UNIVERSITY OF AGDER

Master Thesis

The Significance of Women's Participation in Community Forest Sustainable Management:

A case study of Shikharpur community forest, Hokse VDC-3. Kavre District, Nepal

By

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This Master's Thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this dose not imply that the University answers for the methods that are used or conclusions that are drawn

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Abstract

Community forest programmes are prioritized in the Nepal government forestry sector. This program was started in Nepal during the late 1970s. The main objective of this program is to ensure local people's participation for better forest management. Prior to the 1970s deforestation was very high due to the government nationalization act of local forests. The government had restricted local peoples access to forests. As a result, people were aggressively opposed to the government's actions, and deforestation became a serious problem in rural Nepal. The government realized this as a fact and started a participatory approach in different government programs to mitigate the situation.

Nepal is a nation with Hindu majority where, most social, cultural and economical practices have male domination. Women are responsible for household chores like; making food, taking care of the babies, collecting firewood, fodder, green grass and tending to livestock. Women are closely related with forest activities. They have wide knowledge about forests, forests product and management of forests. Their active participation from problem identification to decision making and benefit sharing stages play a vital role for sustainable resource management. In practice, women participation is very low in community forestry program. There are several factors affecting women's participation such as; socio-cultural norms and values, poor education, poor economic conditions, gender bias, cast domination etc. These factors determine the rate of women's participation in Shikharpur community forest of Hokse VDC. These factors not only affect in community forest programs, but also affect women's active participation in different government programs in Nepal. Women's participation can improve through different community awareness programs and through the active role of government and private sectors. Awareness programs may increase local people's understanding of the significance of women's participation in sustainable forest management. People at Shikharpur depend on forests because firewood is their main source of energy in their everyday life. Livestock and agricultural activities are also correlated with forests. Therefore sustainable management of Forests is essential. The government should consider enforcing a rule for a minimum percentage of women participation at different stages of project management. Social organizations, NGOs, INGOs, and the government should focus on improving education and economic conditions in the researched zone, and develop the attitude of women's active participation is vital for good forest management.

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List of Acronyms and Abbreviations

CBS: Central Bureau of Statistics

CF : Community Forestry

CFUG: Community Forest User Group

FUG: Forest User Group

DDC: District Development Committee

DFO: District Forest Office

FAO: Food and Agriculture Organization

FUG: Forest User's Group

GN: Government of Nepal

INGO: International Non-Governmental Organization

LDC: Least Develop Country

MPES: Master Plan for Forestry Sector

NGO: Non-Governmental Organization

NPC: National Planning Commission

PF : Panchayat Forest

PPF: Panchayat Protected Forest

SLC: School Leaving Certificate Level

VDC: Village Development Committee

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Chapter One

1.1. Introduction

The Community forest program is a new approach towards national forest management in Nepal and is one of the most successful programs operated by the Nepal government. This program is based on the concept of people's participation and was started in the 1978 (Acharya, 2002:149). Forests account for around 40 per cent of the total land area of the country but have been declining by around 1.9 per cent annually during 1990s. This decline was reversed, leading to an annual increase by 1.35 per cent over the period from 2000 to 2005 (UNEP, 2010). Forests are one of the most crucial factors in the natural environment and can play an important role for different sectors.

According to Gilmour and Fisher (1991) community forestry is the control, protection and management of resources by rural communities for whom trees and forests are an integral part of their farming systems (Gilmour et al in Joshi 2003: Introduction). In addition, the community forest program is an umbrella term denoting a wide range of activities which link rural people with forests and trees, and the products and benefits to be derived from them which is one dimension of forestry, agriculture, rural energy and other components of rural development (FAO, 1978 as cited by Amold (1989) in Sharma 2010: Definition). The Nepal government has formulated a master plan for the forestry sector in 1989, a forest Act in 1993, and the forest laws of 1995 altogether to install the community forestry program as a basic policy in Nepal. Not only the government but also development practices have begun to track local people's participation as essential for the forest assessment like monitoring and evaluation for forest management. The special feature of the community forestry is that forest user groups are responsible for proper management of the forest and resources. The forest is an important natural resource for the support of livelihood of people in the villages and is also the natural home for wild life. Likewise, community forestry is a strategy for forest development and protection. It is a project in which problem identification, transformation, resolution and control lies on the community peoples. Thus,

community forestry through forest users groups and local stakeholders for the forest management has become a viable strategy for natural resources protection.

The main objective of the community forests in Nepal is to involve people in all stages of participation e.g. from decision making to benefit sharing. The there years Interim plan ¹ has fixed the goal to reduce poverty through increasing income generation opportunities, decentralized and sustainable management of forest, plants, herbs, soil, watershed, environment, bio-diversity conservation, development of forest entrepreneurship for protected areas, development of sustainable forest entrepreneurship and watershed sectors through people's participation (NPC, 2008:192).

