

# CHAPTER-I

## INTRODUCTION

### 1.1 Background of the Study

Community forestry refers to forest management that has ecological sustainability and local community benefits as central goals, with some degree of responsibility and authority for forest management formally vested in the community. This review provides an overview of where the field of community forestry is today. It has described four case examples from the Americas: Canada, the United States, Mexico, and Bolivia. It also identifies five hypotheses embedded in the concept of community forestry and examines the evidence supporting them. It also concludes that community forestry holds promise as a viable approach to forest conservation and community development. Major gaps remain, however, between community forestry in theory and in practice. For example, devolution of forest management authority from states to communities has been partial and disappointing, and local control over forest management appears to have more ecological than socioeconomic benefits. It suggests ways that anthropologists can contribute to the field. Community Forest (CF) is one of the most popular and flourishing programs in Nepal. The concept of CF evolved in late 1970's. The national forest plan 1976 recognized and accepted the community forestry policy for Nepal, and the legislation of promote community forest was brought in 1979 (CF Bulletin, 2007). The current community forestry policy revolves around the concept of forest user group (FUG). The concept is that those who protect and manage the forest may also utilize its product. A FUG consist of members of a community that regularly use a particularly use a particularly area for collection of forest products and graze their cattle. The current policy on CF has been to given responsibility and authority to local people by farming forest user groups to protect, manage and utilize the forest product. There are 14,66,8 FUGs holding over 12, 33,012 hectares of forest area. Out of the community forests over 1,661,482 households are benefiting in some way or the other. It covers about 17.7 percent of the total forest area and 31.9 percent of potential community forest area of Nepal (MOF, 2009/10)

Community forest is most, accurately and usefully understood as an umbrella term denoting a wide range of activities which link rural people with forests, trees, and the products and benefits to be derived from them. Gilmour and Fisher (1991) define community forestry in terms of control and management of forest resources by the rural people who use them especially for domestic purposes and as an integral part of their farming systems. Since community forestry constitutes both social and biophysical elements, they both are equally important. The "resource can be managed effectively with a clear understanding of forest management principles and knowledge's of natural system and "social" part can be dealt with a clear understanding of a society and their relationships with the resource and institutions related to it.

In the late 90s, with the changing political and policy context, community forestry is being understood and conceptualized in terms of stakeholders relationship because there has only been increasing trend of FUG, tremendous number and types of stakeholders and service providing agencies and organizations, with diverse interests and influence have emerged and grown. The pattern of interactions among these agencies with FUGs and government organizations in fact influence each other's action, their own governance system, gender equity issues, and ultimately to the way how resource in manage and utilized, how the management plans, strategies and program are designed and implemented; how negotiation takes place and conflicts are resolved for effective forest management in order to achieve the desired outcomes at people's livelihoods and resource conditions level. This is the context within which community forestry in Nepal is growing and always progressing. It is not like as it was in the past and it will not be in the future as it now, therefore community forestry should be defined, redefined and understood in a dynamic way.

The present form of Nepal's community forestry is guided by the Forest Act of 1993, Forest Regulations of 1995, and the Operational Guidelines of 1995. These legal instruments have legitimized the concepts of Community Forest User Group (CFUG) as an independent, autonomous and self-governing institution responsible to protect , manage and use any patch of national forest with a defined forest boundary and user group members, CFUGs are to be formed democratically and registered at the District Forest Office (DFO), with CFUG Constitution, which defines the rights of the users to a particular members through a members of consultative meetings and

processes prepares the Operational Plan (OP), a forest working plan, and submits it to the District Forest Officer (DFO) for approval. The plan has to be countersigned by the Chairperson of the CFUG. The general assembly of The CFUG is the supreme body to finalize the plan before it is submitted by an executive committee nominated by the general assembly. The successful implementation of the plan depend more on the awareness level of the community members and their participation in the process of the preparation of group constitution and the Operational plan together with the level of support that various agencies such as DFO, user group federation, NGOs civil society organizations and local government and concerned stakeholders provide, and the relationship among themselves in supporting CFUGs.

### **1.1.1 Achievements and Contribution**

There are now around 14,572 FUGs formed in Nepal during the period of 22 years with nearly 1672007 household members, which account approximately 25% of the country's populations who have taken over responsibility to manage about 1243897 hectors of forest areas, nearly 48% of the total land of the country (DOF, 2010). The moment in Nepal, average of two FUGs are being formed every day and they are given authority and responsibility to manage and user the national forest resources.

Community forestry has contributed mainly to the improvement of forest conditions and people's livelihoods in the following three ways.

#### **a) Capital Formation in Rural Communities and its Flow**

Community forestry has becomes a means to increase natural, social, human, financial, and to some extent the physical capital of community forest users.

#### **Natural Capital**

Community forests handed over to community are natural capital. Evidences show that there are positive changes in both forest condition and the availability of forest products, with a concurrent reeducation in the time spent for collecting forest products. Thousands of FUGs have planted and protected denuded hills, carried out forest management and structural operations, utilized and marketed various forest products for their livelihoods.

## **Social Capital**

It is reported that the community forestry process has increased social cohesion, which has enhanced social capital of those who have been powerless, left in isolation and excluded from mainstream social and political processes.

## **Financial Capital**

The group fund generated from the sale of forest products, levies and outside grants are the financial capital created through community forestry. It is reported that there is a balance of about RS 200 million among 15,000 FUGs in the country (CFD, 2010). This amount is almost equivalent to government's annual forestry development budget allocated to all districts. There are numerous examples where many of these FUGs have established low interest credit scheme as well as grants to poorest household members from the FUG fund.

## **Physical Capital**

Numerous FUGs have carried out many community development activities on their own. Constructions of village trails, small bridges, community building, schools and temples are the good examples of physical capital created through community forestry program.

## **Governance Capital**

Through Community Forestry, reorientation of Forest Department staff to move away from their traditional role of policing to a role of facilitator and advisors has been possible. As a result, changes in attitudes and behaviors of many government staff (mainly Forest Department staff) have been possible. Community forestry is the only one national programme in the country by which creation of thousands of local institutions at community level (i.e. FUGs) and continuously building their capacity as variable local institutions has been possible. In addition, nested enterprises such as user group networks and Federation of Forest User Groups have been established to safeguard the rights and responsibility of forest users. Additional service providers such as NGOs, local bodies, private sector agencies have emerged. These institutions have started to collaborate and work together.

Government officials and staff, service provider agencies, stakeholders and community members are becoming increasingly aware of equity issues. All stakeholders involved in community forestry have begun to realize the need for the active participation of marginalized groups in all stages of projects planning, implementation and monitoring, since their involvement will have direct effects on forest systems and on poor people's well being. Hence, more benefits have started to flow to the poorest, which are the most in need. Subsequently, as their roles as forest managers begin to increase and be valued, the impact on forest systems is increasingly positive.

Many stakeholders have begun to work collaboratively and collectively, by which exchange of information has taken place. Through the interaction process, power and position are being negotiated and redefined. All interested parties are realizing increasingly better opportunities to be engaged in decision making processes. Mutual trust, accountability and transparency have begun to increase.

There is an increasing recognition of the need to enable pro-poor policies. Ground level realities have started to feed in to the different layers of governance during the process of policy revisions through the more consultative processes. Policy intentions are more or less translated into practice by innovative officials and in collaboration with NGOs and other stakeholders. Participatory bottom-up planning process has begun to institutionalize especially in annual and periodic plan preparation. There has been realization among some forestry officials on the importance of bidirectional flow of information from community level to the central level that have to be taken place vertically and horizontally. Civil society actors have started to demand good forest governance to be established in all levels from FUGS to forestry administration and national government.

### **C) Community Empowerment and Social Change**

As noted above, community forestry has become a vehicle in bringing change in social processes empowering poor and disadvantaged members of the community. In some FUGs awareness is raised among disadvantaged and marginalized members of the group in matters related inequality, social injustice and their exclusion from social and political processes including the benefits from mainstream development. It is

reported that in some cases community forestry has made significant contribution in increasing the participation of some marginalized sections of the community. In some FUGs, marginalized user's (including women's) representation has increased in the user' committees and man of them have begun to develop an increased voice in meetings and assemblies. They have also begun to demand services form governments other delivery agencies and powerful members of FUGs.

### **1.1.2 Supportive Factors for Community Forestry**

There are many supportive factors that enable Nepal's community forestry to promote, develop and scale-up in the whole country. Below are some examples.

There is enabling policy that recognizes community forestry as the first priority programme of the forest sector. Community forestry legislation in place that legitimizes the rights of the user groups. All 15,000 FUGs have their own constitution and Operational Plan that provide legal basis for user group to protect, use, harvest and market the forest products on their own.

In addition to the government organizations, agencies, officials and staff, there are various service providing organizations including CFUG federations, NGOs, local bodies bilateral projects, and which are emerging and expanding their roles and many are willing to further support the community forestry program to make it more effective to address the challenges and issues, which will be highlighted later in this article.

There are many trained human resources within and outside government system. Financial resources and additional expertise offered by donor communities and INGOs have helped to find the ways and means for sustainable forest management and rural livelihoods. Ministry and Department of Forests are the one of the oldest and established government institutions with good infra-structure, tremendous amount of knowledge and skilled manpower and forest resource base of about forty percent of the total land area of the country. Many of the CFUGs that have been established throughout the country are innovative and functioning well not only in managing the forests but also have become good vehicle of rural development the forest but groups have been managing forest resources in an much better way than the government organizations. The presence of donor communities who are engaged in building

capacity of stakeholders and government agencies together with the work of some international research organizations in generating knowledge have provided Nepal some opportunities to innovative, experiment and learn for workable approaches, method and tools to promote community forestry.

## **1.2 Statement of the Problem**

According to community forestry development program, community forest is the forest managed and utilized by local user groups. Community forestry program is the process by which government through the department of forestry a reality for rural communities. The poor and the landless people should also be included in the community forestry program.

Community forestry plays a major role in the development of people. Thus, the forests are closely interrelated to human beings. Salmachha Community Forestry Group has also helped in many developmental activities of the community. Salmachha Community Forestry (SSCF) is a Terai community forestry group situated in Godariga VDC in the Kailali district. Community forestry program is the gap between the poor and rich people in the management of forest. Elite groups in the village dominate decision making and often neglect the interest of their groups. The participation of poor and disadvantaged groups in community forestry is very low and the local elites are influential in local decision making process community forestry user group.

Although community forestry has been successful strategy to manage forest resources in Nepal, there still exist measure problems with the community forestry in Nepal.

The main issue with Salmachha Community Forestry relate to the ongoing conflict within the benefit sharing. The Conflict is both social and economic. Among the social problems, issues relating to ethnicity among the group member, political ideologies, and also inclusion. There are other problems like deficiency of technical knowledge among the members, illegal felling of trees, control of forest fire and judicious use of forest resources in time with fair distribution the group members.

- i. What is the socio-economic impact of Community forestry users' group ?
- ii. Is there social participation of women in community forestry?

iii. What are the benefits to users' group from community forestry?

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

The main objective of the present study is to analyze the economic benefit of the community forest in Nepal and particular Gadariya VDC of Kailali district in particular. The specific objectives are:

- (i) To assess the Socio- economic impact of community forestry users' group.
- (ii) To analyze the Social participation of women in the study area.
- (iii) To examine the benefits derived by the user group of community forestry in the study area.

### **1.4 Significance of the Study**

Community forestry in fact must support to fulfill their forest related basic needs and as well as to increase their income level and capability, thus it is an urgent need to study socio economic effect of community forestry on poor people's livelihood and to find out the corrective measures to mitigate the negative impacts in their exits due to community to Nepal Forest Implementation. As mentioned, poverty is a big challenge to Nepal. Forest resources if managed and utilized in favor of women and poor people it helps reduce the poverty. Community forests possess the various the potentialities increase the income level of women and poor people.

