes. Below the table shows the forest production collection according to sex wise.

**Table No. 5. 2 Forest Products Collection (Sex Wise)**

Collectors	Grass/ fodder	Percentage	firewood	Percentage	Timber	Percentage
Women	73	70. 87	56	54. 37	0	0
Women +Men	17	16. 51	34	33. 01	29	28. 16
Women Children	9	8. 74	7	6. 80	0	0
Hired Labor	4	3. 88	6	5. 82	74	71. 84
Total	103	100. 00	103	100. 00	103	100. 00

*Source : Field Survey 2008*

It was found that both males and females collect the forest products. However, women collect more grass, fodder and firewood and men typically collect timber and firewood. Above the table shows that 70.87 percent of women collect grass and fodder, 54.37 percent of women collect firewood and none of the women alone collect timber. On the other hand, none of the men alone collect the forest products. Similar, 16.51 percent of both men and women together collect grass and fodder, 33.01 percent of the men and women together collect firewood and 28.16 percent of both men and women together collect timber.

The children of age above 5 years also collect grass, fodder and firewood occasionally to help their family. Children do these works generally in their leisure and holidays in school. Some of the rich households also hire labors to collect grass and firewood. As heavy physical labor is needed to transport timber from CF to the house, most of the households about 71.84 percent hire labors to collect timber and other wood. On the other hand, about 28.16 percent households both men and women of the family collect timber themselves. Generally, men carry out the cutting tress and making firewood pieces where as women bring the firewood to the house.

### **5.3 Peoples Participation in Community Forest**

People's participation is the main important part in community forest management program. Without people participation CF cannot be success properly and sustainable way. The principal aim of CF is to involve beneficiary in all stages beginning from planning, decision making to benefit sharing. People are essential factor for the sustainable management and development of the community forest. The community forest program itself defines the participation of people in management, utilization and development of their local forest. Thus participation of

people in community forest indicates the involvement of the entire member of FUG in All Levels i. e. from planning, formation process to benefit sharing of forest management.

In the study area active participation of people was identified in three different community forest activities:

- ) Participation in executive committee and meeting
- ) Participation in Silviculture (Ban Godne) activities and
- ) Participation in other (extra) community forest activities.

The people's participation in there activities was found to be different in degree and frequency according to the nature of activities.

#### **5.4 Participation in Executive Committee and Meeting**

The executive committee has to play a significant role in the planning, management and development of the forest. As explained in the Chapter-V, There are 19 members in the executive committee out of them five are women members. Both men and women are equally involved and concerned for the use of forest and its products (timber, fuel wood fodder etc. ). Women are found encourage taking active part in the executive committee. Bellows the table show the people's participation (respondent participation) in different levels of community forest activities.

**Table No. 5. 3 People's Participation in Different Level of CF Activities**

S. N.	Level of Participation.	Male	Percentage	Female	Percentage	Total	Percentage
1	Meeting Attendance	58	56.31	40	38.83	98	95.15
2	Not Attending Meeting	2	1.94	3	2.91	5	4.83
3	Discussion	52	50.49	34	33.01	86	83
4	Giving Suggestion	35	33.98	26	25.24	61	59.22
5	Decision Making	12	11.65	3	2.91	15	14.56
6	Silvicultural Activities	55	53.40	48	46.60	103	100
7	Other (extra) CF Activities	34	33.01	39	37.86	73	70.87

*Source: field survey, 2008*

Form the household survey, four different levels of participation were identified. The first level of participation is attendance in general and monthly meetings, which was found to be 95.15 percent where as women's participation constitutes 38.83 percent. The second level of participation is discussion, where certain individual discusses the issues in the community forest. The participation in discussion was found to be 83.50 percent where women's participation constitutes 33.01 percent.

The third level of participation is giving suggestion relating to the development of the community forest. The participation in giving suggestion was found to be 59.22 percent where women's participation constitutes 25.24 percent. The fourth level is decision making for the implementation of rules and regulation for the forest users group. The

participation in decision making was found to be 14.52 percent where women's participation constitutes 2.91 percent. It was found that 4.85 percent of respondent do not participate in any activities of general meeting where women's participation constitutes 2.91 percentages.

