

**SOCIO-ECONOMIC
EFFECTS OF COMMUNITY FORESTRY IN
RURAL DEVELOPMENT**

(A Study of Kamadhenu Community Forest of
Mechchhe VDC, Kavrepalanchok District)

A Thesis

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LETTER OF RECOMMENDATION

The Thesis entitled “Socio-Economic Effects of Community Forestry in Rural Development (A Study of Kamadhenu Community Forest of Mechchhe VDC, Kavrepalanchok District)” has been prepared by Moti Bahadur Budathoki under my supervision in partial fulfillment of the requirements for the Degree of Master of Arts in Economics.

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APPROVAL LETTER

The Thesis entitled “Socio-Economic Effects of Community Forestry In Rural Development (A Study of Kamadhenu Community Forest of Mechchhe VDC, Kavrepalanchok District)” has been prepared by Moti Bahadur Budathoki has been accepted as partial fulfillment of the requirements for the Degree of Master of Arts in Economics.

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ABBREVIATIONS

CFD	:	Community Forest Development
CDAs	:	Community Development Activities
CF	:	Community Forestry
CFDP	:	Community Forest Development Project
CFP	:	Community Forestry Program
CFUG	:	Community Forest User Group
DFP	:	District Forest Office
FAO	:	Food and Agricultural Organization
FDAs	:	Forest Development Activities
GF	:	Government Forest
GO	:	Government Organization
NGO	:	Non-Governmental Organization
IGAs	:	Income Generating Activities
INGOs	:	International Non-Governmental Organization
UN	:	United Nation
FUG	:	Forest User Group
EC	:	Executive Committee
VDC	:	Village Development Committee
KCFUG	:	Kamadhenu Community Forest User Group
LFP	:	Local Forest Product
PPF	:	Panchayat Protected Forest
PF	:	Panchayat Forest
MPFS	:	Master Plan for the Forestry Sector
NTFP	:	Nepal Timber and Forest Product
NPC	:	National Planning Commission

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Community forest (CF) in Nepal is a part of the national forest in Nepal handed over to a forest user group (FUG), which is recognized by the Forest Act (1993) as a self-governed autonomous corporate body. The legislation allows FUG to develop, conserve, use and manage the forest and sell and distribute forest products independently, according to an approved forest operational plan. However, the ownership of the land on which the forest grows remains with the government. The involvement of communities through the encouragement of forest user's group has proved to be most successful and this policy continues to attract a high priority. During its twenty-five years of implementation, over 1.1 million hectares of forestland has been handed over to more than 13500 FUGs for management (Shrestha et.al., 2007). Master Plan for Forestry Sector (1988) presented a plan to meet people's basic need for fuel wood, timber, fodder and other forest products on a sustained basis and promote people's participation in forestry resources development, management and utilization (Upreti & Shrestha, 2009).

Forest is a renewable natural resource, which provides a wide range of socio-economic benefits and services. Rural people are dependent on forest for the various products to fulfill their basic needs such as firewood, small size pole, fodder, leaf litter and medicinal plant. Forest management can be defined as the 'deciding what one wishes to do with a forest, taking into account what one do with it and deciding what one should do with it' (WG-CIFM,2012).

Community forest management is about the local people who are working in the particular area of the forest with the use right involved in the consumption and the management of the local forest. The assumption of the community forest resource management is the management of the forest by the organization built with the local individuals who are the users of the particular forest area from a long time. The organization is rooted in the local values, practices, way of life and economic activities and long-standing traditional practices (Singh, 2002).

Community forest management policy was introduced in Nepal in 1978 as community forestry in response to the failure of the management from the center government based forest management policy (Private Forest Nationalization Act, 1957). This policy made the people authorized of them management of the forest near of their community under the community level organization (That time's village level political unit, Panchayat). Later on the provision has been made to form a separate independent group of the forest users to manage the forest as the Community Forest User Group (CFUG), which is an autonomous, self-governing organization by the policy level and responsible for the preparing their own constitution and operational plan to run the programs as their own wishes (Sarin, 2004).

Community forestry in Nepal has come a long way since it was introduced. Nepal was one of the first Asian countries to introduce the community forestry program to overcome the environmental problems. It was begun as a program to regenerate degraded forest and to supply or fulfill the basic needs of people. So community forestry policy's main objective is to involve the local people in managing, using and protecting their local forest resources through organizational effort. The government policy of CF (Community Forestry) has empowered local people to make the decision about local forest resource. So that the community people will be benefited by forest in relation to fulfill their needs of timber, firewood, leaf litter and fodder. The CF approach has made a remarkable progress from highly technical forestry to participatory forestry, from protection oriented forestry policy to the sustainable utilization oriented forest policy. For this reasons, Nepal's community has been recognized internationally as one of the most progressive in the world. From beginning to now, one of the inseparable parts of Nepal's CF program is people's participation, involvement of the users in community forestry development process. Different trend has been established in different time under the board concept of people's participation. In present, the major issue of the CF is the social equality and gender balanced participation in forest user group (FUG), Participation of the people belongs to different economic class, caste/ethnic group and social identity can make difference in the overall community forestry development program. In present GOs, NGOs and other organizations working on the area of the forestry has highly

emphasized on the social issue and within it one of the prominent issue is gender balanced participation in forest management. This sensitiveness has made the different programs targeting to increase women's involvement (Lindsay, 2000).

In most of Asian countries women spend the significant portion of their time in forest related activities. Women are the active users and have the primary responsibilities to collect forest product in agriculture-based society. The collection of the firewood for cooking, leaf litter for the cattle and the compost fertilizer and fodder (daura ghas) is the major responsibilities of the women. Thus it is expected that women should take part in the community forest management actively and successfully. For that strong policy supporting to the women's involvement and favorable social environment becomes fundamental. Since the policy in the government level as well as in FUG (Forest User Group) level op (Operation Plan) and constitution seems with a little bit special address and the programs to uplift the women's position in the community forest management. But effective identification of the women associated with different interest group and roles and responsibilities in forest management by the policy level can be welcoming and a fruitful approach for the women's active involvement in the community forestry management (Khadka, 2006).

This study analyzes the socio-economic effects of Kamadhenu community forest user group. Kamadhenu community forest is located in Kavrepalanchok district Mechchhe VDC area. It brings various impacts on the life of community people.

1.2 Statement of the Problem

Community Forestry (CF) has evolved as a management process for the last two decades with gradual shift from resources focus to institutional development. The latter enables villagers to organize into groups and assume management and regulatory responsibility. There is recent emphasis on consolidation and further expansion of CF for community development. Thus concerns on equity, production factors income distribution and well-being of society become important in forestry discourse.

Forestry can be a suitable form of land-use only if land to labour ratio is higher but it can't be in practice. Some households may suffer losses due to no access or restricted

grazing under CF while others may gain from increased availability of forest products. Will there be a net loss for the society, if compensation mechanism does not exist? As the Households are heterogeneous in income levels, the marginal utility of income of the gain or loss can make poor yet poorer. Low or passive participation of poor, disadvantaged group, women and *Dalit* in CF is dominated by local elites. The contribution of CF to the poor is only subsistence level. Most of the research found that, similarly poor people participate in implementation phase of CF but they are deprived in benefit sharing.

Forestry (in its narrow sense) is often not a top priority. The direct benefits from forestry are important, but are often regarded as less so than other needs (LFP, 2010). A same successful Community Forestry Development (CFD) model is used in different types of places, so some of the CFUGs are failed to manage their CF. Alternative forest products, or alternative sources can reduce the demand for FPs from CFs (LFP, 2010). CF Nepal's of programme has proved to be a very encouraging endeavor in the development of a partnership in forestry between farmers and the government. The CF program in Nepal began with the concept of fulfillment basic forest products' needs of the local community and for conserving the forest ecosystem. CFUGs are getting increasingly involved in income generation activities (IGAs), such as, cultivation of non-timber forest products, agro-forestry, and cash crops. Although many agencies, NGOs, INGOs are involved to develop and manage the CF, not notable result is found out.

The sustainability of CF does not depend only on the formation of CFUGs and handing over the resources but also the effective mechanism of handling the resources. The absence of the mechanism for an effective monitoring and regular improvement in CF casts a serious doubt on the long term possibility of the groups as wells as the overall sustainability of CF. Therefore, this research is based on economic effect of community forestry. This study also attempts to identify the contribution made by CFUGs to economic development as well as forest development activities through Community Development Activities (CDAs) and users' willingness to utilize the fund. The study tries to answer the following questions:

- i. How does community forestry manage by the people in Mechchhe VDC of Kavrepalanchok?
- ii. What are the benefits of community forestry for local people?
- iii. What are the problems regarding the community forestry in the study area?

1.3 Objectives of the Study

The general objective of the study is to analyze the economic effect of community forest to the Kamadhenu community forestry users. Specific Objectives are as follows;

- i. To examine the community development activities undertaken by Kamadhenu Community Forest User Groups.
- ii. To analyze the benefits derived by the Kamadhenu Community Forestry User Groups.
- iii. To find out the problems regarding the community forestry in the study area.

1.4 Significance of the Study

Community forestry is the most effective programme in developing economy of Nepal. It has solved many problems of the villagers by providing fuel wood, fodder, timber, employment opportunities and community development activities. The forest resources are decreasing with quality and quantity day by day because of their unsustainable use and their clearing up for settlement and expansion of agricultural lands. These activities have adversely affected the microclimate of the area. The CFUGs are not only provided with well stocked forest but also with degraded forests. Out of the total CFUGs, 74 percent are in good condition and 18 percent are degraded. Rapid improvement in the condition of the community forests should be observed after handing over the forests to local communities (Kandel, 2011). For the last 25 years, forest has been over utilized and destroyed at large. Many government efforts have been under to the betterment of forest resources. However these have been no improvement and forest degradation is still continuing. So this study is essential to identify the economic effect of CF to the CFUG in forest management.

This study may help to other researchers who want to carry out further study on a similar study.

1.5 Limitation of the Study

This study has been concerned on socio-economic effect of community forest bring in Kamadhenu Community forest users group. Specially their level of income, employment opportunities in local area, economic efficiency for purchasing goods and services. Another side their social status of living using forestry product in their daily life. Limited numbers of respondents have been selected for the study Data used in this study has not been verified from any authority.

1.6 Organization of the Study

This study is divided into five chapters. The first chapter is introductory which includes background of the study, statement of the problem, objectives, significant, limitations and organization of the study. The second chapter deals with reviews of literature. Third chapter is concerned with methodology of the study, which included the research design, rational of the study area, nature and source of data, universe and sample, data collection techniques tools and methods of data analysis and interpretation procedure. Chapter four mainly concerned with data presentation and analysis of data which includes socio- economic condition of respondents. In the last chapter summary conclusion and recommendation are included.

CHAPTER II

LITERATURE REVIEW

In this section it analyzes theoretical and empirical reviews related to community forest and its management in Nepal.

2.1 Theoretical Concept

The community forestry program of Nepal is considered as the common property forest management system. Because its major features are the organizations of the users, definite membership criteria, social unit, collective interest of the people etc. It has applied the both formal and informal use of the common property forests by villagers in the middle hill of the Nepal. Common property forests in Nepal are forests that are not privately owned and which are locally organized as belonging to the community (Fisher, 2000).

The Forest Act of Nepal (1993) defines community forest as “that part of the national forest which the District Forest Officer hands over to the user groups for development, protection, utilization and management in accordance with the operational plan, with authorization to freely fix the prices of the forest products, and to sell and distribute the forest products for the collective benefit and welfare” (GoN, 2004).

The local management mechanism as FUG has evolved in Nepal as a strategy for the conservation as well as sustainable utilization of the forest to prevent the overuse of the forest. It further has enabled the people to obtain goods and services that improved their livelihoods without compromising long-term values of the forest. The next widely discussed underpinning assumption under which Nepal's community forestry program has been defined is the 'bottom-up' development approach. It defined community forestry program of Nepal is a paradigm shift from top down to bottom up. Nepal forestry change is a shift from the industrial forestry towards the Panchayat forest and Panchayat protect forest. The phrase was coined 'Forest for local community development' to accept the people first and the tree second in forest management. This rhetoric was developed with the assumption that traditional professional forestry paradigm (industrial) forestry is the barriers to the establishment

of genuine multidisciplinary approach, to develop the authority of the forest management to the community (Gilmour, King & Hobley, 1992). The traditional 'top-down' forestry paradigm was an ideology supporting the 'protection' of the forest where new paradigm supports the effective sustainable management of the common forest resource for the conservation as well as for the use. Therefore, the community forestry development program in Nepal has been considered as an 'innovative' bottom-up paradigm, because it puts people at the centre of the forestry and makes everything else peripheral (Dukum & Lis, 2005).

Gilmour & Fisher (1991) innovate bottom-up forestry planning paradigm. It includes by the policy, villagers are empowered to take decision about their forest resources. Proper reorganization of the organizational power and capabilities of villagers. Technical forestry to the social (community) forestry. Only protection of the forest to the conservation and sustainable utilization of the forest.

Rest of these two theories, other theories also has emerged in different time periods. Some important theories have been briefly discussed here. The trend towards devolution and the decentralization of forest resource management responsibilities was highlighted in Nepal as devolution of the forest management and the utilization right to FUG. Decentralization and the devolution of the power is the dominant theme of the contemporary forestry policy and management discussion. Because of the failure of the centralized policy to produce the desired result, an attempt to the decentralization of the forest policy was made (Chhetri & Rana, 2007).

Devolution of the power refers to the relocating the power away from the center focal point. In the context of the community forestry of the Nepal, it describes the relocation of the administrative function or power from center location to regional and local office of the forest, local political body or to the natural user (Fisher, 2000).

In Nepal, the evaluation of the forestry policy since late 70s has encouraged the community forest management (i.e. PPF, PF, and MPFS). FUG is the example of the devolution of the power from government to the user giving high priority to the small-scale utilities and use purpose of the forest rather from the economic point of view. Although macro level board policy (such as MPFS) has guided the community forestry development process, it is actually a community level FUG that is well

equipped and authorized to take all decisions of the local forest like making the constitution, OP, sharing of the benefit and etc. Although the board policy has certain guideline and policy framework to guide the forest management, the FUG makes suitable OP and constitution as according to the social structural framework of the particular community. That can bring large differences in the policy implication and practices. So, it can be fine example of the devolution of the power in the forest management of Nepal (Bird, 2000).

