

CHAPTER - ONE

INTRODUCTION

1.1 Background

1.1.1 Geographic Characteristics

The area of Nepal is 1, 47,181 square kilometers. Total population of the country is 2, 31, 51,423 (Nepal CBS: 2002) of which 50 percent are female. Administratively, Nepal is divided into seventy- five districts and fourteen zones. Grouped into five development regions. The districts are further divided into Village Development Committees (VDCs) and municipalities. Currently, there are 3,915 VDCs and 58 municipalities in the country. Each VDC is composed of nine wards. Municipalities have wards ranging from nine to thirty five.

Ecologically, the country is divided into three regions comprising the High Mountain region, Hill and the Terai– which run paralleled from east to west with the high mountain along the northern border and the Terai to the South. Owing to its geographical variants, the country's vegetation ranges from sub- tropical jungles to alpine shrub. Forestry Survey (1996) shows that 39.6 percent of total area of the country is covered with forest, of which 29 percent is forest land while 10.6 percent is bushy areas. The annual national forest loss is 1.7 percent and the annual scrubland loss is 0.5 percent.

1.1.2 Economic Importance of Forestry Sector

The forest has been contributing to the social, cultural economic and environmental sector from the early human civilization. Livestock rearing and forest sector have jointly contributed to the agricultural development of Nepal, while the agricultural contributes two third percent of total national income in average, the forestry sector plays an important role in country's economic development. It is estimated that forestry sector contributes about 17.22 percent

of country's GDP through its production as well as environmental services (HMG, 2002).

In rural Nepal, forest is an integral part of the country's livelihood as it provides most of basic goods like timber, poles, fuelwood, fodder, herbs medicines and other forest products that are day to day essentials. In addition to this forest is important for the settlement of wild animals and birds Nepal is one of the few countries in the world where people are to a large extent dependent on the forest resources for their sustenance. Besides the range of products of daily use forest and vegetation cover has significant importance in reducing the runoff increasing soil moisture and in minimizing the problems of water management, which leads to reduce vulnerability context through improving cropping practices and wildlife habitual. It directly contributes to the household and individual welfare by providing basic forest products, employment and income opportunities.

Economically, the country is still poor because of the slow pace of development activities. The present political and security situation has aggravated more in the socio- economy of the rural people. Under such circumstances, major concern of the nation is to raise the living standard of the people through the efficient use of the existing resources. As the economy is predominantly agro- based, the forest plays a vital role in the daily life of almost all rural based people. Forest foods are often particularly important for poorer groups of rural people. These forest based activities often require low establishment costs and are characterized by easy entry and open market access. It is best achieved by the sustainable development of the country's natural resources. Forests are renewable natural resources, which means if managed properly and used wisely, it can be used and regenerated over and over again. Thus the forest is one of the highly potential resources for the economic as well as livelihood development of the people in the country. More the capacity of the individuals and communities to increase the resources the better will be the livelihoods of an individual or of a group.

1.1.3 Origins and Management of Community Forestry in Nepal

The origins of community forestry are strongly linked to different approaches to forest management in the history of Nepal. Before unification in 1769, Nepal was divided into many small kingdoms. The rulers of that period had arranged several different systems of forest management. Although most of the forests were state owned at that time, people were allowed to collect forest products to fulfill their needs free of cost with certain rules and regulations. According to the historical record in the Changu Narayan Temple, for example, one of the Kings of Lichivi Dynasty, Shiva Dev had arranged a very generous system of forest management for the welfare of his subjects. Every household was allowed to harvest up to forty pine trees in a given interval of time to be used as basic construction material and for making charcoal for domestic purpose (Tiwari, 1990).

There were other interesting systems of forest management before the unification of Nepal. 'Kipat' can be taken as an example of an ancient and traditional land holding system of Eastern Nepal where forest resources were managed collectively (Joshi, 1990). Under this system the members of other communities could use the forest of fees or other commodities to the owners of the forest (Arnold and Campbell, 1985). These systems of forest management were concerned with rights of ownership and the protection and distribution of benefits. As there was then low population and an abundance of forest resources, the traditional methods of exploiting forest products did not pose any severe problem.

Gorkhali rulers of Nepal paid little attention to forest management practices (Mahat et al. 1986). The land use policy during that time was designed to encourage the conversion of land from forest to agriculture in order to raise land taxes. Consequently, forest land was converted to agriculture whenever it could be leveled into terraces. During the Rana period, forest management systems of some parts of Terai region was influenced by the colonial forestry of India. Forest resources were treated as a source of revenue

(Dargavel et al. 1985) in India, most traditional forest management systems controlled by different native tribes and communities were abolished by the British rulers. Trees were indiscriminately felled to supply timber for building ships and railway lines and to provide fuel for the ships and trains.

In the 1960s Nepal like other developing countries introduced a large scale afforestation program both on the hills and in the Terai regions, mainly to support forest based industries and to protect land from degradation. During this period, one of the ambitious plantation programs launched by the Bagmati zone Reforestation section was a large scale eucalyptus planting around the Kathmandu Valley.

Unfortunately, the plantation proved a complete failure (Griffin 1988) as result of the inadequate consideration of socioeconomic aspects of the rural people by the project. The profit sharing arrangements between the department of forests and the local people were completely ignored in these plantation programs. Consequently, this and similar plantation programs failed to achieve people's participation and gain their support.

In the 1970s, with the introduction of new concepts of local community development increasing attention was given to the deteriorating condition of forests in the middle hills of Nepal. There has been a growing recognition of the interdependence of forests and farmers. In importance of local needs and of the necessary involvement of local people for effective management of forest resources has been acknowledged, As a result in 1978 a national forestry plan was introduced and community forestry officially commenced in Nepal with the promulgation of a set of specific rules and regulations.

1.1.4 Present Status of CF in Nepal

"Community forestry is the control management and use of forests resources by the villages for their own benefit and for the benefit of the society as a whole" A community forest is the section of forest that is handed over to a group of user households for the group benefit. The villages can either use

products or sell them without damaging the forest. The income derived from the forest product will go the users group fund. Decision about the forest resources within the community forest has been made user's committee. The forest development gives technical and financial support.

The current community forestry policy revolves around the concept of Forest User Group (FUG). The concept is that those who protect and manage the forest may also utilize its product. A FUG consists of all members of a community that regularly use a particularly area for collection of forest products and graze their cattle. The current policy on CF has been to given responsibility and authority to local people by forming forest user groups to protect, manage and utilize the forest product. There are 14,389 FUGs holding forest cover over 1, 225, 993 hectares. Out of the community forests over 1,654,529 households are benefiting in some way or the other. It covers about 17.7percent of the total forest area and 31.9 percent of the Potential Community forest area of Nepal (DOF, 2008).

1.2 Statement of the Problem

Madhu Community Forestry is a hilly CF in the Salyan district. In rural area, the disadvantaged peoples are dependent on public or community forest for their basic forest products needs than wealthier people of the same area. Community forestry programme is widening the gap between the poor and rich people in the management of forest. Elite groups in the village dominate decision making and often neglects the interest of their groups. The participation of poor and disadvantaged groups in community forestry is very low and the local elites (high social status wealthier and educated) are influential in local decision making process CFUGs.

The main issue of Madhu community forestry is conflict and lack of communities co-ordination among the people be ethnic, political, gender wise or socio-economic. There are other problems also, like the level of technical knows- how, lack of proper sampling protection, illegal felling of

tress fire in the forest etc. However, these problems can be solved by external assistance. But conflict can't solve easily and is the main problem, when conflict arises mainly due to the different personal interest of the people. In Madhu community forest, the main reason for conflict is political rather than socio- economic. Some of the people stay away from the program because they feel that users committee has a majority of the people with different political ideology.

Community forest is national natural forest handover to the local users by the government for its sustainable management, conservation and utilization. So Madhu community forest not only the present consumers get benefits but also the future generations. In this respect the following questions can be put forward as research questions.

- I. What are the direct benefits of community forest received by the users?
- II. What kind of support has been given by the INGOs, NGOs and GOs of Nepal?
- III. What programs have been implementing by the CFUGs to increase the regeneration capacity of the forest?

The above questions are answered through the present study.

1.3 Objectives of the Study

Basically, the objectives of this study are as follows:

- I. To analyze the benefits (direct and indirect) derived by the user groups of Madhu community.
- II. To analyze the social participation of women in Madhu community forestry.

1.4 Significance of the Study

Community forestry in fact must support to fulfill their forest related basic needs and as well as to increase their income level and capability, thus, it is an urgent need to study the impact of community forestry on poor people's

livelihood and to find out the corrective measures to mitigate the negative impacts if there exists due to community forestry implementation. As mentioned, poverty is a big challenge to Nepal, Forest resources if managed and utilized in favor of women and poor people, it helps reduce the poverty. Community forests possess the various potentialities increase the income level of women and poor people.

To date, there is no best method developed in community forestry to manage, conserve and utilize particularly of hill forests through the effective participation of rural people. Forestry handover to FUG is accelerating all over the country from Government. Therefore, there is still need to study how far is it effective for the programme to be implemented in every village of Nepal. That is why researcher select the Madhu community forestry and its in economic impact on the concerned user groups of that area.

Therefore, the research has intended to explore something inside the Madhu CF with field level data. It is hoped that the outcome of the study will be helpful to introduce primary and secondary economic benefits, social benefits, to monitor CF programme and this study will be significant to the governmental and non governmental organization and agencies or policy making, implementing plans, will be especially useful for the use groups.

1.5 Limitation of the Study

This study has several limitations.

- I. This present study has focused on only one group (Madhu of khalanga VDC in Salyan District). Therefore the findings of the study may not give the whole picture of other groups.
- II. Simple statistical tools are used to analyze the data obtained. It is because the households do not keep records of their utilized forest products in Nepal.
- III. The study has focused on economic aspects of the participating households only.

IV. This study is based on primary data the reliability depends on it.

1.6 Ethical Consideration

In this study, some ethical norms and values were used, which guided for less biasness during the study period such as:

- Literatures and respondents were explained the purpose and objectives of the study clearly and in an understandable.
- Data/information were not exploited or manipulated during study period; data and information were interpreted on the basis of gathered information and findings.
- The due respect was given to the respondent's culture, social values and their ideology.

1.7 Chapter Scheme

Chapter i	: Introduction
Chapter ii	: Review of Literature
Chapter iii	: Research Methodology
Chapter iv	: Description of Study Area and Data Analysis
Chapter v	: Benefit Derived by Users Group from Madhu Community Forestry
Chapter vi	: Social Participation of Woman
Chapter vii	: Summary, Major finding, Conclusion and Recommendation

CHAPTER - TWO

REVIEW OF LITERATURE

2.1 Review of the Related Literature

Community forestry is an effective and successful strategy of rural development to enhance the status of rural people. In other words "The situation where rural people develop and manage forests as common property to support their farms and household economy" (Nepal Australia CF Project, 1996).

Gilmor and Fisher (1992), stress on need of involvement of women and disadvantaged groups (i.e. lower caste and poor) in CF activities because they think rural societies are not homogenous and egalitarian because wealth and pro- powerful individuals have frequently been able to capture the benefits of development programmes in many parts of the world. Likewise, women as the busiest collectors of many forest products are partly known about forest and trees and make many of the day- to- day decision about forest use. Their decisions making is often quite informal. Every time women go to a forest to collect forest products they make decision about what products added as members of the local community women must be included if community forestry management is to be successful.