An authentic participatory approach is important for an effective implementation of community forest program in Nepal. Where women involvement is crucial at the country's social structure in such manner that they perform all activities related to household and forestry. Women cook food and do most domestic work related to fuel wood, fodder, green grasses, herbs, leaf litter and graze the animals. There is a close relationship between rural women and the forest; therefore deforestation can unfavourably affect them. Women participation is a crucial factor for success and failure of a community forest project. The women participation level in community forest programs is very low. According to Kandel, "women represent about twenty four percent of the total members in the executive committee. Total numbers of CFUGs (Community Forest User Group) are 13,125: where only five percent are women members, and their performance as compared to men management or mixed management is quiet more effective (kanel and kandel 2004 in Kafle 2008:7)." In despite most of community forest has been managing by men control. Proper utilization and management of forest resources are main agenda of development. It is related with environment, social, economical and cultural aspects of the society. Gender bias is high in most of government and private organization program management in Nepal and also in community forest programs. Women's are the first involved and principal users of these resources although their participation is low in the community forestry program.

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¹ Government of Nepal eleventh three year national plan.

This paper is going to present separately by parts of the research where it has organized in different sections such as introduction; background of the study, objective and research question, research area, literature review, qualitative methodological approach, profile of the study area, sentiments for participation, empirical finding and analysis, conclusions and recommendations.

1.2. Background of the Study

Nepal is a rural dominant country as it has more population in rural areas, where 85 per cent of the population are live in rural areas, and the majority of them are living below the poverty line. However, the country has many resources but due to weak management they are being wasted. Among them, forest is one of the most essential natural resources available in rural Nepal. As forest, water and mines are the main natural resource of Nepal, the government is doing endeavour attempts to make the maximum use and conservation of those resources fundamentally for the developing of the country. Among the natural resources, the forest is one of the largest natural resources in terms of land area coverage. Forest resources play an important role in the daily life of people. These resources are indispensable for about 95 per cent of the rural population and compost manure.

The total energy consumption in Nepal was 338pata joule (PJ) in 2002. The share demand was traditional energy sources was 85.80 percent and this rate are being increased due to population pressure on resources. The land use situation of the country forest comprises 37 percent (5.5 million hectares), sunblind and decreases forest 10.6 percent (1.56 million hectares), grass land 12 percent (1.75 million hectares), cultivated land 21 percent (3.05 million hectares) and other (including snow area) 25 percent (3.69 million hectares) (master plan to forestry 1988/89 in Forestry Nepal, 2012). A forest survey taken in 1998 shows that there is only 29 percent forest land of the total land. This survey indicated that Terai forestland is decreasing at the rate of 1.31 percent annually.

Forest resources have made a significant contribution to economic and social development. Forest provides various things such as fodder, timber, firewood, and raw material for industry among others and contributes to earn foreign currency as well. On the other hand, there are several indirect benefits such as; it plays an

important role for climate balance by protecting the productively of the soil and by providing recreational values as well as ecological balance.

In olden days, forest remained in pristine conditions primarily because the population were low. People lived in closed harmony with nature and gave higher priority to conservation of forest resources. In those days, forests were looked upon as a source for maintaining life-supporting system. There was a strict social control on the cutting of trees. In the Licchavi period ² even to enter to the forest, permission of the kings was needed (Karmacharya, 1987). During the Ram Shah³ regime, even dry leaves were charged if being taken. Thus, in those days forest was an abundant resource in the Himalayas and the famous (Char Kose Jhari) 8 miles strip in the Terai (Kayastha, 1991). However, this situation has been changed in recent years with increasing population as more forestland has been cleared for cropland (Karmacharya, 1987). More and more people encroached the forest and cleared the land for cultivation, where migrations and squatters had been the main reasons for deforestation.

The natural forest has been degraded considerably due to over exploitation and absence of systematic management. The growing pressure of forest resources is intensified by an over increasing human and livestock population. As the forest declines, number of problem related to environmental degradation such as soil erosion landslides, desertification and climatic harshness are common phenomena found in Nepal. The forest cannot be a separated area in association with natural conservation climate, environment, bio-diversity and socio-economic development of the country. To manage the forest properly, the nation and the community have to become globally. In 1975, FAO's forestry division established a community development of the forests. There after Australia, Britain, America, Denmark, Finland and Switzerland also initiated community forestry management projects.

Forest usage for farming live stock raising and other domestic purposes is not new in Nepal. Prior to 1950 two types of traditional forest management existed in Nepal; Talukadari and Kipat system.⁴ In 1957, the government of Nepal encoded the private forest nationalization Act to protest management and conservation of the forest for benefiting the entire country. Unprepared to assume the technical and administrative responsibility of forest ownership, villagers reacted negatively to the nationalization

³ His Majesty King of Gorkha (1666-1693B.S).

² An ancient Kingdom of Nepal.