The devolution of the power in community forestry has emphasized upon the local people's participation in the forest management. Participation has been a catchword of the bottom-up forest development approach. The basic philosophy of the Nepal's community forestry program is people's participation (the forest should be capable to fulfill the basic needs of the people through their participation). The management policy of the forest cannot be in isolation of the people who are supposed to be benefited. Therefore participatory resource management has seen as an appropriate solution to ensure the equitable and sustainable use of the forest. To achieve this aim devolution of power or empower the local people to management their forest is the first necessary step (Neupane, 1992).

Formulation and registration of Forest User Groups, is the first step. This follows the preparation of Forest Operational Plan– a forest management agreement between the FUG and DFO. This plan is prepared by FUG with the technical support from local forestry technician. The District Forest Officer formally hands over the forest area to the FUG for management according to the operational plan. While handing over a forest as community forest, political boundaries have no effects. The FUG has the rights of collection, sale and distribution of particular forest products, which are stated in the Operational Plan. Operational Guidelines for Community Forestry identifies four main planning phases- investigation, negotiation, implementation and review. The planning decisions for the forest management are taken in the FUG General Assembly, facilitated by the technician employee of the District Forest Office. The concerned Forest User Group, under the technical assistance from the District Forest Staff, implements the Operational Forest Management Plan. The User Group must not take any action prohibited in the community forest by the law, besides as incentives for plantation, development and protection of forest. However, subsidy is being

reduced and gradually withdrawn to make the Community Forestry program sustainable (Regmi, 2008).

The FUG, by means of its regular meeting, monitors and evaluates its activities. It also evaluates whether the co-movements made by District Forest Office and other concerned development agencies are fulfilled or not. The results are used as a feedback for the amendment or improvement of the operational plan in the future. The District Forest Officer of the concerned district monitors and evaluates the activities of the forest user group. While doing so, he/she is to focus mainly on whether the activities performed by the user groups are according to the operational plan and government rules and regulations or not. According to the law, the user group may obtain necessary assistance from national and international, governmental and non-governmental agencies.

The field forestry staffs motivate the local people to engage in community forestry through extension. Field level training programs are planned and implemented extensively in district and regional training centers for field's staffs, user group members and local leaders. Study, tours and workshops are organized to discuss community forestry. Extension materials are developed and distributed in the field. User groups are given opportunities to discuss ways and means of managing community forests through networking at the district and national levels. International as well as national non government organizations are involved in community forestry directly or indirectly.

One of the millennium development goals agreed at the United Nation's millennium summit includes halving extreme poverty and hunger by 2015. Similarly, the objectives of Tenth Plan are to reduce poverty by means of empowerment, targeted programs to the level thirty percent. The forestry sector's objectives include assuring the people participation in the management of forest vegetation, herbs, along with business based on forest products with a view to enhance employment opportunities and alleviation poverty. As a sub sector program of the Tenth Plan, CF aims to promote employment and income generation opportunities to poor and disadvantaged families. It further promotes non timber forest products under community forest management; managing community forest focusing on NTFPs not only increases the

income but also generates employment for its users. CF also helps in the development of infrastructures. Nepal's position as the least developed, land locked and strategically important country has made it a prime target for the world's lending institutions and aid donor agencies. In the forestry sector, this shifts in philosophy and policy resulted in move away from large scale community based projects to small scale community based programs designed to meet the basic needs of the villagers. The major emphasis of most Forest Aid Projects in the hilly regions of Nepal has been on the establishment of nurseries and plantations, the achievement of physical target and the creation of new forest resources (Singh, 2002).

It reported that many CFUG after meeting their forestry needs of fuel wood, fodder and timber have earned a significant amount of income for their group funds from the management of CF. mentioned that many CFUG in Nepal, Australia Community Forest Protected Area have used part of their income to hiring guards to protect forest, building schools and roads, establishing irrigation facilities and drinking water systems providing credits to CFUG members, connecting electricity and purchasing torch, lights to use in literacy program(Molnar, 1992).

It is shown that the CF management activities are helping community development activities by injecting funds and voluntary services. For instances, in Nepal and India, CFUG are undertaking small scale CDAs with the funds generated from CF (Hunt et al, 1996). The small scale development activities could be more appropriate than sponsored activities to solve local problems. This is because local people determine their needs, seek solutions and act accordingly, such initiatives may be more sustainable than the activities run by the outside funding because continue sustained for ongoing maintenance cost (Molnar, 1992).

To sum up, according to the Tenth Plan, Nepal has been able to introduce itself as country of community forestry in the world. With the help of community forestry, Nepal has improved in the field of forest, environment, biodiversity and sustainable management and socio-cultural development. Through the medium of community forestry, the democratic exercise, gender equity, social justice and social improvement etc have been lunched in the local community. Community forest has been handed

over to the local communities to improve the livelihoods of people below the poverty line (NPC, 2002-2007).

The plan focuses on poverty reductions from the nation. In poverty reduction, community forests play an important role. So the plan has given top priority on forest-related programs like community forests and leasehold forests. The total percentage of forest cover area has increased from 29% to 31% during the time of the plan. 2000 new community and 300 new leasehold forests were formed and more than 23 million forest areas were donated to the government for the enhancement of community forests during the 10th plan (10th plan 2001-2006).

Give emphasis on climate change in relation to preservation of forests. It makes the plan to maintain the previous percentage of forest area and add new forest areas in hills and terai. The main focus of the plan is enhancing community forest user groups and leasehold forest groups in the hills. According to the plan, the government adds some more area as conservation areas and gives emphasis on women's participation in community forests (Interim plan, 2007-10).

2.2 Review of National Studies

In most of the Nepali society, caste/ethnic group is the key element in maintaining social diversity, where another equally important category is the diversity in terms of gender. In terms of caste, caste-based social stratification has created unequal access/opportunities for people within community forestry, as the poor and occupational caste groups (mental worker, shoe-maker, tailor etc.) are often ignored in the decision-making process of community forestry. This directly affects the distribution of goods and benefits and participation in other activities of the FUG (Adhikari, 2012).

Participation itself doesn't always secure all kinds of the community's people's involvement. Because it is a vague term and its notion doesn't secure all people's power over the decision-making and benefit sharing. But it is incomplete to secure the interest groups' participation equally. Socially disadvantaged people's (such as the poor, women and so-called low caste) access has still in question. The cause is the community level's powerful people's domination upon the common property

resource. FUG is not often comprised of household of the diverse social economic status and diverse forest based interest. In EC, generally poor women and disadvantaged people are often ignored and decision-making. the community forestry often unsuccessful to secure the basic needs of the poor and low caste peoples basic needs because of the elite and high caste people's domination in FUG. According to her study in the Sindhupalchok district she has concluded that, Member in user groups are predominant from the economically advantaged group. Economically disadvantaged groups are often excluded from the membership. Economically disadvantaged groups may lose access to VITAL resources.

The term 'environmental Justice' also concerns to the equitable distribution of the resource, fair treatment of people of all races, culture and income with respect to the development, implementation and enforcement of the environmental law, regulation and policies (Amatya & Shresth, 2002).

Rural Nepali economy is highly based on agriculture, although subsidiary occupations are government and private job, their main occupation is agriculture and livestock raising. Therefore the most important natural resource for them forest resource for various reasons (i.e. daily animal feeding, firewood for cooking and pole for making house. People have a certain relation with the forest and certain mechanism of the forest management based on particular environment and people's culture. Traditional, indigenous forest management have been practiced from several hundred years ago in Nepal, which has been based on the practical experiences of the community dwellers that differs from community to community in terms of culture, religion, knowledge system and living pattern. The traditional mechanism of forest management has been transmitted from generation to generation as a wealth of knowledge. Such knowledge and experiences have taught users how forest should be managed in the interest of the community. The development of community forest resource management in Nepal is not only the concept but a major part of the government policy and supported by the foreign aid. In Nepal forest department was established in 1942 (Joshi, & Pokharel 2009).

The Decentralization Act of the early 1980s empowered Panchayat to form the committee of the forest consumers. It provided Panchayat with defined function,

responsibility and authority for implementing projects of forest management funded through district or VDC budget (Functions such as a forestation, development and management of the forest). It tried to address the concept of forest user group (FUG) by creating user committee from the people, who are using the particular forest. It made provision that community forestry has to be formed by local people in coordination with the forestry component at the district level (i.e. range post staff, DFO etc.) and the FUG is the main body of the forest management. The role of the center government is to continuously update the overall picture of the forest, provide guidelines trainings and resources to the district and monitoring and advising them for the more effective performances.

2.3 Review of International Studies

Social equity issue refers to the unequal power relation between rich and poor, high and low caste, women and men and so on. The social issue has been considered as the second-generation issue of the community forestry. The agenda of the equity has been focal point of the social issue (Winrock, 2002).

From two different reasons equity is related to the community forestry. First is the philosophical argument's community forestry is aimed to meet the need of the diverse group of the society. It must insure the disadvantaged group's people's access to by the policy level and empower them to make equal control in CFUG. The second is 'the political reason'. The program should benefit various interest groups in community. The membership in CFUG doesn't adequately represent poor and occupation caste group's participation. They have not the equal access due to various reasons (i.e. social hierarchy) in the intra CFUG activities, mainly in benefit sharing and decision-making. The issue of the intra CFUG equity is generally related to these problems (Grosen , 2006).

The word 'community' in the community forestry indicates a homogenous group having common interests. But the community members are diverse in terms of their occupation, wealth, education and the caste/ethnicity although it may be a homogenous group in terms of physical characteristics such as geography. The issue of the intra CFUG equity is very important where the members of the community are diverse in terms of the socio-cultural and economic factor. Within a community there

are the groups of the people who have the same interest common characteristics in certain thing; this is termed as the interest group (Gilmour and Fisher, 1991). With respect to even the forest management too, the identification of the needs roles and authority of all interest group within a user group is crucial to maintain the intra-CFUG equity (Arnold, 2011).

Strategies to increase women's control over the local natural resource management must address the question of gender relation. To understand gender issue in forest management it is necessary to look at the gender roles and division in terms of ownership and control over and access to resource, knowledge and the product of their labour. Probably all the societies, women have little value to men because of the subordinate social status. In the rural Nepalese society, there is no equal opportunity for the men and women in all sectors (Barkes, 1989).

When question of the equity in community forest management comes, it often gives the notion of the equal opportunity for the women the disadvantaged and the lower caste's people. Gender and equity has been the major agenda of the contemporary debate on the people's participation in the community forestry. It is related to the gender balance participation in FUG and it basically rests on the leadership, benefit sharing decision-making and the representing the certain interest group. Both policy and the implementation strategies and the programs of the donor agencies have focused to make better status of women in forest management and tried to make at least token participant of them in executive committee of the user groups. But nominal discussion has been made so far about the equity among the women or intra women equity. The policy seems considering women as the single interest group as we know women as an interest group from the gender balance participation's perspective. But in reality women is not the homogenous group in every respect. Within the women they have the diverse interest according to the caste, economic status, household position, educational status and age group. The woman of the user's household doesn't have the same types of access and opportunities and constraints to make the desired involvement in CFUG activities. But those minority women who have the dominant figure in the society are getting the easy access in the name of certain part of the women's representatives in FUG' beneficial activities such as training. In reality they don't represent or make it beneficial for all the women who

also have the same kind of the right. The women of a blacksmith household, women of the landless household and the regular forest user women etc. are not getting chance or getting less chance. In the country, women of the elite class, women member of the village level figures, educated women who is not related to the forest as rest of the community women are getting the privileges in the name of the women's participation. In this way in reality the real user, poor, lower caste and occupation caste group's women have been excluded from making any meaningful intervention. Therefore securing an easy access of the all types or basically disadvantaged groups' women seems most necessary to make possible the real essence of the women's participation (FAO, 2010).

But due to the various reasons those programs were not effective and that time's political conditions also helped degrade forest. Government policy was made to control the forest from the center. The forests were over exploited and government could not stop it because of technical, political as well as other reasons. To stop the destruction and degradation of the forest, the government adopted a restrictive policy, the private forest Nationalization Act, 1957. This Act brought a vital change in relationship between people and forest. It supposed people not as a 'manager' but as a 'destroyer' of the forest and isolated them from the forest. Through that policy all forest was technically came under the government. So people started the illegal falling of the tree and agricultural use land. Therefore this forest act was not suitable from the people's point of view and it was unsuccessful because it didn't recognize the role, authority and responsibility of people in forest resource management near their village. In the late 1970s, a new concept of forest management was introduced as Nepal National Forestry Policy, (NNFP) in response to the failure of PFNA, 1957 (FAO, 1993). Social/community forestry evolved with an address to concern of meeting subsistence needs of the people for firewood, leaf litter, fodder and etc. The Panchayat forest (PF), 1976 and Panchayat protected forest (PPF) rule, 1978 were people oriented forest policies. With the formulation of the PF and PPF, community forestry was implemented in twenty-nine district of Nepal with the loan assistance of the World Bank. On some hill district different donors like USAID, AUSAID provided the grant assistance, etc(Grosen, 2006).

Molnar, A. (1992) According to the (WG-CIFM, 2002), "The 1993 Forest Act clearly defined the forest user group (FUG) as an autonomous and corporate bodies with perpetual succession. FUGs were defined as a group of the households using or development on forest resources. FUGs are identified by the district forest office (DFO) based on the household survey to access forest dependence. According to this Act, after the reorganization of the users, the members develop a constitution and five-year's management and protection plan. Each FUG is supposed to make an executive committee (EC) of 10-15 members of its users. The role of the forest department is to facilitate the functionary of the FUGs and provide technical assistance as according to the necessary (WG-CIFM, 2002). Therefore this policy has provided a strategies legal framework for the expansion of the community forestry (Lindsay, 2000).