Achievements of community forest in Nepal are establishment of the right over resource participation of women and other minority groups, local level capacity building, establishment of federation and network generation of forest increase productions of forest products, fulfilling subsistence need, financial support in livelihood improvement assess to forest for income generation and certification of community forest (Khanal, 2006).

To date, there is no best method developed in community forestry to manage conserve and utilize the forest resources. Particularly of Terai forest through the effective participation of rural people. Forestry handover to FUG by government is accelerating all over the country. Therefore, there is still need to study how far it is effective for the program to be implemented in every village of Nepal. This is why researcher



selects the Salmachha Community Forestry and its economic impact on the concerned user groups of that area.

Therefore, the research has intended to explore something inside the Salmachha Community Forestry with field level data. It is hoped that the outcome of the study will be helpful to introduce primary and secondary economic benefit, social benefits to monitor CF program and this study will be significant to the governmental and nongovernmental organization and agencies or policy making implementing plans will be especially useful for the user groups. This research finds that forest is a renewable resource which it the main pillar of the development which can play the vital role to improve living standard of rural people it systematically protected, managed and utilized.

## **1.5 Limitations of the Study**

This study has several limitations:

- i) This present study has focused on only one group (Salmachha Community Forest of Godariya VDC of Kailali district). Therefore, the findings of the study may not give the picture of the other groups.
- ii) Simple statistical tools are used to analyze the data obtained. It is because the households do not keep record of their utilized forest products in Nepal.
- iii) The study has focused only on socio-economic aspects of the participating households.

## **1.6 Organization of the Study**

This study has been divided into seventh chapters. The first chapter deals the introduction. It includes Background, statement of the problem, objectives, significance, limitation and organization of the study. The second chapter presents the literature reviews. The third Chapter deals the methodology. It includes the introduction, selection of the study area, population and sampling procedure, nature and sources of data, techniques of data collections, data analysis and calculation of income. The fourth chapter deals with the economic impact of community forest with reference to infrastructure and education. Status of community forest in Kailali

district of Salmachha Community forestry, location, history, information about community forest user group, other information, population composition, ethnic composition, household size, educational structure, occupational structure, income level, livestock composition, holding pattern, crop production pattern and condition of food sufficiency and other includes effect on educational structure support on education, nature of access on education, access on education in terms of ethnicity. Nature of support to other children for the educational purpose, investment in education institution, effect on health check-up, effect on road by cf, support on road, nature of access on road.

The fifth chapter deals with the social participation of women are in Salmachha community forest. It includes women participation in FUG committee, Participation in the meetings, participation of women in decision making process, participation in community forest development activities and social-behavioral changes.

The chapter six deals with the benefits of user group of Salmachha community Forest. It includes direct benefit and their values, sustainable collection, availability of forest products, road construction, school support, indirect benefits and their values, environment benefit, unification people, impact on household time saved and other benefits derived from the Salmachha Community Forest, it includes reduction of women's work load, source of resources, sources of energy, income source of the community forestry of Shreee Salmachha User Groups, fuel wood, green ground grass, timber, fines and penalties, and major area of expenditure.

Major findings, conclusions and recommendations are presented in the chapter seven.

## **CHAPTER -II**

### **REVIEW OF LITERATURE**

Forest has historically constituted one of the most important sources of renewable wealth for human being. There are many scholars and researchers who have devoted their time on forestry issues of Nepal.

This chapter makes an attempt to review some of those literatures that have focus on community forestry.

#### **2.1 Theoretical Review**

A community is defined as the human population that lives within a limited geographical area, share common interest and carries a common interdependent life. The member of a community have a 'we feeling' community forestry, as its name indicates, has two major component: resources of forest and local communities. The process of establishment and maintenance of the relationship between these two elements could be called community forestry.

The food and agriculture organization of the united nation defined community forestry as "any situation which intimately involves local people in forestry activity. It embraces a spectrum a situation ranging from wood lot areas which are short of wood and other forest products for local needs, through the growing of tree at the farm level of provide caps crops and the processing of forest the product at the house hold, artisan or small industry level to generate income to the activities of forest dwelling communities." this definition includes all the forestry related activities performed by individual household, farmer and communities as community forestry. However, there is no specific definition of community forestry that applies everywhere. We find variation in the definition of community forest from one country to another country.

Community forestry is most accurately and usefully understood as an umbrella term denoting a wide range of activities which links rural people with forest, trees and the products and benefits to be derived from them. Gilmour and fisher define community forestry in terms of control and rural people who use them especially for domestic purposes and as an integrate part of their farming system. since, community forestry

constitutes both social biophysical elements they both are equally important. The "resources" can be managed effectively with a clear understanding of forest management principles and knowledge of natural system and "social" part can be dealt with a clear understanding of a society and their relationship resources and institutions related to it.

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

**Tiwari (1983)** pointed the community forest management, and rural development as a new people oriented productivity.

He concluded that community forest management as a workable definition which is a combination of the production and management system. Forestry covers all non field crops produced farmland surface that can be either directly consumed or easily harvested and marked by the local community.

**Kayastha (1991)** defined that the fundamental idea behind community forestry is to support directly the sustainable use of forest that provides welfare to the community. A new concept that involved local people to have a say in forest management resource mobilizations community forestry originated in Gujrat of India in 1970's when all the efforts of government failed to control forest destruction. The approach rapidly developed in rural area of developing countries to fulfill the basic needs of rural and the same time to balances the environmental conditions. Conceptually, community forestry was initially defined as any forest management activity or situation which closely involves local people in a forestry activity and tree growing activities for which rural people their own efforts.

**Gilmour & Fisher (1992)** stress on need of involvement of women and disadvantaged groups in community forestry activities because they think rural societies are not homogeneous and egalitarian because wealth and pro-powerful individuals have frequently been able to capture the benefit to development programs

in many parts of the world. Likewise, women as the busiest collectors of many forest products are partly known about forest and trees and make many of the day-to-day decision about forest use. Their decisions making is often quite informed. Every time women got to a forest to collect forest products they make decision about what products added as member of the local community women must be included must be included it community forestry management is to be successful.

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

**Thapa (1997)** had studied about the forest management practices and women participation management of the watershed. She has found that the distribution of forest depends upon the attitude. She has also mentioned that the role of community forestry in important to the protection and management of forest resources. In the developing activities on forest worker's participation is low in decision making. But in the collection of forest product they have vital roles.

**Maharjan (1997)** in the case study of Bhaktapur district has tried to find out the present condition of community forest management with reference to women's participation. In her study, she concluded that community forest area is not equally distributed. The people had been involved in the different activities of community forest program. In the executive committee, male participant were found more than female. The role of male participants in decision making process is significant than female. She has also found that low participation of women is due to education and other cultural factors.

**Boyce (2001)** for any development programs to be success, women's participation is very important. But when participation of local's that are often involved is only men and women are always ignored and not included in development programs. Similarly, in natural resource management also, women's participation is not considered

worthwhile even though they are primary users on the forest and have more indigenous knowledge about the forest than their male counterparts.

**Karki (2006)** community management of forest has changed the concept of community life villages don't think in terms of collective benefits was spend the money earned from the forest in community development works likes widening of trail record and supplying water. Karki in thesis has analyzed the community forestry fulfilled the different type of forest product needs. He has noticed that the community forest is saving the time of people, if there is no community forest the households wood and fodder. They use this saving time for other income generating work. He has recommended in his study that the more awareness. Programmes are necessary to increase the use of improved store, kerosene stove, Bio-gas etc. To decrease the pressure on community forestry for fuel wood (Karki, 2007).

**Pokhrel (2008)** He analyzed the contribution of CF. It focuses that CFUG usually invest their fund in four areas, (1) Forest Development, (2) Public infrastructure Development, (3) Pro-poor activities, (4) Forest administration forest development is defined as any activity that improves the forest condition such as civil cultural operation, hiring a sorest watcher and awareness campaigns public infrastructure development includes building schools, roads and water reservoirs. Pro-poor activities refer to allocations soft loans and programmers for training self employment skills forest administration refers; honoraria for executive members, meeting allowances, per diem and traveling allowance regarding operational plan auditing and making signboards and stationery.

## **2.2 Empirical Review**

**Maskey (2001)** Community forestry in Nepal has been perceived as a mean to fulfill the basic needs of people such as fuel wood and timber and other forest products. Operative for more than two decades, community forestry is moving towards grasping the opportunities provided by the forest act 1993. Community forestry user groups are focusing on marketing and commercialization of forest products to generate fund and mobilize the resources and fund for different activities. fund of community forest are being generated through various, internal and external sources grants and rewards from government of Nepal VDC's entrance fees from the visitors from the bank are the major external sources of income, while income from the sale of forest application

product fees, new entrance fees, membership fees, penalties and income from the micro project are identified as a major internal source of income. external source of income primarily government of Nepal grants uses to constitutes highest share of income of community forests user groups but contributor of forest user group fund. Income from the sale of forest products is now the main income source of the forest user groups especially from the timber. The potential to increase forest user group fund is very high but forest user groups are adopting operational Plan. Therefore, the incomes they are generating comprises only fraction of what they could generated.

**MOF (2007)** in his report has analyzed that community forestry program in an integrated manner in under implementation to help maintain social empowerment , gender quality, social justice, equity and good governance. To increase brosd base of economic growth through community fouestry program and the policy of increasing involvement of backward women and Dalit in community forestry by managing social empowerment, gender equality, social justice and eqityand good governance, women's participation in the community forestry rogram has increased.

**Dhungana (2007)** in his report has concluded that community forestry has contributed to positive change of economic well-being of the people managing the forests in the study sites. The economic scenario seems brighter not only due to increased net income over the years but also due to the opportunities to harvest increased forest product. The surplus of forest products especially timber and fuel wood, at increasing rate over the study years means the potential of financial asset from selling the product is high. The fund thus accrued to CFUGs funds could be invested in other income generating activities and community development.

**Lamichhane (2009)** in his case study form Sindhupalchowk District has tried to find out the consumption pattern of timber and fuel wood in community forestry user group. Timber was a major product of the CFs since the plantation forests of pines were grown to produce enough timber. Timber was mainly used for constructional activities, but most of the users also burned timber due to the scarcity of fuel wood. Although the CFUGs had accorded priority to the needy users for the maintenance and constructions of their house and cowsheds, a substantial numbers of users had no need for timber. Similarly, fuel wood was mostly used for cooking food, followed by

large amounts of fuel wood used to brew local alcohol. Local alcohol was one of the main sources of income as it was readily saleable.

**Three years interim plan (2007-2010)** At the beginning of the tenth plan forest area where managed through formation of same 12 thousand community forest user groups have been formed, and they are managing some 2.24 million hectares of forest area. In addition to community forest consumer groups have been formed to create income opportunities for people living below poverty line. These groups are managing 3700 hectare of forest resulting in improvement of the quality of forest as well as projection of forest environment and biodiversity. This is also resulting in easy supply forest product for people depending on the forest sustainable management of forest, as well as implementation of community development works. Through the means of community forest user groups. Gender balance community empowerment and institutional development works are increasing. In the context of sustainable conservation of Nepal's bio-diversity. 19 percent of the total land is covered by conserving area. In order to fulfill its obligation of international conservation on biodiversity, Nepal biodiversity strategy IN 2059 B.S. and Nepal biodiversity strategy implementations plan 2063, have been implemented. Since opportunities have been obtained for generating international resource through Nepal's forest sector from provisions like carbon trading, reduction in climate change and payment for environment services, it is necessary to make diplomatic efforts efficient and effective for this purpose. There are problems like decrease in forest area due to flooding and landslides lack of awareness about biodiversity, lack of identification of valuable non-timber forest products, lack of information about farming technology, and reluctance of the private sector to move forward in this sector as expected.