Above the table shows that most of the respondent attendants attend the general meeting only for attendance. Participation decreases as the responsibility of the task increases. Therefore, at the level of decision making only a few executive members who are influential individuals in the community are participating. It was found that the women's participation is lower than the men in all the levels and also the number of women not attending the meeting is higher than the male. This is because of different factors i. e. , education, traditional roles, social values and norms which hinders the participation of women in decision-making and other activities of the CF. It was found that generally women for the educated background are take part in all levels of CF activities where as women for the deprived group only take part in the silviculture and extra activities like plantation and only attend the general assembly. They generally participate the meeting just to know the future plans and rules. Due to their illiteracy and social bound they do not move their stapes in discussion and suggestion. They are actively involved in the protection of forest by stopping the illegal collection of forest products because they are highly depending in the forest products like, firewood and fodder for their livelihood.

## **5.5 Participation in Silviculture Activities**

The basic forestry products needed by the local people include none other than firewood, fodder, timber and bedding material. These are harvested from forest by applying silviculture practice, which is often called as "Ban Godne in Nepali. This literally means weeding, cleaning

and shrub cleaning. In fact, it is defined as a practice of cleaning and cutting undesired tree species for improving the forest condition, thereby increasing the quantity and quality of products. (pokheral,2000)

Generally, ban Goden is carried out twice a year particularly during the agriculturally slack period. The activities of Ban Goden run for two weeks in each time. As explain earlier, the entire member households must attain in Ban Godne. Table 6. 1 shows that 100 percent people participated in the Ban Godne whereas women participation constitute 46. 6 percent. The cent percent participation in Ban Godne is due ton the penalty system and also the motivation towards the condition of forest.

From the household survey, it was found that in Ban Godne and village cleaning, which includes physical labor and much time, the participation of women is high. This is because women are mostly involved in household works rather than in official works and have managed leisure time to work in community forest. Moreover, it was also realized that usually women are concern in sharing of firewood and fodder for their daily domestic work. Whereas it was found that some men are not interested in silviculture work, as it is not related to them.

### **5.6 Participation in Other (Extra) CF Activities**

The development and protection of the forest condition depend on the activities likes, plantation, nursery establishment and guarding system performed by the FUG. Community forest is also play a vital role in economic and community development. Participation during plantation was found to be high in the study area.

70. 87 percent people participated in extra activities in CF where women participation constitutes 37. 86 percent. According to community member, they used to provide some seedling to the participants during plantation, which has caused increased in participation. Moreover women

participation was found to be comparatively high during plantation, this may be due to the closed interrelationship between women and the forest.

According to committee members, the women were the main forest offenders before CF has started. Since CF has started, it has help the women to save their time from day to day activities by making available of firewood, fodder, grass, leaf litter, water in the near by area. The women who have spend a lot of in walking just to get a bundle of firewood and fodder now get it from near by community forest. The save time could be used for other purposes, i. e. , taking care of children or houses, involving in social function. Such activities can help them to keep their environment healthy ( Pokharal, 2000). Thus nowadays they are the guard to forest. Generally women are very conscious about the status of forest than man. They often control firing and illegal cutting of forest.

### **5.7 Factors Affecting the Women Participation in Community Forest Management**

In Nepal, more than 50 percent of the total population is female and they are lagged behind in almost every activities and opportunities. Unless women are empowered and provided equal opportunity, the Nepalese socio-economic situation will not gain momentum in obtaining higher equitable growth (Maharjan, 1997). As certain women are found to be involved in different activities of forest management in the study area, there are still some constraints affecting the extent of women participation in CF management. The major factors, which promote and hinder the women's participation, are:

- ) Traditional roles of women and social norms
- ) Education
- ) Composition of FUG



## **5.8 Traditional Role of Women and Social Norms**

The multiple roles of rural women having both domestic and outdoor i. e. , agriculture and forest product collection responsibilities make them bounded within a small limitation. Rural women usually spend about 12-15 hours a day in household tasks. They have to spend much time in taking care of children and house, preparing food. They have to waste their time in more time consuming and laborious task like making available of water for human and livestock, firewood grass and fodder etc. Thus full participation of women in economic and community development program is hampered by a lock of time and energy

It was found that only the married women are involved in different Community forest and community development activities. This is because unmarried women are not allowed to do such things in the study area as they have to marry and also they are mostly engaged in education activities. So despite of well education unmarried women are far behind from the community development activities.