CHAPTER III

RESEARCH METHODOLOGY

This chapter provides the detail of the procedures adopted for the present research. The details of the research design, data collection techniques, nature and sources of the data analysis techniques and the introduction of the study areas have been presented.

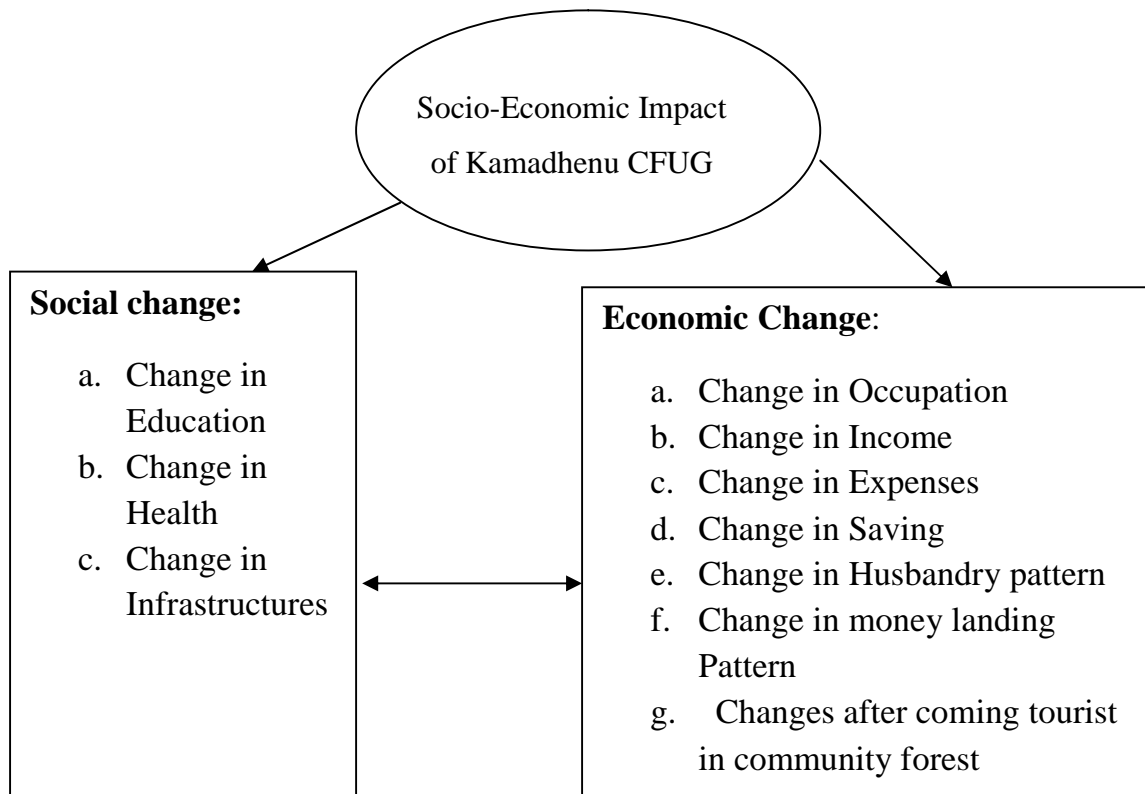
3.1 Research Design

The study has adopted the 'descriptive' research design. A descriptive research design has been used because the goal of the study is to describe qualitatively the women's involvement in the community forest management rather than comparatively and explicatively.

The study is based on the qualitative interpretation of the gathered data. So the descriptive research design is the best for the present study. The study describes socio economic impacts of community forest.

3.2 Conceptual Frame Work

The study tries to explore the Socio-Economic Impacts of Community Forest in Mechchhe VDC Kavreplanchok.



Above figure show the change of society after established community forest. There are two types of change one is social change and another is economic change. Change in education, change in health and change in physical infrastructure are social factors and occupation, income, expenditure; saving, land pattern and animal husbandry pattern are economic factor. After starting the community forest program there are change in those social and economic sectors. Figure reveals that those social and economic factors are interrelated. Economic factor is effect the social factor and vice versa.

3.3 Sampling Processing and Sample Size of Data

The Kamadhenu Community forest User Group (KCFUG) is selected for the study. The Kamadhenu Community forest lies in ward no. 3,5and 8 of Mechchhe VDC of Kavrepalanchok district, which was handed over to the people of this VDC in

1998A.D. This study conducted within the users area of Kamadhenu community forestry, including 113 households of wards no 3, 5 and 8 of the Mechchhe VDC. Normally, head of each households, participated in this study and ask questions. All households have been incorporate in this study.

3.4 Nature and Source of Data

In order to achieve the objective of the research, relevant data were collected from both primary and secondary sources. Since the nature of the study is the qualitative, preference has been given to qualitative primary data collected from the field. However quantitative data was also collected by household survey.

3.5 Data Collection Techniques

The secondary data were collected from the published and unpublished books, documents, studies carried out before related to the present topic, the constitution and the operational plan of the studied FUGs. The other sources were the different government legislation, regulation, Acts, operational guidelines of the community forestry, bulletin published by the government forest office and etc.

Especially following methods of the data collection was adopted to collect the primary data from field study:

3.5.1 Household Survey

For the detail information of the respondents household survey has been conducted.113 households were taken from ward no 3, 5 and8 of Mechchhe VDC and asked question to the respondents about age, occupation, income, sex education etc.

3.5.2 Observation

In the course of fieldwork of this study, simple observation was done. The conditions of forests, the general and committee meeting of user group women's role in the meeting and women's participation on forest products collection were observed in this study. House constructions and condition of firewood storage also was observed. So the observation was proved more fruitful to find the reality in this study.

3.5.3 Interview and Questionnaires

Several interviews have been conducted during the field works. Some key informant interviews (individuals) and some group interviews were taken. Individuals of former and current executive committee (EC) members, women of the different groups were taken interviews. Group interview of the men were taken at tea shop and dairy collection center. Interview helped to understand the men's concept toward women's involvement, different constraints of the different groups' about FUG, socio economic impacts of existing community forest.

3.6 Data Analysis

Data collected through various methods was compiled and crosschecked to avoid the possible errors and the misinterpretation of the data and to maintain the validity and reliability of the data. After checking validity and reliability of the data collected data were analyzed by using simple mathematical and statistical tools like percentage, tables and graphs.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

In this chapter it analyzes the data which collected from the field. Data were collected from the field by using questionnaires.

4.1 Socio -economic characteristics of the Respondents

Socio economic characteristic including education, sex, occupation treatment pattern which help to find out socio economic situation of the respondent which describes in this sub section.

4.1.1 Respondents by Sex (in percentage)

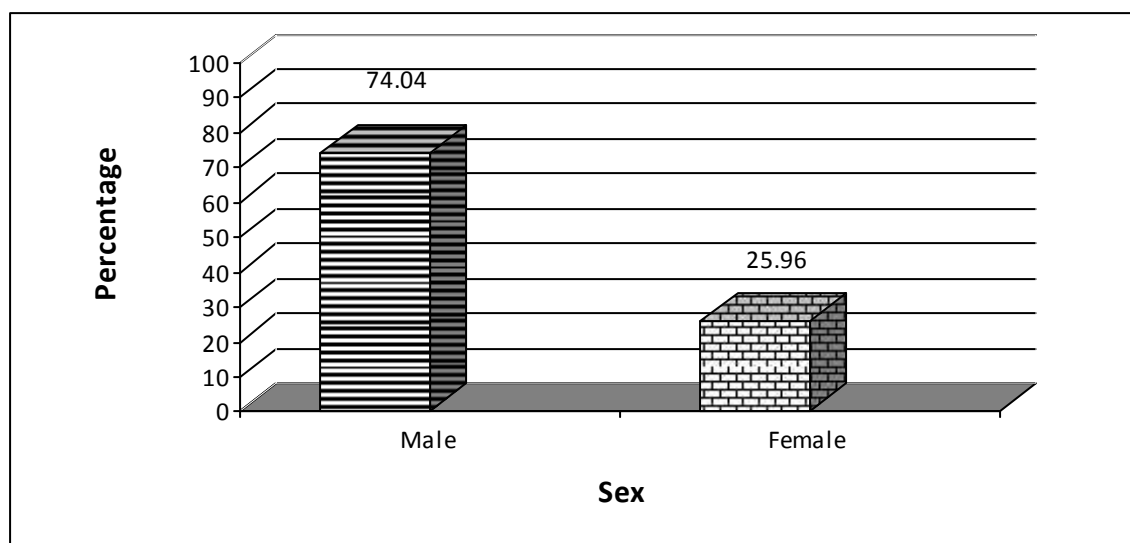
Table: 4.1 Respondents by Sex

Sex	No.	Percentage
Male	97	74.04
Female	16	25.96
Total	113	100

Sources: Field Survey, 2015

Above table shows the sex composition of the respondents. Data shows that 74.04% of the respondents are male and 25.96% are female.

Figure: 4.1 Respondents by Sex (in percentage)



Source: Based on the Table No.4.1

Above figure shows the sex composition of the respondents. Data shows that 74.04% of the respondents are male and 25.96% are female.

4.1.2 Respondents by Marital status

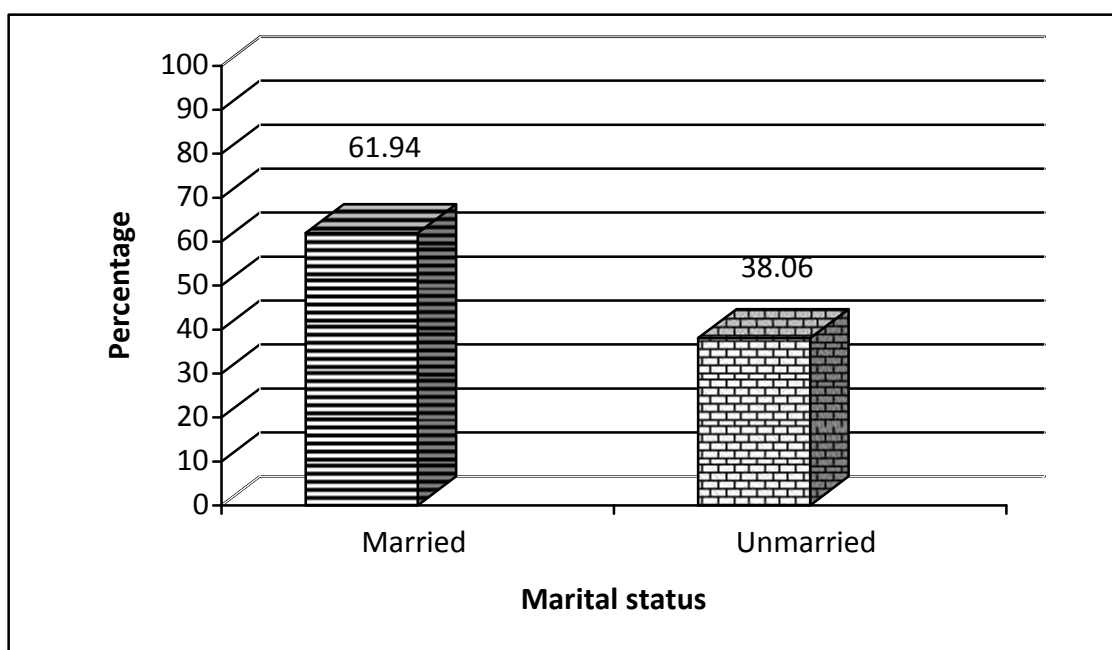
Table: 4.2 Respondents by Marital status

Marital Status	No.	Percentages
Married	70	61.94
Unmarried	43	38.06
Total	113	100

Sources: Field Survey, 2015

Above table shows the marital status of the respondents. Data shows that out of 113 respondents 61.94% are married and 38.06% are unmarried. It shows that majority of the respondents are married.

Figure: 4.2 Respondents by Marital status (in percentage)



Source: Based on the Table No: 4.2

Above figure shows the marital status of the respondents. Data shows that out of 113 respondents 61.94% are married and 38.06% are unmarried. It shows that majority of the respondents are married.

4.1.3 Respondents by Age Group

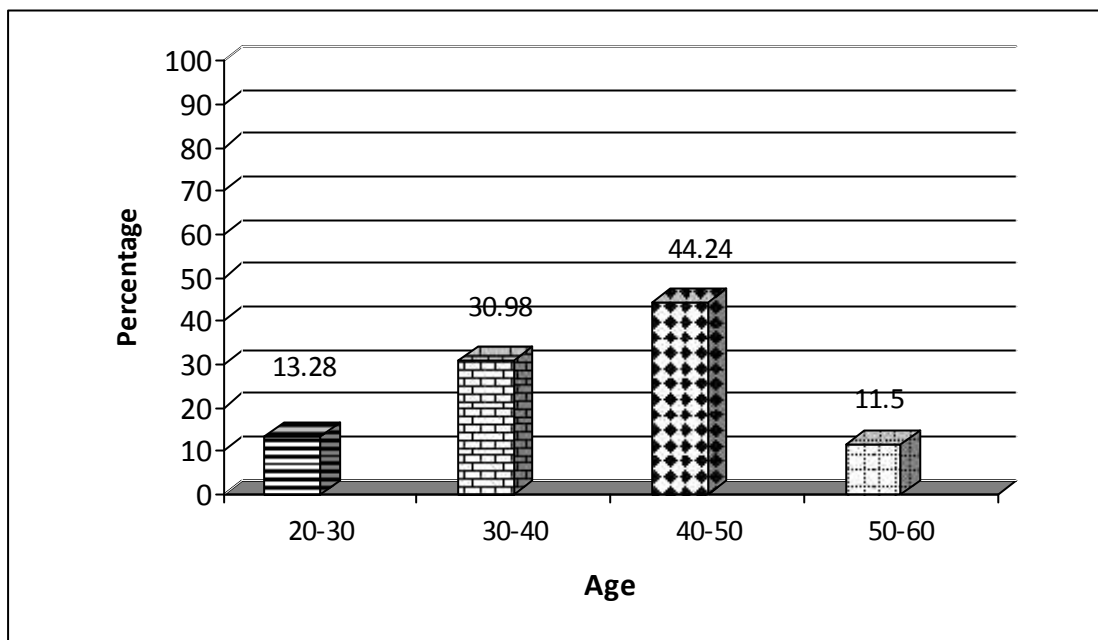
Table: 4.3 Respondents by Age group

Age Group	No.	Percentage
20-30	15	13.28
30-40	35	30.98
40-50	50	44.24
50-60	13	11.50
Total	113	100

Sources: Field Survey, 2015

Above table shows the age composition of the respondents. Data show that 13.28% of respondents are between age group 20- 30 and 30.98% respondents of this study are between 30-40years age group. In the same way 44.24% of the respondents are between age group 40 to 50 and 11.50% are between age group 50-60. In this study only above 20 and below 60 are taken as respondents.