**Joshi (2010)** he has included that there is positive impact of community forestry on user group such impacts are related to income generation, conservation of natural resources. The main objectives of community forestry program have been envisioned to meet basic forestry need such as firewood, fodder and leaf litter and timber for communities. The established fund was accumulating by different activities such as selling product, penalty, membership fee, application fee, awards, subsidies etc. The study found that distribution of firewood and other benefits are fair and equitable CF fund uses in various sector of community development activities such as school support, infrastructure development and lot more.



**Tenth plan (2000-2007)** also emphasized CF for creating income generation opportunities of the poor and focuses in the involvement of INGO's and CBO's (community Based Organization) in carrying out income generating activities for poverty reduction and rural development. The community forest annually generated about us \$ 12 million from the sale of forest products. However, CFUG have experienced difficulties in investing their fund in right kind of activitie. They are now spending 36 percent of their expenditures is community development activities such as school, road and health post and other development activities. The benefits are spending of pro poor programs. Additional spending on the live livelihood improvement of poor, disadvantages group and women are big challenges in CF (Kanel and Niraula, 2004).

**Gilmour (1998)** in his study report has , concluded that the forest land in the two district i.e. Sindhuplanchowk and Kabhreplanchowk consist of total area of (1200 hectares.) which 2.1 percent forest was being degraded however this figure included substantial area of forest (382000 hectares) that was actually removed from the forest land by leering (largely in Terai) exclusively that area from consideration the loss of crown dynasty in the remaining forest amounted to 5879000. He included areas of converted from forest land to shrub land that represented loss of fifteen percent country wide over the 14 year period (1964 -1978) equivalent an annual loss of 12 percent. Using an area of 12,700 he. of natural forest in the two district, and a degradation figure of 1.3 percent per year the resultant loss of forest over a twenty years period would be equivalent to 29,000 he. He suggest that recognition and open acceptance of this reality coupled with active efforts in implementation improved management of all natural forest with the participation of local villages would greatly improved the resources and assist in halting the decline in the forest condition more over he maintained that villagers would generate employment opportunity and increase income implementations community forestry program.

**Shrestha (2005)** in his article has suggested that community forest is a village and community level forestry practice where decision and actions are often are made collectively where in rural people participation in planning, establishment, management and harvesting of forest corps and receive the major proportion of The socio- economic and ecological benefits CF is not just a special technology by rather a process of socio-economic change that requires a continuous participation of

community in planning, implementation and problem solving. The overall aim of CF is to decrease the Socio-economic hardship of the people living in the rural area. Majority of these people suffices from actual poverty and their basic need must be made so that they can lead a better life. The issue of resource conservation and sustainable development can only be address if people enjoy a secured livelihood CF approach therefore, particularly significant for the socio-economic uplift of the user.

**Banko Jankari (2007)** has suggested that for the benefits of community based enterprises, there is a strong need for policy advocacy in favor of poor and marginalized community on the concept of right based approach to development rather than relying on relief and reform approaches. The formation of inter-spectral linkages in very important to maximizes the potential benefits from the enterprises as the enterprises fall within the jurisdiction of different line agencies.

**Pokhrel (2010)** in his article has found that the office and community building gets priority to develop the community. He has analyzed the community forestry is a well established management from of Nepal. The success of community forestry is improving the forest condition encouraged the government to initiate some development works beyond the fulfillment of only basic forestry needs. He has explored the investment made by community forestry user groups in community infrastructure and their priorities as well. primary data from three mid hill districts of Nepal were collected from questionnaire survey of 100 CFUGs The results have suggested that community infrastructure was the largest category of expenditures of CFUG funds where in the majority to the CFUG accorded investment priority to schools. He has found in study, higher CFUG income has led to a proportionately higher investment in community infrastructure and suggests that it was necessary to increase CFUG income to promote investment in community infrastructures. This study has found that among of the priorities is office and community building than other infrastructures and in second priority is school support and road construction.

**SANDE (2005)** in its research and training workshop has analyzed that Nepal's community forestry program was originally initiated to achieve the national the national goal of poverty reduction. But despites two decades of successful implementation. The program's contribution to poverty alleviation is far from satisfactory. It has carried out to examine how community forest funds have been

established through the collection of fees, fine and dentations and how these funds actually contribute to poverty reduction build building, school support road constructions, scholarship etc He has carefully scrutinized the investments made from these funds in order to analyzed their impact on alleviation.

**Acharya and Acharya (2007)** about the community forestry have described, the case studies indicate that promotion and implementation of forest based small scale enterprises (FBSSSES) can affect the livelihoods of many people in the rural areas of Nepal signifying the relevance of CF in broad strategic planning for poverty alleviation. The activities undertaken any very and include a wide variety of forest products that are in demands raining form subsistence based agricultural implements to furniture enterprises.

**Baral (1998)** in his thesis examined that community forest management issues are only discussed in committee meeting and in general assembly where poor people and women usually do not participate. The normal practice in community is that the elite members of the society tend to take all key positions in the executive community and make decisions on community forest management such as harvesting of the forest product and their distribution. The need of the community and the condition of the community forest should determine the forest development activities. But it is not found addressed in most of the operational plans. As the elite members of the CFUGs and the DFO staffs make the decision on this matter ordinary users are unaware of it.

Jha,(1998) in his thesis has tried to find out the present condition of community forestry management with reference to the socio-economic characteristics of forest user members and described and analyze how for the forest user group have been utilizing and sharing the benefit from their community forest resources. In the case study of Ramechhap district, he concluded that the community forestry, in his study are, is more successful in the sense of its increasing number of forest user groups and increasing forest user's awareness of the community forest. Some forest user's groups are determined by few rich people. So, the minimum involvement of the poor and low caste in the decision making process and a leadership building has become a difficult job. The forest user groups are found becoming increasingly active in forest development. The perceptions of the forests user groups show that are enthusiastic about initiating some income generating activities and community development

activities in the community forestry. The project and the department of forest have realized community forestry as a means of raising socio- economic condition of the people through income generating activities and community development activities.

Shrestha (2002), in his thesis has tried to review the institutional practices of FUG with special reference of contribution of self-mentoring and evaluation in group management, forest management communication, empowerment and livelihood. The study has found that poor users who are unable to receive timber from the forest are being benefited from all credit. Therefore participation and interest of poor in forest management has increased after small scale and entrepreneurship FUG has initiated program to support women, poor and disadvantaged group after the small scale and entrepreneurship process. Low interest credit facility to poor household for income generation has provided from FUG fund. They are raising goat and pig from the loan.

Similarly, small scale entrepreneurship in week bazaar has become source of income to some of the poor members of FUG from the credit facilities. These kinds of activities are supporting to improve the livelihood of poor households. Effective use of local resources for uplifting poor and disadvantages group has initialized from FUG. After SM&E, They are encouraging to individual households for income generation program, in close coordination with other local agencies to improve infrastructure development at local level such as bamboo bridge construction, over small streams in village, renovation of foot trails, drinking water supply, support of local school building construction and encouraged the household toilet construction providing timber with fee of cost from the community forest.

Ghimire (2007) in his thesis has focused that the contribution of community forestry in kavreplanchok district is receiving about NRs 8.39 million annually from the sale of forest products, membership fees, loan interest and other income sources. The primary focus of CFUG investment is development of physical infrastructure with greater emphasis of school building, drinking water projects and electrification. Emphasis on building, human capital and social capital is very low as compared to their investment on other aspects of development. The most effective contribution of community forestry is income of middle class users.

Bhattarai (2009) in his thesis has conducted a case study of Bhadare Khurkure community forest saligram VDC in Parbat District, His study was primarily based on

primary data but secondary data were also used. His sample size was of modest size. But did not conduct focused group discussions, which are supposed to be a very important tool in the field of research. According to the study, the community forest have helped in school construction and providing salary of two teachers. From the community forest 60 members have got employment opportunities. He also pointed out that male literacy rate is higher than female literacy; similarly, 65.11 percent of community forestry of community forestry income was invested in road construction, school building and environment and income generations. Furthermore, community forest contributed 44 percent out of total household income. But, on the other hand, it is mentioned that agriculture is the main occupation in the study area. This study has some contradictory findings implications. Bhattarai, (2009).

In conclusion, it is event from above that the benefit of community forestry among user groups are very immense. But the lack of efficient management of such forest and utilization of its resources have been frequently seen as problems of community forestry. Thus, prevalent limitations of optimum and efficient utilization of FUG Funds on poverty reduction, improve education, health and road programmers tries to contribute some new idea in literature of community forest. A case study on Salmachha Community Forestry users' group of Gadariya V.D.C of Kailali District.

## **CHAPTER -III**

### **RESEARCH METHODOLOGY**

This chapter refers to the overall approach to the process of study based on survey data, using simple arithmetic analysis of different variables have been performed. It contains research design, nature and sources of data, sample selection, data analysis technique as the set of methodology that has been used in the research study.

#### **3.1 Selection of the Study Area**

The study area is selected because of the following reasons.

- i) The existence of the community forestry group.
- ii) There is participation of lower caste and women in the management committee of the group.

#### **3.2 Research Design**

Salmachha community Forestry is community forestry in Kailali district that lies in the Far Western Development Region of Nepal. The area of this Salmachha Community Forestry is about 129.242 hectares. The total number of forest user household's community is 550 in Salmachha Community Forestry user groups. The Salmachha Community Forestry users group has been selected purposively.

#### **3.3 Populations and Sampling Procedure**

There are altogether 550 households registered in the Salmachha Community Forestry Users Groups from Ward No. 2 of Gadariya VDC. It is very difficult to take whole population for the study. Out of total households 20 percent have been taken as a sample size, which consists of 110 households. These sample households were taken by simple random sampling method.

### **3.4 Nature and Sources of Data**

The study is quantitative as well as qualitative in nature. The study is based on both primary as well as secondary data. The primary data has been collected through the questionnaire, interview, observation and field work.

Secondary data have been obtained from journals, articles, dissertations, research report, text books, District Forest Office. The study is based on the primary data, which have been collected from the users of community forestry. The users' group member of Salmachha Community Forestry has been primary respondent for the study.

### **3.5 Tools and Techniques of Data Collection**

The information for the study has been obtained by interviewing the all households from the Community Forestry User Group. Carefully structured questionnaire additional information has been obtained from direct observations from the field work. Sample 110 households were interviewed. Total annual income is the sum of the various items like monetary income by selling crops, vegetables, livestock production, knife making etc. monetary values are calculated by taking average at the current market price. The overall weight of utilized fodder and manure has been taken one 'Bhari' (loads). There is converted into money terms. Quantity of firewood has been taken in quintal and quantity of timber and poles have been measured in cube - feet respectively and converted into monetary terms. Various methods of data analysis have been used for data analysis.

### **3.6 Data Presentation and Data Analysis**

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

## CHAPTER - IV

### ECONOMIC IMPACT OF COMMUNITY FOREST

#### 4.1 General Introduction of Kailali District

Kailali District, a district of Seti zone is one of the seventy five district of Nepal lies in the Far Western Development Region. This district is linked with Bardiya in the East, Kailali in the west, Doti, Dadeldhura and Surkhet in the north and Indian boarder in the south. It's area is 3235 sq. km. there are 42 VDCs 2 municipalities i.e. Dhangadhi and Tikapur and 6 election constituencies. Dhangadhi is the district headquarters of Kailali district at a distance of 665 kilometers from Kathmandu. It is situated between 28<sup>0</sup> 22"-29<sup>0</sup>5" North latitude and 80<sup>0</sup>30"-81<sup>0</sup>18" east longitude. The district was returned to Nepal from East India Company in 1860 A.D. The growth of town owned much to extension of railway up to 'Gauri Fanta' across the border originally for timber transport. (CBS, 2011).