## **5.9 Education**

Education plays a vital role in development. Education is promoting as well as the hindering factors for women participation in decision-making. In the study area it was found that the male respondents are more educated than the female. On the average the women are literate but only few have completed high school. Due to lack of education, women usually did not understand the rule, regulation and policies of CF. Moreover, they have to lose the opportunity for training due to their illiteracy. On the other hand, they feel hesitation to open and put their view in mass of educated individuals due to their education. This is the major reason for the lowest participation of women in giving suggestion and decision –making.

### **5.10 Composition of FUG**

This size of FUG is also affecting the participation of women in CF management. It is a mixed and large users group but the size of executive committee is small where women's involvements are not more than 25 percent. Due to big voice of males, female voice is often avoided. Besides, women rarely participate in the official works, which deprives the women from the important official status of CF like, decision, financial status, grants and donation from different agencies etc.

### **5.11 Participation in Decision Making and Profit Sharing**

Participation in decision making and profit sharing among the beneficiary was examined during the observation in their committee meeting. In the observation we observed that who are the voice raiser and whose voice taken into account also give participation level for decision making. Participation in decision making also found by reviewing meeting minutes, agenda discussed and decision on the respective agenda. Participation in decision making found 14.56 percent.

Benefit sharing has done irrespective of the family size but on an equal basis for all members. There were no major disputes found in this issue however timber distribution required need assessment. Beneficiaries express their satisfaction on grass/fodder, Firewood Collection.

### **5.12 Community Forest on Development and Welfare Activities**

Each and every thing has its positive and negative impacts as two sides of a coin. Similarly, CF program has also both types of impacts in community. During the time of interview, it was observed that CF program is now become a part of life of rural community. It was found that the member households of the user group are directly or indirectly benefited from the community forest. It was found that the direct benefit

is the forest products i. e. , grass/fodder, leaf-litter, firewood and timber. The indirect benefit from the CF are increasing greenery of the forest, increasing water resources, wildlife and bio-diversity, decreasing soil erosion and landslides, decreasing in encroachment of forest area, participation in different community development works and increasing leadership pattern among villagers. Despite some negative issues, CF is providing different facilities to the people of the community. The major negatives impacts are conflicts between user groups due to boundary and traditional rights, fear of wild animals to the users living near by forest.

To date Maulakali FUG has accomplished following activities:

- ) Water spring conservation
- ) Water tap construction in household
- ) Road construction by breaking stones
- ) Wood and financial donation to school and campus
- ) Financial support to construct temple
- ) Utensils for the party, celebrations
- ) Fuel wood for death rites and maternal care

When asked the respondents for potential social development activities that can be carried by the FUG they gave opinions like:

- ) Irrigation
- ) Lightening in the street
- ) Temple protection
- ) Tap construction
- ) Road construction
- ) Plates/spoons for party, celebrations
- ) Culvert building
- ) CF building

- ) Community building
- ) Trail construction
- ) Water resource management
- ) Trail courses for women
- ) Any work that benefits all the villagers
- ) Income Generating Activities for FUG Members
- ) Utensils for the party, celebrations
- ) Picnic spot
- ) Leasehold within CF

Among these community development activities, tap water conservation, trail construction, utensils for the party, fuel wood for death rites and maternal care are currently carried out by this FUG.