Figure: 4.3 Respondents by Age group (in percentage)



Source: Based on the Table No: 4.3

Above figure shows the age composition of the respondents. Data show that 13.28% of respondents are between age group 20- 30 and 30.98% respondents of this study are between 30-40years age group. In the same way 44.24% of the respondents are between age group 40 to 50 and 11.50% are between age group 50-60. In this study only above 20 and below 60 are taken as respondents.

4.1.4 Respondents by Education

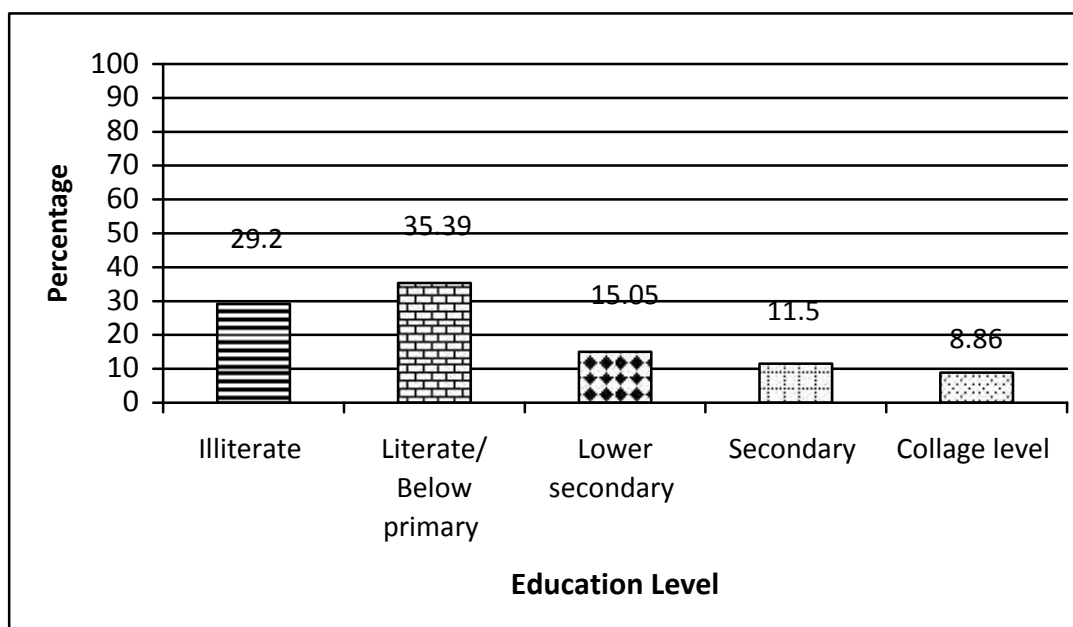
Table: 4.4 Respondents by Education

Education level	No.	Percentage
Illiterate	33	29.20
Literate/ Below primary	40	35.39
Lower secondary	17	15.05
Secondary	13	11.50
Collage level	10	8.86
Total	113	100

Sources: Field Survey, 2015

Above table shows the education status of the respondents. Data shows that 29.20% are illiterates and 35.39% are literature. In the same way, 11.50% are secondary and 8.86% passed collage level. It shows that majority of the respondents are only literate.

Figure: 4.4 Respondents by Education (in percentage)



Source: Based on the Table No: 4.4

Above figure shows the education status of the respondents. Data shows that 29.20% are illiterates and 35.39% are literature. In the same way, 11.50% are secondary and 8.86% passed collage level. It shows that majority of the respondents are only literate.

4.1.5 Respondents by Treatment Pattern

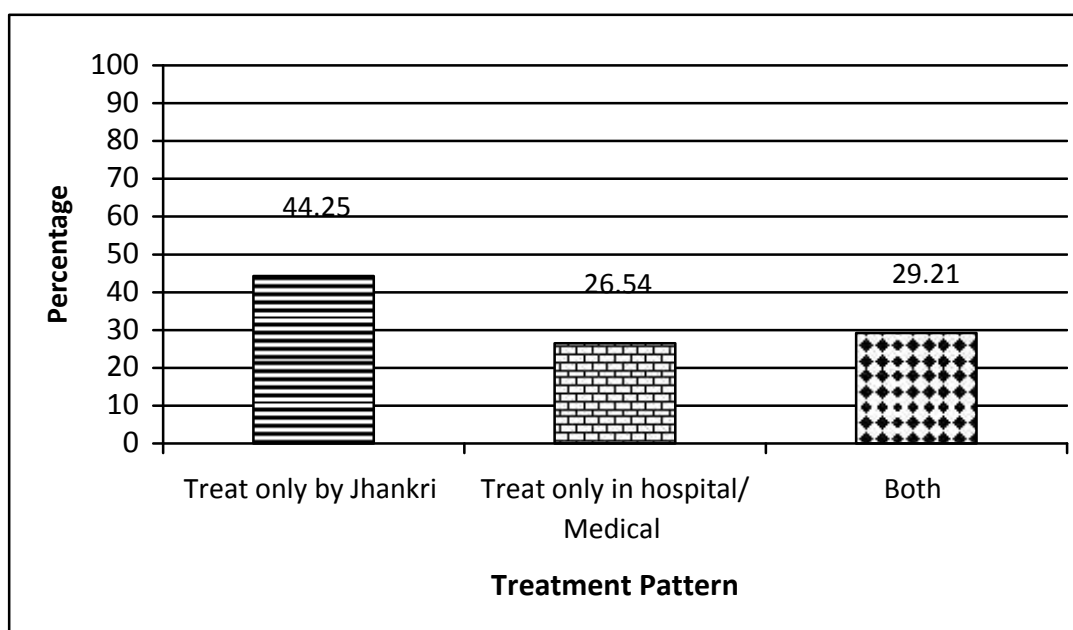
Table: 4.5 Respondents by Treatment pattern

Treatment pattern	No.	Percentage
treat only by Jhankri	50	44.25
Treat only in hospital /Medical	30	26.54
Both	33	29.21
Total	113	100

Sources: Field Survey, 2015

Above table shows the treatment of the respondents. Data shows that 44.24% are treat only by jhankri and 26.54% are treat only doctor / hospital. In the same way,29.21% go both hospital and Jhankri .

Figure: 4.5 Respondents by Treatment pattern (in percentage)



Source: Based on the Table No: 4.5

Above figure shows the treatment of the respondents. Data shows that 44.24% are treating only by Jhankri and 26.54% are treating only doctor / hospital. In the same way, 29.21% go both hospital and Jhankri .

4.1.6 Respondents by Safe Drinking Water and Toilet Facilities

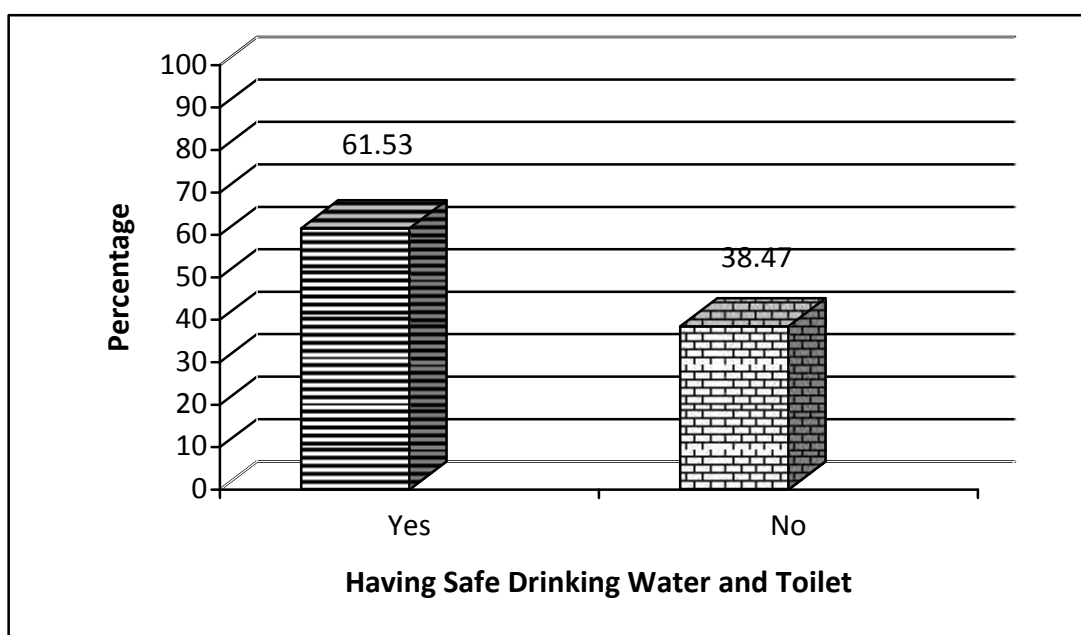
Table: 4.6 Respondents by safe drinking water and toilet facilities

Having Toilet and pure drinking water	No.	Percentage
Yes	80	61.53
No	33	38.47
Total	113	100

Sources: *Field Survey, 2015*

Above table shows the respondents by having toilet. Data shows 61.53% have toilet and drinking water facilities and 38.47% have not got such facilities. It shows that most of the respondents have toilet and pure drinking water facilities.

Figure: 4.6 Respondents by Safe Drinking Water and Toilet Facilities



Source: Based on the Table No: 4.6

Above figure shows the respondents by having toilet. Data shows 61.53% have toilet and drinking water facilities and 38.47% have not got such facilities. It shows that most of the respondents have toilet and pure drinking water facilities.

4.1.7 Respondents by Caste and Ethnicity

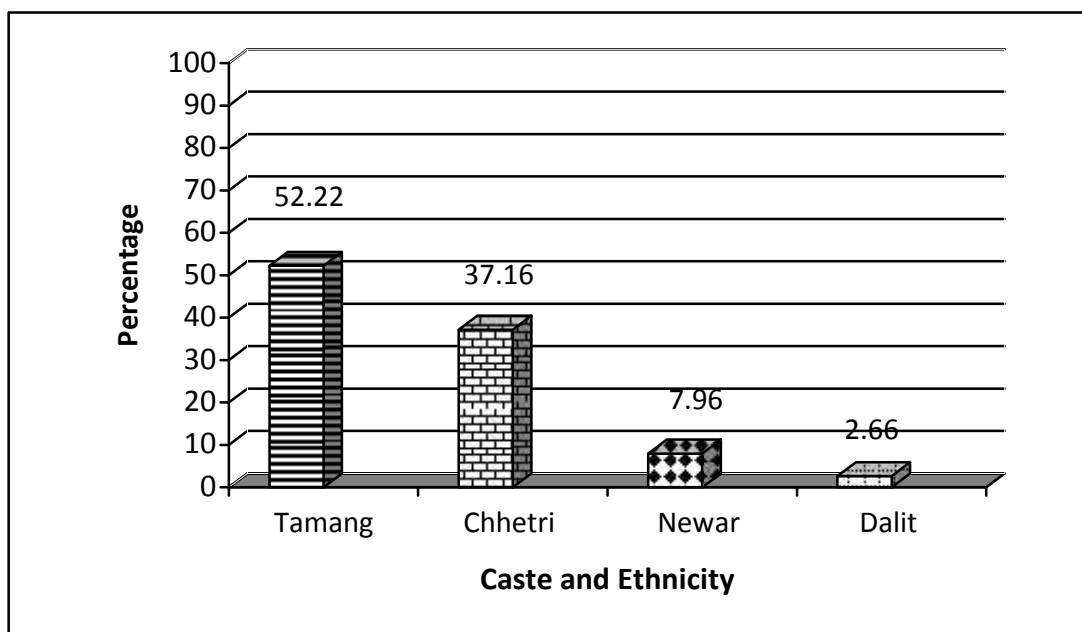
Table: 4.7 Respondents by Caste and Ethnicity

Caste/Ethnicity	No.	%
Tamang	59	52.22
Chhetri	42	37.16
Newar	9	7.96
Dalit	3	2.66
Total	113	100

Sources: Field Survey, 2015

Above table shows the respondents by caste and ethnicity. Out of the 113 respondents 37.16% are Chhetri, 52.22% are Tamang, 7.96% are Newar and remaining 3% are Dalit. According to the data most of the respondents are Tamang.

Figure: 4.7 Respondents by Caste and Ethnicity (in percentage)



Source: Based on the Table No: 4.7

Above figure shows the respondents by caste and ethnicity. Out of the 113 respondents 37.16% are Chhetri, 52.22% are Tamang, 7.96% are Newar and remaining 3% are Dalit. According to the data most of the respondents are Tamang.