Forestry Act 1961 was amended in 1976 to incorporate the provisions of panchayat and panchayat protected forest. However, the act failed to produce desired result as the managerial responsibility of the forest lied with the local political entities called panchayat, which is now turned as Village Development Committee. It also become failure to recognize the proper identification of traditional and real use rights. So, it neither contributed to an efficient management nor ensured effective people's participation in forestry activities. However, changes in forest management became gradually evident after the implementation of forestry sector master plan in 1988. Master plan focused on achieving people's basic needs for various forestry products, increase income at

village level and conserve natural ecosystem and genetic resources by maintaining a safe and wholesome environment (Sharma 2000).

Community forestry is not just a special technology but rather a process of socio- economic changes that requires continuous participation of the community in planning, implementing and problem solving. Thus community forestry to be initiated both is government land and community land involved people in all stages from decision making to harvesting (Kayastha, 1991).

The Food and Agricultural Organization (FAO) of the united Nations defines community forestry as "an situation which intimately involves local people in a forestry activity. It embraces a spectrum of situation ranging from woodlot in areas which are short of wood and other forest products for local needs, through the growing of trees at the farm level to provides cash crops and the processing of forest products at the household, artisan or small industry level to generate income, to the activities of forest dwelling communities" (FAO 1978).

The Master plan forestry sectors recommended that there should be no ceiling on the area of forests to be handed over that forests should be handed over to local users and not to the Panchayat; that women and the poor should be involved in the management of community forests; that all revenue generated from the sale of forest products should go to local user groups, that all accessible forests of Nepal should be handed over to user groups to the extent that they are willing and capable to manage them; that the role of forestry staff should be changed to that of extension service and advisors, and that the promotion of community forests should be the forest to be handed over was thus guided by the "interest and capacity" of the community to manage the same (Sherstha and Budhathoki, 1993).

Community forestry has two major components: forest resources and local communities. The process of establishment and maintenance of the relationships between these two elements are called as community forestry. Government civil society and local bodies are the main agencies that help to

promote community forestry in Nepal. From professional point of view, community forest means the management of the forest through a community in terms of its protection, improvement and utilization in sustainable based. In early days local people employed watchers to protect the near by forest for satisfying the domestic needs (Fisher 1989) however, the degradation of the forest resources continued. The promulgation of nationalization Act 1957 and subsequent failure of management efforts turned forest into the open access resource with tendency of free side among the villagers. After the nationalization of the forest, Government lacked human, financial and other resources needed to put all accessible forests under proper management, or even just to protect them form exploitation(Sharma, 2000).

Khanal (1996), has mentioned that CF is a way of land protection with increases the productivity of the forests and reduces soil erosion and sedimentation. He has also pointed that community forestry is one of land protection and management options which is gaining wide support in the hill 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.

Pokhrel (1999), the handling over the forest to communities for management and use has increased the opportunities for management and use has increased the opportunities for organized income generation. FUG have started to incorporate Income Generation Activities (IGAs) in their operational plans. There are many examples such as inter cropping of cash, crops , cultivation of non timber forest products and medicinal, herbs selling red clay, seeding firewood, poles and timbers, organization tours for tourist in community forest. Membership fees and penalty are other sources of membership fees and penalty are other sources of income form community forestry.

Upadhayaya (1989), in this study has assessed the perception role, view on distribution of Common Property Forestry (CPF) to determine the factors

influencing respondent's view on CPF products distribution and distribution equality. According to him fact that the distribution of forest product like fodder, grass, timber, poles sale leaves etc. should be distributed according to their contribution in Community Forestry (CF) management in order to make them full benefited of their involvement. With regards to equitable distribution respondents showed that CPF product should be equitably distributed to the people in the area regards of their involvement in CPF product should be equality distributed to people in area regardless of their involvement in CPF management and distribution scheme so that long term stability can be maintained. He revealed that socio- economic factors like age, income caste and education of the household heads education and age of women of income and education local leaders significantly affect their perception of CPF management and product distribution.

Gayfer Julian (1994), in an overview of the NUKCFP has mentioned the objectives expected results and approach and strategies of the project. She has also outlined the current status of activities and the characteristic of the FUG's in Koshi hill area. The overall project approach is based on the belief that " careful formed forest user groups provide the base for an overall improvement in forest condition/ productivity through a program of technical support encouraging 'active' forest management in turn this promotes the institutional development of user groups through realization of benefits of sharing, involvement of poor and women role of user groups as a vehicle for other community development activities to be addressed by the groups."

Baral (1998), community forest management issues are only discussed in committee meeting and in general assembly where poor people and women usually do not participate. The normal practice in community is that the elite members of the society tend to take all key positions in the executive communittee and make decisions on community forest management such as harvesting of the forest products and their distribution. The need of the community and the condition of the community forest should determine the

forest development activities. But it is not found addressed in most of the operational plans. As the elite members of the CFUGs and the DFO staffs make the decision on this matter ordinary users are unaware of it.

Karki (2006), community management of forest has changed the concept of community life, villagers don not think in terms of personal benefits. Rather, they think in terms of collective benefits we spend the money earned from the forest in community development works like widening of trail roads and supplying potable water.

2.2 Management Trend of Community Forestry

Community forest management issues are only discussed in committee meeting and in general assemblies where poor people and woman usually do not participate. Shortly after the formation of Nepal's modern government in 1951 the forest resources of the country were nationalized. By the late 1970s. It was apparent that ownership and local control of land were important for conservation, over the nest decade; greater control was placed in the hands of local governing bodies or Panchayat. These similar to traditional community forest known as Sanad forest thus bringing current management back to the approach used many decades ago. The author concludes that failure to recognize the importance of the traditional management system cost a great deal (Adhikari, 1990).

Property rights over forests in Nepal have a long history of dramatic changes in 1957, the forest nationalized forests and brought most forest tracts that were under private or community ownership, under its control. Nationalization of forests provoked many owners and users of forests to convert forested land to agricultural land to avoid losing access. By the mid-seventies deforestation was rampant. Slowly a consensus developed within the government that local communities had to be involved to sustain forests.

The forest Act 1961 which was first amended in 1978 signaled a major change in forest policy from government management to community to community

ownership in 1982, the community forestry legislation and decentralization Act was passed and plans were made to increase local forestry rights. Nepal gained democracy in 1990, and the popularly elected government acted in 1993 to hand over forest management rights to forest user groups (FUGs). Currently, almost a quarter of potential community forests in Nepal are managed through some 11000 user groups. There are plans to increase this area to include all forests that can be potentially managed by communities. Thus, the stakes for getting community forestry rights are very high (SANDEE, 2004)

GTZ (2004), German technical cooperation used in the forest management planning system can be summarized in four parts.

- I. Compartmentalization: Identification of village intervention zones protection zones, and manageable units
- II. Forest resources assessments: Assessments of resources condition current use of the resource and its production potential.
- III. Forest management planning: Assessment of supply and demand checking sustainability and decision on management options.
- IV. Forest management plan compartment register forest management map and monitoring sheets.

The forest act 1993 and Rules 1995 allow the CFUGs to sell and distribute forest products independently. As provided in the legislation, CFUG can generate group fund in various ways including active management of CF. Most of the hill CFs are still inaccessible to roads and market has not penetrated it to those areas. In some cases the transaction cost of marketing is so high that CFUGs do not have incentive to collect/ harvest /sell and or distribute all types of forest products available in their CG. Several CFUGs have been selling their valuable species to contractors at a lower price. That the prevailing market rate the fund management issues clearly indicated that long term sustainability of CFUGs is questionable irrespective of the fact that the projection regime of CFs at the moment is reasonably effective for maintaining the greenery (Dhital et al. 2002).

The national workshop on CF, held in 1993 contributed considerably in the formulation of new forest legislation other workshop was held in 1998 it drew a new vision poverty alleviation through community forestry, based on the four pillars- social justice equity gender balance and good governance the Ninth plan of the government had also the objective of poverty alleviation through development endeavors. The workshop identified action areas not only for the government but also for other stakeholders. Thus the workshop stressed the need of action from different actors to attain the vision set out in the workshop. The poverty alleviation or livelihood improvement is the main objectives of the current. Tenth plan (2002-2007) and community forests have the potential to meet subsistence needs and to provide. Income (Forest Act 1993 and Regulation 1995) Thus the community forestry program can help in achieving the objectives of poverty alleviation. After years of protection, most of the community forests have increased their growing stock and have increased their potential yields than previous protection oriented operational plan period. FUGs are using the community forests to meet their minimum needs while removing shrubs, dead dying and diseased trees and cutting branches. In this way are just meeting subsistence needs and not utilizing full potential of forest productivity.

Watershed management is basically the management of forest, soil and water of a particular hydrologically bounded geographical area for the sustainable production and use of goods and services needed by the people community forestry is one of the land use and management option which is gaining wide support in the hills of Nepal. Community forestry in Nepal entails the management of local forests by the user groups within the policy framework stipulated in the forest Act and Regulations. The user groups have the rights to extract forest products from these community forests within the constraints of the operational plan. So far the impacts of community forest management has been positive in terms of better forest management socio-economic welfare and institutional performance. However, the process of hand-over forests is still very slow, only about 5percent of the total forest of Nepal

have so far been handed over to above 4,500 forest user groups. There is still a need to strengthen the capability of forest user groups in managing the forest resources more productively and equitably (Kanel, 2004).

The forest improvement system to be introduced under the Community Forest Management (CFM) programme through the participation of all stakeholders is meant to generate revenue for local development. Despite having been against the idea of community forestry in the terai, inner terai and Churia, regions, the government seems to have belatedly realized that local people's participation is a *sin-qua-non* for the conservation of forest in these areas. The collaborative forest management manual of 2003 envisages the diversion of 25 percent of the revenue generated from the sale of forest products in the block (production) forest to the district forest coordination committee for forest and local development (GON, 2003)

Three years interim plan (2007-2010); at the beginning of the Tenth plan, forest areas were managed through formation of some 12 thousand community forest user groups. By the end of the plan period some 14500 community forest user groups have been formed, and they are managing some 1.24 million hectares of forest areas. In addition to community forests, more than 950 leasehold forest consumer groups have been formed to create income opportunities for people living below poverty line. These groups are managing 3700 hectares of forest, resulting in improvement of the quality of forest as well as protection of forest, environment and biodiversity. This is also resulting in easy supply of forest product for people depending on the forest sustainable management of forests, as well as implementation of community development works. Through the means of community forest users groups, gender balance community, empowerment and institutional development works are increasing. In the context of sustainable conservation of Nepal's biodiversity, 19 percent of the total land is covered by conservation areas. In order to fulfill its obligation of international convention on biodiversity, Nepal biodiversity strategy, 2059 and Nepal biodiversity strategy implementation plan, 2063, have been

implemented. Since opportunities have been obtained for generating international resource through Nepal's forest sector from provisions like carbon trading, reduction in climate change and payment for environment services, it is necessary to make diplomatic efforts efficient and effective for this purpose. There are problems like decrease in forest areas due to encroachment of forests, costly and ineffective land conservation due to flooding and landslides lack of awareness about biodiversity, lack of identification of valuable non- timber forest products, lack of information about farming technology, and reluctance of the private sector to move forward in this sector as expected.