### **5. 12. 1 Social Relation**

Majority of the respondents said that there is no conflict among the FUG members. It was also observed that series of meeting, assemblies etc of FUG have created opportunities for the users to discuss about the mobilization of their local development. During the meeting, they also discussed and resolved the conflicts and issues of benefits-sharing. Working together for their village development and resolution of their conflicts by themselves in the meeting has built the social unity. From the field study, it was observed that due to community forestry, Maulakali FUG has maintained good environment in their community by attaining the social and protecting their natural environment. This indicates that there is good team spirit and community forest users committee members have good leadership to manage forest.

### **5. 12. 2 Improvements in Maulakali CF**

When asked to the respondents to give suggestions for the improvement in the CF they suggestion following ideas:

- ) Alcohol consumption should be banned so that the poorer household would not have to be fall in vicious circle of poverty.
- ) There should be protection of Kalij from illegal hunting.
- ) Smuggling of timber should be checked continuously. Maulakali CFUG should be more active.
- ) Providing more training and study tours for Kafle FUG Members.
- ) Continue to work with improvement.
- ) Committee and FUG members have to try to work best to get benefit from CF.
- ) Fuel wood rate should be made different for rich and poor people in the community forest.
- ) Poor people and people living for away should also be involved in the FUG.
- ) IGA activities should be promoted and implemented.

### **5. 13 Socio-Biological Changes in the Community Forest**

#### **5. 13. 1 Biological Changes**

The inventory was not done at the time of hand over of community forest to the FUG. According to the household surveyed and group discussion, it is found the degraded forest of shrub land handed over to the community. It was handed over for its protection, improvement and proper utilization through users participation in sustainable way. During these years, forest has developed its vegetation.

- ) Forest cover has been increased

- ) Forest trees have been increased that supplies fuel wood, fodder, timber
- ) Water spring appeared
- ) Number & species of wild life has been increased i. e. Leopard, Malsapro, Kalij, Deer etc.

### **5. 13. 2 Socio-behavioral Changes**

During the interview the researcher found the change in attitude of FUG members towards CF.

#### **Positive Effects**

- ) Increased expression capacity in users (especially in women)
- ) Knowledge about “Greenery is better for health”
- ) Positive attitude on CF management and feeling of “CF is ours”
- ) People are more interested in CF than earlier period.

#### **Negative Effects**

Sixteen percent of the total users have expressed negative effect of forest development in their social life i. e. robbery due to dense forest. Wildlife has been increased so the users feel afraid to go alone in the forest.

# CHAPTER VI

## SUMMARY, CONCLUSION & RECOMMENDATIONS

### 6.1 Summary

The present study is focused in forest user group namely "Maulakali Community Forest User Group" located in Gaidakot VDC Ward No. 1&2 of Nawalparasi district. The present study is based on the following research questions:

- ) What are the sources at forest products?
- ) What are the roles of people in utilization of forest products (FPs)? (Grass, fodder, leaf-litter, firewood and timber)
- ) How actively the entire members participate in community forest (CF) activities?
- ) What are role of people participation in policy making in use CF?
- ) How do people participate in decision making of FUG committee and how often their voice is listened in the CF meetings?
- ) What are the responsible factors that affect in people's participation in CF management?
- ) Based on these research questions, the present study has the following major research objective:
  - ) To highlight socio-economics characteristics of the respondents.
  - ) To analyze income generating activities and distributes of forest product in the study area.

- ) To understand people's participation in community forest management system.

Descriptive and exploratory research design was used in this study. The emphasis is given on the qualitative rather than the quantitative aspects of the information relating to the management condition of forest as well as role and activities of people's participation in forest management system.

The study area is homogenous due to all the inhabitants are the entire members of Maulakali Forest Users Groups (FUG). A systematic random sampling has been used for selection of the respondents. There are total 1030 beneficiaries households in universe divided in 3 cluster or settlements. It is hoped that a sample size of 10% of sample frame from each cluster could represent the status of the whole community. So the interview was taken with 103 beneficiaries households. However, the study focused to both the male and female respondents.