⁴ Different types of forest management system.

proposal. They were been believing that their traditional rights of access and use had been cut off. As a result, local responsibility for forest protection disappeared. In Nepal, the nation of community forestry comes up after the problem of deforestation and desertification. NGOs started to work on community forestry management, in an initial period after a three days meeting sponsored by the government in 1975, which turned into a 13 days marathon with forests participating from all over Nepal (poffenberger, 2000:57) a number of NGOs started to work in community forest management programs. Later in 1976 Nepal's National Forestry Plan (NNFP1978) proposed the need of community forestry programs for the management of forest. Between, 1957 and 1977 several laws were passed defining government authority over the forest and regulated the use of these resources. The forest act of 1961 was the first comprehensive forest legislation in Nepal's history. It was an attempt to institute better management of the forest. In 1977 and 1978 Panchayat Forest (PF) and Panchayat Protected Forest (PPF) ⁵ were introduced under the Community Forest Development Program (CFDP) with the purpose of handling back the protection and management of the forest to the people (Chettri and Pandey 1992). In many parts of the hill regions, numerous local forest management systems can still be found.

Many research studies on forest resources and their protection and management have made it clear that indigenous system of forest management is widely distributed throughout Nepal, (Fisher et al 1989) and these systems of forest protection and management have effectively and successfully operated within the local environment contexts. Similarly, many community forest programs are currently in operation in most parts of Nepal in which user groups are the units of forest management and decision workers in community forestry.

Nepal's status as one of the world's least developed and poorest nations bring special challenges to achieve sustainable community development and conserve natural resources.

Experience from community forest programs in Nepal show that such programs can build capacity within rural communities to undertake their own development and at the same time to arrest the rate of deforestation and increase the biological diversity of human modified forests impact. The community stood as potential benefits for both

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⁵ A set of rules and regulations to govern the handing over of limited areas of government forestland to the control of the village panchayat.

communities' development and forests conservation while the main focus on community forestry has been on supporting subsistence agriculture and livestock management. Recent development in Nepal suggests that community forestry can play a major role in community development especially in strengthening local organization and raising funds for increasing rural welfare (Kaystha, 1991).

The special feature of community forestry is that the local organizations, sponsored by the government, need to manage and conserve forests. In community forestry, a direct link is forged between community development and forest conservation. Community forestry is a viable strategy for arresting the rate of land degradation and as a result increasing the forestry and the returning of species from previously degraded habitats in Nepal. Community forestry can yield improvement to rural welfare and rural conditions since the resources managers and local users are the same entity (Barlett, 1992).

The first publication that developed the concept of identifiable community forestry was a paper by Campbell and Mahat 1977 (kayastha1991) through the legislation outlining community forestry was enacted in 1978. Some aspects of the plan relevant to the community forestry are both long term and medium term. The long-term goal is to meet people's basic needs of fuel wood, timber and other forest production and contribute to food production through an effective interaction between forest and farming practices. In addition, protecting the land against degradation to contribute to the growth of national economics by managing community forestry resources. The medium term goal is to promote peoples participation to develop legal frame works needed to enhance the contribution of individual communities to strengthen the organization framework.

There are various community forestry practices in other countries such as China, as a good example known as "Four sided Forestry". China's community forestry program focuses on the plantation along the roads, the rivers and around the houses. There are models from Philippines in the form of "small holder's tree farming projects". In India, where community forestry is believed to be the first organization in the state of Gujarat, community forest has been kept under "social forestry" sector.

Community forestry emphasizes a gradual shift from a highly technical "classical forest management" approach to "participatory approach" which is also people

oriented approach. Hence community forestry in Nepal is about establishing a partnership between Nepal government and the forest users group, in which community forestry is seen as a deliberate and conscious application of business methods and technical forestry principles, to help villages and communities. People's participation is the most essential feature of community forestry in Nepal, due to a large amount of illiterates and backwardness. It has been turned very difficult to get peoples participation in the forestry project in Nepal (Gilmour et al 1991).

Therefore, the main aim of community forestry in Nepal is to involve people in all stages of participation such as decision making to benefit sharing. A genuine participatory approach is important for effective implementation of community forest program in Nepal. Involvement of women is crucial for the country's social structure in such that they will perform all activities related to household. So they are major collectors as well as major suffers. Women cook food and do most domestic work related to fuel wood fodder and leaf litter. Thus, they are the most affected by deforestation.

In fact, community forest program is a new approach towards forest management in Nepal and one of the most successful programs of Nepal government. This program is based on the concept of people participation. Where the main focus of the program is to involve the local community in the forest management. The seventh plan also emphasized to encourage the maximum participation of people in the management of forest resources to fulfil their daily life needs (NPC, 1985). Now community forestry programs have been lunched in 58 districts under the department of forest. The tenth five-year plan of the government expected that during this period, the program would be lunched all over the country.

The government had formulated a master plan for the forestry sector in 1989, forest act in 1993 and the forest by law in 1995 altogether in order to insist on the community forestry program as a basic sector policy in Nepal. Not only the government but also development practices have begun to track about the local people's participation as essential for the forest assessment like; monitoring and evaluating for forest management. The special feature of the community forestry is that forest user groups are the responsible for proper management of forest and resources.

Forest is an important natural resource for the support of livelihood of people in the villages and is also the habitat of wild lives. Likewise, community forest is a strategy for forestry development and protection. It is a project in which identified the problem of mutation, and the community people should control resolution. Thus, community forestry through forest users group in which management of forest rests with the people has been came to a viable strategy of protection. Where women participation is the main determinate for the success/failure of a community forestry project. This study attempts to deal with all those issues focusing on a case study of Shikharpur Community Forest of Hokse VDC, Kavrepalanchok district.