2.3. Economic Effect and Livelihood in Nepal.

Nepal is largely a rural country nearly 81 percent of the population depends on subsistence agriculture and natural resources for its livelihood, This rural population is highly dependent on forest resources for meeting basic needs like firewood (for cooking and heating), timber for construction and furniture and fodder for cattle. The forest also supplies 42 percent digestible nutrients for cattle.

Similarly, occupational, households with agricultural workers are prone to poverty. 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.

Nepal has targeted the poor through area based programme by providing infrastructure to the more backward and isolated regions and through target-people like lower caste, women and marginalized. However, in practice these programmers are very small and the benefits tend to go to the non- poor. Women and lower caste people are disadvantaged. With little access to or control over resources and subjected to the domestic violence. The CF program has been prioritized increased household income as a result of supplying adequate forest product, income generation opportunities and more raw materials for farming and livestock rearing.(HMG/MOPE,2000)

In order to assess the distributional impact of community forestry, Adhikari focused on two mid-hill districts of Nepal, where community forestry is prevalent. He surveyed eight forest user groups in Kavrepalanchok and Sindhupalanchok districts. Using participatory rural appraisal techniques households in each forest use group were categorized into poor, middle income and rich households. Twenty percent of randomly selected households were surveyed from each category. Household questionnaires were used to collect forests use and agricultural information. Households use community forests for a variety of purpose benefits from forests include firewood, tree fodder, cut grass, leaf litter, medicinal herbs and timber. To determine if there are differential benefits to diverse socio- economic groups. Adhikari calculated the value of forest products to different economic groups. Adhikari's study shows that richer households earn more from community forestry than poorer households in terms of both absolute and relative income. Poor households in average earn about. Rs, 7756 (Nepalese rupee) annually from community forestry while richer households earned Rs. 24,466. Thus rich households gain. Thus rich household gain approximately three times more than poor households. Another significant result is that male-headed households gain more from forests relative to female-headed households. This can be attributed to the low representation of female of females on FUG executive committees (15.7percent) and their lack awareness regarding community forest operational plans (Adhikari, 2003)

Aryal (2001), identified that Panday Gaon has high literacy rate i.e. about 77 percent they are very much aware of conserving forest, the main occupation, i.e. agriculture, cash crop (veg) have helped to raise people's level of income. Livestock is also other main occupation. After implementing community forestry programme they were able to enhance their business and agriculture activities. Villagers can get easy accessibility forest product co-operation among people and environmental benefits and community forest has been a source to support development and social works in the village. A temple electricity and road are the contribution of community in the village.

The article "Benefit cost Analysis of community forest" attempts to examine the equity impact of community forest with the help of cost- benefit analysis among the three income groups of sixteen selected community forest user group in Arun River valley. Eastern mid- hill, Nepal for the purpose of benefit analysis, eight major types of forest products from CF were incorporated considering as material values and intangible benefits of forest such as environment service and greenery were overlooked totality. Total costs of forest use and management were classified into labor costs, transaction costs and membership fees. With the help of summary statistics of gross benefits and costs. Net benefit and B-C ratios for the three income groups were calculated which showed that the net benefit and B-C ratio of poor medium and rich households to be -3 and 0.85, 0 and 1 and 4 and 1.08 respectively. The current practices of community forest management have negative impact on rural poor that lacks the provisions for addressing equitable system of benefits distribution and cost sharing among the forest user groups and households. If community forestry is to be rural poor friendly, poor income households should realize the full value of the share of unused forest products either form transferable rights or from marketable access (Dahal, 2006)

Community forestry has a great potentiality to generate sustainable economic benefits to the local communities at household level and also to support community developments. But, they are in the small scale. If the market develop this situation could be changed. Therefore, there is a need to plan such activities in a large scale that could shift them from subsistence level to the market level. As community forestry program was lunched two and half decade ago to facilitate people in participation on various forest activities. People; no doubt have receiving direct and indirect benefits from the forest. Forest is renewable range of socio- economic environmental and cultural benefits and services. This is common that rural people are dependent on forest for various products to fulfill their basic needs such as firewood fodder, leaf litter, fruit and medicinal plants and to provide other services that are essential inputs into the farming 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. Further three 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).

Livelihoods is simply a means of living for which (or capital or assets) are need various macro and micro level factors such a natural calamities, shocks, policy, legislation, government and non governmental structures and agencies, market, social processes (cultural norms, values customs, festivals and traditions) do affect the livelihoods a people. More the capacity of the individuals and communities to increase the resources and the ability to cope with the factors of various types, the better will be the livelihood of the rural people. Community forestry has become a means to increase natural, social, human, financial, and to some extent the physical capital of community forest users. Community forests handed over to community are user's natural capital. The group fund generated from the sale of forest products. Levies and outside grants is the financial capital created through community forestry. Namerous FUGs have carried out many community development activities on their own. Construction of village trails; small bridges community building, schools and temples are the good examples of physical capital created through community forestry programmme.

Community forestry has become a vehicle in bringing change in social processes empowering poor and disadvantaged members of the community. The aim of community forestry has been to build FUG'S institutional capacity so as to ensure that awareness will be raised among disadvantaged and marginalized members of the group in matters related to inequality, social injustice and their exclusion from social and political processes including the benefits from mainstream development. It is reported that community forestry has made significant contribution in increasing people's participation of many marginalized section of the community. In many FUGs, their representation has increased in users committees and many of them have began to voice in

meetings and assemblies. They have also began to demand services from government, other services delivery agencies and powerful members of FUGs. In addition, community forestry has become a platform for various stakeholders to work together. These major stakeholders include: District forest office, local government, user federation, and non government organizations and academic and research institutions.

In conclusion, literatures were explained the purpose and objectives of the study such as: Income generating activities, status of social participating women, alleviation of poverty, inequality, social, rural development and benefit cost analysis of community forestry. The above literatures were helped to analyses in the economic effect of Madhu community forestry.

CHAPTER - THREE

RESERCH METHODOLOGY

3.1 Introduction

Research methodology refers to the various sequential steps to be used by researcher in studying a problem with certain object in view. An appropriate research methodology is necessary for an investigation of find out result. In this study, we have tried to find out the benefits derived by the user groups and management system of women regarding the community forestry.

3.2 Selection of the Study Area

Madhu community forestry is a hilly CF in salyan district that lies in the Mid-Western Development Region of Nepal. The area of this Madhu community forestry is about 86 hectors, the climate of Mhadu C.F is sub-tropical, the average maximum temperature is 31⁰ celsius and the average minimum temperature is 3⁰ celsius. Vegetation area is 10 he.

The study area is selected because of the following reasons:

- I. Community forestry has been implemented in this area.
- II. Having participation of lower cast and women in management committee.
- III. Researcher is interested and familiar with the area.

3.3 Population and Sampling Procedure

The population of the study is all 135 user households in the study area. Out of which about 90 households have been taken randomly as sample with out replacement. In Madhu community forest users group are divided in to six Toles. All the households are divided into five different categories on the basis of landholding, food sufficiency, and level of education, level and types of permanent job, employment in foreign countries.

The above reasons, researcher have been selected large households.

3.4 Nature and Sources of Data

The study is based on both primary as well as secondary data. The primary data has been collected through the technique of purposive sampling survey. The direct observations by the discussion have been done with forest users by the researcher.

The secondary data has been tapped from various types of relevant literature such as journal, articles, dissertations, research report, text books, DFO and DF etc. However, the study is mainly based on the primary data, which has collected from the users of CF. Therefore, the user group member of Madhu community forestry is the primary respondent.

3.5 Techniques of Data Collections

Under study of Madhu community forest user groups of Khalanga VDC, particular investigation and direct personal interview is taken with the user groups. The structured questionnaire is also included for such respondents which have become helpful to collect the information. The questionnaire consisted of a number of questions with the field of personal identification, population composition, and education status and landholding pattern, activity about community development forest management and forest development as well as income generation.

3.6 Data Analysis

The collected data have been classified, tabulated and analyzed in terms of simple statistical tools like frequency, percentage and mean and presented in the forms of tables, pie-charts, bar-diagrams and figures etc. Both quantitative and qualitative data analysis techniques are used for the analysis of the collected data. For the analysis of the quantitative data, percentage and mean are used. Similarly, qualitative data are analyzed using descriptive means.

3.7 Calculation of Data

Total annual income is the sum of various components like monetary income by selling crops, vegetables, livestock production, knife making etc. Monetary values are calculated by taking average at the current market prices. The overall weight of utilized firewood, fodder and grasses has been taken in Bharies at first. Then it has been converted into kilogram on the basis of average weight of local Bhari for final analysis in monetary terms.

Firewood 1 Bhari =25-30 kg approx is Rs. 15

Fodder 1 Bhari =25 kg approx is Rs. 5

CHAPTER - FOUR

DESCRIPTION OF THE STUDY AREA AND DATA ANALYSIS

4.1 District Background

4.1.1 Location

Salyan is a hilly district that lies in the Mid-Western Development Region of Nepal, from 28⁰ 31' N to 28⁰ 53' N latitude and 82⁰ 0' to 82⁰ 46' E longitude. The area of this district is about 1951 sq. km. It's headquarter is Khalanga Salyan (DDP, 2007).

4.1.2 Climate

The climate is sub-tropical in Salyan district and the average rainfall is about 1110 mm. The average maximum temperature is 31⁰ celsius and the average minimum temperature is 3⁰ celsius (DDP, 2007).

4.1.3 Geography

The elevation of the district varies from 326 meters to 2827 meters. Almost all the land is a falls on the middle maintain zone. The important rivers following through this district are Saradakhola, Bherikola, Bhagbatikhola ,Ghattekhola, Shukekhola, Babaikhola.

4.1.4 Population and Ethnicity

The population of Salyan district is 213500 which include 106834 male and 106666 female. The population growth rate of 1.61 percent. The number of households are 38084 with an average size 5.61 persons. The major ethnic groups of the district are Brahmin, Chhetri, Newar, Magar, Gurung, damai, Kami, Gharti, Sharki (CBS, 2001).

Maps of Salyan District

4.1.5 Educational Status

There are 361 all together (primary, lower secondary, secondary and higher secondary schools. The numbers of students are 59753. Literacy rate of the district is 44.45 percent above six years old (DDP, 2007).

4.1.6 Types of Forestry

Table 4.1: Types of Forestry

Forestry	Number	Area
Community	298	25809.29he.
Women forestry	6	-
Covered forestry	35	164.35he
Possible national forestry	27	224.Aa
Not used forestry	-	9938he

Source: District Forest Office, 2007.

According to the local people wild animals like Leopard, Jackal, Fox, Deer, Malsapro are present in the community forest birds like Dhukur, Titro, Kotale, Parrot, Whyakur, Bankakhuro, Chil, Latekosero etc are also found in the forest. This community forest is about 21 km form the district headquarters.

The community forest area is characterized by the subsistence economy with most forest users being farmers and rarely some being landless labours. The forest user group has specified the following objectives of the management and protection of the forest.

1. To fulfill the basic needs of users for forest products such as fuelwood, fodder and timber as a sustain basis.
2. To increase the greenery of the area.
3. To manage the forest scientifically by dividing into different blocks.
4. To increase the productivity of land and conserve soil and water.
5. To improving the forest condition by protecting, promoting and developing it appropriately.