Both primary and secondary data collection methods were used in this study. Primary data is a major factor to fulfill the objective of the study. Some of the standard tools and technique were used in order to collect primary data from the study area. Interview schedule, observation, focus group discussion have been especially taken as tools for the study.

## **6.2 Major Findings of the Study**

The total population in ward No. 1 & 2 of Gaidakot VDC is 7878 comprising 4041 male and 3864 female in 1248 households. In MCFUG, there are total 1030 member household with total population is 6492 out of them 3391 male and 3101 female. The average family size of the study area is about 6 persons. The economically active population, i. e. age



between 15 and 60 years is about 68. 14 percent of the total sampled population which indicates that the productivity of the area is very high.

In the study area, there are Brahmin, Chhetri, Gurung, Magar, Newar, Kumal, Bote, Kami, Damai and Chepang caste/ethnic groups. According to sample household the caste and ethnic distribution of the study area is Brahmin/Chhetri 42, Gurung/Magar 32, Newar 10, Kumal 10, Bote 4, Kami 2, Damai 2 and Chepang 1.

The demographic summaries of the household sample shows that about 76 percent of the total population are literate and about 18 percent are illiterate. Out of total literate population, 44.63 percent are male and 32.23 percent are female. Most of the population is engaged in agriculture. The demographic summary of the household sample shows that about 29.12 percent population is engaged in service, about 29.12 percent in business, and about 41.76 percent in agriculture.

Since the time of establishment, the MCFUG has been managing the forest according to operation plan. They are following the same guideline, legal rules and regulations as stated in the approved forest operation plan for the forest management. Besides, it was found that the user groups usually used to give priority to things according to deed assessments. According to DFO staffs and local users, the condition of the forest is becoming glorious after community had started to manage the forest. The overall forest management system in MCFUG can be described as: Operation management, Protection management, Utilization management and Promotion/Development management.

It was found that in MCFUG there exist very few conflicts regarding management of forest, decision-making, conflict between entire members, conflict with neighboring groups and conflict with DFO. But still various conflicts exist in this group. The conflict within this FUG can

be described as: Conflict over access, Conflict due to resource availability, Conflict in sharing of benefit.

The major conflict in this user group is the distribution of timber wood. During the interview, it was found that most of the users were not satisfied with distribution of timber wood, as they did not get the sufficient wood. On the other hand, the committee member said the amount of wood is very limited and also they are tightened by the rules. Moreover, there are no more damaged and old trees, which can be collected. As they claimed, despite of insufficient amount of wood they are distributing the timbers were equally to the member according to need assessments.

In the study area active participation of people was identified in three different community forest activities: participation in executive committee and meeting, participation in Silviculture (Ban Godne) activities and participation in other (extra) community forest activities. The people's participation in these activities was found to be different in degree and frequency according to the nature of activities.

From both the household survey and key persons, four different levels of participation were identified in forest executive committee viz. , attendance, discussion, suggestion and decision making. The first level of participation is attendance in general and monthly meetings, which was found to be 95.15 percent where as women's participation constitutes 38.83 percent. The second level of participation is discussion, where certain individual discusses the issues in the community forest. The participation in discussion was found to be 83.50 percent where women's participation constitutes 33.01 percent.

The third level of participation is giving suggestion relating to the development of the community forest. The participation in giving suggestion was found to be 59.22 percent where women's participation

constitutes 25.24 percent. The fourth level is decision making for the implementation of rules and regulation for the forest users group. The participation in decision-making was found to be 14.52 percent where women's participation constitutes 2.91 percent. It was found that 4.85 percent of respondent do not participant in any activities of general meeting where women's participation constitutes 2.91 percentages.

It was found that the women's participation is lower than the men in all the levels and also the number of women not attending the meeting is higher than the male. This is because of different factors i. e. , education, traditional roles, social values and norms which hinders the participation of women in decision-making and other activities of the CF. It was found that generally women from the educated background are take part in all levels of CF activities where as women from the deprive group only take part in the silviculture and extra activities like plantation and only attend the general assembly. They generally participate the meeting just to know the future plans and rules. Due to their illiteracy and social bound they do not move their steps in discussion and suggestion. They are actively involved in the protection of forest by stopping the illegal collection of forest products because they are highly depending in the forest products like; firewood and fodder for their livelihood.