Most part of the district lies in Terai belt varying the attitude of 17 m to 1957 Most people are Tharu . Agronomy is the base of economy, where Karnali, Mohana, Patherai, Kada,Kamara,Surmi Rivers. Proud water for cultivation of the land, Dhangadhi is the prime commercial hub. Dhangadhi- Dadeldhura highway would become backbone for the development of Kailali.

Kailali district is rich in term of religious and cultural importance. Many festivals are celebrated in this district like Gaura Parva ,Biswat Sakranti, Sawane Sakranti, Maghe Sakranti, Dashain, Dipawali, ,Tiz, Basanta Panchami and Fagu Purnima. Among of them Gaura Parva is famous and most important festival far for western Nepal.

The total population of Kailali district is 6, 16,697. Among them50.64 percent are male and remaining 49.36 percent is female.

#### 4.1.1 Status of Community Forestry in Kailali District

In Kailali district, there are 209724 hectare land is covered by forest and 89934.65 hectare land is covered by agriculture. There are four types of forest i.e. community forest, conservative forest, government forest land and probable forest. However community forest has covered 208724 hector lands which are 64.83% of the total



forest land. There are 319 CF in the district and 72927 household are involved in the community forestry program which is 287.58% household of district. The total number of people involved in community forest program is 3294 Salmachha Community Forest areas in 103 hector.

## **4.1.2 Salmachha Community Forest**

### **4.1.2.1 Location**

The Salmachha Community Forest is the small range scale community forest. Located in mid part of the Kailali district covering about 129.242 hector of the forest area with 550 households. All area is under the Gadariya village development committee ward no. 2. It is bordered on the north by Kharuwakhera Village, in east Ghuraha khola, in west Kanari River, and in south Phulwari village.

### **4.1.2.2 History**

The Salmachha community Forest user group managed forest has a special topographic feature as most of the forest area lays plain canvas etc. The forest is worth seeing due to besides of Kanari River and Ghuraha Khola throughout the forest area. The History of the conservation of this forest is nearly 35 years. In the past, the forest is affected and used by Sukumbashi. The Sukumbashi finds in various destinations namely Kailali, Kailali, Banke, Bardiya etc.

Prior to 1998 nobody thought about the overwhelming situation of forest that could arise due to deforestation. People started continuous destruction an encroachment of forest after the democracy. During this time some people in the community through towards forming a user group to protected the existing forest. As a result in 2001 the forest was legally handed over to local users hoping sustainable management.

### **4.1.2.3 Information about Community Forest Users' Group**

The Salmachha Community is the small level of the district. So its user group size is also small. The population of 2 wards is involved in this community forestry program. The total house hold member of these is 550. Among these 450 households is already becoming the member of community forest user group, which consists of 81.81 of total population (Source: Field study 2013).

#### 4.1.2.4 Other Information

The climate in this area is tropical to warm temperate. The annual rain fall varies from 1577 to 2587 mm. The absolute maximum temperature recorded in Kailali 43<sup>0</sup>c and absolute with minimum temperature is 24<sup>0</sup>c the soil is generally rich, high organic matter with high fertility index. In order to forest resources the plain area is covered with tropical with Sisau and Khayar forest (DDC Report, 2010).

### 4.2 Social and Economic Structure of Forest Users' Group

#### 4.2.1 Population Composition

In the study area, there are 550 households with total population 41250 are involved in Salmachha community forest user group. The total sample population of Salmachha CFUCL is 825 out of which 424 (51.40) are male and 401 (48.60) are female. Population composition is shown in the following figure.

**Table. 4.1**

**Composition of Family Sample Household by Age and Sex**

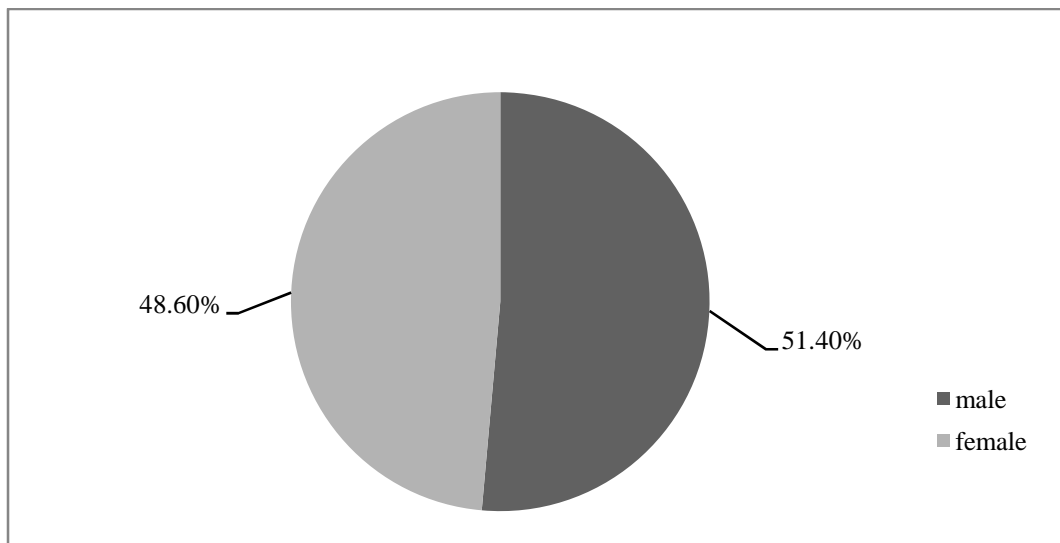
Age group (in years)	Male	Female	Total	Percentage
0-5	60	58	118	14.30
6-15	110	101	211	25.57
16-40	172	162	334	40.48
41-60	65	67	132	16
60 above	17	13	30	3.6
Total	424	401	825	100

*Source: Field Survey, 2013*

The table No. 4.1 shows that there are 329 people are under age, out of sample 466 peoples are economically active and physically active also and 30 people are old.

**Figure 4.1**

**Population Composition of Salmachha Community Forest**



*Source: Field survey, 2013*

The figure 4.1 shows that out of sample population 424 (51.40) male and 401 (48.60) Female. Similarly, with reference to field age wise Population Composition. Out of sample household, about 39.87% population is below 15 years and that the above 60 years in only 3.63%. The economically active population is age between 15 to 60 years is about 56.48 % of the sample population. The population composition of sample household according to age is presented as in table 4.1.

#### **4.2.2 Ethnic/Caste Composition**

Tharu, Brahmin, Chhetri, Magar, Kami, Lohar etc. are major caste living in the study area the ethnic structure has been divided into higher caste, middle caste and lower caste as shown in the following table.

**Table 4.2**  
**Representation of Caste of sample Households**

<b>Character</b>	<b>No. of Sample household</b>	<b>Percentage</b>
Brahmin, Chhetri,	10	9.09
Magar, Gurung,	10	40.90
Kami, Damai, Sarki, Lohar	30	27.27
Tharu	60	54.5
Total	110	100%

*Source: Field survey, 2013*

The table 4.2 shows that the sample household number of Brahmin and Chhtri is 35, Tharu 60, Magar and Gurung is 10 and Kami, Damai, Sarki, Lohar is 30 respectively. In which 9.09 % are higher caste, 54.54 % middle caste and 27.27% lower caste.

### **4.2.3 Household Size**

The average family size of sample household 7.5 and ranged from 1 to 5 respondents have less than six members and their composition is 33.63% family having 6 to 10 members is 51 in number which is 46.36% of the total in table and figure respectively. It shows lowest household prefer having under size family. Family having more than 10 members is 22 in numbers which is 20%. The size of sample household is presented as below.

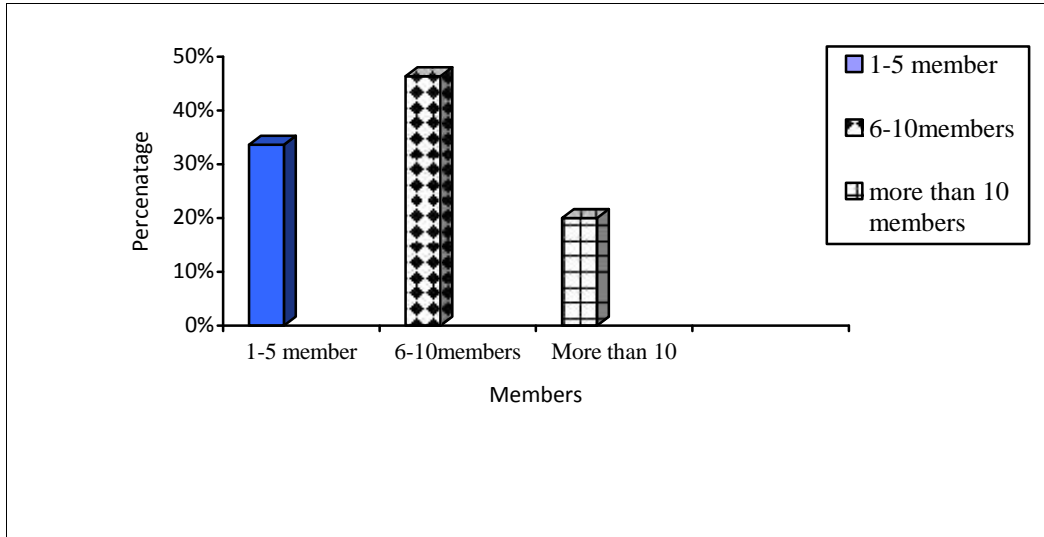
**Table : 4.3**  
**Composition of Population Age Group**

<b>Number of Household</b>	<b>Population in Age Group</b>	<b>Percentage</b>
37	1-5	33.64
51	6-10	46.36
22	More than 10	20.00
110	-	100.00

*Source: Field survey, 2013*

**Figure 4.2**

**Family Composition of Sample Households**



*Source: Field Survey, 2013*

The figure 4.2 shows that there are out of sample household 37 households have below 33.64%, 51 households have below 46.36% and 22 households have more than 20%. This shows that few people prefer small size of family. In this research more household more no of family members.

**4.2.4 Educational Status**

Educational structure of the community people has played important role for the participation in different community the community forest activities. Hers, the level of education has been divided into four categories like illiterate, literate to 5 classes, class 6 to SLC, intermediate and below table 4.4 show the educational status of sample households Head.