6. To protect forest from the on going interfere of rival CFUGs.

There are 135 households including of this community forestry. Head committee is actively working there. There is no electing system there are eleven numbers in head committee with four women. This is the permanent committee with president, vice president, secretary, treasure and seven other general members, regularly meeting is held in every last day of the month.

4.2 Community Forest and Donors:

The donor community was very active in drawing up of the master plan for the forest sector in the late seventies and eighties. After the promulgation of the new forest Act, 1993 a lot of countries through their institutions have been continuously providing assistance for strengthening of the community forest management in Nepal. The forest rule 1995 also opens up the possibility of donor involvement in the execution of forest related works. The following table will illustrate the involvement of the donors in forestry sector:

Table 4.2 Donors and Forest Development

Country	program/project	Districts	Program
Denmark	NARMSAP	38	Natural resource management support
Australia	NACRMLP	2	Natural resources management and livelihood
Switzerland	NSCEP	3	FUGs support
Germany	CHFDP	3	CFUGs support and watershed management
Britain	LFP	10	Livelihood
USA	SAMARPUM	8	Good governance
Netherlands	BISEP-ST	8	Biodiversity

Source: FECOFUN, 2004

From the above analysis it is clear that the community forest program in Nepal today stands at a firm legal and institutional foundation. Their involvement has made the CFUGs stronger. The above table can be seen in figure.

Considering the positive aspects of their community forest. Denmark is conducting “Natural resources management sector wise helping programme” from 1995. Among the various natural resources management sector-wise helping programme unit the community forestry development implementation projects are running in 38 hilly districts: 6 in eastern development region, 8 in central development region, 9 in western development region, 8 in mid-western development region and 7 in far-western development region.

4.2.1 Factors Influencing Community Forestry Development Process

The factors influencing community forestry development process can be shown in the flowchart.

Flow Chart 4.1: CF Development Process

4.2.3 Impacts of Community Forestry

Impacts of community Forestry can bring about to the community is shown is flow chart 4.2:

Flow Chart 4.2: Community Forestry System

Community forest has three impact as shown in the above figure viz, economic impact, environment impact and social impact. By economic impact, the source of income will increase production rate which in turn result in the increment in labor supply. It finally helps in capital formation. The whole process ultimately assists in the economic upliftment of FUGs.

FUG is concerned with its environment impact. Soil fertility, moisture and vegetative cover will be increased in the areas where CF exists. It helps to minimize soil erosion that may occur otherwise. All these benefits eventually help to maintain proper ecological balance. Another major impact of community forest is the social one. Initially Community forest helps to change the attitudes and perception of the people in the positive direction. It in turn assists to increase women participation. Once women's participation is increased, due to positive attitude and perception as well as awareness, the life quality of FUG member will be increased. These factors strengthen the people in decision making for their own betterment. All these finally help in launching the CF programmes successfully.

4.3 Profile of Khalanga VDC

Khalanga VDC is located in the electoral constituency no. 2 of the Salyan and in the center side of the district. Khalanga bazaar and Sitalpati bazaar the main area of Khalanga VDC. Khalanga bazaar is a district head quarter.(It is surrounded by Rukum district to the north, Dang and Banke districts to the south, Surkhet districts to the west and Rolpa districts to the east). The total population of this VDC 6390, out of which 3153 Chhetri. The total households of this VDC are 1075. Most of the people of this VDC have been engaging in agriculture and livestock. The main crops cultivated are paddy, corn, millets, wheat and other cash crops such vegetables etc. Buffalo, cow, bullock, goat, poultry farming, pig etc are the main livestock. People cultivate traditional way like the people of other similar districts. Animal husbandry is another source of income. Other occupation includes teaching,

government and non-government services and sales services. Majority of the population of the VDC are Hindu by religion.

In the VDC there are different castes. Brahimin, Chhetri, Newar, Magar, Sarki, Kami, Damai, Gharti, etc. The main trees species in the forest are Sal, Katus, Chilaune, Uttis, Simal, Mauwa etc.

4.3.1 Population Distribution by Caste/Ethnic Group in Khalanga VDC

According to the national census report 2001, the population distribution by caste/ethnic group of Khalanga VDC has been tabulated in table 4.3.

Table 4.3: Population Distribution by Caste/Ethnic Group in Khalanga VDC

S.N.	Caste/Ethnic Group	Population	Percentage
1	Chhetri	3153	49.34
2	Magar	159	2.49
3	Sanaisi	160	2.51
4	Kami	493	7.72
5	Sarki	93	1.45
6	Brahman	424	6.63
7	Thakuri	296	4.63
8	Muslim	48	0.75
9	Damai	133	2.08
10	Rai	126	1.97
11	Gaine	81	1.26
12	Mali	29	0.45
13	Badhi	20	0.31
14	Tharu	2	0.03
15	Kumal	6	0.09
16	Others	1167	18.26
Total		6390	100

Source: Census 2001, CBS

There are 15 identified castes as given table 4.2 and 1167 persons are kept in others. The large number of population of this VDC is of Chhetri which is 49.34 percent.

4.3.2 Population by Religion

Table 4.4: Population Distribution by Religion

Religion	No. of Population	Percent
Hinduism	6144	96.15
Buddhist	245	3.83
No stuted	1	0.015
Total	6390	100

Source: Population Census 2001, CBS

There are 2 identified religion as given in table 4.4. 1 person is kept in not stated The large numbers of population of this VDC is Hindu.

4.3.3 Population by Mother Tongue

Table 4.5: Population by Mother Tongue

Mother tongue	Population	Percent
Nepali	5140	80.43
Magar	645	10.09
Maithali	51	0.79
Others	554	8.66
Total	6390	100

Source: Census 2001, CBS.

According to the table 4.5 large percent of people's mother tongue is Nepali i.e. 80.43 percent. 10.09 percent people's mother tongue is Magar. Similarly, 0.79 percent is Maithali and 8.66 percent others mother tongue respectively.

4.4 Introduction to Madhu Community Forestry

Madhu community forest is located in khalanga VDC, ward no. 2 and has been considered one of the best FUG in khalanga VDC. The total area of the community forest is 86 he. The district forest office handed over this forest to the FUG in the fiscal year 1999/2000. It is about half hour walk from district headquarter, There are found different sort of trees like Sal, Sallo, Paiyo, Tuni, Bakaino etc.

The total number of households in the FUG is one hundred thirty five. The households are mainly from chhetri caste, few from Newar, Magar, Damai, Badi. The FUG consists of an executive committee handed by mr. Deb Bahadur Pandey. The chair person is eight passed with 11 members including four women, two representatives from watchers. The local leaders old generation have accepted to be an advisor in the committee. Many members of the executive committee are educated.

The FUG has hired two watchers providing a salary of 1,500 per month. Since the FUG is headed by a member it has carried out appreciating works with the FUG fund, the FUG has carried out extension activities e.g. wall painting, wall posturing and fixed of sign boards related to forest protection. The FUG has carried out these actions within the district headquarter and on the way to their village. Because of these extension activities the FUG is not facing any problem of forest fire in the community forest.

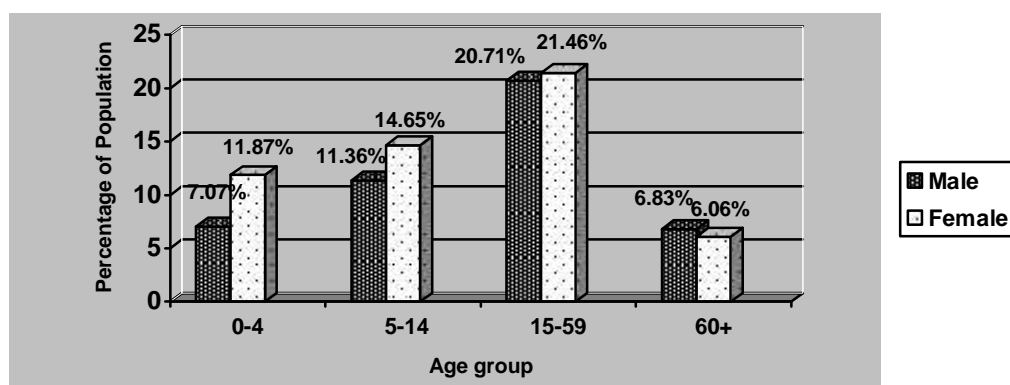
4.4.1 Population Distribution by Age Group of MFUG

Table 4.6: Age and Sex Composition

Age group	Male	Percent	Female	Percent	Total population	Percent
0-4	35	7.07	54	11.87	89	18.94
5-14	52	11.36	65	14.65	117	26.01
15-59	97	20.71	92	21.46	189	42.17
60+	34	6.83	31	6.06	65	12.89
Total	189	45.63	221	54.04	410	100

Age and sex composition is one of the most important demographic features the planners. It will help them to know which sector is weaker and which one is stronger in a community and what support they can do for the upliftment of that age and sex. Age and sex affect marriage, birth fertility and mortality directly it also shows dependency ratio above table shows that out of total population of 410, 44.95percent are infant and children (up to 14 years), 42.17percent are economically active (15 to 59) and 12.89percent are old. Dependents are children, old and thin percentage is (18.94+26.0+12.89) i.e. 57.84percent. Age and Sex distribution we also seen following figure.

Figure 4.1: Population by Age Group



4.4.2 Ethnic Composition

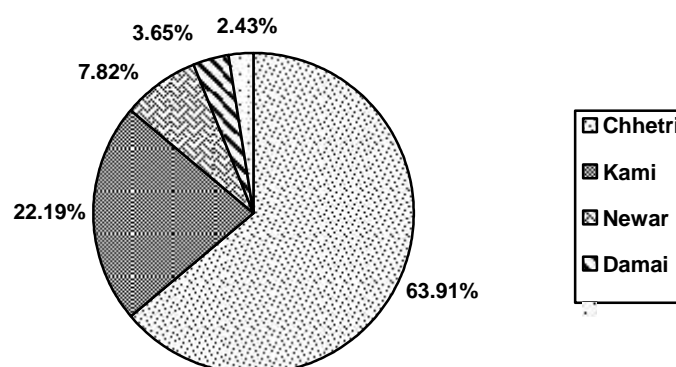
Table 4.7: Ethnic Composition of the Sampled Household

Ethnic group	No. of household	Total pupation	Total percent
Chhetri	65	262	63.91
Kami	20	91	22.19
Newar	8	32	7.82
Damai	5	15	3.65
Badi	2	10	2.43
Total	90	410	100

Source: Field Survey, 2008

The villages where forest users have been living are inhabited by various ethnic groups. Table 4.7 shows that out of table 90 sampled households of the communities, chhetri is the dominant ethnic group. Which covers 63.91percent (65 HHs and 262 populations) followed by Kami 22.19percent (20 HHs and 91 populations), Newar 7.82percent (8 HHs and 32 populations), Damai 3.65 (5 HHs and 15 populations) we can be more clear by following figure.

Figure 4.2: Ethnic Composition



4.4.3 Family Size

Table 4.8: Average Family Size by Ethnic Groups.