From the household survey, it was found that in Ban Godne and village cleaning, which includes physical labor and much time, the participation of women is high. This is because women are mostly involved in household works rather than in official works and have managed leisure time to work in community forest. Moreover, it was also realized that usually women are concern in sharing of firewood and fodder for their daily domestic work.

### 6.3 Conclusion

The community forestry plays a vital role in conservation, protection and regeneration of forest resources of the country. Moreover participatory approach in community forest not only satisfies the basic need of the rural people but also enhances the rural livelihood. It also empowers people towards team building, group dynamism as well as self-motivation in community development. As the local resources are effectively managed and utilized, it helps the country for being self-motivation in community development. As the local resources are effectively managed and utilized, it helps the country for being self-dependent.

As observed during interview, the work division in the household works is quite systematic among respondents. Due to awareness among the respondents because of education and most of them were migrated from other parts in the study area, the male and female sharing the domestic works. However in few households of the lower status (uneducated) families, there exist much discrimination and tension. With a few exceptions, the invisible energy and labor of women within the households are comparatively counted because of small family size in the study area. Male and female have the equal role and responsibility in the collection of forest products after the inception of the community forest because of the limited opening days for collection of firewood.

As the lower cast women are illiterate and have to do hard labor for family income, they seemed to be very passive in community forestry and development related works. Whereas it will be very unfair to say that they could not walk ahead. Thus it was realized that the principal need of the women should be fulfilled to draw them in the mainstream of the development. Based on the fact of the present study, it can be said that

Maulakali community forest users group is one of the good users groups, which is utilizing its own local resources for the betterment. But the existing community forest management system is more protection oriented rather than productive oriented. For this reason, the poor people may be deprived from day to day use of forest product, which may affect their economy.

It can be said that the leadership among the women of this FUG is also increasing, despite the fact that the participation of women is very low in decision making.

It was realized that, there is a need of various training and technical support regarding utilization of forest products, record keeping, benefit sharing, monitoring, new methods on silviculture practices, selection of plantation site according to plant species etc for the better efficient, effective as well as productive management. However, there must be transparency in product sharing among entire users, which reduces the conflicts in FUG.

As we know, each and every thing has its positive and negative impacts on the community (society). Similarly, community forestry program has also both types of impact in community. During the time of interview, it was observed that CF program is now become the part of life of the rural community in the study area. Despite some negative issues, CF is providing different facilities to the people of the community. The direct and indirect benefits from the community forestry have played the great role in the social life of the people in the study area. Less time consumption in performing the different activities by women has made them use the leisure time in taking care of children and house, involving in different social functions and also encourage them to identify their strategic needs and right in development. As the revenue from the community forest is used in different community development activities

like, road construction, construction of water taps, temples and resting places etc, the livelihood of villagers is become easier. As the study area is in the foothill of Churiya range near by the market area, a temple of God Maulakali is located in the top of hill from where the scene of Chit5awan valley could observed, CF helps for the promotion of the local tourism from which some community people run their small business as income generating activities. It is also a good opportunity for the government to enhance the livelihood of the rural people by developing the skill oriented training program in the study area.

#### **6.4 Recommendations**

Based on the fact observed and mentioned in the present study, some points were identified which should be improved for the betterment of The Maulakali Forest Users Group in coming days. Thus the present study has following recommendation:

- ❖ FUG should involved more women and members from economically disadvantage group in users committee so as to make plan and policy to meet the requirement of the mentioned group.
- ❖ Users committee should do survey and systematic need assessment prior to timber distribution so as to lessen the conflicts and biasness.
- ❖ FUG should consult technicians to select the plantation site according to the plant species to fit with the local climate so as to check failure in the plantation.
- ❖ User's committee should be productive oriented rather than protective so as to take maximum benefits from their available resources for sustainable development.