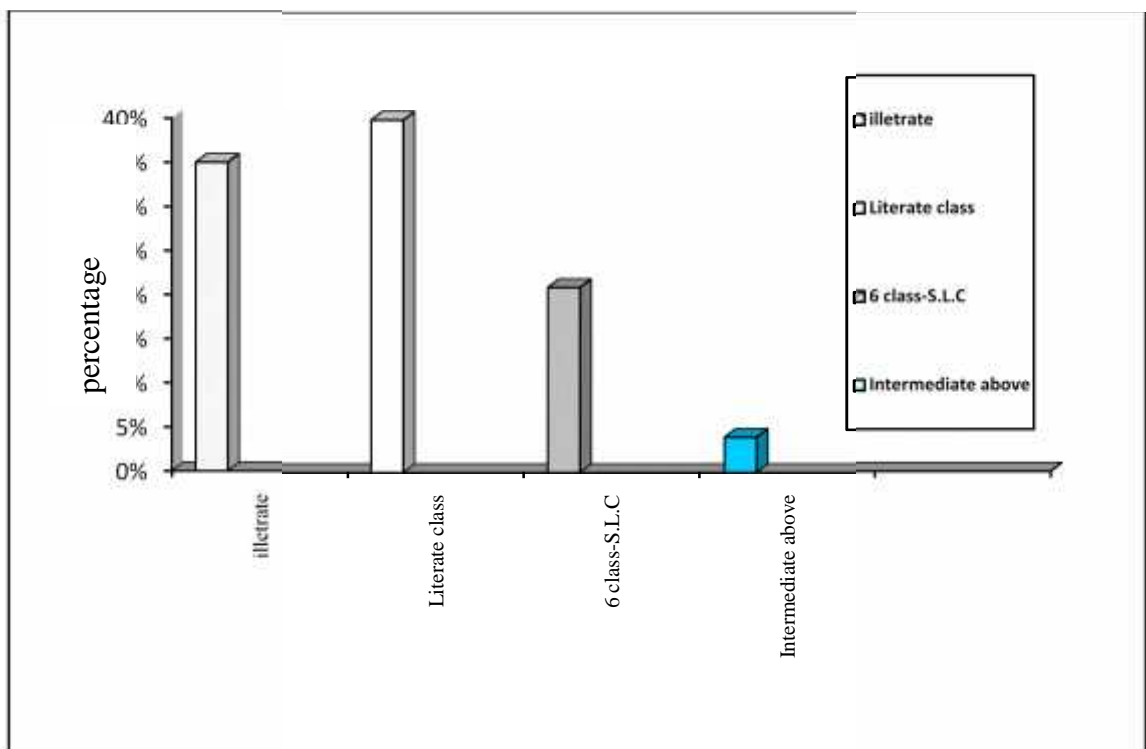
**Table 4.4**  
**Educational Status of Head of Sample Households**

S.N.	Level	Number of Population	Percentage
1	Illiterate	314	35.0
2	Literate Class	363	40.0
3	6 Class -S.L.C	125	21.0
4	Intermediate above	23	4.0
5	Total	825	100.0

*Source: Field survey, 2013*

**Figure. 4.3**

**Educational Status of Head of Sample Household**



*Source: Field study, 2013*

The figure 4.3 shows that educational structure of the household head is not bad. About 40 percent of the respondents are literate to SLC. Whenever as 35 percent respondents are illiterate 4% percent are intermediate and class 6- S.L.C is 21% respectively.

#### 4.2.5 Occupational Composition of Sample Households

Agriculture is the main occupation of Nepal. So, the case is in this study area about all agriculture land in this area is under middle caste i.e. Tharu, Magar etc. The nominal land belongs to others. So in this area, most of the people are engaged in agriculture. It is already mentioned that there are 46.12 percent economically active people in the study area. The demographic summary of the sample household shows that 46.12 percent is in agriculture about 15.37 percent in wage labor, about 0.59 percent in business, about 1.31 percent in service and 36.60 percent population is engaged in students. The table shows the occupation structure of the household member.

**Table 4.5**  
**Occupational Composition of Household Member**

<b>Occupation</b>	<b>Total No. of Population</b>	<b>Percentage</b>
Agriculture	315	38.18
Wage labor	185	22.42
Service	19	2.30
Business	9	1.09
Student life	297	36.00
Total	825	100.00

*Source: Field Survey, 2013*

The table 4.5 shows that 38.18 percent peoples are engaged in agriculture sector, 22.42 percent are in wage labor, 1.09 percent is in business, 12.30 percent people are in service and remaining 36 percent people are in student life.

#### 4.2.6 Income Level of the Sample Households

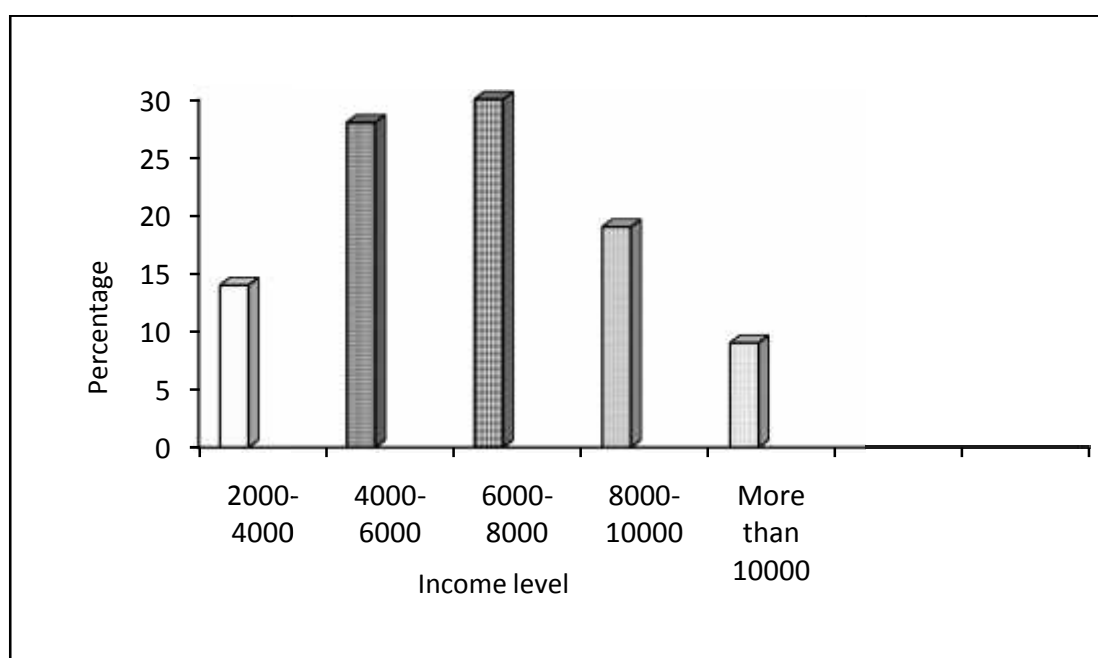
The major source of income in this study area is agriculture and livestock of sample households. It is very difficult to know about accurate income level of respondents because they feel uneasy to tell their cash income and expenditure. However, following table and figure shows the approximate monthly cash income of the household from various sources.

**Table 4.6**  
**Monthly Income of Sample Households**

S.N.	Monthly Income	Number of Households	Percentage
1	2000-4000	14	14.0
2	4000-6000	32	28.0
3	6000-8000	35	30.0
4	8000-10,000	19	19.0
5	More than 10,000	10	9.0
Total	-	110	100.0

*Source: Field Survey, 2013*

**Figure 4.4**  
**Average Monthly Income of Sample Average Households**



*Source: Field survey, 2013*

The figure 4.4 shows that there are 14% households having monthly income between 2000-4000, 28% households having the monthly income between 4000-6000, 30% households have the monthly income between 6000-8000, 19% households have the monthly income between 8000-10,000, and remaining 9% households have the monthly income more than 10,000.



### 4.2.7 Livestock Composition of the Sample Households

Livestock is also a part of agriculture. It plays an important role for the upliftment of their socio-economic condition of related households. The prosperity of a family can be also judged by the number of animals. The following table and figure shows the table number of livestock according to ethnic group.

**Table 4.7**

**Livestock Composition of Sample Households**

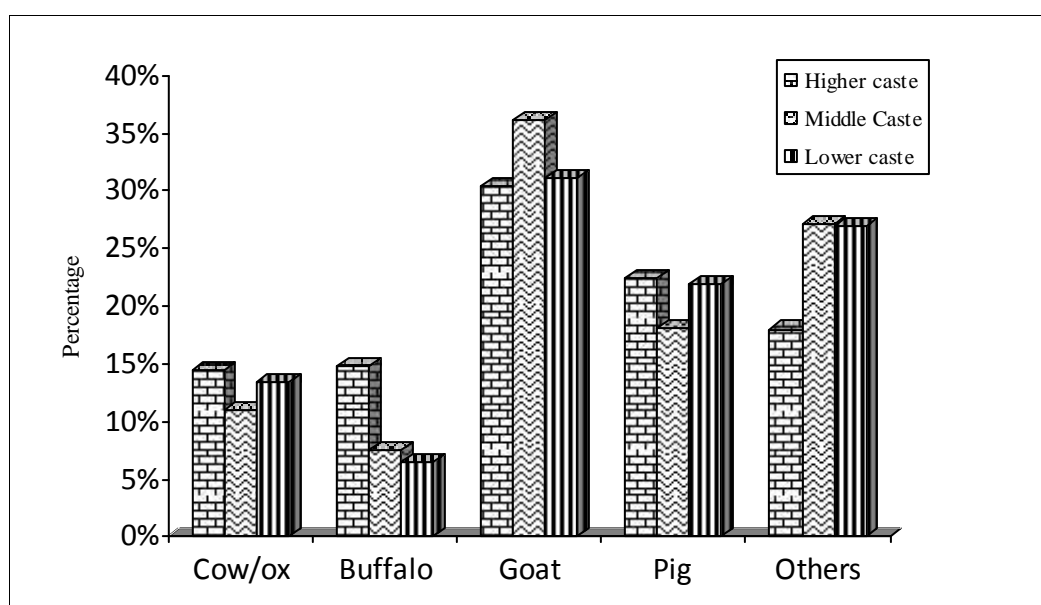
Caste/Ethnicity	Cow/Ox	Buffalo	Goat	Pig	Others	Others
Higher	36	37	76	56	45	250
Middle	77	53	253	127	190	700
Lower	29	14	67	47	58	215

*Source: Field study, 2013*

The Table 4.7 out of sample livestock 250 livestock is having higher caste, 700 livestock are having middle caste, and 215 of them have lower caste.

**Figure 4.5**

**Livestock Composition of Selected Households by Ethnic Group**



*Source: Field Survey, 2013*

The figure 4.5 shows that the percentage of livestock characterized in order of higher, middle and lower castes respectively. It represents the livestock's composition of selected household by ethnicity.

#### 4.2.8 Landholding Patterns of the Respondents

Land holding determinates the income and food sufficiently of the people. The more land more income, less landless income because more people depend upon agriculture in the study area. In the study area, largest land holders are Tharu and Chhetri. The following households are in Salmachha Community Forest User Group. The following table and figure shows the land holding pattern of the sample households.

**Table 4.8**  
**Landholding Pattern of the Respondents**

<b>Land size in Katha</b>	<b>Number of Households</b>	<b>Percentage</b>
0-10	51	46.37
10-20	36	32.73
20-30	12	10.90
30-40	8	7.27
Above 40	3	2.73
Total	110	100.00

*Source: Field Survey, 2013*

The above table shows that 51 households have up to 10 katha, 36 households have 10-20 katha, 12 households have 20-30 katha, 8 households have 30-40 katha and 3 households have found having more than 40 katha respectively.

#### 4.2.9 Crop Production Pattern of Sample Households

In this study area, most of the people depend upon agriculture and most of them are engaged on agriculture production, various types of crops are the main sources of food for the people in this area. Paddy, wheat, maize, lentil, mustard are the main crops production of the study area. There are variation in crop production between food crops and cash crops. Most people allow their land for the production of food crops the average crop productions are shown in the following table and figure as below.