1.3. Problem Statement

Forest has been the main source of natural revenue since the beginning of the 20th century. However, now a day's many dense forests have been depleted, and the remaining forests are also being degraded due to heavy pressure of men and livestock. This has been alarming in Nepalese Himalayas. During the time between 1947 and 1980, national forest declined from 57 per cent to 23 per cent of the total area, and an annual rate decreasing of 1.8 per cent between 1980-2000 (UNEP (2001), FRA (2000) in Baland et al, 2007:2). On the other hand, the master plan of the forest sector (1998) notes that there was a decline in the area under natural forest in Nepal by 5.5 per cent from 1964/65 to 1978/79 and by 3.4 per cent from 1978/79 to 1985/86.

Deforestation has become a serious problem in Nepal. The government's efforts are not sufficient to solve the problem. If it will only depends on the government to solve the forest problem, it would surely increase many other serious problems because government restrictions, rules and regulation limit people access to the forest and will be extremely hard to maintain people daily necessities. The major and direct affective problem would be the lack of grass, firewood, timber etc. which would have also a negative impact on the environmental issues, deforestation problems, soil erosion, landslide, uncertain rainfall, change in the water cycle and pressure of a growing population.

Firewood is the main energy source for rural people. It is difficult to keep the balance between the demand and supply of forest resource due to increasing pressure of human and livestock population. A serious problem in this context has risen. It has been realized that without active participation of people in the forest management, it would be impossible to check such environment, as well as physical challenges. The concept of community participation therefore should be one of the most effective and essential resources.

To alleviate the problem of deforestation, community forestry participation particularly reforestation activates have been imperative. Community forestry has impacts; the people's participation positions that direct popular participation in management and decision making process. In addition, it has been enhancing the vital role of the local people in the decision making process. Participation thus is a collective effort of the beneficiaries concern to pool their resources to obtain objectives, where both genders play a vital role, although women represent around 84 percent in firewood collection and have more involvement in forest activities. Women are the primary user of the forest and forest product, and they can play a significant role for protecting the forest depletion. For rural women, deforestation means more time and energy to be spent for on household necessities.

However, there are some studies about people's participation in community forestry but very few have been conducted on the women's participation in community forest management. So it is a great need to study about participation and also to suggest improvements in the organization of forest user group committees for effective forest management. This study will attempt to evaluate the forest role in the study zone, the people livelihood and will assess the activities preformed by women in community forest sustainable management.

1.4. Research Objectives

The main objective of this research is to identify the significance role of women in the national community forest program for sustainable management through a case study of the Shikharpur community forest where the research will find out the present situation of women's participation in the community forest program management, forest role in people's daily life, the main challenges in women participation, and suitable suggestions to solve these challenges.

1.5. Research Questions

This research will mainly focus on these following research questions:

- ♦ What role does the forest have for the local households and communities in Shikharpur?
- ◆ In what ways are women's contributing in community forest management program?
- ◆ How is the present situation regarding women's participation in the Community Forest User Group Committee?
- ◆ What are the main challenges of women's participation in community forest management?
- ◆ Why is women's participation important for a sustainable community forest management?
- ◆ How can women's participation in community forest management be improved?

1.6. Presentation of Study Area

Hokse is situated in the eastern part of the capital Kathmandu within a distance of 45km. It is one of the Village Development committees (VDC) among the 3915 VDCs of Nepal, and one among 87 VDCs of Kavrepalanchok district. The structure of land is not uniform; it is higher in the northeast part and lower in the southwest part in the VDC. The weather condition of this area varies around the year mainly subtropical in this zone and can be divided into three categories; winter, summer and rainy seasons. On the other hand, the population of this VDC has been increased, and it is on urbanizing process and migratory habitat. The total population of this VDC is 4469 inhabitants with a total of 900 households. The male habitant is 2105 and female habitant corresponds to 2364 (CBS, 2001). There are several ethnic people living together, but the majority of these people are from Brahmins and Chhetri community. They are also the main cast of Hinduism. Most of people are engaged in agricultural activities.

Forest is the main natural resource of Hokse VDC. There are two types of forests: private forest and community forest. The forest covers around 36.52 per cent area of this VCD area. The average minimum and maximum temperature of the VDC varies

from 4°C to 30° C. The climate structure is reflected in the natural vegetation. The study area has been facing the problem of water scarcity. Jhiku, Danfe, Chakhola Dhap and Sobarne are the main rivers of this area. The water flow is limited in the dry session and also those rivers are not sufficient for irrigating the whole land of VDC. According to the VDC secretary, 67.19 per cent of the people (male 77 per cent and female 58 per cent) are literate. 14 different education institutions have been providing education (information provided by VDC secretary Uttam Prasad Lamichhane on the base of VDC profile 2001). Agriculture is the main source of livelihood of the study zone where the subsistence of the people is based on agriculture activities. A mixed type of agriculture (agriculture and livestock) has been practiced in this VDC. Besides this, people have occupations in business, factory, service daily labour and various other work sectors. Most of the villagers raise cattle for draught power, manure essential for agriculture, milk and meat. Animals play a crucial role in their social-cultural life. Agricultural, livestock and forest activities are interrelated where people are struggling to fulfil their basic needs through these activities. Men are the head of the families. They have all financial and other social authority, and they are mainly involved in agriculture work. Women are responsible of housework such as food preparation, firewood, fodder collection, grazing and caring animal activities.