- ❖ Government and non-government organizations should be encouraged to work on community forestry based programmes.
- ❖ DFO should focus poor for different forestry training for their knowledge and skill development.
- ❖ DFO should provide FUG the institutional and technical support to explore suitable and sustainable opportunities of LGA relating NTFP and other like goat keeping, poultry farming etc.
- ❖ Development of infrastructure for supporting tourism development need to be developed at local level. This will help in promotion of the tourism as well as in generation of employment to the local community.

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## APPENDIX – B

### QUESTIONNAIRES

1. Name of the Respondent: Ethnic Group:  
 Age: Sex:  
 Respondent Education Status:  
 Religion: Occupation:  
 Wealth Rank:  
 Household Composition:

S. N.	Name	Age	Sex	Education	Occupation
i)	.....				
ii)	.....				
iii)	.....				
iv)	.....				

2. Are you a member of FUGC?  
 i) Yes                                      ii) No

3. Description of Land:

Land Holding size ..... Ropani/Ha/Bigha/Kattha

Land Type	Khet	Kharbari	Pakhobari	Pasture	Forest Plantation	Others
Before CF						
After CF						

4. What are the agricultural crops that you have grown in your land?  
 In Mana, Pathi

Species:	Khet		Pakho	
	Before CF	After CF	Before CF	After CF

Paddy

.....

Wheat

.....

Maize

.....

Millet

.....

5. What is your perception about agricultural production?

i) Increased            ii) Decreased

Why?.....

.....

6. Which crop do you like most and why?

.....

.....

7. How do you relate the agricultural products with CF Development?

.....

.....

8. Does your agricultural yield fulfill you needs?

i) Yes                    ii) No

If No, for how many months does you agricultural yield sufficient?

i) 1-3            ii) 3-6            iii) 6-9            iv) 9-12

9. What do you do with agricultural crops yield in your

Khet/Pakhobari?

i) Consume            ii) Sell            ii) Both

If sale, what is the annual income? .....

10. What types of animals do you have:

<b>Animals</b>	<b>Total Number</b>	<b>Improved</b>	<b>Breed</b>
	<b>Ordinary Breed</b>	<b>Utility</b>	
He Buffaloes	.....	.....	.....
She Buffaloes	.....	.....	.....
Cow	.....	.....	.....
Oxen	.....	.....	.....
Goats	.....	.....	.....
Sheep	.....	.....	.....
Others	.....	.....	.....

11. How do you feed these animals?

- i) Stall feeding
- ii) Grazing on CF

12. Where do you collect the fodder?

- i) Community Forest
- ii) Private Land

13. What was you livestock holding before CF?

He Buffaloes

She Buffaloes

Cow

Oxen

Goats

Sheep

Others

14. How the CF has helped you to increase/decrease the number of livestock?

.....

15. Has livestock helped improve you economic condition? How?

.....

.....

.....

16. What is your annual income from selling milk, ghee and livestock?

.....

17. Any problems for livestock grazing?

.....

18. Details about forest products.

Products	Quantity/Day (in Bhari)				
	Daily Requirements	Own Land	Govt. Forest	Community Forest	Buying from Other
i) Fuel wood					
ii) Fodder					
iii) Timber					
iv) NTFP					
v) Leaf Litter					
vi) Herbs (medicines)					
vii) Others					

19. How do these CF products help you in your economic condition?

.....

.....

.....

20. Distance to collect daily use forest product?

Before CF

After CF

21. What is the CF product distribution system?

i) Equal Basis

ii) Equity Basis

iii) Do not know

iv) As per requirement

v) For disaster as subsidy vi) For social custom

vi) Auction

22. How do you benefit from CF?  
.....  
.....

23. Have you started any income generating activities (IGA) regarding the CF Development Programme?

If yes, what is it?  
.....

24. What types of IGA do you prefer regarding CF Development?  
Why?  
i) .....  
ii) .....  
iii).....  
iv).....  
.....