4.1.8 Respondents by Religion

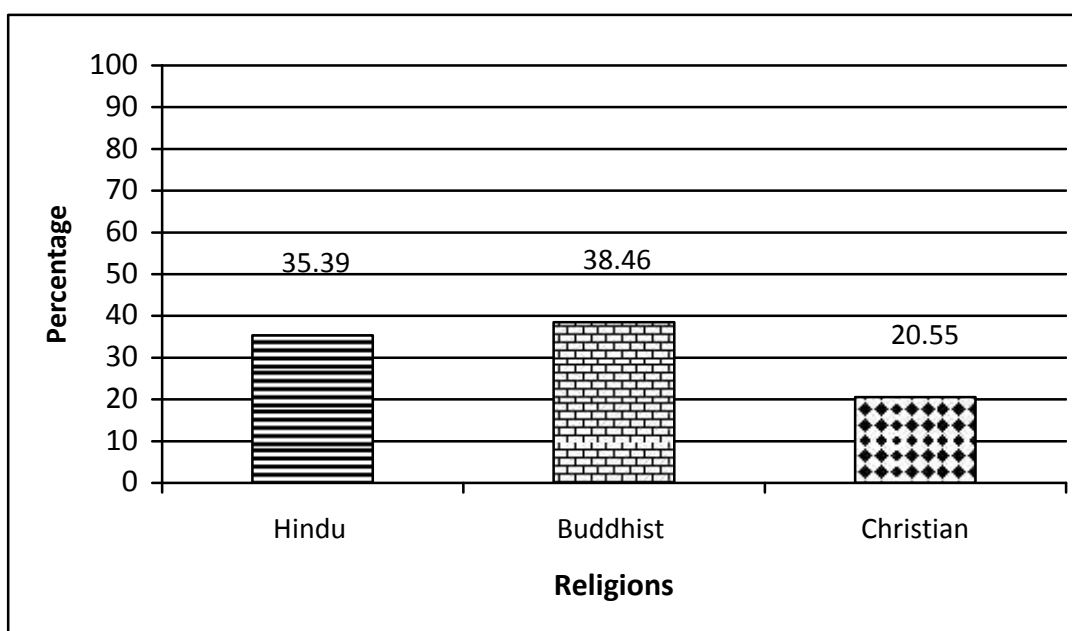
Table: 4.8 Respondents by Religion

Religions	No.	%
Hindu	40	35.39
Buddhist	50	38.46
Christian	23	20.55
Total	113	100

Sources: Field Survey, 2015

Above table shows the respondents by religion. Out of 113 respondents 35.39% are Hindu, 38.46% are Buddhist, in the same way 20.55% are Christian.

Figure: 4.8 Respondents by Religion (in percentage)



Source: Based on the Table No: 4.8

Above figure shows the respondents by religion. Out of 113 respondents 35.39% are Hindu, 38.46% are Buddhist, in the same way 20.55% are Christian.

4.1.9 Respondents by Occupation

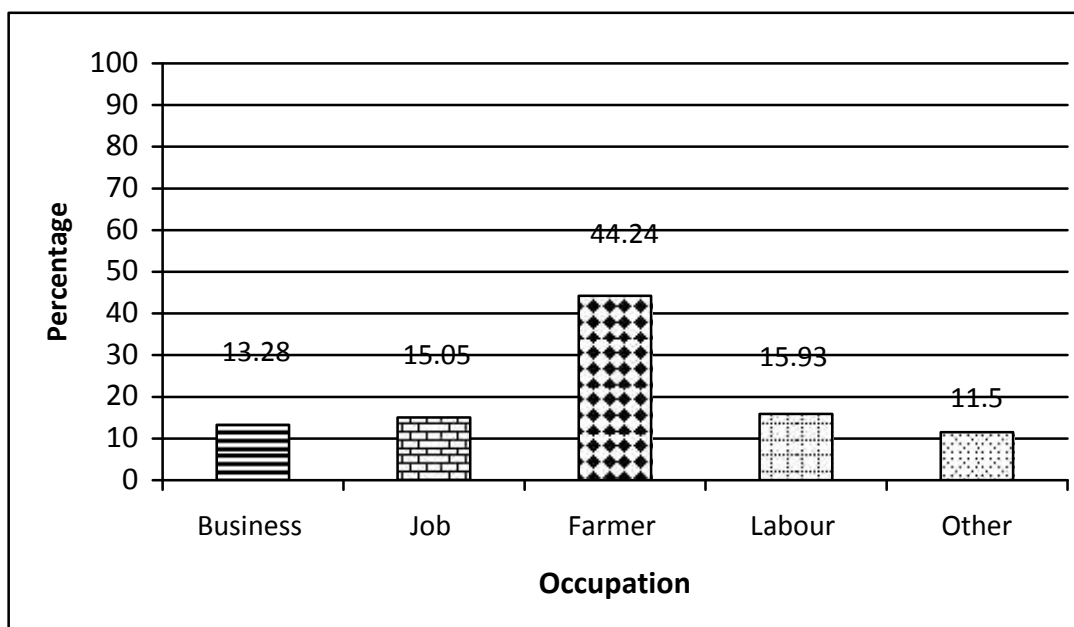
Table: 4.9 Respondents by Occupation

Occupation	No.	Percentage
Business	15	13.28
Job	17	15.05
Farmer	50	44.24
Labor	18	15.93
Others	13	11.50
Total	113	100

Sources: Field Survey, 2015

Above table shows the occupation of the respondents. Data shows that 44.24% of the respondents involve in farming whereas 15.05% involve in job and 13.28% involve in business. In the same way, 15.93% involve in labor and 11.50% involve in other jobs.

Figure: 4.9 Respondents by Occupation (in percentage)



Source: Based on the Table No: 4.9

Above figure shows the occupation of the respondents. Data shows that 44.24% of the respondents involve in farming whereas 15.05% involve in job and 13.28% involve in business. In the same way, 15.93% involve in labour and 11.50% involve in other jobs.

4.1.10 Respondents by Income

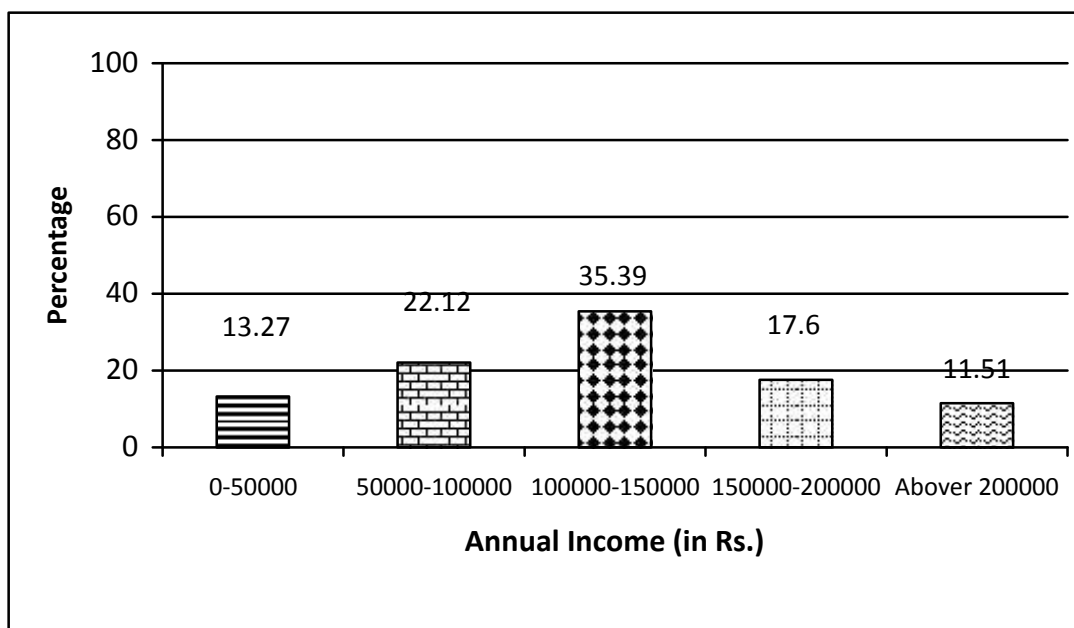
Table: 4.10 Respondents by Annual Income

Annual Income	No.	Percentage
0-50000	15	13.27
50000-100000	25	22.12
100000-150000	40	35.39
150000-200000	20	17.60
Above 200000	13	11.51
Total	113	100

Sources: Field Survey, 2015

Above table shows the annual income of the respondents. Data shows that 13.27% earn up to 50 thousand and 22.12% earn 50 to 100 thousands. In the same way, 35.39% earn 100-150 thousand and 17.60% earn 150 to 200 thousand. Only 11.51% earn more than 2000.

Figure: 4.10 Respondents by Annual Income (in percentage)



Source: Based on the Table No: 4.10

Above figure shows the annual income of the respondents. Data shows that 13.27% earn up to 50 thousand and 22.12% earn 50 to 100 thousands. In the same way, 35.39% earn 100-150 thousand and 17.60% earn 150 to 200 thousand. Only 11.51% earn more than 2000.

4.1.11 Respondents by Expenditure

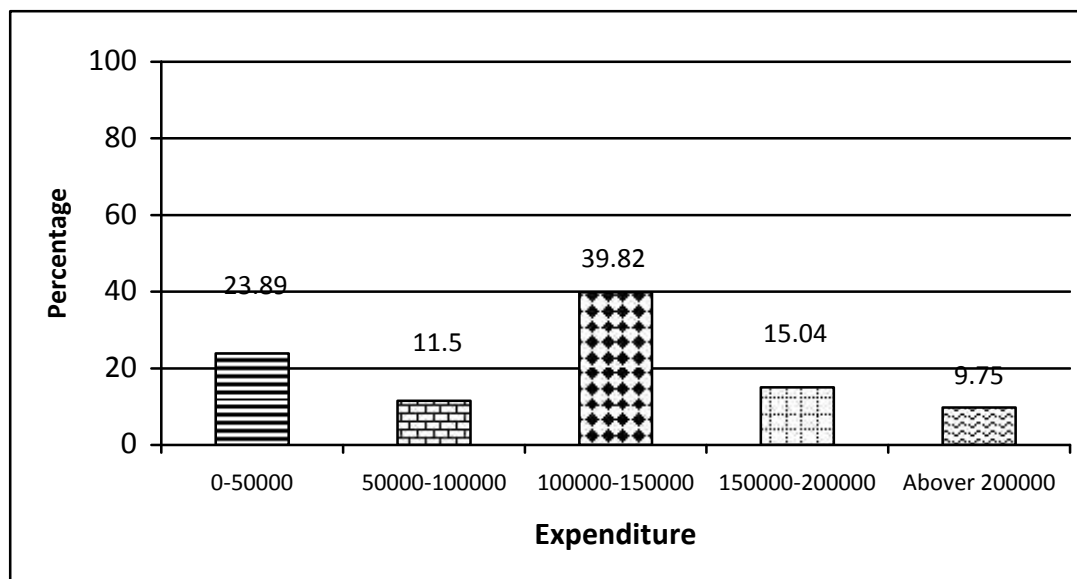
Table: 4.11 Respondents by expenditure

Expenditure	No.	Percentage
0-50000	27	23.89
50000-100000	13	11.50
100000-150000	45	39.82
150000-200000	17	15.04
Above 200000	11	9.75
Total	113	100

Sources: Field Survey, 2015

Above table shows the annual expenditure of the respondents. Data shows that 23.89 spend more than 50 thousands and 11.50% spend 50-100 thousands. In the same,39.82% spend 100 to 150 thousands. 15.04% spend 150 to 200 and 9.75% spend more than 200. It show that most of the respondents expenditure is higher than income. They spend in education, cloths , celebrating festivals.

Figure: 4.11 Respondents by expenditure (in percentage)



Source: Based on the Table No: 4.11

Above figure shows the annual expenditure of the respondents. Data shows that 23.89 spend more than 50 thousands and 11.50% spend 50-100 thousands. In the same, 39.82% spend 100 to 150 thousands. 15.04% spend 150 to 200 and 9.75% spend more than 200. It shows that most of the respondent's expenditure is higher than income. They spend in education, cloths, celebrating festivals.

4.1.12 Respondents by Saving

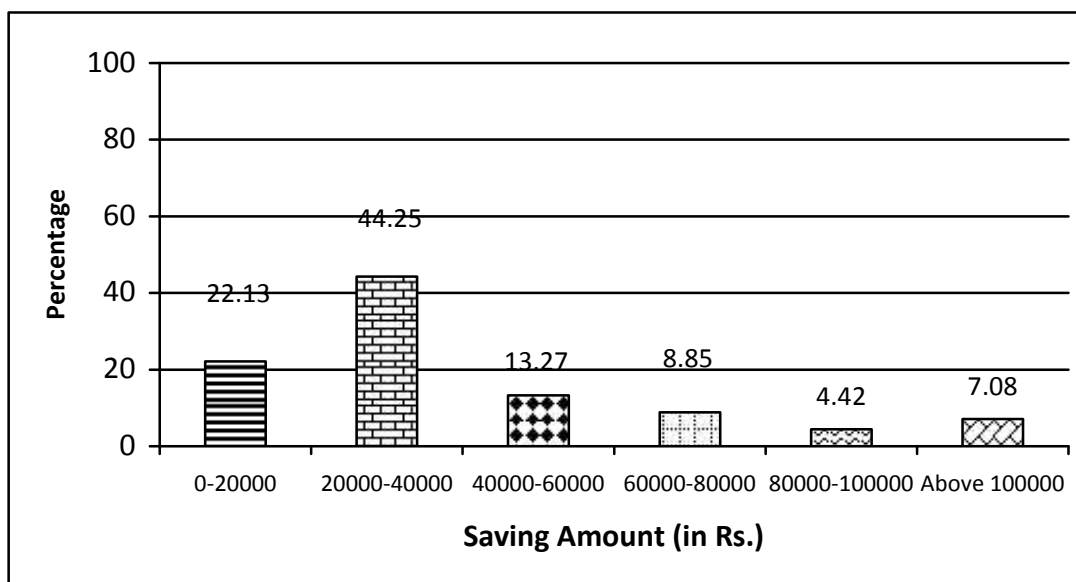
Table: 4.12 Respondents by Saving

Annual Saving	No.	Percentage
0-20000	25	22.13
20000-40000	50	44.25
40000-60000	15	13.27
60000-80000	10	8.85
80000-100000	5	4.42
Above 100000	8	7.08
Total	113	100

Sources: Field Survey, 2015

Above table shows annual saving of the respondents. Data shows that 22.13% save up to 15 thousands and 44.25% save 20-40 thousands. In the same way, 13.27% save 40-60 thousands and 8.85% save 60to 80 thousands. Similarly, 4.42 % save 80 to 100 thousands and 7.08% save above 100thousands.