**Table 4.9**

**Crop Production Pattern of Sample Households**

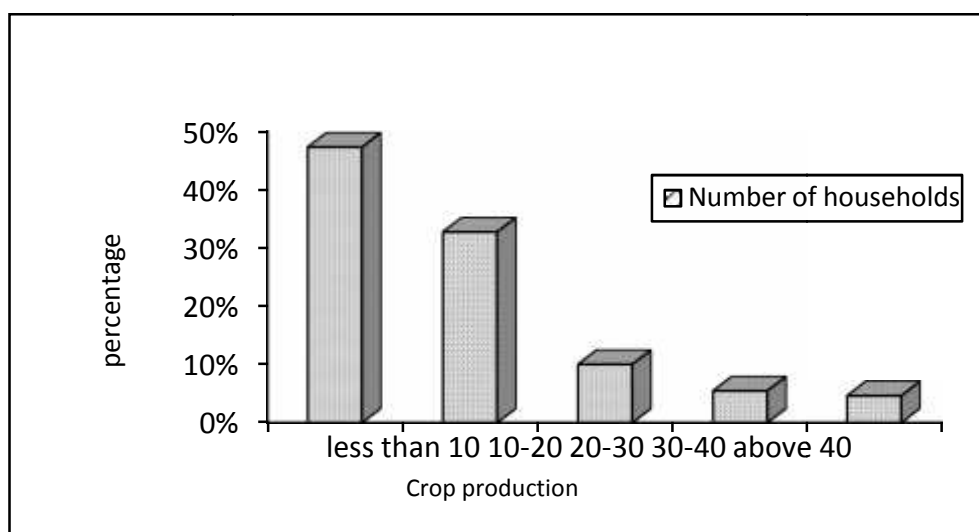
<b>Crop Production in Quintal</b>	<b>Number of Households</b>	<b>Percentage</b>
Less than 10	52	47.28
10-20	36	32.72
20-30	11	10.00
30-40	6	5.46
Above 40	5	4.54
Total	110	100.00

*Source: Field Survey, 2013*

The above table shows that 52 households have crop production up to 10 quintals, 36 households have crop production from 10-20 quintals, 11 households have crop production from 20-30 quintals, 6 households have crop production from 30-40 quintals and 5 households have crop production more than 40 quintals respectively.

**Figure No. 4.7**

**Crop Production Pattern of Selected Households by Quantity of Product**



*Source: Field Survey, 2013*

According to the figure no. 4.7 shows that 52.73 percent households have only up to 10 quintal crops produced from their land. And other 46.37 percent households have produced lower than 10 quintal crop produced in their land.

#### **4.2.10 Condition of Food Sufficiency of Sample Household**

In the study area, out of sample household 15 households are saver which is 13.63 percent of the sample households. 52 households, 47.27 percent have sufficient of food for their family consumption for the whole years and 33 households do not have sufficient food. It means they have to depend upon others for food through they are deeply the agriculture as an occupation, 4 households hardly fulfill their requirements for 6 months from they produced in their land for the others 6 months they have to buy from other or market. 6 household produced food in their land, which full fills the only 3 or 4 months. These households are the under the absolute poverty line.

The following table shows the condition of food sufficiently of sample households

**Table 4.10**  
**Condition of Food Sufficiency of Sample Household**

<b>Particulars</b>	<b>No. of HHs</b>	<b>Percentage</b>
Saver	15	13.63
Sufficient for home consumption	52	47.27
Not sufficient for home consumption	33	30.00
Food above 6 months	4	3.64
Food below 6 months	6	5.45
Total	110	100.00

*Source: Field Survey, 2013*

#### **4.3. Effect on Education by the Community Forest of the Study Area.**

Education is most important for the day to day life. Education is related to the any business and accusation. So that community forest also helps to improve the education or effect, the education situation of that area. By the income from the related community forest the user group determine the in what types of school or

college they can built and to admit their children. So, the effect of education condition by the establishment of CF of the study area explains below.

### 4.3.1 Support on Education by the Community Forest

Most of the people who are involved in CF they feel support to improve school or educational condition of their children but some people don't accept this, Due to the low income they cannot invest the earning in educational sector. Their income is used for household consumption. We can explain this by the help of the following table.

**Table 4.11**  
**Support to Improve Education by the Community Forest**

S.N.	Support improve	No. of household	Percentage
1	Yes	100	90.91
2	No	10	9.09
Total		110	100.00

*Source: Field Survey, 2013*

The Table no. 4.11 shows that 9.09 percent household cannot support to improve the school or educational condition of their children and 90.91 percent household can support to improve school or educational condition of their children. This analysis shows that most of the community forest provides access for the education. So we can conclude that CF play important role in improving educational situation of the study area.

### 4.3.2 Nature of Access on Education

In Nepal, There are two types of education. First one is provided by the government and another is provided by the private sector. The government sectors cannot provide more facilities than private sector. So, the products of government sector cannot competition with the produce of private sector.

**Table 4.12**  
**Nature of Access on Education**

S.N.	Types of School	No. of HHS	Percentage
1	Government School	106	96.36
2	Private School	4	3.64
Total		110	100.00

*Source: Field Survey, 2013*

The Table 4.7 shows that 96.36 percent HHS send their children in Government School. But only 3.64 percent HHS send their children in private school. Table 4.7 shows that most HHs cannot afford the private school due to low income 96.36 percent HHS earns little money. So they cannot afford the expensive fee of the private school.

### 4.3.3 Access on Education in Terms of Ethnicity

Nepal has multi-region, multi-language, multi-culture and also multi caste i.e. Brahmin, Chhetri, Tharu, Magar and many others. The accesses on education of these castes explain below with the help of table

**Table 4.13**  
**Access on Education in-Terms of Ethnicity**

S.N.	Caste	No. of HHS	Institution		Total Percentage
			Private	Government	
1	Higher Caste	35(31.82)	5(14.29)	30(85.71)	100.00
2.	Middle Caste	45(40.90)	4(8.89)	41(91.11)	100.00
3.	Lower Caste	30(27.27)		30(100)	100.00
Total		110	9	101	

*Source: Field Survey, 2013*

The Table 4.8 shows that access of education in -terms of caste or ethnicity in private school and government school. The sample of 110 CF Household of the study area,

110 household are involved. They are categories in three groups, 35 HHs are from Higher caste, out of 35 HHs, 14.29 percent households provide education to their children from the private school and 85.71 percent household provide education from government school, 45 HHs from the middle caste of 45 HHS, 91.11 percent HHS admit in government school and 30 HHS are lower caste. Out of 30,100 percent HHs provide education to their children from government school. From the field survey from HHs who involved in community forest in the study area. Most of the HHS can provide education to their children from government school. So we can conclude that the education of government school of the study area is well.

#### **4.3.4 Nature of Support of Other Children for the Educational Purpose**

All the children do not get opportunity in education due to the poverty. Some few community forests provide opportunity to get education. These community forests play vital role to improve educational status of these children of the study area, which is explained with the help of following table.

**Table 4.14**  
**Nature of Support to other Children**

<b>S.N.</b>	<b>Support</b>	<b>No. of HHS</b>	<b>Percentage</b>
1.	Yes	105	95.45
2.	No	5	4.55
<b>Total</b>		<b>110</b>	<b>100.00</b>

*Source: Field Survey, 2013*

The table no. 4.9 shows that from the 110 household of study area, 95.45 percent HHs accepted the community forest provide educational opportunity for the other children. Community forest provides scholarship for three poor and talented students in primary level of the study area. Community forest provided copy and pen for the five poor and talented grills that are study in government school. Community forest provide uniform and others pay the fee for the certain students who are from low income group family back ground and backward to get education. But only 4.55 percent HHs accept community forest cannot support due to low income and other

problems. The concluded that community forest to increase the literacy rate of the study area.

### 4.3.5 Investment in Educational Institutions

Nepal has two types of education, first one is provided by government institution and another is provided by private institution. Nature of investment in educational institution of the study area explains below by the help of the table 944.15).

**Table 4.15**

**Investment Educational Institution by the CF**

S.N.	Support	No. of HHS	Percentage
1.	Yes	95	86.37
2.	No	25	22.73
Total		110	100.00

*Source: Field Survey, 2013*

Table 4.10 shows that 86.37 percent households accept that the CF invest in educational institution where as 22.73 percent HHS accepted that the CF do not invest from these. 86.37 percent HHS accepted that the CF invests in what types of educational institutions in invest which in shown by the above table.

### 4.4 Effect in Health Situation

This is a slogan "Health is wealth". So, good health plays the important role in socio-economic condition of the society or nation. In this sub-topic this research trying to analyze how much the CF contributes to improve the health situation of the people in the study area.



**Table 4.16**

**Nature of Use Medicine**

<b>S.N.</b>	<b>Medicine</b>	<b>No. of HHS</b>	<b>Percentage</b>
1.	Domestic Medicine	36	32.73
2.	Antibiotic	70	63.64
3.	Other	4	3.63
Total		110	100.00

Source: Field Survey, 2013.

The Table 4.11 shows that 32.73 percent household used domestic medicine. 63.64 percent household used antibiotic and remaining 3.63 percent household used other types of medicine. Others type of medicine includes Ayurvedic medicine, Yoga and some are believe in traditional treatment i.e. Dhami, Jhakri.

**4.4.1 Nature of Health Check-up**

Establishment of the community forest plays the important role to improve the health situation of the study area. Before the establishment of the community forest forestry user group cannot go hospital to check-up their health due to poverty. After establishment of the community forest where the forestry user groups go to their health check-up explain below by the help of the table.

**Table 4.17**

**Nature of Health Check-up**

<b>S .N.</b>	<b>Types of Hospital</b>	<b>No. of HHS</b>	<b>Percentage</b>
1.	Clinic	31	28.18
2.	Community Hospital	10	9.09
3.	Government Hospital	50	45.45
4.	Private	19	17.27
Total		110	100.00

Source: Field Survey, 2013

The Table 4.12 shows that after the establishment of the community forest of the study area the household who are involved in community forest 28.18 percent goes to the health check-up in Clinic, 9.09 percent household goes to the community hospital, 45.45 percent household check- up their health in government hospital and 17.27 percent household check-up their health in private hospital. Form this data, concluded that due to the establishment of the community forest household involved there and earning income. From this income they can go to the hospital to check-up their health. So, establishment of the community forest helps to improve the health situation of the forestry user groups of the study area.

Road is most important transportation of the daily life and backbone for the development activities. So the CF also helps to improve the road or effect the road situation of that area. By the income from the related CF the FUGS determine in what types of road to built so the effect of road condition by the establishment of CF of the study are explain below.

#### **4.4.2 Support on Road By the CF**

Most of the people who are involved in CF they feel support to improve the road condition accept this. But due to the low income of community forest cannot invest the income in road sector; we can explain this by the help of the following table.

**Table 4.18**

#### **Support to Improve Road by the Community Forest**

<b>S.N.</b>	<b>Support to improve</b>	<b>No. of HHS</b>	<b>Percentage</b>
1.	Yes	70	63.64
2.	No	40	36.36
Total		110	100.00

*Source: Field Survey, 2013*

Table 4.13 shows that 36.36 percent HHs cannot accept support to improve the road condition of the study area by the CF and 63.64 percent HHs accept support to improve the road condition of the study area by the CF. This analysis shows that CF

provides access for the road. So, we can conclude that CF play important role in improving road situation of the study area.

#### **4.4.3 Nature of Access on Road**

In Nepal, there are three types of road, first on is Kachchi, second in Graveled and third is Pakki. Establishment of the CF plays the important role to improve the road situation of the study area. Before the establishment of the CF HHS accepts the road is Kachchi in the study area. Due to low income and neglected by the government. After the establishment of the CF where the HHS accepted the road is Graveled explain below by the help of the table 4.19.

**Table 4.19**  
**Nature of Road**

S.N.	Types of Road	No. of HHS	Percentage
1.	Kachchi	20	18.18
2.	Graveled	90	81.82
Total		110	100.00

*Source: Field Survey, 2013*

The table 4.14 shows that after establishment of the CF of the study area the HHS who are involved in CF. 18.18 percent HHS accept the road is Kachchi or not improve the road and 81.82 percent HHS accept the road is Graveled or improve the road. Form this data conclude that due to the establishment of CF FUGS involved there and earning income, from this income they can invest to the road to built in the study area. So, establishment of CF helps to improve the road situation of the study area.