Ethnic Groups	Household	Population	Average Family Size
Chhetri	65	262	4.0
Kami	20	91	4.6
Newar	8	32	4.0
Damai	5	15	3.0
Badi	2	10	5.0
Total	90	410	$20.6 \div 5 = 4.12$

Source: Field Survey, 2008.

Family size affect the economic, health condition and condition of the family. The average family size to he sample HHs (household is 4.12 percent) which is less than national average (4.95 percent) households. Damai have the smallest family size of 3 persons per household and Badi have the largest of 5 persons per households.

4.4.4 Sex Composition

Sex composition is also of the most important demographic features for the planner. Separate data for males and females are important for various type of planning. It will help to know which sector is weaker and which is stronger in the community and what support. They can do for the uplifting of that sex. The balance of sexes affects the social and economic relationship within a community. There are 410 persons out of them 189 are males and 221 are females. This proves that in this study area there is difference between males and females in sampled households.

4.5 Socio Economic Characteristic of User Group

4.5.1 Occupational Composition

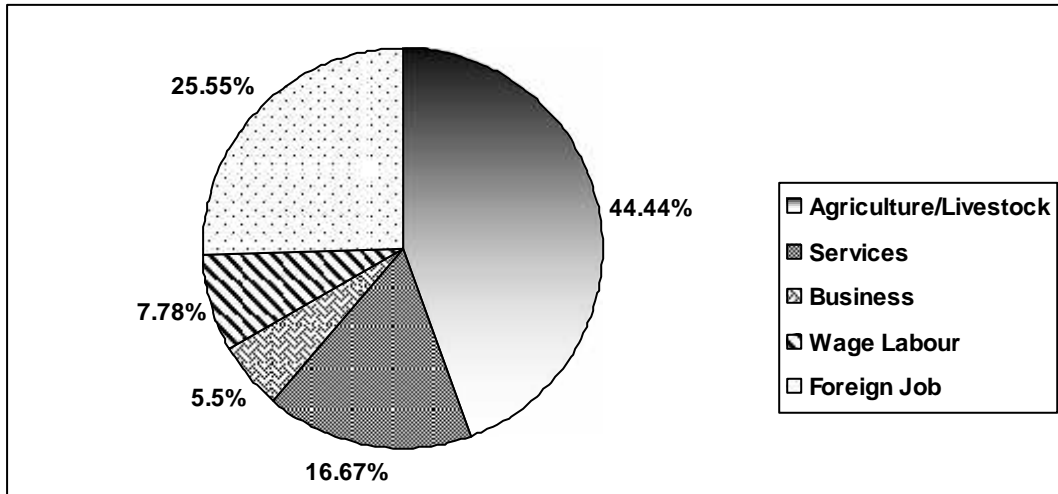
Agricultural is main occupation in Nepal. This trend can be seen in the study area also. Livestock is an additional occupation of this area. The main source of income is agriculture and livestock. Moreover some households are engaging in non agricultural occupation such as services business, wage labour and students. Table 4.9 below presents the occupational composition of Madhu CFUG.

Table 4.9: Occupational Composition in Madhu CFUG

Occupation	No. of household	Percentage
Agriculture /Livestock	40	44.44
Services	15	16.67
Business	5	5.55
Wage labor	7	7.78
Foreign job	23	25.55
Total	90	100

Source: Field Survey, 2008.

The above table shows that 44.44 percent of total sampled households are excluding agriculture and livestock and other households are engaging in other professions like services, business, wage labour and Foreign job.

Fig.4.3: Distribution of Occupations of the CFUG

4.5. 2 Educational Status

Educational status also represents the economic status partially because it is human resource. In this study educational status has been classified into five groups. They are

- i. Illiterate
- ii. Literate
- iii. Primary
- iv. Secondary
- v. Higher

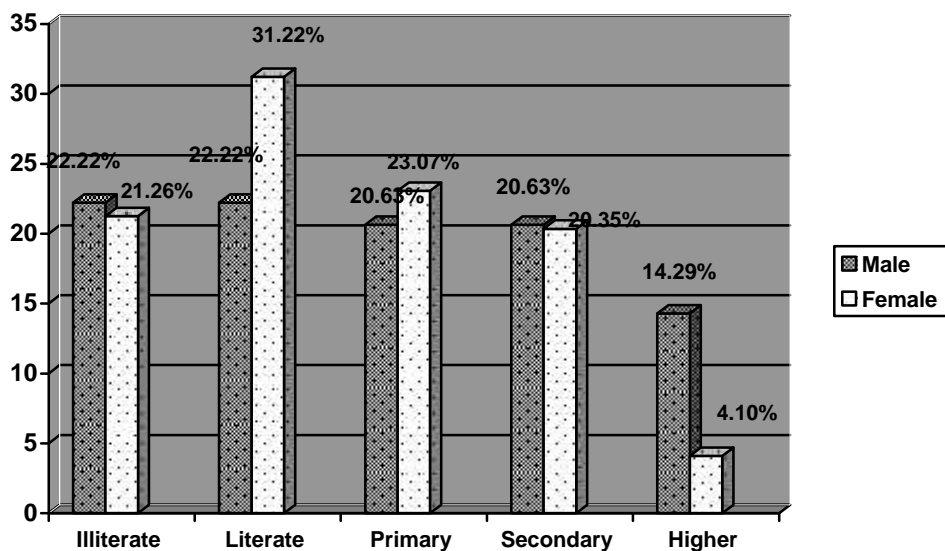
Illiterate are those who cannot read write. Literate are those who can read and write. Primary education means 5 classes passed. Secondary means SLC passed and higher education means intermediate and above passed.

Table 4.10: Educational Status

Level	No.of male	Percent	No.of female	percent	Total	Total percent
Illiterate	42	22.22	47	21.26	89	21.71
literate	42	22.22	69	31.22	111	27.07
Primary	39	20.63	51	23.07	90	21.95
Secondary	39	20.63	45	20.35	84	20.49
Higher	27	14.29	9	4.10	36	8.78
Total	189	100	221	100	410	100

Source: Field Survey, 2008.

The above table shows that out of 410 people there are 21.71 percent are illiterate, 27.07 percent can read and write, 21.95 percent of the people has primary education, 20.49 percent secondary and 8.78 percent had obtained higher education. It can be seen in figure 4.4.

Figure 4.4: Education Status

4.5.3 Frequency of Land Holding

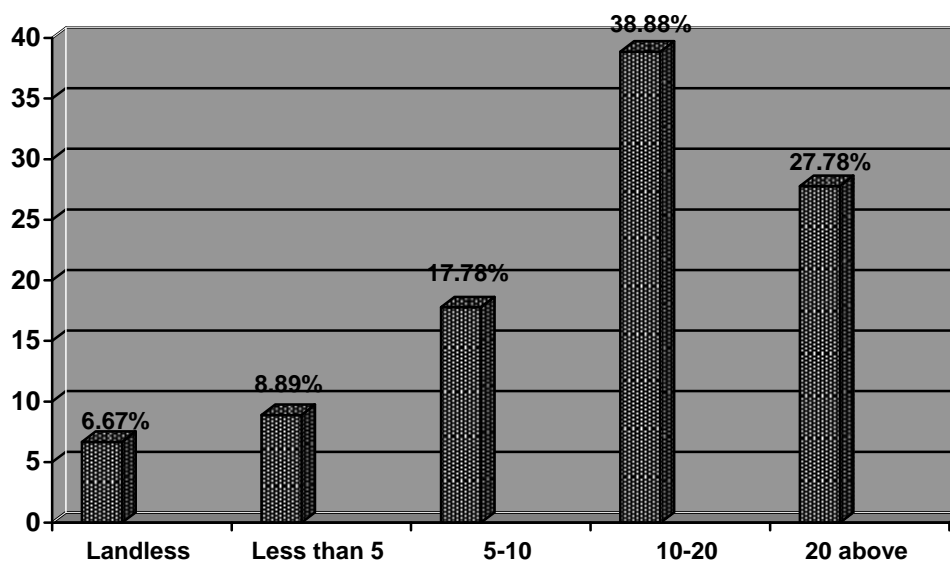
Land holding is one of the most important determinants of the income and food sufficiency. More than 93 percent households have land but not sufficient. Some of people plough other's land as tenants and some people have to spend their income or purchasing rice. Table 4.11 show average land holding pattern of sampled household.

Table 4.11: Frequency of Land Holding Pattern in Madhu CFUG

Land Size in Ropani	No. HHs	Percentage
Landless	6	6.67
Less than 5	8	8.89
5-10	16	17.78
10-20	35	38.88
20 above	25	27.78
Total	90	100

Source: Field Survey, 2008.

From the above table 6 households have not their own land and 35 households have 10-20 Ropani land. 25 households have 20 above ropani. It shows the economic status is not so poor of the people living there. It can be seen in figure.

Figure 4.5: Frequency of Land Holding

4.5.4 Distribution of Livestock Holding in the Sampled Households

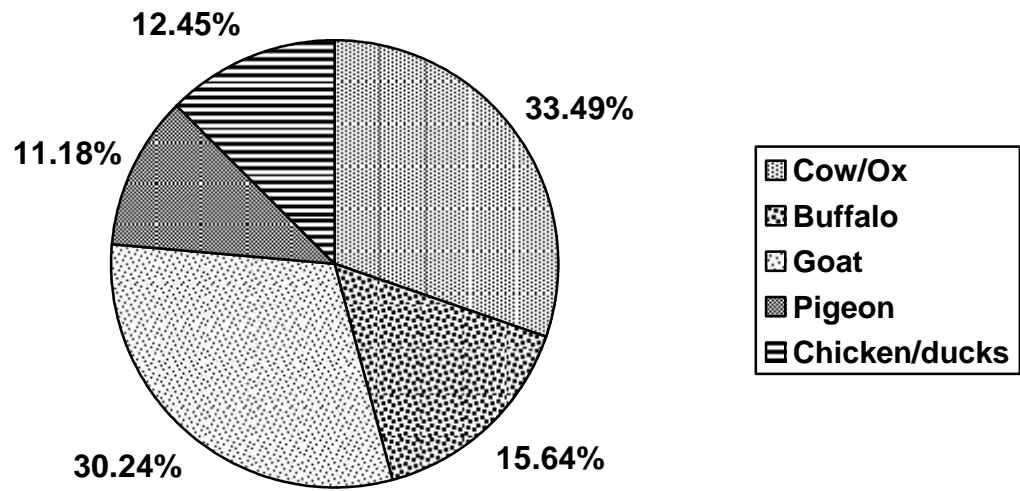
Livestock is one of the important occupations of Nepalese people for getting milk, meat, manure, ghee, eggs and ploughing etc. Livestock is considered as a liquid asset as it can easily be converted into cash by selling them when there is money crisis in the house.

Table 4.12: Distribution of Livestock Holding in Madhu CFUG

Types of animals	Average no. per HH	Percentage
Cow/ox	2.38	30.24
Buffalos(he/she)	1.23	15.64
Goat (he/she)	2.40	30.49
Pigeon	0.88	11.18
Chicken/ducks	0.98	12.45
Total	7.87	100.00

Source: Field Survey, 2008.

Cow/ox and goat have occupied the highest percentage of livestock i.e. 30.24 and 30.49 respectively. It can be seen in figure.