Figure: 4.12 Respondents by Saving (in percentage)



Source: Based on the Table No: 4.12

Above figure shows annual saving of the respondents. Data shows that 22.13% save up to 15 thousands and 44.25% save 20-40 thousands. In the same way, 13.27% save 40-60 thousands and 8.85% save 60to 80 thousands. Similarly, 4.42 % save 80 to 100 thousands and 7.08% save above 100thousands.

4.1.13 Respondents by Food Sufficiency

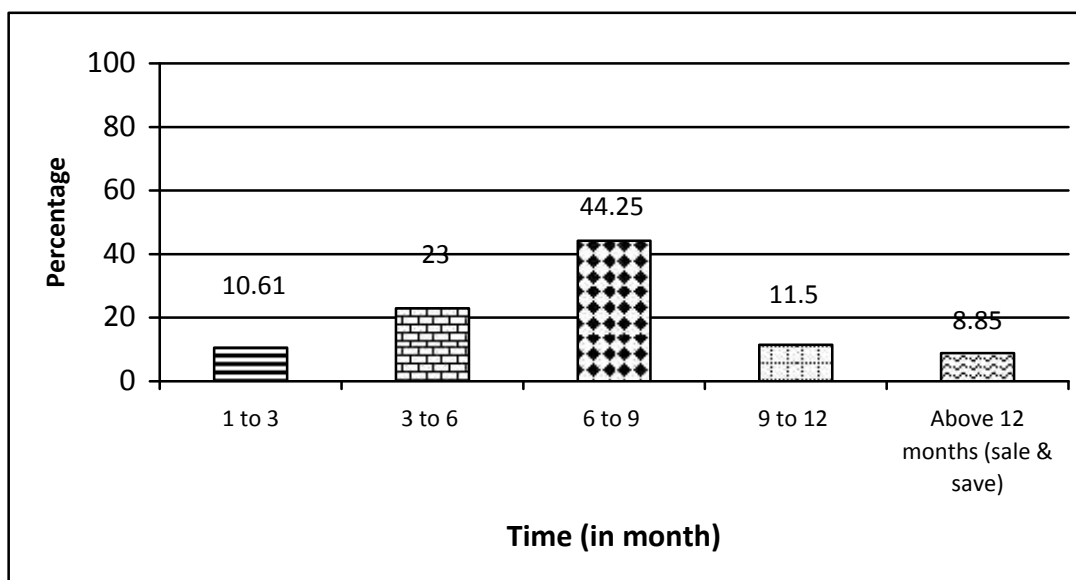
Table: 4.13 Respondents by food sufficiency

Time in Month	No.	Percentage
1 to 3	12	10.61
3 to 6	26	23
6 to 9	50	44.25
9 to 12	13	11.50
Above 12 months(sale & save)	10	8.85
Total	113	100

Sources: Field Survey, 2015

Above table shows the food sufficiency of the respondents. Data shows that 8.85% sale gain paddy and wheat and other 40% grow just for sufficient. In the same way, 11.50% grows maintains only 9to 12 month and 23% have only food sufficient 3to 6 months. Only 10.61% grows food for 1to 3 months.

Figure: 4.13 Respondents by food Sufficiency (in percentage)



Source: Based on the Table No:4.13

Above figure shows the food sufficiency of the respondents. Data shows that 8.85% sale gain paddy and wheat and other 40% grows just for sufficient. In the same way, 11.50% grows maintains only 9to 12 month and 23% have only food sufficient 3to 6 months. Only 10.61% grows food for 1to 3 months.

4.2 Socio-Economic Impact of Community Forest

In this subsection it analyzes socio economic impacts that bring in Mechchhe VDC after forming community forest user group. Kamadhenu community forest brings various changes in community level. The CFUG takes benefit from community forests which are mentioned as follows:

4.2.1 Social Impacts

According to the respondent, the villagers themselves managed the forest before the government nationalized it. During that time, the density of the population was very small and resources were abandoned, so there was no higher demand of forest products. After nationalization, the government itself started to manage the forest through the forest guards. Then people were restricted to collect the forest resources. As a result, they began to use forest resource in illegal ways. Therefore the condition of forest became worse day by day. The villagers nearly cleared the forest and forest resources either by encroachment of the forest land or illegal cutting of green timber for earning money by selling them in the local market. As a result, the forest resources were nearly finished and villagers started to collect firewood from the nearby forests which were nearly hours walk from the study area.

It was found that the people of the study area depended upon the forest resources for their livelihood. They had made rules and regulations to manage forest which is known as constitution and operational plan. In the beginning, CF constitution and operational plan was formulated in the presence of local people with the help of district forest officers. It was informed that at that time, only male members were involved. They made an operational plan for forest management and utilization such as plantation, thinning and pruning, collection of fodders, leaf-litter and firewood. Within the field visit it was found that all the users had followed the rules and regulations strictly. They had formulated different rules and regulations for different kinds of resources which are described below briefly. If anybody went against the rules and regulations, he/she will be punished.

Cutting down green trees for firewood was strictly prohibited for the users in the CF. They had allowed collecting dry twigs of trees at any time. There is no restriction on

the collection of dry firewood collection. The thinning and pruning activity is held in every winter season in each block. During this time, the users distribute the firewood that came from thinning and pruning activities on the basis of equality.

The collection of fodder was strictly prohibited at all times from CF. It was only opened for the users twice a time in a year. In winter season, forest is opened for fodder collection for 15 days. It is not allowed to collect timber from CF. However, timber is given only to those users who need to construct or repair their house. There was no evidence of timber distribution to the users group in the study area till the field visit time. In the study area, plantation of seedlings is usually held in Jun and July. Seedlings for plantation were provided by the district forest office and other NGOs. The committee had planted various kinds of plants on the decision of managing committee.

In this study area, the committee had organized thinning and pruning activities each November. During that time, they removed useless twigs of trees and unnecessary seedlings for the proper growth of the trees. The operational plan declared that only one third twigs were allowed to be removed from the trees.

The fund of CF came from the entry fee, punishment fee, donation etc. which were kept in the bank in the name of secretary and treasurer. They used that fund to manage the forest and other local development activities. It was informed that they used 75% fund of the total fund for the development activities such as road construction, temple construction etc. whereas 25% of the fund was found to be used for forest management.

Farming and forest are interrelated to each other. Most of the people of Mechchhe VDC ward no 3, 5 and 8 are farmers so their economy is dependence on forest product. So community forest is directly beneficial for farmers.

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:

The people in the villagers of Mechchhe 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 provide sustainable supply. Afforestation by community forestry programme become very feasible for livestock rearing.

The community forestry 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.

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 downstream 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:

Community forestry prevented soil erosion. 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.

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.

People are mainly depended on agriculture directly / indirectly because of predominance of agro based economy in our country and so are in the study area. There are 60 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.

Community forest is popular and comparatively successful program of Nepal which emphasis on conservation and optimum use of forest products for their economic development . It is related to conversation and economic upliftment because farming and animal husbandry is fully depends on forest. In this chapter it is analyzed the existing community forest management system, local people participation, mainly women participation and problems of community forest to maintain conservation.

4.2.2 Social Changes Brings by Community Forest in the Study Area

Before and after involvement in community forest people brings various changes in their social life.

Table: 4.14 Social Changes Brings by Community Forest in the Study Area

Before	After
Less tourist came	Increase number of coming tourist
Few hotel	New hotel established
No road facilities in rural area	Getting facilities of road in Rural Area
No facilities of drinking water	There is facilitates of drinking water
Less employment	Increase employment
No clubs in village	Establish eco-club in village

Sources: Field Survey, 2015

Above table shows the social change that brings in village by community forest. Community forest and buffer zone program run various program in VDC. Though the support of buffer zone and community forest user group literacy program run in village. It brings positive changes. In the same way, the program build road, establish club, develop road in rural area provide pure drinking water for people and enhance rural electricity program. This entire program brings positive change in the life of people in Mechchhe VDC.

4.2.3 Economic Changes Brings by Community Forest in Mechchhe VDC

Community forest support farmers by providing fuel, fodders and grass for domestic animals. Before and after establishment of community forest there found various Changes which describes as follows.

4.2.3.1 Positive Change in Income

Community forest and buffer zone rings various program which brings changes in income o f the respondents. The following table shows the situation as;

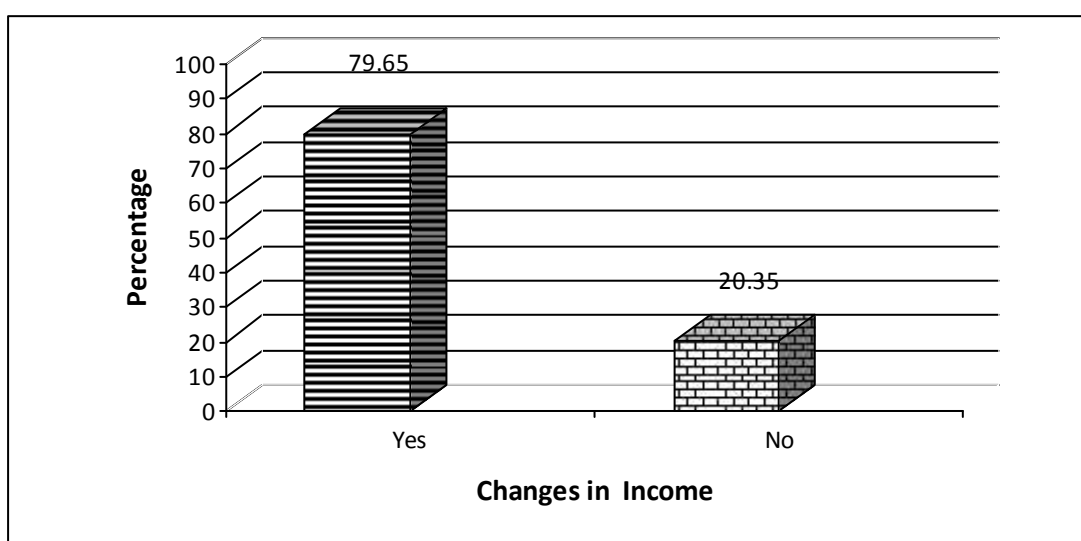
Table: 4.15 Positive Change in Income

Positive Change in income	No.	%
Yes	90	79.65
No	23	20.35
Total	113	100

Sources: Field Survey 2015

Above table shows the view of respondents on economic impact of community forest. According to Chandra Bahadur Lama, his annual income has been increased by Rs.200000 than previous year because he got loan from KCFUG and started poultry farm. Similarly according to Prem Bahadur Rayamajhi, he used forest product to make his buffalo farm and got benefit by selling milk. He increased his annual income by Rs.150000. 79.65% of the respondents feel positive change in income whereas 20.35% have not feel positive change in income. It shows that majority of the respondents feel changes in income status.

Figure: 4.14 Positive Change in Income (in percentage)



Source: Based on the Table No:4.15

Above figure shows the view of respondents on economic impact of community forest. 79.65% of the respondents feel positive change in income whereas 20.35% have not feel change in income. It shows that majority of the respondents feel changes in income status.

4.2.3.2 Positive Change in Animal Husbandry pattern

After lunch community forest program in study area respondents enhance their capacity of keeping domestic animals like goats, cows and buffalo.

Table: 4.16 Positive Change in Animal Husbandry pattern

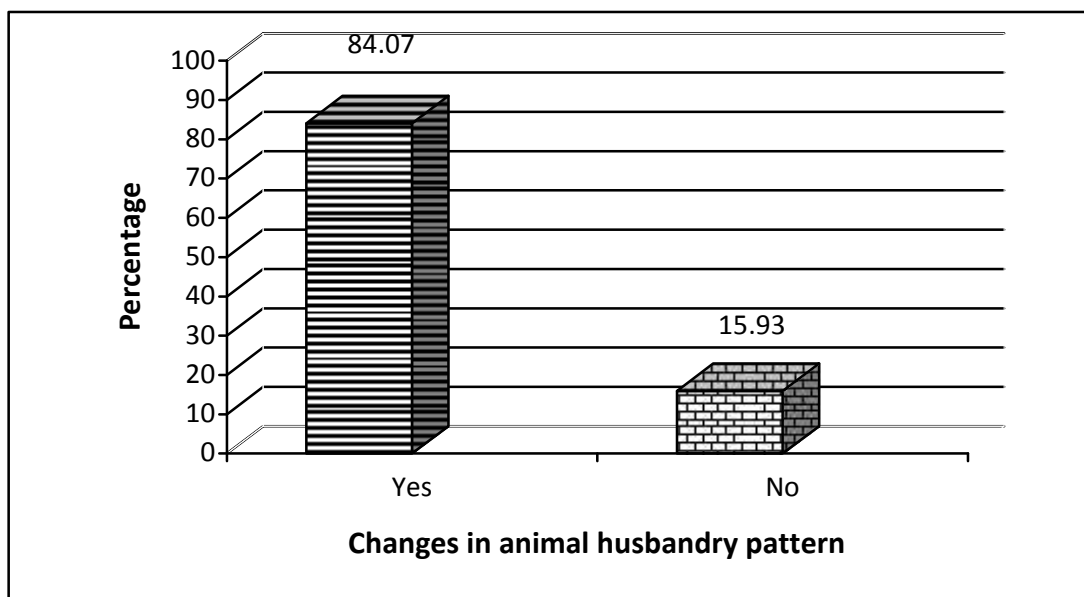
Positive change in animal husbandry pattern	No	%
Yes	95	84.07
No	18	15.93
Total	113	100

Sources: Field Survey 2015

Above table shows the respondents views on changing pattern of animal husbandry. According to Ram Bahadur Sapkota, his livestock is increasing day by day because of joining CFUG. He has increased his annual income by 125000 than previous year . In the same way another person Mr. Netra Bahadur Rayamajhi has also increased his income by 100000 from his cattle. Similarly some people are getting loan from

KCFUG to start poultry farm, animal husbandry, bee keeping etc. Above data shows that 84.07% feel positive change in animal husbandry pattern and 15.93% have not felt any change in animal husbandry pattern.