1.7. Significance of the Study

Every research has separate purposes to contribute upon development, production, process or emerging issues. This research purpose is on the significance of women participation in community forest sustainable management in Nepal, which is significant to raise participation, gender issues on natural resources and sustainable management in developing countries.

The trend of community forestry in the present days has changed drastically in comparison to the earlier days of community forestry. Forest extension has become more users oriented. The involvement of more and more people has been prioritized for the success of a community forestry program in Nepal. Villagers are seen as both users and managers of the forest professionals and technicians are seen as technical advisors and facilitators. Thus, the shift is from a high technical "classical forest management approach to a participatory approach."

Nepal is a traditional Hindu majority nation, and there exists a separated status of women. Social norms are expected to lessen their participation. In this study, social factors have been searched to motivate female participation. At the same time, study has been attempted to find more support given by agencies to increase the level of women's participation.

This study on the women participation on community forestry has its own importance because the slogan of women's participation and women empowerment is being expressed from different media information. Which has been mainly focused on participation of women's in community forestry and factors affecting on their participation. In addition, forest role in local people daily life. This study has attempted to access the activities of women in community forestry. Thus, study shows how the Shikharpur CFUG in Hokse VDC, Kavrepalanchok work and it also shows how the community women are contributing to the forest management. For instance how they are aware to manage the forest and their present role in decision-making level of community forest program.

At the theoretical level, the study findings and analysis can contribute to how participatory approach has to be implemented for sustainable management of forest resources, especially in developing countries; like Nepal where gender bias is extremely high.

This research can be useful for policy makers because it has resin important of women's participation in forest sustainable management and also provides feasible recommendations to solve the problem. It shows active participation of women in community forest program with effective sustainable forest resource management in compeer with man and government due to the fact that they are primary users of the forest product.

The study was conducted as apart of the assignment of the researcher for a partial fulfilment of the requirements for Masters' of Science in Development Management of the university of Agder, Norway. I hope it will be useful to generate and produce new knowledge.

1.8. Outline of Thesis

This study has been organised into seven chapters. Chapter one serves introduction, background of the study, problem statement, research objectives and questions, a short introduction of the study area as well as the significance of the study and outline of thesis. Chapter two presents a literature review where the chapter is organised in different sub topics such as; community forestry- a general overview, an overview of forest management in Nepal before and after 1951. In addition, concept of people participation, participation in the development management, participation of women in community forestry and theoretical framework Chapter three clarifies about research design, sampling, primary and secondary data collection process where semistructure interviews, focus group discussion and participation observation is the main tool for primary data collection. In addition, this chapter deals with the data analysis process, limitation and ethical challenges. Chapter four presents profile of the study area such as a brief introduction of Kavrepalanchok district and Hokse VDC. It describes the geo-physical situation of the study area and district as well. Chapter five clarifies sentiments for participation in community forestry, an overview of people's forest management committee, the formation of community forest committees, forest user group and user committee. Chapter six organised the research finding and analysis where it has presented social and demographic characteristics of respondents, forest role in local livelihood, situation of women's participation CFU executive committee, the operational plan preparation process, regular group meeting, forest protection, distribution of forest product, plantation, operational activities and different forest related work. On the other hand, chapter describes the problem face by women to participation in the community forestry program as well as encouraging factors for women participation. Chapter seven presents a summary, conclusion and recommendation of the research.

Chapter Two

2.0. Literature Review and Theoretical Framework

2.1. Literature Review

2.1.1. Community Forestry – A General Overview

The term community in its broadest sense may refer to any group of persons united by a "common interest". In this sense, a professional group, a residential unit, or a club or a voluntary association may all be referred as communities. Forest is a biological community dominated by trees and other woody vegetation. Thus, community forestry activities are aimed at providing direct benefits to rural people and, "the people" should have a substantial role in decision-making and participation. At this level, it is a statement about the philosophy that lies behind community forestry (Gulmore and Fisher, 1991).

Community forestry is one of the components of social forestry. Agro-forestry, agro-silvo pastoral system and private planning programs which come under the umbrella term of social forestry (Vergera, 1985). Who describes the natural and potential role of social forestry and opinion on what ways, and to what extent can social forestry helps alleviate the acute socio-economic problems faced by many of the developing countries. In this potential role of social forestry, Vergera mentioned in his paper, the ecological aspects such as site protection, economic aspects, income and wage and social benefits like a higher quality of life.

The emerging of the concept of the community forestry appeared the late 60's and early 70's parallel with the wider concern of development with meeting basic community needs. FAO forest economist, Jack Westby is stronger advocated of the community forestry.