Figure 4.6: Distributions of Livestock Holding in Madhu CFUG

CHAPTER - FIVE

BENEFITS (DIRECT AND INDIRECT) DERIVED BY THE USERS GROUP FROM MADHU COMMUNITY FORESTRY

Identification of benefits is strongly linked with effects of community forestry on the economic and financial, environmental and social aspects of communities.

Identifying the benefits of community forestry may present no major conceptual difficulties, but can be very difficult to carry out in practice due to the multipurpose nature of CF. Benefits are more difficult to compute as they usually occur in the long future for example, the benefits of afforestation in terms of reduced soil erosion may not show up for many years or even decades. Furthermore, an analysis of overall benefits of community forestry needs to consider and manage many apparently in the Madhu case study.

According to the nature, stage and level of involvement and location in the forest management and location in the forest management system the benefits of community forest are identified below.

5.1 Direct Benefit and Their Values

Availability of forest products such as fuel wood, timber and leaf litter, fodder grasses, bedding material, medicinal herbs and plants are taken as direct benefits. The valuation of timber, grasses leaf litter is carried out according to the prices fixed by the FUG.

The direct benefits obtained from community forestry are:

5.1.1 Sustainable Collection

The people in the villagers of Darimchour and Bhagbatikhola get sustainable firewood and fodder for their daily need. It was possible only after the introduction of community forestry programme. In the early phase, the degraded forest couldn't provided sustainable supply. Afforestation by community forestry programme become very feasible for livestock rearing.

5.1.2 Availability of Forest Products

The community forestry of Darimachour and Bhagbatikhola has highly contributed to increase the forest products such as grass, leaf litter, firewood, fodder, medicinal herbs and poles. The user group has accumulated the significant amount in its community fund from its indigenous forest management and this fund is used for the community welfare.

5.1.3 Road Construction

Khalanga village development is far away from the district headquarter one ungravelled road passing thorough the Madhu community forest to maintenance improve and construction the road to Madhu community. Forestry user group have used the group fund. The user group of this village are highly benefited from transpiration.

5.1.4 School Support

There is one primary school named Shree Bhagnbati Primary Viddylaya established in 2053 B.S., one higher secondary school named Sheer Shivajan Higher secondary School and one campus in the center part of Khalanga VDC. The Madhu CFUGs have been providing timber for the construction of school building and making furniture at free of cost. If CF is getting some price. After, CF is the main source of timber for school and campus construction and maintenance.

5.2 Indirect Benefits and Their Values

The indirect values of CF refer to social and environmental goods and services that the CF provides forest degradation and destruction might imply the loss of many of these environmental benefits although the extent of loss would depend on the subsequent land use environmental benefits might include a decrease in soil erosion; reduce down stream flooding, increase in forest cover increase in soil fertility, improvement in water sources, increase in numbers and diversity of birds and wild life and increase in biodiversity.

Employment generation, the establishment of an organized FUG and social integration might be some of the social benefit. Mostly, the indirect benefits are as follows:

5.2.1 Environmental Benefits

Community forestry prevented soil erosion and land slide. It provides catchments protection. The villagers have constant source of water for irrigation which was not available prior the implementation of community forestry programme. The forest is being dense and dense every year and people have got provision of fresh oxygen. Thus the forest has played important role in the balance of ecosystem.

5.2.2 Unification of People

Mechanism of encouraging and farming user's group committee, thus building up social capacity for rural development. After the establishment and unification of the community forestry, people are united to tackle every type of social problems through mutual co-operation.

5.2.3 Impact on Households Time Saved

If there is no community forestry households had to spent more time for collecting firewood and fodder. Thus, there is saving of time in such activities because of the community forest. So, that, another main source of income of sampled households is utilization of time saved to another productive activities. After implementation of CF almost all the members or FUG save their time for collecting forest products like firewood, fodder, green grass and leaf litter etc. more than two hours a day. They use this saving time in poultry farming rather than remaining idle, which has been the best sources of income of households in the study area.

As shown about above in chapter four table 4.14 the sampled households have 12.45percent chickens and ducks in average. This number according to key information was 10 before the implementation of community

forestry. This information proves that the sample households are have saved the time and this time is implemented in different income generating sector.

Table 5.1 Saved by CF. (per day)

Total time Saved (daily)	HHs	Percent
0.5hour	41	45.56
1 hour	30	33.33
1.5 hour	10	11.11
2 hour	9	10.00
Total	90	100

Source: Field Survey, 2008.

According to the table 5.1 after inception of community forestry programme the Madhu community forestry user has saved their time 0.5 to 2 hours per day, per household. From above table it is clear that central percent household of Madhu CF get chance to save their time with the implementation of CF. 8 or 9.9percent households have saved 2 hours time per day, it is greater advantage through other households. Similarly 45.56percent households have successes to save 0.5 hour. Only 30 and 10 households have saved their time 1 and 1.5 hours per day respectively.

Figure 5.1: Time Saved by C.F.

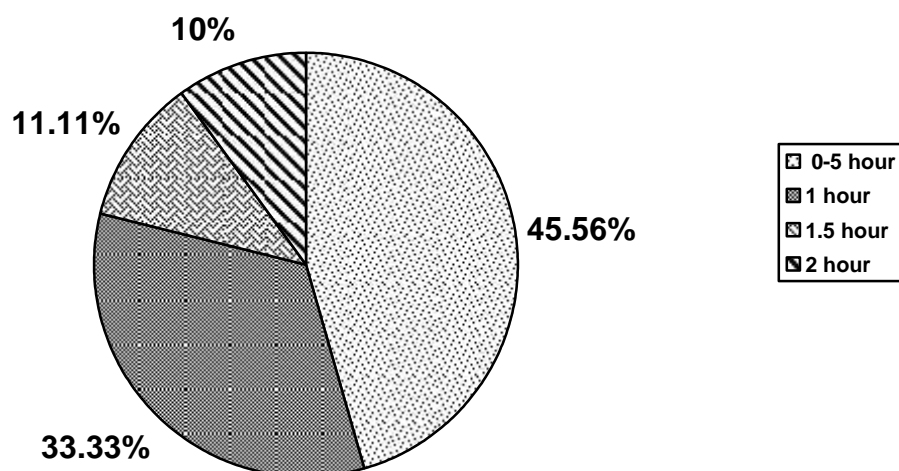


Table 5.2: Saved Time During a Month and its Utilization by Activities

HHS	Percent of HHS	Saved time	Poultry farming	Goat/sheep farming	Vegetable farming	Others
41	45.56	15 hour	15 hour	-	-	-
30	33.33	30 hour	-	30 hour	-	-
10	11.11	45 hour	-	-	45 hour	-
9	10.00	60 hour	-	-	-	60 hour
90	100	150 hour	15 hour	30 hour	45 hour	60 hour

Source: Field Survey, 2008.

*other include =agriculture sector, childcare, home cleanliness etc.

According to the above table 15 hours time have been saved 41 household. Among 41 households one household has saved same unit of time i.e. 15 hours per month. The 41 households have utilized that time in poultry farming, 30 households have saved their time. 30 hours per month and they have utilized the time in goats/sheep farming, similarly 10 household have been able to save their time 45 hours per month and they have utilize that time in vegetable farming. At last 8 households have saved 60 hours in a month and they use their time in agricultural sector, home cleanliness and others.

Figure 5.2 Saved Time Utilized Sector

where,

P/F = Poultry Farming

G/S = Goat/ Sheep

Veg = vegetable

oth = others

5.3 Other Benefits Derived from the Madhu Community Forestry

5.3.1 Reduction of Women's Work Load

In the Nepalese context, women's daily lives are directly attached with food. Thus women are main members of the family who take care and decide the household works. They are busy whole day and their work load is generally much higher than man for the purpose of collection of water grass and foliages for that they have to walk longer distance. Therefore, respondent are asked to evaluate whether women are benefited from CF in term of reducing of work land has been decreased after the implementation of CF. According to the respondents and women group discussion indicates that before the implementation of CF sufficient forest. Products are not available in the nearby Forest due to its deforestation therefore they has to spent 1-2 hours to collect one head load of forest products.

Furthermore, The women group discussion revealed that due to the restriction on grazing in the CF. Stall-Feeding system has been widely used and has to spend considerably less time any for whole day to graze their cattle and have time to go to other works i.e. mother health literacy seed and livestock, sanitation, saving and credit in the village. In addition, the group can take extra benefit from the dung saved from the stall – feeding as it has been sited in the forest during grazing period of livestock.

5.4 Source of Resources

People are mainly dependent on agriculture directly or indirectly because of predominance of agrarian base economy in our country and so is in

the study area. There are 44.44 percent of people are engaged on agricultural agriculture. It is very necessary to uplift the condition of agriculture, use of modern technology and fertilizers to raise the level of income. The CF has helped to provide the source of watershed to irrigate land and to yield more production in the village.

5.4.1. Source of Energy

The villagers of the study area are dependent upon fire wood as main source of energy. Out of 90 sampled 85 household have the fire wood as main source. There is some practice of using alternative source of energy like, Biogas, Gobar gas and Electricity.

a) Source of Firewood

Table 5.3 Source of Firewood

Sources of Firewood	Firewood (in Bhari)*	Percentage percent
Community Forestry	1050	47.72
Private Forestry	1000	45.45
Others Source	150	6.81
Total	2200	100.00

Source : Field Survey, 2008

*1 Bhari = 25-30 kg

It can be seen from the table that the annual consumption of firewood sampled household is about 2200 Bharis. Each household is getting 1050 Bharis of firewood only from the community forest. In other words the contribution of the community forestry to fulfill the total demand of firewood is more than 47.72 percent and other demand was fulfilled from the private forest more than 45.45 percent and other source like agricultural residues 6.8 percent.

b. Source of Fodder for Livestock:

Forest are the main source of fodder for livestock fodder trees are Important for hill communities as they provide quality feed for livestock. The CF can not alone meet the demand of fodder for livestock. Private Forest (PF) agricultural residues (Ag) and straw (Paral) are other sources of fodder to feed livestock a given in table 5.4.

Table 5.4: Source of Green Grass and Fodder

Source	Average utilized Green Grass (in Bhari)	Per bhari priced/ Total market price	Average utilized fodder and straw (in Bhari)	Per bhari price/ Total market price
CF	120	Rs5/600	110	Rs 5/550
P.F	317	Rs 10/3170	270	10/2700
A.G.	90	Rs 5/450	42	5/210
Total	527	Rs 4220	422	3460

Source: Field Survey, 2008

The sample household rely on community forestry and agricultural residues. The above table shows that 120 Bhari of Green grass has been obtained from CF and the rest of the demand is fulfilled by P.F (317 Bhari) and agricultural residues (90 Bhari) Similarly out of the total demand of fodder straw CF has fulfilled 110 Bhari and the rest 270 Bhari by P.F. and 42 by agricultural residences. These data shows that CF also has great impact to the people of the area in fulfilling the demand of fodder and grass for livestock.

5.4.2 Demand and Supply of Madhu Community Forestry User Group (MCFUG)

The community forestry does not have sufficient capacity of supply the required forest product for the FUG members; its contribution is found to be

satisfactory after the implementation of the CF program. The major of demands in the FUG are fuel wood, grass, leaf litter timber and forest vegetation. It presents based on household survey the CF supplied 45.45 percent firewood 22.27 percent green grass and 21.15 fodders.