25. Is it necessary to separate certain amount of FUG's fund for poor upliftment activities?  
i) Yes      ii) No      iii) Do not know  
Give reasons for yes or no.  
.....  
.....

26. How many times are meetings & assemblies held during one year?  
.....

27. How many times do you participate in meetings/assemblies in a year?  
i) Always      ii) Sometimes      iii) Not at all

28. How do you know information for meeting and assembly? If you do not participate in the meeting/assembly, how do you know the decision of committee?

.....  
.....

29. Who fixes the date, venue, time and agenda for meetings/assemblies?

.....

30. Do all the members of Forest User Group Committee participate in decision making?

i) Yes      ii) No

31. How are the decisions made in the Users Group Committee?

i) Among members      ii) Voting in committee

iii) By chair person      iv) Do not know

32. Which one is the best decision making process?

.....

33. How you brought any agenda for discussion? If yes, which? What was the decision? 34. Did you feel free to put your own view at general assembly?

.....  
.....  
.....

35. Do you feel that other people respect and consider you opinion?

.....  
.....  
.....



36. Do you think that the time of meeting/assembly was suitable for women and poor people? How?
- .....
- .....
37. Do women speak in the meetings/assemblies? Are women's voices listened? If yes, please give one example.
- .....
- .....
- .....
38. "Women are to be encouraged to participate in community forest management activities. " What is your opinion?
- i) Strongly agree
  - ii) Agree
  - iii) Neutral
  - iv) Disagree
  - v) Strongly disagree
  - vi) Do not know
39. How do you participate in the CF development programme?
- i) Providing volunteers                      ii) Providing land
  - iii) Providing financial support   iv) Others
40. Who have done plantation works in your CF?
- i) By club    ii) By user's voluntary labours
  - iii) By DFO   iv) Combine
41. What are the potential social development works that CFUG can do?
- .....
- .....

42. Among these social development activities, what are the activities are being run by this CFUGs?

.....  
.....

43. How did CFUG get inspiration to accomplish these social development activities?

44. Who takes leadership for the above mentioned development activities?

- i) Members of CFUGC                      ii) Elites
- iii) Elected members of VDC      iv) Others

45. What is the financial source for these activities?

- i) CFUG fund                              ii) Government grant
- iii) Donor agencies                      iv) Others

46. Is there any conflicts within FUG? What sort of conflict? What did you do to resolve?

.....  
.....

47. "Community Forest is in favor of poverty alleviation of the rural people in the FUG i. e. its effects on socio-economical change. "

What is your opinion?

- i) Strongly agree                              ii) Agree
- iii) Neutral                                      iv) Disagree
- v) Strongly disagree                              vi) Do not know

48. Do you have something to say on CF, Please?

.....  
.....

49. What are the main sources of cooking fuel:

- a) firewood      b) L. P. Gas      c) Kerosene                      d) Bio-gas      e) Other

50. What is the main energy source for lighting?  
 a) Kerosene                      b) Electricity                      c) Other
51. Who collect the fuel wood?  
 a) Women                              b) Women + men  
 c) Women + children              d) Hired labour
52. Who collect the fodder/green grass?  
 a) Women                              b) Women + men  
 c) Women + children              d) Hired labour
53. Who Collect the Timber?  
 a) Women                              b) Women + men  
 c) Women + children              d) Hired labour
54. Do you think the grass/fodder problem has been reduced after the initiation of forestry program?  
 Yes, How: .....  
 No, How: .....  
 Had there been a conflict/dispute in the distribution of forest products before the formation of FUG?  
 a) Yes                                      b) No
55. Do any committee members request you for your advice and suggestion?
56. How do you participate in such activities and who?  
 a) Regularly              b) Frequently              c) Occasionally              d) None  
 a) Male                      b) Female                      c) Both                      d) None
57. How frequently do you participate in the CF general meeting? Who participates mostly?  
 a) Male              b) Female                      c) Both                      d) None
58. What kind of relation to develop between district forest office and forest user group?
59. How do you think the community forest will be sustainable?