## **CHAPTER-V**

### **WOMEN'S PARTICIPATION IN SALMACHHA COMMUNITY FOREST**

#### **5.1 Women Participation in FUG Committee**

In the Salmachha CFUG, there are 15 members in the committee. In the current year, the committee had elected 5 female members in the committee (33.33) percent of the total communities members) although there is women's participation in the committee. The key position like president, vice president, treasurer, secretary, vice secretary is held by only males. The position of member is held by the female member. From the household survey, it is found that 25 percent of the total respondents do not know how many times and when assembly meeting and committee meeting are held in a year. This is because the respondents do not attend the meeting. About 65 percent of the respondent said that they always attend the meeting and general assembly. The respondents also said that fines would be lived if they do not attend the meetings. Similarly, 23 percent of the members do not attend meetings sometimes, 11 percent said that of the respondents they do not attend the meetings at all. There is because either they do not get the information or they do not have times to attend the meetings

From the household survey, it is found that 25 percent of the total respondents do not know how many times and when assembly meeting and committee meeting are held in a year. This is because the respondents do not attend the meeting.

**Table 5.1****Trend of Participation of Community Forest Users in Meeting and Assembly**

Fiscal year	With respect to FUG meeting				Percent age	With respect to FUG Assembly				Percent age
	No. of meeting	Participation				No. of assembly held	Participation			
		Male	Female	Total	Male		Female	Total		
2005/2006	12	120	15	135	12.25%	3	200	27	227	11.23%
2006/2007	15	150	35	185	16.78%	3	250	40	290	14.35%
2007/2008	15	155	40	195	17.69%	2	300	102	402	19.90%
2008/2009	16	130	150	280	25.40%	2	321	200	521	25.79%
2009/2010	17	156	151	307	27.85%	3	330	250	580	28.71%
	Total			1102	100%	Total			2020	100%

*Source: Field Survey, 2013*

From table 4.14 it can be observed that the number of FUG meeting has suddenly increased in the Fiscal year 2005/2006. The female participation has also increased from the fiscal year 2009/2010.

All the respondents replied that, venue and time is fixed by the secretary with the decision made in earlier meetings and with the permission of the chairperson. All the respondents said that the day and time of the meetings are fixed with due to consideration for the FUG member's convenience. Hence it can be concluded that meetings are held in a democratic way.

## **5.2 Participation of Women in Decision Making Process**

The respondent also admitted that decision is made according to consensus of the majority. The respondents also said that women do participate and speak in the discussion. The researcher attended one of the general assembly and found that women do

not speak much in the meeting. The observation in the meeting gave the impression that the committee members and elite leaders took most of the time in discussion and passed their proposal for decision making. The major reasons for exclusion of the poor and the women in decision making are illiteracy, poverty, household work and low empowerment of the women community.

### **5.3 Participation in Community Forest Development Activities**

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

When asked to the respondents to suggest improving women's/ poor participation in the community forest management program they suggested the following.

- ) By encouragement and motivation of the women and poor in the community forest management activities.
- ) Introduction of program in favor of poor and women.
- ) By Promotion of income generating activities.
- ) By provision loan facilities.
- ) By support to women by males.
- ) Give warning and introduce fines when they are absent in the meeting and CF management activities.

Most of the respondent said that literacy program, training and other activities are the most important to encourage women and poor to participate in the community forestry activities.

### **5.4 Socio-Behavioral Changes**

During the interview, it was found that the positive effect were increased expression capacity in users (especially in women) knowledge about "Greenery is better for health". Positive attitude on CF management and feeling of "CF is ours" and people are more interested in CF than earlier period.

The negative effective were that fifteen percent of the total users robbery due to dense forest wildlife has been increased so the users fell afraid of go alone in the forest.

# **CHAPTER-VI**

## **BENEFITS to USERS GROUP BY THE COMMUNITY FOREST**

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

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

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

### **6.1 Direct Benefits and their Values**

Availability of forest products such as fuel, timbers 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 prices fixed by the FUG.

The direct benefits obtained from community forestry are:

#### **6.1.1 Sustainable Collection**

The people in the village of Gadariya VDC ward no. 2 get sustainable firewood and fodder for their daily need. It was possible only after two introduction of community forest couldn't provide sustainable supply. A forestation by community forestry program becomes very feasible for livestock rearing.

### **6.1.2 Availability of Forest Products**

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

### **6.1.3 Road Construction**

Gadariya village development is far away from the district headquarters on ungraveled road passing through the Salmachha Community Forest to maintain improve and construction the road to Salmachha Community Forest. Forestry user group have used the group fund. The user groups of this village are highly benefited from transpiration.

### **6.1.4 School Support**

There is one Higher secondary schools named Shree Gadariya secondary school in the centre part of Gadariya VDC ward no. 4. The Salmachha CFUGS have been providing timber for the construction of school building, timber for the construction of school building and making Furniture at free of cost. If CF is getting some prices. After, CF is the main source of timber for school construction and maintenance.

## **6.2 Indirect Benefits and their Value**

The indirect values of CF refer to social and environmental goods and services that the CF provided forest degradation and destruction might imply the loss of many of these environmental benefices although the extent of loss would depend on the subsequent land use environmental benefits also might include a decrease is social erosion, reduce downstream flooding, increase in numbers and diversity of birds and wild life and increased in biodiversity, employment generation. The establishment of an organized FUG and social integration might be some of the social benefits. Mostly, the indirect benefits are as follows:



### 6.2.1 Environment Benefits

Community forestry prevents soil erosion and landslide. It provides catchments protection. The villagers have constant source of water for irrigation which was not available prior the implementation of community forestry program. 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.

### 6.2.2 Unification of People

Mechanism of encouraging and farming user's groups committee, thus building up social capacity forest. People are united to tackle every type of social problems through mutual cooperation.

### 6.2.3 Impact on Household Time Saving

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

**Table 6.1**

**Impact on Household Time Saving**

<b>Total Time Saved (Daily)</b>	<b>No. of HHS</b>	<b>Percentage</b>
0.5 hour	65	59.09
1 hour	34	30.91
1.5 hour	6	5.45
2 hour	5	4.55
Total	110	100.00

*Source: Field Survey, 2013*

According to the table no. 6.1 after the inception of Salmachha Community Forestry user has saved roughly 0.5 to 2 hours per day, per household. From table 6.1 it is clear

that all households of Salmachha CF get Chance to save their time with the implementation of CF 5 households have saved 2 hours time per day it is greater advantage other households. Similarly 59.09 percent household has saved 0.5 hours.

### **6.3 Other Benefits from the Salmachha Community Forestry**

#### **6.3.1 Reduction of Women's Work Load**

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

#### **6.3.2 Source of Resources**

People are mainly depend on agriculture directly or indirectly because of predominance of agrarian economy in our country and so are in the study area. There are 46.12 percent of people are engage an agriculture. It is very necessary to uplift the condition of agriculture, use of modern technology and fertilizer to raise the level of incomes. The CF has helped to provide the sources of watershed to provide the sources of watershed to irrigate land and to yield more production in the village.

#### **6.3.3 Source of Energy**

The villages are dependent upon firewood as main source of energy out of sample 110 total 100 household have identified firewood as main source of fuel. There is some practice of using alternative source of energy like bio-gas, *gobar gas*, and electricity.

### (a) Source of Firewood

**Table 6.2**  
**Source of Firewood**

Sources of Firewood	Firewood (in Bhari)	Percentage
Community forest	5000	90.50
Private forest	400	7.24
Other Sources	125	2.26
Total	5525	100.00

Source: Field survey, 2013

\* 1Bhari = 25-35kg

It can be seen from the table that annual consumption of firewood total household is about 5525 Bhari. Each household is getting 5000 Bhari of firewood only from the community forest. In other words the contribution of the community forestry to fulfill the total demand of firewood is more than 90.50 percent and other demand was fulfilled from the private forest more than 7.24 percent and other source like agriculture residues 2.26 percent.

### (b) Source of Fodder for Livestock

Forests are the main source of fodder for livestock. Fodder trees are important for the Terai communities as they provide quality feed for livestock. The CF cannot alone meet the demand of fodder for livestock. Private forest (PF) agricultural residues (Ag) and straw (Paral) are other source of fodder to feed livestock is given in table.

**Table 6.3**  
**Source of Green Grass and fodder**

Source	Average utilized green grass (in bhari)	Per Price/ total marked price	Average utilized fodder and straw (in bhari)	Per market price
CF	120	Rs 5/600	115	4/460
PF	335	Rs 10/3350	295	10/2950
AG	103	Rs 6/618	93	5/465
Total	558	Rs 3950	503	3875

Source: Field Survey, 2013

The sample household relies on community forestry and agricultural residues. The above table shows that 120 Bhari of green grass has been obtained from community forest and the rest of demand is fulfilled by private forest (355 Bhari) and agricultural residues (103 Bhari). Similarly, Out of the total demand of as fodder straw CF has fulfilled 115 Bhari and the rest 295 Bhari by private forest and the 93 by agricultural residues. These data shows that CF has made an important impact to the people of the area in fulfilling the demand of fodder and grass for livestock.

## **6.4 Income source of the Community Forestry of Salmachha users' Group**

The CFUGs has been generating income from various activities, such as selling forest products, penalties, entry fees or membership fee and functional levy, in these CFUGs. The interest obtained forms the loan on the poor people. They have not collected the money from the donation from outsiders. The main sources of income for CFUG are as follows.

### **6.4.1 Fuel wood**

In this village for the sample of 110 household the forest is opened once a year in winter- December for cutting fuel wood. They participate after paying some fee as a levy. Each household can collect an average 20 Bhari of Fuel wood per year. The members have to pay Rs. 20 load for fuel wood exceeding 20 loads once a month. During October- November the member can collect two loads of grass per day.

### **6.4.2 Green Ground Grass**

The CFUG area is opened for collecting grass, Ashoj, Manghir during this time some needy users to collect 2 Bhari grass per day for their livestock.

### **6.4.3 Timber**

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

community forest is used only when the private resourced is insufficient. Likewise, timbers are essential for making agricultural implements (e.g. Ploughs, tools handle). If the users of this CF ask wood for making their houses, they to pay some amount to the CFUG, according to CFUGs rule.

#### 6.4.4 Fines and Penalties

The present study found that users who break the rule of group and do not come to participate on forest development and management are be fined. Grazing animal is not allowed in restricted CF area. If anybody grazes animal inside the forest, he/she is fined. Similarly, cutting trees without permission of FUG is supposed to be illegal in the CF system. If anybody goes to the forest with cutting equipment a fine Rs 500 will be live. The person who does not attend the work of forest development and management will also be fined Rs 200 per day.

Similarly, moreover grants, prizes, interest, entry fee etc. sources of income for the CFUG 1,54,000 on saving kept in their fund CF has distributed the amount to the villagers at 2 percent interest rate.

**Table 6.4**

**Income source of Salmachha CFUG Income Sources**

<b>Income Sources</b>	<b>F/Y 2010/11</b>	<b>Percentage</b>
Timber and poles	527530	76.42
Fuel wood	15327	2.22
Entry and renew fee	11040	1.60
Monthly fee	3424	0.50
Fine and penalties	10254	1.49
Nursery (green grass and fodder)	8335	1.21
Royalty	4180	0.61
Grants	110244	15.97
Total	690334	100.00

*Source: field survey, 2013*

Table 6.4 shows that the main source of income CFUGs is timber which contribute 76.42 percent.