5.5 Income Source of the Community Forestry of Madhu User Group

The CFUG has been generating income from various activities, such as selling of forest product, penalties entry fees or membership fee and Functional levy. In this CFUG, the interest obtained forms the loan to the poor people. They have not collected the money from the donation from outside. The main sources of income for CFUG are as follows:

5.5.1 Fuel Wood

In this village, out of 135 households, every pause 15 to Magh 15, forest area is opened for cutting fuel wood. They can participate after paying some fee as a levy. Each household can collect an average 15 bhari fuel wood per year. They have to pay the money per bhari Rs. 2 in they have been collected all the money in the found. If more than 15 Bhari fuelwood, which pay the money per Bhari Rs 15.

5.5.2 Green Ground Grass

The CFUG area is opened for collecting grass from Ashoj - Manshir during this time some needy users to collect 2 Bhari grass per day for their livestock. The household can carryout the grass during opening time within few charge.

5.5.3 Timber

Timber products are generally divided into two groups construction timber and smaller products used for making agricultural tools and equipments. The village people require construction timber when there is a loss of house by fire, landslides. Similarly timbers are required to build new house when the family size become large or family members get separated from each other. However, it is noted that timber form community forest is used only when the

private resource is insufficient. Likewise, timbers are essential for making agricultural implements (e.g. ploughs, tool's handle). If the users of this CF ask wood for making their houses, they to pay some amount to the CFUG, according to CFUGs rule.

5.5.4 Fines and Penalties

In the case study it is found that users who break the rule of group and does not come to the work of forest development and management must be fined.

Grazing animal is not allowed in restricted CF area. If anybody grazes animals inside the forest, he is fined. Similarly, cutting trees without permission of FUG is supposed to be illegal in the CF. If anybody goes to forest with any cutting weapon will be fined Rs. 100 at a time.

And another side, the person who does not attend the work of forest development and management also will be fined Rs 10 for one day's fine.

Similarly, Grants, Prizes, Interest, Entry fee etc also are the source of income on the CFUG. Nearly, 15500 Rupees kept in their fund. They mobilize this amount of money to the needy villagers at 2 percent interest rate.

In this way, income source of CFUG Darimchour and Bhagabati upto 2007. FY2008 can be summarized with the help of table as below:

Table 5.5: Income Source of Madhu CFUG

S.N.	Particular	Income in FY Rs 2007/08	Percentage
1	Entry Fee	600	3.87
2	Fine and penalties	200	1.29
3	Timber	7000	45.16
4	Fuel Wood	6000	38.70
5	Green Grass (Fodder)	1500	9.67
6	Interest	200	1.29

	Grand Total	15500	100.00
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Source: Field Survey, 2008

The table shows that the main source of income of the CFUGs is timber and fuelwoods which are contributed the 45.16 and 38.70 percent respectively.

5.6 Major Area of Expenditure

The areas of expenses are divided into four namely natural capital development, human capital development, physical and social capital development and administration. Natural capital development includes forest management cost. Human capital development includes training and skill development cost physical and social capital development includes community infrastructure development cost as well as other investment on income generation activities and support to disaster. Forth category administration cost includes administrative expenses. Forest management includes wage and seedling cost related to forest management activities (nursery, tree planting, harvesting cost, etc), remuneration to watch man and other expenses for material purchases related to the forest management administration expenses stationary and office supplies and audit cost. The physical capital and social activities include the community infrastructure development such as funding to sanitation, drinking water construction of community Chautari and other expresses related to community welfare.

Table 5.6: Amount Invested in Different Asset in FUG(9 Years)

Major Area of Expenditure	Amount In NRs	Total Amount In NRs	percent of Investment income	Rank
1. Natural capital Forest management				
a. Nursery	1200			
b. Tree planting	1500	2700	17.42	I
2. Human Capital (Training and skill)	1000	1000	6.45	II
3. Physical Social capital social support				
a. Construction of Chautari	500			
b. Village Road	1500	2000	12.90	III
4. Administration Cost				
a. Renew membership fee	450			
b. Purchase of Register	125			
c. Purchase of Stationary	175	750	4.84	IV
Total investment		6450		
Total Income		15500		
percent of Investment of Total income		41.61		

Source: Annual Report of FUG, 2007

The above table shows that the 41.61 percent of income is utilized in the FUG. The largest share of investment is made for forest management/Natural capital then other expense.

CHAPTER- SIX

SOCIAL PARTICIPATION OF WOMEN IN MADHU COMMUNITY FORESTRY

6.1 Women Participation in FUG Committee

Women are about 11 members in the committee. The researcher was able to approach with Vice- Chairperson, Secretary, Committee- Members, and Treasurer of the community forest. This year, they have elected 4 female members in the committee that comprise 36 percent of the total communities' members. Although there is women participation in the committee, the key positions like secretary, chairperson, treasurer is hold by male. This is because there positions require educated people perform the activities.

Total Members are represented I executive committee of the MCFUG is a follow:

Table 6.1: Comparison of Working Committee, 2008

Designation	Name	Sex	Caste
President	Deb Bahadur Pandey	Male	Chhetri
Vice President	Ram Shrestha	Male	Shrestha
Secretary	Anada Kumar Thapa	Male	Chhetri
Treasure	Dhurb Bhudhathoki	Male	Chhetri
Member	Parbati khatri	Female	Chhetri
Member	Shovakar Thapa	Male	Chhetri
Member	Surya Kumari Thapa	Female	Chhetri
Member	Devi Dangi	Female	Chhetri
Member	Dhadar Damie	Male	Dalit
Member	Sita Pandey	Female	Chhetri
Member	Gopal Thapa	Male	Chhetri

Attendance of EC member in monthly meeting is assessed based on the minute books of concerned FUG.

6.2 Participation in the Meetings

From the household surveyed, it is found that 20 percent of the total respondents do not know how many times and when assembly meeting and committee meeting held in a year. This is because the respondents do not attend the meetings themselves but someone husband or father from that household participate in the meeting.

About 72 percent of the respondents said they do always attend the meeting and general assembly. The respondents also said that fine would be levied if they do not attend the meetings. Similarly, 21 percent of they do not attend meetings sometimes where as one each respondent from poor, medium and rich category (10 percent) said they do not attend the meetings at all it is because either they do not get the information or they do not have time to attend the meetings.

From the table below, we see that the participation of male and female users is increasing gradually in the committee and assembly meetings.

Table 6.2: Trend of Participation of Community Forest Users in Meeting and Assembly

Fiscal year	With respect to FUG meeting				With respect to FUG Assembly			
	No. of meeting held	Participation			No of Assembly held	Participation		
		Female	Male	Total		Female	Male	Total
2056/57	9	5	54	59	2	2	83	85
2057/58	9	5	48	53	1	2	47	49
2058/59	9	6	52	59	2	7	44	51
2059/60	12	8	112	120	1	5	40	90
2060/61	14	14	101	115	1	13	34	47
2061/62	14	16	101	117	3	15	185	200
2062/63	15	25	109	134	3	35	121	156
2063/64	17	66	110	176	2	81	156	237

Source: Madhu FUG.

From the above table, it can be seen that the number of FUG meeting has suddenly increased in fiscal year 2059/60. The female participation has increased from the fiscal year 2063/64.

All the respondents replied that the date, venue and time is fixed by the secretary with the decision made in earlier meeting and the permission of the chairperson. All the respondents said that the day and time of the meetings are fixed with due consideration of the FUG members convenience. From this we can say that meetings are held in democratic way.

6.3 Participation woman in Decision Making

They also admitted that decisions are made according to the consensus of the majority. The respondents also said that women do participate and speak in the discussions. The researcher attended one of the general Assembly and Found that women do not speak much in the meeting. The observation in the meeting gave impression to the researcher that the committee members and elite leaders took most of the time in discussion and passed their proposal for decision making. The major causes of exclusion of poor and women in decision making are illiteracy, poverty and less empowerment.

6.4 Participation in Community Forest Development Activities

All respondents strongly agree to the statement that women are to be encouraged to participate in the meetings and community forest the FUG members are positive towards the women participation and their leadership. They suggested that literacy class, training awareness and income generating activities should be incorporated to encourage women's participation in the meeting and community forest management activities.

When asked to the respondents to suggest improving women's/poor participation in the community forest management programme, they suggested following ideas:

- i. By encouraging and motivating the women and poor in the community forest management activities.

ii. By proposing programme in favor of poor and women.

By providing some benefits like free school education for the children.

iii. By promoting income generating activities.

iv. By providing loan facilities.

v. By supporting to women by males.

vi. By giving warnings and taking fines when they are absent in the meetings and CF management activities.

Most of the respondents said that literacy programmed, training and IGA activities are the most important to encourage women and poor to participate in the community forestry activities.

6.5 Socio-behavioral Changes

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

6.5.1 Positive Effects

i. Increased expression capacity in users (especially in women)

ii. Knowledge about "Greenery is better for health"

iii. Positive attitude on CF management and feeling of "CF is ours"

iv. People are more interested in CF than earlier period.

6.5.2 Negative effects

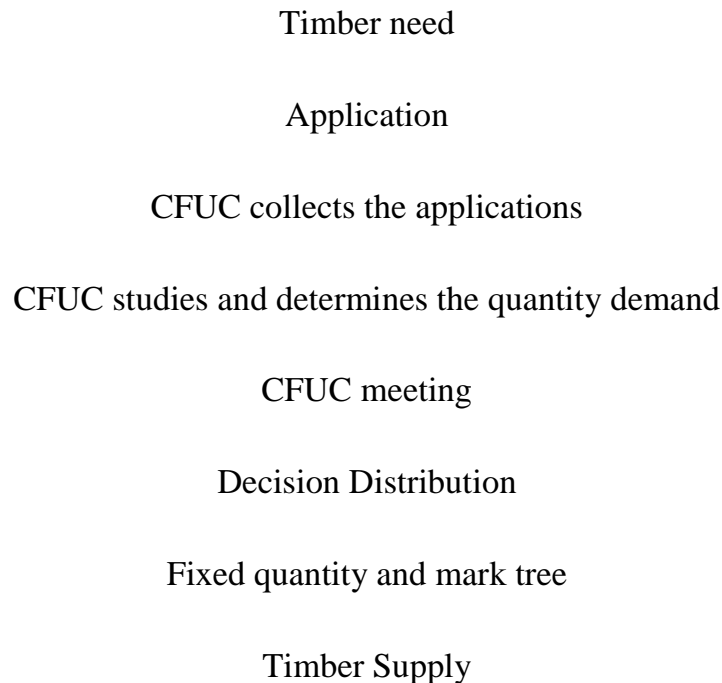
Fourteen percent of the total users have expressed negative effect of forest development in their social life i.e. robbery due to dense forest. Wildlife has been increased so the users feel afraid to go alone in the forest.

6.6 Distribution Procedure of Timber

Forest user committee provides timber to the people suffered from natural disasters and calamities without cost. For this FUC calls the application with

essentials fee. The timber has not been provided freely in any cases. The process of timber distribution is given in the flowchart 6.1.

Flow Chart 6.1: Distribution Procedure of Timber



The distribution steps are described bellow in brief:

1. Submission of Application

The first and fore most stop is to submit application to the forest users committee from the timber needed users. It is compulsory for every members of users.