The community forestry initially involved local people in forest activity. Community forestry refers to control and management of forest resource by the rural people who use them especially for domestic purpose and as and integrated part of their farming system (Fisher, 1989).

Community forestry or village forestry are seen as the control management and use of forest resource by villagers. It seeks to increase the level of awareness of local people

and actively involve them in all aspect of forestry activities. Community forest has been defined as: "The control protection and management of local forest by local people or community known as user groups" (Shrestha, 2004).

Gerald Foley has also an opinion that over the past decade, farm and community forestry has emerged as one of the principal responses to the problems caused by the widespread loss of tress and forest cover in the developing world. Its aim is also to help people to solve their own wood supply problems, meet their own needs and preserve the environment where they live by planting trees on their farms and around their villages (Foley, 1984).

2.1.2. An Overview of Forest Management in Nepal

Forest is directly related with the nation's development. It plays a crucial role for the enlistment of the living standard of people. By knowing this fact, different efforts have been made by Nepal government, which can be summarized in the following chronological order.

2.1.2. A. Before 1951 A.D.

Little is known about the forest before the unification of Nepal. There were not any provision for the protection and management of forest except the code of Gorkhas king Ram Shah (A. D. 1606-1636). The different code i.e. 12^{th} , 13^{th} & 14^{th} codes of King Ram Shah (A.D. 1606 to 1636) dealt with maintaining "Gauchor", planning trees along the provision of fines for those guilty of cutting trees (Gautam, 1993).

Since the unification of modern Nepal, showed little interest on managing the forest, due to "The Gorkhas" the functionaries' rules. They may be provisions of land ground i.e. ("Birta" and "Jagir")⁷ to the individuals in turns of the religious social. These types of land were mostly the land and forest of the Terai. The Land used policy in the hill was designed to encourage the conversions of land from forest to agricultural use in order to increase the tax base (Gilmour, 1991).

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⁶ Grazing place for livestock.

⁷ Land tuner system of previous time.

In the middle of the 19th century while the "Ranas" became the dictator who ruled the forest of Terai exploitation. But in 1854 " Janga Badhur Rana" promulgated a civil code known as Muluki Ain". There was a provision of fines for those who cut down the trees. There were also some provisions like not to convert the forest into agricultural land and not to let animal graze into the forest.

Scientific management of the forest was also imitated by the "Ranas" whose prime minister Chandra Shamsher in 1910 assigned "Basudev Sharma" to determine the area of western Terai by realizing the importance of forest development and establishing the control of land management and the forest administration. Thus, we can conclude that until 1951, there was little effort made for the management and protection of the forest from the government level.

2.1.2. B. After 1951 A.D.

The scientific management of the forest is begun only after the 1951. During this period, various explicit measurements were taken by the state, to manage and utilize the forest. The private forest nationalization of 1957 is one of the first endeavours of the state. This limited the area of private forest that was categorized as private and national forest. All private forest greater than one hectare in the hill and three hectare in the Terai ⁸ were nationalized without compensation. As a result, people reacted by destroying their forest. The "Birta" abolition in 1957 is another endeavour in the management of the forest.

In 1959, the ministry of forestry was established in order to look after the forest activities of the country. After the political change in 1960, the "Forest Act 1961" was promulgated. This act ranked protection of forest as more important as providing access to forest by the local population (Graner, 1997). The main aim of this act was to prevent local people from exerting the forest. In 1981 "The timber cooperation" was established to utilize timber from the resettlement area in the Terai.

The government had formulated the forest preservation act 1967 by prescribing the penalties. This act strengthened the role of forest department and its officials. The state through control oriented legislature sought to solve the illegal forest activities, but those acts were not effective as it was only the weaker section of society the one that was brought under the law (Fisher, 1991).

⁸ South Nepal plain land.

In 1978, the government did real change in forest policy indented with two new categories. The Panchayat Forest and Panchayat Protected Forest and leasehold forest rules. They were intended to involve local and private communities in the management forestry. In 1980, the department of forest presents as scheme known as "Community forestry development project" for the hills area with expectations of full local people participation in preserving and managing forest by themselves.

Forest act 1983 acted by law made the community forestry management activities easier. It delegated the prober of handily over the community forestry to the district officer instead of the regional director. The forest user group had the right to manage, conserve, protect, utilize the forest and handed over community forest according to their approved management operational plan (Regmi, 2000). In 1988, the master plan for the forestry sector was completed. More effort was made regarding to the effective management and preservation of forest in the Panchayat system, but partial success was obtained.

After the restoration of democracy in 1990, the forest act 1993 was promulgated. But it became effective only after the approval of forest regulation in 1995 (Gyawali and Koponen, 2004). This forest acts classified all the forest into two groups as government forest and private forest. Private forest is the forest that is planted and conserved by an individual under the current law the government forest included government manages forest, protected forest, lease hold forest, community forest and religious forest. The government manages forest means a national forest managed by Nepal government.