## 6.5 Major Area of Expenditure

The Salmachha Community Forest user group has spent their collected income in different sectors. The expenditure has been made for improvement such as forest protection, management, poverty reduction, infrastructure development plantation and nursery. The expenditure area of Salmachha CFUG in fiscal year 2010/11 is given in table 6.5

**Table 6.5**  
**Expenditure Pattern of Salmachha CFUG**

<b>Expenditure</b>	<b>F/y 2010/11</b>	<b>Percentage</b>
Forest protection	130621	35.60
Plantation and nursery	20000	5.45
Management purpose	135115	36.82
Infrastructure development	50000	13.62
Poverty alleviation program	20525	5.59
Miscellaneous	10723	2.92
Total	366984	100.00

*Source: field survey, 2013.*

Table 6.5 shows that Salmachha CFUG has spend 35.60% expenditure for the purpose of forest protection, 5.45% in plantation works, 36.82% in management purpose, 13.62% in infrastructure development, 5.59% in Poverty alleviation program and 2.92% miscellaneous respectively. in this we came to know that the Salmachha CFUG is doing its tasks effectively for the management and development of the forest of that area along with its proper and effective programs.

# **CHAPTER -VII**

## **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **7.1 Summary of Findings**

The major findings obtained from this study are as follows:

- ) In the study area the main source of income of CF is timber and fuel wood which is contributed 76.42 percent and 2.22 percent respectively.
- ) In the study area the community forest helps to improve education, health and road.
- ) Males play the vital role in user's committee. Due to the lack of education and HHS work women less are involved in the user's committee. But in seminars and trainings women are gradually participating. Presently, they have elected 5 female members in the committee that compares 33.33 percent of total community members.
- ) The poor users are getting direct benefits of community forest such as, timber, firewood, fodder, leaf litter, grass, agricultural tools at reasonable prices.
- ) IN the study area the main occupation is agriculture. Nearly 46.12 percent are engaged in agriculture in addition to agriculture people are adopting different occupation to raise their living standards.
- ) It is found that the majority of the population is engaged in agriculture and livestock.
- ) Participation of level of Dalit and poor was very low and attendance and active participation of Dalit and female in EC meeting was low EC was the main form of decision making therefore they have low approach in decision making process.
- ) Participation of women was less due to male dominance, illiterate and their engagement in kitchen work. Poor and Dalit were mostly had to do work for daily food so they did not have time to go to the meeting.

## 7.2 Conclusion

The forest was at the stage of shrub land at the time of the formation of Salmachha Community Forest. After 5 years, the forest has returned to its original condition. There is possible because the users of Salmachha are very concerned in the growth of the forest, with the supports and suggestions from DFO staff and other line agencies and also through training, awareness activities and work shop conducted to the Salmachha CFUG members. The disappeared plants species are regenerated. There is increase in bio-diversity. The wild animals and birds can be seen in the forest the main source of the CFUGs is timber and Fuel wood with share contribution of 74.42 percent and 2.22 percent respectively. It is found that positive impact of community forest on user groups such impacts are revealed from income generation, construction works and awareness of people on the need for conservation of natural resources.

Community Forest improves the education situation, health situation and road construction. It helps to positive economic impact on education and infrastructure. Community forest fulfills the wants of forest products like firewood, fodder, green grass, leaf litter, timber act required for day to day lives for villages in this forest user group. Forest products are distributed proportionality on the basis of household size. In generalist users perceive that they getting the benefits. Regarding the livestock the study has found that community is interested to keep but there is no considerable increase in number of livestock during the period. Grazing problem cost of hay and lack of care taker for livestock are the causes of limited number of livestock. The community forest users are attracted to tomato cultivation after the community forest development. The community forest users are get to get income from the forest products or from the forest related products. The community forest users have steadily increased their fund. The economic impact by community forest on education, health and road CF helps to increase the literacy rate and improve the human power. Health situation helps to save the money and human capacity. Similarly road helps to save time and improve the development activities.

This study has also found that there is good participation of the community users in various community forest management general assembly meetings and local infrastructure development activities. Most of the community members have



visited other community forest in different place and had opportunities to learn much more on community forest management the achievement of the goals like good coordination among committee member and community users, maintaining transparency and good communication within committee members are some of the indicators to good leadership. However, it is found that there is lack of active participation of women and disadvantaged group in the institution activities. The major source of fund is selling forest products to its own numbers. District forest office good, grants for forest development and management activities (such as nursery and plantation), bank interest and membership fees. There are other sources of income the community forest users have mobilized. Their fund in different infrastructure development and social welfare activities, however, they have not implemented any activity that would benefit directly. The FUG users like people raw relating to women and poor groups through activities, like literacy class, credit facilities. In conclusion, it can be said that this Salmachha CFUG has tried its best to conserve the forest but management and utilization the resources so for of been lacking.

### **7.3 Recommendations**

Based on the findings of the study, following recommendations are suggested.

1. Development of infrastructure and education for supporting tourism development need to be development at local level. This will help in promotion of the tourism as well as in generating of employment to the local community. Therefore, community forest user should give top priority to management community forest.
2. Timber, firewood, grass, fodder, leaf litter and agriculture tools are the direct benefits CF required by the common people, therefore CFUG should give top priority to was with low income for the distribution of these benefits.
3. Income received form CF should be invested on those activities which could benefited to poor users. More affectively the benefits of CF and inspire to participated in forest protection and development.
4. The technical supports from DFO are must for the active forest management onsite training for the forest management NTFPS collection and cultivation rural forest enterprises establishment, frequent field visit for the awareness of

new policies to the community people Area the main subjects that the DFO should improve for active forest management by the rural community. The CFUG should work more clearly with DFO.

5. Training program on the operational plan preparation, forest rules and regulations and awareness building should be conducted for all CFUGs. For successful community forest program leadership training should be given to the leaders.
6. Improved cooking store, kerosene stove, Gobar gas, electrical stove government can carried out to reduce firewood consumption and improve health DFO can CO-ordinate with concerned agencies.

The Role of CFUG in improving road, health and educational and in improving the welfare of rural communities needs to be the known and supported for achieving the success in this direction. All users should be involved in the community forest management process. In Salmachha CFUG, users should be sensitized through awareness raising program related to CF the involvement of users from different background.

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**Appendix I**  
**Questionnaire**

**Community Forestry Program Household Survey 2013**

Serial No.:

Date:

1) Name of the household head:

Age:

Sex:

Ethnic Group: Type of home:

Language:

Education:

Religion:

Main Occupation:

Distance between home & community forestry.

2) Family description.

S.N.	Name	Age	Sex	Educational							Occupation
				IL	Literate	P	LS	S	HL	H.Ed.	

3) Description of L&.

(a) Do you have own l&?

(i) Yes

(ii) No

(b) If yes, how do you have of fallowing (in bigha)?

(i) Bigha

(ii) Kaththa

(iii) Dhur

(c) If Not, How much other's l&s do you cultivate?

(i) Bigha

(ii) Kaththa

(iii) Dhur

(d) L& Presentation.

S.N.	Type of L&	Area of L&	Cultivation ownership			Remarks
			Self	Rented out	Rested in	
1.	Khet					
2.	Bari					
3.	Private Forest Garden					
4.	Pasture					

#### 4. Annual Crop Production

S.N.	Types of crops	Cropping area (in Kaththa)	Qty. of annual Production (in Quintal)	Per Quintal Price (NRS)	Total Value
1.	Paddy				
2.	Maize				
3.	Wheat				
4.	Oil seeds				
5.	Potato				
6.	Vegetable				
7.	Fruits				
8.	Others				

#### 5. Income sources of Household /people

Occupation	Income (In Rs.)
Agriculture	
Business	
Services	
Wage labor	
Others	





8) Do you have had any support from the government to run this community forest?

- a) Yes
- b) No

9) Can you help the other children who are in helpless in their educational purpose?

- a) Yes
- b) No

10) Do you invest in educational institution?

- a) Yes
- b) No

If yes, what types of educational do you invest?

- a) Government school
- b) Private school

- c) Government college
- d) Private college

11) Can those earning from the community forestry help to improve your health?

- a) Yes
- b) No

12) Before the establishment of the community forest which medicine did you use to solve the health problem?

- a) Domestic medicine
- b) Antibiotic
- c) Other

13) Where do you go to health check-up after the establishment of the community forest?

- a) Clinic
- b) Community hospital
- c) Government hospital

14) Are these household who are engaged in your community forest all are healthy?

- a) Yes
- b) No

If yes, what ways .....

15) Sources of energy.

A) What are the sources of your energy?

- a) Firewood
- b) Others

B) If firewood, from where do you get?

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

C) How much Bhari of firewood you need a week?.....

D) Who collect firewood in your family?

- a) Women      b) Men      c) Children      d) Both men & women

E) Are you conserving firewood?

- a) Yes      b) No

If yes, how do you conserve?

- a) Use alternative sources      b) Use improved stoves      c) Use Biogas

16) What types of house has your family?

- a) Kachchi      b) Pakki      c) Toilet

17) Dose your agriculture yield fulfill your needs?

- a) Yes      b) No      c) Partially

18) Food sufficient

- a) < 6 months      b) 6-9 months      c) 9-12 months      d) Over 12 months

19) If food is sufficient only less than 12 months what other sources of supplement?

- a) Labor      b) Service      c) Others

20) Compared to late 6 year whether your community forest has improved?

- a) Improved      b) worsened      c) Constant

21) Do you get other benefit from community forestry besides fuel wood & fodder?

- a) Yes    b) No

If yes what are they?

1.....    2.....    3.....

22) How much interest paid for the loans?

.....

23) Do you get loan from community forestry?

- a) Yes    b) No

24) Is there any development program supported by CF?

- a) Yes    b) No    c) No Idea

If yes what are they?

- a) Construction of road    b) Trial improvement  
c) Construction of bridge    d) Construction of School

25) What do you think about the benefit from CFUG?

- a) Fuel Wood    b) Timber    c) Leaf litter    d) Fodder grasses  
e) Bending material    f) Medicinal herbs    g) Plants

26) What other indirect benefit you receive from CFUG?

- a) Support the rain in time  
b) Reduce downstream flooding  
c) Decrease in soil erosion  
d) Increase in forest cover  
e) Increase in soil fertility

- f) Improvement in water resources
- g) Increase in numbers & diversity of birds & wildlife
- h) Increase in biodiversity
- j) Increase the production of crops

27) Do you think FUG has increased employment?

- a) Yes
- b) No

If yes, in what ways

.....

28) Do you think FUG has increased incomes of the Participations?

- a) Yes
- b) No

If yes how?

.....

29) Are you member of FUG?

- a) Yes
- b) No

If yes, what is the position?

.....

30) How many time are meetings & assembles held during one year?

.....

31) Do all the members of forest user groups committee participate in decision making?

- a) Yes
- b) No

- 32) How are the decision made in the user group committee?
- a) Among members                      b) Voting in committee
- c) By chair person                      d) do not know
- 33) "Women are to be encouraged to participation in community forest management activities what your opinion is?
- a) Strongly agree                      b) Neutral                      c) Disagree                      d) Do not know
- 34) Do you have something move to say on CF, Please?
- .....
- 35) How much amount of money is in your? (CFUG fund in CRS)
- a) Total Fund
- 36) What the fund has been utilized?
- a) Loan                      b) bank                      c) other
- 37) Is there equal participation of female & male in FUG?
- a) Yes                      b) No
- If no, which group participates more?
- a) Male                      b) Female
- 38) What are the problem of the encountered by FUG member?
- a) Lack of education                      b) Lack of people's participation
- c) Lack of awareness                      d) All of the above
- 39) What might be the reason of less participation?
- a) Education                      b) Household work
- c) Income level                      d) others

40) What kind of role is playing in GUG?

- a) Active members                      b) Passive members

41) Are there equities in decision making & benefit sharing between male & female?

- a) Yes                                      b) No

42) Do you think CF will be improved in social effect in future?

- a) Yes                                      b) No.

43) Do you have any comment & suggestion towards the improvement of your community forestry?

Comments.....

Suggestions: .....