2 Decision has been Made either by Consensus or by Majority

Generally decision is made by priority process; the women seldom participate in the assembly. Women play little role in decision making. The flow the decision made by male members. The problem of lower occupation caste is not considered in decision process. Executive body has been gore a head for making decision.

3 Availability

The timber must be distribution for selected users according to their urgent needs Decision making is done on the basic of the timber availability.

4 . Purji (approval slip) Distribution

After fixing the quantity of distribution the committee provides a purji with charge to the people to enter in the forest for felling trees. The committees marks the trees supposed to be fallen before the actual felling of trees.

In the process of management system, women also have started some progress but the involvement of women in decision making, evaluation process is relatively lower than men.

6.7 Prospect of Community Forestry

Community forestry has provided many daily needs of the users group. It has encouraged the people to conserve manage and utilize the forest resource in a sustainable way.

Community forestry is popularity the people of other villages where community forest program is not started are anxious to initiate community plantation program. The people are aware of the benefits derived by the user groups.

Community forestry can be taken as mode forestry programme as its motto for the people, by the people and is more realistic and applicable in the mid- hills of Nepal. Moreover, the NGOs, INGos and Government sectors must devote further to expand community forestry in every village in the hills of Nepal.

CHAPTER - SEVEN

SUMMARY, MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Summary

The study summarized with the objectives of identifying to analyze the effect of community forest on the Socio-economic livelihood of forest users of Madhu FUG in the Khalanga VDC, Salyan district. The primary data were collected based mainly through household survey and also based on rapid rural appraisal such as informal group discussion, field observation and pictorial comparison stratified random sampling for data collection was applied. Descriptive statistics are used for analysis. The improvement in the forest condition, increase in bio-diversity of the community forest, fulfillment of basic needs of forest section of the community forests products like fuel wood, fodder, leaf litter and timber, increase In crop production, easy access to irrigation are major contribution of the community forest users. Facilities of drinking water construction of local infrastructure like stone water tap, trial road, school building are major contributions of CF in terms of physical capital of the community forest users. The community forest has also contributed in human capital of the rural livelihood by providing skills training on forest management increasing participation in management activities and in institutional activities of community forest.

7.2 Major Findings

The major findings obtained from this study area as follows:

1. In the study area the main source of income of CF is timber and fuelwood which is contributed 45.16 percent and 38.70 percent respectively.

2. The poor users are getting direct benefits of community forest such as; Timber, Firewood, Fodder, Leaf litter, Grass, Agricultural tools etc in reasonable price.
3. Scholarship fund is raised to support in the school education of children of poorest people, genius and intelligent students.
4. 20 percent of the total income achieved through forest product sale distribution is spent on income generating activities.
5. In the study area the main occupation is agriculture, so 44.44 percent are engaged in agriculture in addition to agriculture people are adopting different occupation to raise their living standards.
6. Males play the vital role in user's committee. Due to the lack of education women to be involved in the user's committee. But in seminars and trainings women are gradually participating. This year, they have elected 4 female members in the committee that comprise 36 percent of the total community's members.

7.3 Conclusion

The forest was converted into shrubland at the time of hand over as Madhu community forest. After 10 years, the forest has returned to its original condition. It is possible because the users of Madhu are very concerned in the growth of the forest, the back supporting and suggestions from DFO staff and other line agencies through training, awareness activities and workshops conducted to the Madhu FUG members. The disappeared plants species is regenerated. There is increase in bio-diversity, the wild animals and birds can be seen in the forest. The main source of income of the CFUGs is timber and fuel woods which are contributed the 45.16 percent and 38.70 percent respectively. It is found that there is positive impact of community forest on user group. Such impacts are revealed from income generation, construction works, and awareness of people on the need for conservation of natural

resources. The study has been also designed to review the policy statements and sub-sequent actions by the user group for sustainable forest development.

Community forest fulfills the wants of forest products like firewood, fodder green grass leaf litter, timber act required for day to day lives for villages in this forest user group, forest products are distributed proportionately on the basis of household's size. In general its users perceive that they are getting. Regarding the livestock, the study has found that community is interested to keep cows followed by goats. However, there is not considerable increase in number of livestock after these ten years. Grazing problem, caste of hay and lack of caretaker for livestock are the causes of limited number of livestock. Agriculture and government service are major source of income of the community forest users. The community forest users are attracted to tomato plantation as wash crops after the community forest development. The community forest users have not generated income from the forest products or from the forest related products yet. The community forest users have been steadily raising their fund.

The major source of fund is selling forest products to its own members, district forest office grants for forest development and management activities (such as nursery and plantation), bank interest and membership fees. The community forest users have mobilized. Their fund in different infrastructure development and social welfare activities. However, they have not implemented any activity that would benefit directly to the FUG users, women and poor group e.g. literacy class, credit facilities.

This study has also found that there is good participation of the community users in various community forest management, general assembly and local infrastructure development activities. Most of the community members have visited other community forest in different places and had opportunities to learn much more on community forest management. The achievement of the preceded goal, good coordination among committee

members and community users, maintaining transparency and good communication within committee members are some of the indicators of good leadership. However, it is found lack of active participation of women and disadvantaged group in the institutional activities.

In conclusion, we can say that this Madhu FUG has tried its best to conserve the forest but not manage and utilize the resources so far.

7.4 Recommendation

Base on the observations and findings on the study there are some points identified for further improvement of the CF development work of the sample CFUG. Thus the study recommends to the CFUG which are as follows:

1. Timber, Firewood, Grass, Fodder, Leaf litter and Agriculture tools are the direct benefits CF required by the common people. Therefore, CFUG should give the top priority to poor users in the distribution of these direct benefits.
2. Income received from CF should be invested on those activities which could make benefited to poor users utilizes fruit of CF and inspire to participate in forest protection, protection and development.
3. Government and non-government organizations should be encouraged to work on community forestry based programme.
4. Madhu FUG should keep on focusing fund mobilization activities that generate direct benefits to the poor.
5. The technical supports from DFO are must for the active forest management. On site trainings for the forest management, NTFPS collection and cultivation, rural forest enterprises establishment, frequent field visit for the awareness of the new policies to the community people area the main subjects that the DFO should improve for active forest management by the rural community.

6. Training programme on the operational plan preparation, forest rules and regulations and awareness building should be conducted for all CFUGs. For successful community forest programme leadership training should be given to the leaders.
7. FUG should encourage women and poor people in decision making process.
8. Improved cooking store, kerosene stove, Gobar gas government can be carried out to reduce firewood consumption and improve health, DFO can coordinate with concerned agencies.
9. Need to awareness building about biodiversity and encourage the community to develop tourism.
10. The role of CFUG in improving the welfare of rural communities needs to be known and supported for achieving the success in this direction. All users should be involved in the CF management process. In Madhu CFUG, users should be sensitized through awareness raising programme related to CF for the involvement of users form different background.
11. Participatory monitoring and evaluation system should be developed to asses their own work by the FUGs themselves.
12. The Madhu FUG has been successful in conservation of the forest , but now time has come to move further from conservation to promotion and utilization of the forest.

APPENDIX – 1**Community Forestry Programme****Questionnaire****Household: July 2008**

1. Name of the Respondent:

Age: Sex:

Ethnic Group : Language:.....

Respondent Education Status: Occupation:.....

Religion: Wealth Rank:.....

Family Description.

S.N	Name	Female	Male	Educational Status		Occupation				
				1	2		3	4	5	6
				Male			Female			
1										
2										
3										
4										
5										
6										

Educational Status

- i. Illiterate
- ii. Literate (either formal or non- formal education)

- iii. Primary
- iv. Secondary
- v. Higher Secondary

2. Description of Land:

2.1 Land Holding size Ropani/ Ha/ Bigha/ Kattha

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

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

Specifies	Khet		Pakho	
	Before CF	After CF	Before CF	After CF
Paddy				
Wheat				
Maize				
Millet				
Others				

2.3 What is your perception about agricultural production?

- (i) Increased
- (ii) Decreased

Why?

.....

2.4 Which crop do you like most and why?

.....

2.5 How do you relate the agricultural products with CF development?

.....
.....

2.6 Do your agricultural yield fulfill your needs?

- (i) Yes (ii) Little (iii) No

3. Livestock

3.1 What types of animals do you have?

Animals	Total Number	Improved Breed	Ordinary Breed	Utility
He Buffaloes
She Buffaloes
Cows.....
Oxen
Goats
Sheep
Others

3.2 How do you feed these animals?

- (i) Stall Feeding (ii) Stall Feeding combined with grazing on
Community Forest or Private Forest
- (iii) Grazing on CF (iv) Grazing on Private Land

3.3 Where do you collect the fodder?

- (i) Community Forest (ii) Private Land

3.4 Do you get enough fodder to feed for your livestock?

- (i) Yes (ii) No

3.5 How the CF has helped you to increase/ decrease number of Livestock?

.....
.....

3.6 Has livestock helped improve your economic condition? How?

.....
.....

3.7 Any problems for livestock grazing ?

.....

IV. Sources

4.1 How much do you collect the forest products? And from where?

Products	Quantity/day (in Bhari)				
	Daily Requirement	Own Land	Govt. Forest	Community Forest	Buying from Others
i) Fuel wood					
ii) Fodder					
iii) Timber					
iv) NTFP					
v) Leaf Litter					
vi) Others					

4.2 How do these CF products help you in the economic condition?

.....

.....

.....

4.2 How did you manage your requirements of forest products before CF ?
Was it sufficient?

.....

.....

4.3 Is firewood the main source of energy?

- (I) Yes (ii) No

If, No what is the other sources of energy?

- (i) Kerosene (ii) LPG Gas (iii) Gobar Gas (iv) Others

4.5 Who is generally involved in CF production collection?

- (I) Women (ii) Men (iii) Children (iv) Both men and women

4.6 What is the CF product distribution system?

- (i) Equal Basis (ii) Equity Basis (iii) Do not know

- (iv) As per requirement
- (v) For social custom
- (vi) Auction

(Tick appropriate)

4.7 How many Bharies of firewood you need a week?

.....

4.8 Where do you get timber?

- (i) Community forest
- (ii) Private forest
- (iii) Market

4.9 Is there any development programme support by CF?

- (i) Yes
- (ii) No
- (iii) No idea

If yes, what are they?

- (i) Construction of road
- (ii) Trial improvement
- (iii) Construction of bridge
- (iv) Construction of School

5. Participation

5.1 Are you member of FUGC?

- (i) Yes
- (ii) No

If yes, what is the position?

4.4 How many times are meetings and assemblies held during one year?

.....

4.5 How many times participate in meetings/ assemblies in a year?

6. Others

6.1 How do you participate in the CF development programme?

- (i) Providing Volunteers (ii) providing land
- (iii) Providing financial support (iv) Others

6.2 Who have done plantation works in your CF ?

- (i) By club (ii) By user's voluntary labors
- (iii) By DFO (iv) Combine

6.3 What are the potential social development work that CFUG can do ?

.....
.....

6.4 Who takes leadership for the above mentioned development activities?

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

6.5 What is the financial source for these activities?

- (i) CFUG Fund (ii) Government Grants
- (iii) Donor agencies (iv) Others

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

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

6.7 Do you have something to say on CF, please?

.....
.....

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