Figure: 4.15 Positive Change in Animal Husbandry Pattern (in percentage)



Source: Based on the Table No: 4.16

Above figure shows the respondents views on positive changing pattern of animal husbandry. Data shows that 84.07% feel positive change in animal husbandry pattern and 15.93% have not felt any change in animal husbandry pattern.

Table: 4.17 Changing in other Factors

Other Factors Changing	No.	%
Chang in saving	160	80
Changing in Occupation	100	50
Changing in money lending pattern	160	80
Change in purchasing goods	40	20

Sources: Field Survey 2015

Above table shows the other economic related activities that found changes after lunching program by buzzer zone and community forest user group. Data shows that 80% respondents feel changes in saving and 50 feel changes in occupation pattern. After lunching program they involve in self business and agriculture activities such as

vegetable farming and supply. 80 % feel change in money lending pattern. Before formation of saving group people used to borrow money by local money lender now they borrow from saving group. In the same way, 20% feel changes in habit of purchasing goods.

4.3 Infra-Structures Development by Community Forest

In study area community forest build school building club building, rural road by coordination with local organization. These infra-structures provide facilities to local people. During the five years period Kamadhenu community forest user group provides desks for school and other furniture also provide to mother group and local club. Such activities bring positive impact in community level. Except that community forest user group provide training related conservation and livelihood strengthen.

4.4 Income Generating Activated through Community Forestry

4.4.1 Forest Based Enterprises

Micro enterprise development based on local resources/CF resources and skilled is a good option to lift the poor out of poverty and for generating income and employment at household and /or community level. It has been realized from field experience that CF had immense opportunities for creating and developing forest as well as forest based micro-enterprises.

Table: 4.18 Forest Based Enterprises

Name of Enterprises	No. of Enterprise	Household Involved	Persons Involved
Furniture	2	-	8
Sal leaf plate	-	4	4
Beehives	10	10	-
Aran	1	1	2

Sources: Field Survey 2015

More than one dozen household/persons have got employment and involved in income generating activities through the CF. But it has not taken significant contribution of enterprises. People have taken advantage more by the bee hives and furniture. A Kami house has a traditional Aaran (Agricultural Equipment by Iron).

4.4.2 Revolving Fund to the Income Generating Activities

Revolving fund is established in CFUG to provide soft loans to the poor/local people. Income generating activities are generally selected by CFUG based on the interest of the borrower and market opportunities. Majority of the loan form revolving funds (63%) are invested in livestock rearing such as goats, buffaloes, pigs and chicken.

Table: 4. 19 Revolving Fund Disbursements

Fund Utilization	No. of Household	Percent
Domestic Purpose (For basic needs)	13	23.64
Keeping goats, pigs, etc.	35	63.67
To pay loan	7	12.72
Total	55	100.00

Sources: Field Survey 2015

It is found that only 48.67% local users have taken fund for domestic purpose (23.64%), keeping animal (63.64%) and paying loan (13.72%).

4.4.3 Indirect Income from the Source of Forest Product

The villagers mainly depend upon firewood, fodder as well as timber. Firewood is used as the source of energy and fodder for livestock. So that to fulfill the demand of these forest products for the local users, Kamadhenu Community forestry has played the vital role in this area.

Table : 4.20 Indirect Income from Forest Products

Source	Consumption Unit	Market Price	Total Price (RS.)
Fuel wood (in Bhari)	226	Rs 40/30 Kg	9040 (19.01%)
Fodder (in Bhari)	339	RS 20	6780 (14.26%)
Timber (in cubic feet)	705	Rs 45	31725 (66.73%)
Total			47545 (100%)

Sources: Field Survey 2015

Community forestry has provided similar as Rs. 47545 benefit to the local users last year. In which fuel wood, fodder and timber contributed the advantage of 19%, 14% and 66% respectively. People were provided 3000 cu. ft. cubic feet timber last year, which accounts for Rs 12, 00,000.00. Timber products play most significant role rather than fodder and fuel wood. People saved Rs. 904 from the fuel wood, which has been spent to fulfill their need of fuel wood. Fuel wood is distributed from CF according to the family size with nominal charges of Rs 20 per *Bhari*. Kamadhenu CF is opened in the winter season for dry fodder, in summer; green grasses are used mainly to feed livestock. CF could not provide the all demand of fodder and green grass, so they have been using their farmland too.

CF contributed 339 *Bhari* fodders last year, which saved Rs. 6780 of the local users. It is indirect earning not direct money income, otherwise saving money should be spend for the fulfillment of these forest products.

4.5 Benefits Derived by Users from Community Forestry

Secondary benefits of forest management (like the construction of school buildings, employing teacher or construction of rural infrastructure like roads or drinking water, irrigation schemes) are very substantial and crucial in the rural context. Generating these benefits, CFUG is increasingly assuming the stewardship for local development, which are conventionally the state functions.

Forestry is mainly a social service. Therefore, it is not possible to access its projects purely on the basis of commercial benefit-cost analysis. Its benefits and costs must take into account the various relevant factors which affect national welfare, environment, resources and security. Human welfare depends up on air, soil and water management, in which factors play vital role.

Their diverse contributions include several abstruse beneficial influences viz, pollution control, temperature control, retardation of the flow of heat into the ground during the day and exudation during the night, interception of rain water and its infiltration, water and soil conservation, role of trees shelterbelts and wind breaks, capability, role of trees to fix atmospheric nitrogen leading to the production of nitrogen, fertilizers, recreational and amenity values, scientific and educational

valued, military defense tribal and village welfare, and so forth. Forestry projects are motivated to provide environmental and ecological stability, improve social condition, ameliorate the economy as well as lead to more equitable distribution of income. Forest economics helps to evolve new criteria for the assessment of various aspects of forest role to provide factors at present beyond the scope of traditional benefits-cost analysis. Community forest provides various benefits in various sectors some of the benefit derived by Kamadhenu CFUG are categorized in the following topics.

4.5.1 Social Benefits

Community forestry activities are launched in the community. It provides the benefits to the living in this community. Some of the social benefits of Kamadhenu community forestry are as follows:

a. Strengthening Organization

Mechanism for encouraging and forming user group committee, thus building up the social capacity for rural development. After the establishment of the Kamadhenu CF, people are united to tackle every type of social problems through strong organization. Participation of the poor, disadvantaged people, women and *Dalit* in CF is the most social achievement. Structure of the CFUG is given below:

Table: 4.21 Kamadhenu CFUG's Organization

	Female	Male	Total
General assembly	-	-	113
User's group	4	7	11
Executive committee	1	4	5

Sources: Field Survey 2015

b. Employment Generation and Poverty Reduction

Through the Kamadhenu community forestry has not launched any significant income generation activities but it has initiated some programmers to the rural poor people for their upliftment by distributing goats, pigs and loan without interest selecting very

poor person of the community. Similarly *Tejpat* and vegetables production, goats, bees and pigs keeping and nursery building have been begun for two years which helped to generate income and employment opportunities to pro-poor, disadvantaged, and lower casts groups which helped their poverty reduction.

c. Co-operation among People

The sustainable supply of forest product (firewood, fodder, timber etc.) helps people not to quarrel. Conflicts come due to shortage and the sustainability helps to live people in harmony, People in this village have united to increase the economic status, preservation, proper utilization of resources and efficient co-ordination among the user group members.

4.5.2 Economic Benefits

Most of the expected economic benefits of community forestry to the rural communities were expected to be non-monetary and strongly related to subsistence use. The creation of increased forest resources and proper management of these resources in the community forest has provided the significant economic benefits to the users. Some of the economic benefits derived by the Kamadhenu CF user groups are as follows:

a. Availability of Forest Products:

Kamadhenu community forestry 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.

b. Sustainable Collection

It is found that FUG in Kamadhenu community forest has been able to protect, manage and utilize the forest resources sustainability. Such as CFUG harvests timber, fuel wood and fodder generating economy. Afforestation, reforestation and thorny wire covered around the forest by CFUG because helpful to increase the livestock rearing which is very important to increase the income of the local people.

c. Multiplier Effect

It is expected that surplus of fuel wood, timber and other non-timber forest products from community forest can help the users to enter into market economy. This will bring a significant multiplier effect in community forestry by increasing further job opportunities for the rural people such as, increasing in job opportunities, increasing the income, consumption, saving and living standard of the people. Such opportunities are not found enough in reality till 2006 A.D. Expectations are limited only in the constitution of the Kamadhenu CF.

4.5.3 Environmental Benefits

Some of the major environmental benefits of community forestry are: it controlled the soil erosion and provided the bio-fertilizers to the farm productivity increased, compared before. This forest influenced local climate. Kamadhenu CF provided habitat to wildlife such as, wild cock, wild pig, monkeys and various kind of birds. It was found by survey that, most of the local people would walk in the morning and evening in CF for enjoyment, recreation and mental peace. It absorbs the various types of air pollution and rains into this area so that local people are not so unhealthy.

4.5.4 Improvement in Agriculture

The farmers considered the forest as an integrated part of the farming system. People of the community have used improved variety of seeds for agriculture after the introduced of DF. Along with forestry activities, discussion regarding improved seeds of the forest trees and crops with their relation to production has been usually discussed in the FCG forums. These interactions increased their perception and awareness among the villagers. The remaining households have the knowledge of the improved variety of seeds but still use the traditional belief. Less than 50 percent respondents used bio-fertilizer, and most of them use chemical fertilizer on their farm land. Some of the farmers said that if the trend continues for long, the soil may become unproductive for cultivation and also they believed that the use of compost enhances soil fertility.

Tree leaves are used as fodder to animals green and dried leaves are used as bedding material in animal stall. Dried leaves and dung are mixed to make the organic compost. Which is main fertilizer used in farming. Firewood is used for cooking and heating. Timber for plough and other agricultural equipments and non-timber-bamboo, stem fodder and masala are provided by Kamadhenu CF to the users.

4.6 Forest Product Collection and Distribution

Fuel wood, pole, fodder, grass, leaf litter and timber are the main forest products for the user's domestic purpose. The collection and distribution rules for these forest products are outlined in the forest users group's constitution and forest operational plan as follows:

4.6.1 Fuel Wood

Fuel wood is collected from singling, pruning and thinning operations that is carried out every year in one of the management block. Green fuel wood collection other than these operations is strictly prohibited. According to the operational plan, each household is required to send one person to carry out community cultural operations. The product fuel wood is distributed equally, along with the 10 rupees charge, to each of the households. In addition, user can collect dry twinges and branches from the forest at the Paus and Magh months of the year free of charge.

4.6.2 Timber and Poles

The FUG committee carries out needs assessment of the users and provides up to 30 cubic feet of timber and a few poles to those who particularly need timber and poles for house and shed construction and maintenance. For this, users are charged Rs. 15 per cubic feet of timber and Rs. 20 per pole. These prices are set by the FUG committee to be lower than those of the free market (where timber costs about Rs. 40 per cub.) on the understanding that members use the materials for their domestic needs rather than selling them on. Besides the private purpose, the timber and poles can be given to people who are suffered by natural disaster i.e. landslide, flood, fire and so on with free from the charges. If the society needs timber and poles for social infrastructure development such as electricity, schools, hospital, road construction,

timber can be used without hampering the condition of forest or as per the operational plan.

4.6.3 Free Fodder

User can collect fodder from CF and other forest product free of the charge only in the Baishak, once a year. One person of one household is permitted to collect fodder in a day. During rainy season, users are not allowed to collect fodder.

4.6.4 Forest Protection

The forest is protected from the fire setting, cattle grazing, illicit felling of trees and collection of forest products such as medicinal herbs (harro and barro) and other raw material through a strike system of forest watching. Although there is not the forest watcher, all the users themselves patrol the forest. There is the provision of punishment to those who are found in the forest illegally. Rupees collected from such punishment is added into the fund of user group.

4.7 Availability of Forest Product

Availability of forest products are significant to provide the requirements of forest to the local people. Many community forestry users are gained the available forest products by the community forestry. It determines the economic status of local people. Some users have used the forest products only subsist enable used and some of them used these for selling which is shown below the table.

Table: 4.22 Availability of Forest Product

Products	Selling Household		Buying Households	
	Number	Percent	Number	Percent
Timber/pole	14	12.38	25	22.12
Fuel wood	5	4.42	70	61.95
Fodder	3	2.65	26	23.00
Leaf litter				

Sources: Field Survey 2015

Fewest numbers of the households neither sell nor buy the forest products like timber pole, fuel wood and fodder. Nearly 19 percent households sell the forest products and majority of the households buy the forest products from the CFUG and commercial seller. About 12 percent local users sell timber pole which is gained by CF. More than fifty percent households have to buy firewood for their daily use from the CF and other firewood seller. It can be seen from the above table that, there is not equitable sharing of benefits from the community forestry. Some of the users are having made a profit but some of them are deprived to take the advantage. So the role of the CFUG is weak in the context of distributing the forest products.

4.8 Problems of Community Forestry Development

Whenever a community based programme is initiated its success hinges on the participation, coordination motivation and satisfaction of the people as a whole. Therefore, to make the CF programme successful, everybody in the community must know the sacrifice, benefit and its prospect for further development. This can be possible if the programme is democratically, administered, people oriented and technical feasible.

The main problem of community forestry is conflict and lack of coordination among the people because of the diverse ethnic groups, political ideology, gender and socio-economic pattern. Conflicts can occur when people have different views or perception on an issue, when some one's interest is not considered or fulfilled when decision is made or when other's interest is encroached up on. These conflicts can be between individuals within a group, between institutions. Similarly, in community forestry conflicts are also seen within forest user group, between users and district forest office.

In Kamadhenu community forestry, conflict arises at the time of limitation about sharing of benefits but it was resolved sooner. Now, after the restoration of democracy, conflict is political rather than socio-economic between users. People with different political ideology cannot sit under the same roof. This can be solved if people try to forget their political ideology for the common benefit of their village. This is a serious problem of Kamadhenu community forestry. Other problems of community forestry are technical. They can solve by external assistance.