At last, from the above-mentioned matter, we can say that after the "Ranas Regime⁹" of the government democracy establishment has formulated various acts for the forest management, where different concepts were introduced, and different provisions were made. But, all were not able to act in effective ways.

⁹ The Rana dynasty was a Hindu Rajput dynasty, which ruled the kingdom of Nepal from 1846 to 1951.

2.1.3. Concept of People Participation

The emerging of the concept of community forest in the late 60's and basic community needs and decade 1970's. People's participation appeared in the field of development as a cause of failure of trickle down model of economic development. Deforestation had risen which was the main cause for soil erosion, drought and flood in the middle of 1970s. After the realization of the problem, community forest development program was introduced (Kafle, 2008:2). This program is one of the highest priority programmes of Nepal forestry sector, which has been widely recognized as one of the best policy examples of developing natural resource management, and use rights to local people (Agrawal and Ostrom 2001; Adhikari, 2003 in Ghimire 2005:1). Most of the rural people are dependent on forest for their everyday life but the government nationalization action of 1957 restricted the access of people in the forest and forest production. This action badly affected in people daily life and as a result, people reacted aggressively towards the government act and deforestation started being risen. After the decade of 1970s, government realized the problem and gave more emphasis to the participatory approach for national forest management. Successful forest management needed the participation of local communities (Poffenbefge & McGean in World Development, 2001: background). Masters plan of the forestry sector 1989 also contributed to promote community forest program. In 1993, government developed a forest act, which its main foundation was for the community forest program development, where the responsibility of forest was handover to the local community groups from governmental side (Forestry Nepal, 2011). Community forest program focuses on developing and strengthening the institutional arrangements, which support utilizing existing social structures (Wily 1994; Gilmour and Fisher 1991 in Achary, 2002:152).

Participation has become one of the most widely used words for different programs in different ways. There is various definitions given by various authors and some of them are noted below

- a. For some authors, "Being a member of a voluntary Organization is participation."
- b. Other has interpreted, "Participation as sharing in decision making."

- c. Some other defines "Participation as in terms of monitory, material and labour contribution".
- d. Cohen and Uphoff (1997) defined, Participation as involvement of the people in the decision making process and implementation of the program, sharing benefits of the development program and their involvement in an effort to evaluate such program".

People participation as a concept has gain remarkable currency in recent years. This is mainly because of its symbolic power as a glossy cover to make plants, program and project attractive. Besides endorsing people participation is one good way to assert the legitimacy of a program or project today. There is so much talked about empowering the local people and decentralization. People's participation has been taken as a means by the government agencies and projects for achieving their goal (Chhetri, 1992).

Participatory management is often seen as an appropriate solution to degradation decrease. It has thought that granting properly rights over the local commons would ensure the equitable and sustainable use of environmental resources. When the responsibility of allocating natural resources is delegated to the local organization communities. They tend to appropriate their resources used problems, which can be solved through the community forestry program. So this program is one of the best ways of economic and environment activities through the proper management of local resources of forest (Adhikari, 2003:1).

Community participation is a process in which people are encouraged to realize that they have the abilities, energy and some of resources to make initiatives to improve their lives. This approach to be fulfilled through the community forestry project and requires the community participation, and involvement (Donald and Rai 1992:278).

In community forestry, people's participation means that the user must protect and manage the forest and consume the forest resources that are timber, fuel wood, fodder and other possible product on the basis of equality and equity.

The willingness to participate in community forestry clearly varies depending on the nature of the activities (decision making, forest protection, forest development and forest utilization). In each activity, different groups of people were found to be participating at different levels and for different resources. The principle aim of community forestry is to involve people in all stages from decision making to harvest. So, it is the most essential feature for community forestry.

2.1.4. Participation in Development Management

"Development is the participation of people in a mutual learning experience involving themselves, their local resources, external change agents, and outside resources. People cannot be developed, but they can only develop themselves by participating in activities, which affect their well-being. People are not being developed when they are herded like animals into new ventures."

Julius Nyerere, 1968

The concept of community development and community participation took shape in the 1950s where the term community development was perceived to be synonymous with community participation (Chowdhury, 1996 in Mathor, 2008:7). The participatory approach was introduced after 1960s in a different sector programs as an approach of development but in the forest in Nepal sector it had been implemented during the decade of 1970s. Participation is an essential tool for the sustainability of the programs and one of the foundations of sustainable development. Involvement of different stakeholders is a crucial factor for the success of every program. They should have actively participated during the problem identification to the benefit sharing. The participatory approach was introduced to involve local people and different stakeholders actively participation during the program identification to implementation and benefit sharing process. It can play a vital role for the sustainability of the development process. In the present decade, it has been practicing several governmental and private sector programs. Community participation is necessary in different stages of the program such as; planning, the determined use of local and community knowledge, capacities, decentralization of polices and actions critical for disaster risk reduction, which has been practicing in different sectors (IPCC, 2012:28). Different types of participatory models had been being practiced in developing countries where they had still been facing many challenges for effective participation. Several factors play crucial role for effective participation, such as the socio-culture factor, awareness level of people, economic condition, gender bids, policy of government and private sectors. In the last decades, participatory approach has been facing many challenges although it has given a positive impact for the development process.