4.8.1 Technical Know-how

There is not any program of community forestry development. So this area is neglected by NGOs and INGOs for the development of community forestry. CFUG faced the more difficulties to convert the theoretical knowledge into practical field, due to the more administrative role of DFO than technical. Very few members are trained. Many local people as well as CFUG members don't know about the technical aspect of forestry. How to make plan, how to plant the tree properly, how can gain more benefits by CF are rare in the mind of various users. It is found by the survey, only few members of CFUG know about community forestry.

4.8.2 Sampling

Although sampling is provided to the community forest user group, its proper management and protection is securing some problem. The Kamadhenu community forest is not matured too enough to generate by itself. Technical, administrative and management knowledge are required for the sustainable community forestry development.

4.8.3 Illegalizing of Trees

Illegal feeling of trees occur sometimes in the Kamadhenu community forestry nearly 15% of the respondents reported that it is a big problem but the majority of them said that is not a big problem and has occurred of few times.

Table : 4.23 Problem of Kamadhenu Community Forest

Problems	No. of Respondents	Percent
Conflict	30	26.55
Illegal cutting, hunting and poaching	22	19.47
Lack of technical knowledge	17	15.04
Monitoring and evaluation	15	12.27
Unequal distribution of forest product	5	4.43
Lack of loan distribution	14	12.39
No problem	10	8.85
Total	113	100

Sources: Field Survey 2015

Out of 30 households, 113 respondents from the household have reported about main problem of conflict. 26.55% of the problems are occurred by the conflicts. The majority of the problems are crusting by the illegal cutting, hunting and poaching, lack of technical knowledge monitoring and evaluation, lack of land distraction etc. A few (4.43%) respondents reported that the unequal distribution of forest product is a problem. Lack of monitoring and evaluation are problems for community development. Only 8% respondents stated that there is not so significant problem.

4.8.4 Effectiveness of CFUG

The effectiveness of CFUG function or role based on the perception of the users. Some of the users can take more advantages from CF and they become satisfaction of the CFUG role and others oppose to the user group. The perceptions of the users are mentioned on the following table:

Table : 4.24 Perception of the Users

Description	No. of Respondents	Percent
Very good	20	17.70
Good	30	26.55
Fair	16	14.16
Satisfactory	47	41.59
Total	113	100

Sources: Field Survey 2015

Majority of the respondents (41.59%) are not satisfied with the work of CFUG. Only limited number of the respondents (17.7%) supported to the CFUG function. And rest of them are neither satisfied nor unsatisfied. So, according to the majority of the respondents there are still existing some problems. Which should be solved for the successful gain of users.

Basically respondents made some baseline before saying good or bad. They are resource mobilization. Forest condition, community participation, development activities, awareness, motivation and measured the effectiveness in terms of increasing/decreasing forest condition/diversity as well.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study entitled " socio economic impact of community forest: A study on Kamadhenu Community Forest" focuses on the presents situation of community forests and its overall changes. The general objective of the study is to analyze the socio economic impact of Kamadhenu community forest of Mechchhe VDC of Kavrepalanchok district. The specific objectives of the study are; to find the socio-economic condition of community forest user's study area, to find out women's participation in Kamadhenu community forestry user group's activities; to find the changes brings in people's life after joining in community forest and to find the view of local people about the women's role towards CFUG. The study has adopted the 'descriptive' research design. A descriptive research design has been used because the goal of the study is to describe qualitatively the women's involvement in the community forest management rather than comparatively and explicatively. It is based on the qualitative interpretation of the gathered data. So the descriptive research design is the best for the present study. The study describes socio economic impacts of community forest.

The Kamadhenu Community forest User Group (BCFUG) is selected for the study. The Kamadhenu Community forest lies in ward no. 3, 5 and 8 of Mechchhe VDC of Kavrepalanchok district, which was handed over to the people of this VDC in 1998A.D. The researcher is the inhabitant of the same village development committee. Being the local people, the researcher became able to collect the reliable information from the existing socio-economic structure. Before this attempt, there was no study conducted study focusing women's participation and role on development activities as well as community forest activities of that area. In order to achieve the objective o the research, relevant data were collected from both primary and secondary sources. Since the nature of the study is the qualitative, preference has been given to qualitative primary data collection techniques. However quantitative data was also collected by household survey. The secondary data were collected from the published and unpublished books, documents, studies carried out before related to the

present topic, the constitution and the operational plan of the studied FUGs. The other sources were the different government legislation, regulation, Acts, operational guidelines of the community forestry, bulletin published by the government forest office and etc.

Especially following methods of the data collection was adopted to collect the primary data from field study. For the detail information of the respondents household survey has been conducted. The sampling households have been chosen by conducting stratified sampling method according to their caste, ethnicity, education and other entity and backgrounds. The format of the HH survey has been included. In the course of fieldwork of this study, simple observation was done. The conditions of forests, the general and committee meeting of user group on forest products collection were observed in this study. House constructions and condition of firewood storage also was observed. So the observation was proved more fruitful to find the reality in this study. Several interviews have been conducted during the field works. Some key informant interviews (individuals) and some group interviews were taken. Individuals of former and current executive committee (EC) members, women of the different groups were taken interviews. Group interview of the men were taken at tea shop and dairy collection center. Interview helped to understand the men's concept toward women's involvement, different constraints of the different groups' about FUG, socio economic impacts of existing community forest. Data collected through various methods was compiled and crosschecked to avoid the possible errors and the misinterpretation of the data and to maintain the validity and reliability of the data. After checking validity and reliability of the data collected data were analyzed by using simple mathematical and statistical tools like percentage, tables and graphs.

5.2 Conclusion

37.16% are Chhetri, 52.22% are Tamang, 7.96% are Newar and remaining 3% are Dalit. According to the data most of the respondents are Tamang. 74.04% of the respondents are male and 25.96% are female. 61.94% are married and 38.06% are unmarried. It shows that majority of the respondents are married. 13.28% of respondents are between age group 20- 30 and 30.98% respondents of this study are between 30-40years age group. In the same way 44.24% of the respondents are

between age group 40 to 50 and 11.50% are between age group 50-60. In this study only above 20 and below 60 are taken as respondents.

29.20% are illiterates and 35.39% are literate. In the same way, 11.50% are secondary and 8.86% passed college level. It shows that majority of the respondents are only literate. 44.24% are treating only by Jhankri and 26.54% are treating only doctor / hospital. In the same way, 29.21% go both hospital and Jhankri . 61.53% have toilet and drinking water facilities and 38.47% have not got such facilities. It shows that most of the respondents have toilet and pure drinking water facilities. 60% of the respondents involve in farming whereas 10% involve in job and next 10% involve in business. In the same way, 15% involve in labour and 5% involve in other jobs like fishing, boating etc. 10% earn up to 50 thousand and 25% earn 50 to 100 thousands. In the same way, 27.5% earn 100-150 thousand and 22.5% earn 150 to 200 thousand. Only 15% earn more than 2000. 17.55% spend more than 50 thousands and 25% spend 50-100 thousands. In the same, 27.5% spend 100 to 150 thousands. 20% spend 150 to 200 and 10% spend more than 200. It shows that most of the respondents' expenditure is higher than income. They spend in education, cloths, celebrating festivals. 7.5% save up to 15 thousands and 15% save 20-40 thousands. In the same way, 33% save 40-60 thousands and 17% save 60 to 80 thousands. Similarly, 16% save 80 to 100 thousands and 11.5% save above 100 thousands. 40% sale gain paddy and wheat and other 40% grow just for sufficient. In the same way, 22.5% grows maintains only 9 to 12 month and 10% have only food sufficient 3 to 6 months. Only 2.5% grows food for 1 to 3 months.

The people in the villagers of Mechchhe 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 provide sustainable supply. Afforestation by community forestry programme becomes very feasible for livestock rearing. The community forestry 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. Community forest and buffer zone program run various program in VDC. Though the support of buffer zone and community forest user group literacy program run in

village. It brings positive changes. In the same way, the program build road, establish club, develop road in rural area provide pure drinking water for people and enhance rural electricity program. This entire program brings positive change in the life of people in Mechchhe VDC.

90% of the respondents feel change in income whereas 10% have not feel change in income. It shows that majority of the respondents feel changes in income status. 80% respondents feel changes in saving and 50 feel changes in occupation pattern. After lunched program they involve in self business and agriculture activities such as vegetable farming and supply. 80 5 feel change in money lending pattern. Before formation of saving group people used to borrow money by local money lender now they borrow from saving group. In the same way, 20% feel changes in habit of purchasing goods

5.3 Major Finding

After analyzing the data collected from the field the finding are drawn which are Kamadhenu community forest user group play important role to bring changes in socio economic situation of the people living in Mechchhe VDC. Community forest user group take initiation on development activities in village. Community forest user group plays role on conservation activities due to tourist attraction and jungle safari many people get job in community level. Management committee is not so transparent women participation is nominal, most of the decision done by male. Government office create problem in some time while community forest made decision on conservation aspect. Most of the community people are happy with program of community forest user group and forest is failure to participate women in each of the decision making level coordination part of the community forest user group is not so strong.

5.4 Recommendations

Community forest brings various changes in community level though it needs to improve some things in implementation level.

- i. The community forest is under Government sector. So, it is necessary to be registered as like other community forest.
- ii. Community forest management committee dominates other. So, it is necessary to stop domination.
- iii. Management should be transparent for work.
- iv. Infrastructures development and income generation activities run by the KCFUG must be transparent of all community forest user people.
- v. Female members should be increase in management committee.
- vi. Social discrimination should be stopped.
- vii. Planning and management should be conducted in participation of all people.
- viii. Plantation programme must be launched from time to time.
- ix. General Assembly should be conducted in time.
- x. All the members must be responsible for smooth growth of forest.
- xi. Equal opportunity should be given to both economically advantaged and disadvantaged group.
- xii. To reduce the fuel wood consumption pattern in the village, fuel wood saving device like smokeless and less fuel consumptive ovens, improved stoves, solar power, biogas, small hydropower projects etc should be encouraged for the substitution of fuel wood.
- xiii. If community forest generates high income from program, the income should be free from tax.
- xiv. The local political body or local government should have to coordinate and integrate their development budget with community forest user group and full responsible authority and financial resources should have to be provided to forest user group to sustain the development and conservation activities.
- xv. There is a good potentiality of tourism sector in the study area. For this government should support the community forest to manage and publicity of the tourism place.
- xvi. Feasibility study should be carried out for the commercial value of tree such as Chap, Khayar and Sal etc. and encourage them to protect.

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APPENDIX - I

Questionnaire

Socio-Economic Effect of Community Forestry

Name:

Date:

Address:

Personal Background:

Age:

Sex:

Ethnic Group:

Family Number:

Male:

Female:

1. Education

(a) Illiterate

(b) Literate

(c) Secondary education

(d) Higher education

2. What is your profession?

(a) Agriculture

(b) Service

(c) Work labour

(d) Traditional profession

(e) Others

3. What is your income status?

(a) Lack of subsistence

(b) Only subsistence

(c) Saved after feeding

4. What are your facilities in your home?

(a) Toilet

(b) Bathroom

(c) Radio

(d) TV Computer/telephone

5. What is the source of energy in your house for cooking?

(a) Biogas

(b) Kerosene

(c) Gas

(d) Fuel wood

6. Do your CF able to meet daily needs of following forest products?

(a) Fuel wood

Yes

No

(b) Grass

Yes

No

(c) Leaf litter

Yes

No

(d) Timber

Yes

No

7. Who goes to CF development Program from your family?

Name of worker

- (a) Fuel wood
- (b) Grass
- (c) Meeting
- (d) Plantation
- (e) Protection

None goes

8. How many livestock's do you have?

No.

- (a) Cow
- (b) Buffalo
- (c) Goat
- (d) Pig
- (e) Chicken
- (f) Duck

9. Have you used timber recently?

- (a) Yes (b) No

If yes, for why?

- (a) Home construction
- (b) Furniture
- (c) Animal shed construction
- (d) Tools

10. From where do you get timber?

- (a) Government forest
- (b) Community forest
- (c) Private forest
- (d) Market

11. What are the changes you have witnessed after the introduced of community forestry programme?

- (a) Increased of forest area
- (b) Proper use of resources
- (c) Effective reservation of forest
- (d) Promotion of livelihood

12. How does it helped to reduce the poverty on your opinion?
- (a) Provide loan to the poor
- (b) Provide skill oriented training
- (c) Provide educational opportunities
13. How has CF programme helped people in generating activities besides forest products?
- (a) Introducing modern seeds and fertilizer to farmers
- (b) Giving training
- (c) Provide loan to the user
14. Have you realized any problems in CF programme?
- Yes No
- If yes, how?
- (a) Conflict
- (b) Illegal cutting of timber
- (c) Unequal distribution of forest product
- (d) Fire and grazing
- (e) Others
15. How much do you satisfy the activities of CF role?
- (a) Best
- (b) Better
- (c) Good
16. How much do you have farm land in Ropani?

17. What did people get after the introduced of CF, in your opinion?

18. Do you agree with the recent committee? If no, why, give reason.

19. What are the core problems for the development of CF management?
 In your opinion.

20. In your opinion CF is
- (a) Very beneficial
 - (b) Good
 - (c) Not very important
 - (d) Not good

21. What is your recommendation to improve the development of the community forestry?

22. What types of goods and service are provided to the users?

	Free	With cost
(1)
(2)
(3)
(4)
(5)
(6)
(7)
	

23. Fund Mobilization area

- (1)
- (2)
- (3)
- (4)
- (5)
- (6)
-

24. Community development activities

- (1)
- (2)
- (3)
- (4)
- (5)

Problems

S.No.	Particular	Problem
1.	Forest related	
2.	User group related	
3.	Users related	
4.	Community development related	
5.	Social	
6.	Economic	
7.	Other	

25. What is being changed after handover the forest to Kamadhenu CF user group

S.No.	Particular	Before CF	After CF
1.	Forest area		
2.	Forest protection		
3.	Community development		
4.	Poverty reduction		

26. What may be recommendation?

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