2.1.5. Participation of Women in Community Forestry

"Women have a vital role in environment management and development, therefore full participation is essential to achieve sustainable development" (Principle-20, Rio Declaration, 1992).

Forest is one essential resource for human beings, and it is one of the major natural resources of Nepal since most of the people live in rural areas of the country, where they are involved in agricultural and farm activities. Firewood, fodder, and green leaves are essential for rural people everyday life. Firewood is the main energy source in rural Nepal. Women are involved in household activities such as; preparing food, taking care of the children, livestock, collecting firewood, fodder, grass, among others, which are closely connected between women and the forest. They also have several cultural and religious festivals where forest is involved in such types of ceremonies. Most of the forest related activities have performed by women. The decade of 1970s participatory approach was popular in development management. In the same way, it was implemented in forest resource management in Nepal. Community forest program has clearly sought to promote participation and equity in men-agreement and use of resources through formalized policies to empower "backward, poverty stricken, and women users" (HMG 1998, 297 in Lachapelle at al, 2004:2). However, men have dominated most of the participatory management approach. Women have not gotten the decision-making power in such types of programs. Most of the rural women are male-dominated in Nepal, where men play the role of decision-making actors in each sector. Women are mainly responsible of making food, taking care of the family and the livestock as one their main responsibilities. Their labour is not taken into account in the economic sector, and just a few percent of women have access to jobs and other business activities where socio cultural aspects play a vital role.

Participation of women is in any development program a crucial factor since they cover more of the half of the world population and men should not subjugate them. Almost all of the countries have male domination, but the concept of male domination is nowadays decreasing.

Gender issues are becoming the centre of discussion of each and every program nowadays. Some years ago this concept was ignored in most of the development programs. Women's predictions are necessary in management of natural resources, which is the main foundation for sustainable development. Therefore, the gender is being the main streamlined in resources management programs. Since, its implementation, participation of women has more emphasis because they have more intuition and knowledge about forest production and the benefits received from forest. In this case, different studies conducted by different authors or researchers have noticed some crucial factors, which are noted as follows.

Involvement of women is crucial for the success of community forestry. Women are the main collector of forest product such as fuel wood, fodder and fruits grass etc. and they cook and do most of the domestic work. Therefore, they are the ones who suffer the social and economic consequences of deforestation most directly having to spend more time and walk longer in search of these essential forest products. However they should not be considered in isolation, and total community participation should be effective (Kayastha, 1991:144).

In rural areas, women have more knowledge about forest resources such as firewood, fodder and medicinal herbs because women are the main collectors and have the knowledge about the forest resources and its efficient use. Women had been exploiting several forest and numerous areas within it. They travel from low hills to high forests for as far as six hours walk upon their villages. During spring and autumn, women go from the lower parts of the forest, to the highest parts to visit and not only to collect firewood, fodder and herbs which are almost solely to women's responsibility, but also to cut "Nigalo" a type of bamboo, in order to give it to the village men to work with it. Thus, the village women have the knowledge of species identification they know the spices names, the usage, the geographic locations and conservation of the species (Shrestha, 2001:113).

Recent data shows that the participation of women in FUGs is low and that the women representation percentage in FUGs and the average is of around 20 percent or less (Adhikari, 2001:17).

Community forests provide a vehicle for economic development based on local initiative, innovation and entrepreneurship. They can help employment opportunities; increase public awareness and support the forest management activities. Community

forestry is the way to success development, and it is the right strategy to take the people in the mainstream of national activities, which is the best process to create community awareness (Haley, 2002:59).

The concept of the community forestry program is focused on the participatory approach where traditional users and groups manage the forest resource in a participatory way. Management of forest mainly focus on protection, utilization and decision-making activities. It promotes rural development through improving production efficiency, equity and sustainability of the management system (Chhetri, 2005:1). The participatory way is effective for sustainable resource management. More than fifty per cent of the population are women in Nepal, but their participation in different governmental and private sector programs is extremely low due to different social cultural norms and values. Most of the rural women are only involved in household activities. They have little or none economic and social decision-making power in a still patriarchal family system type. In the same way, community forest is one of the most important government programs where women are primary users, and they can play a vital role for sustainable management of the community forest. The Master Plan for Forestry Sector (1998) gave the guideline to have one-third of the women's participation in community forest user group formation at a local level (Kafle, 2008:7). Women participation should be improved for decision making as well as other forest activities, which support effective forest management like, good communication, motivation for being involved in forest activities, training/workshops, creating income and generating activities that can support to improve women participation in community forest management (Lamichhane, 2004: 55).

Women participation in any development program becomes a crucial factor. They cover half of the world's population, but men conceal them. The gender issue is becoming the centre of discussion of each and every of the programs in which women are involved such as management of natural resource where women predictions are necessary. Therefore, the gender is being main streamlining in resource management programs. "Women have more knowledge about the forest resources and the benefits received from them. Women have a vital role on environment management and development; therefore full participation is essential, to achieve sustainable development" (UN Rio Declaration 1992 Principle 20:2)

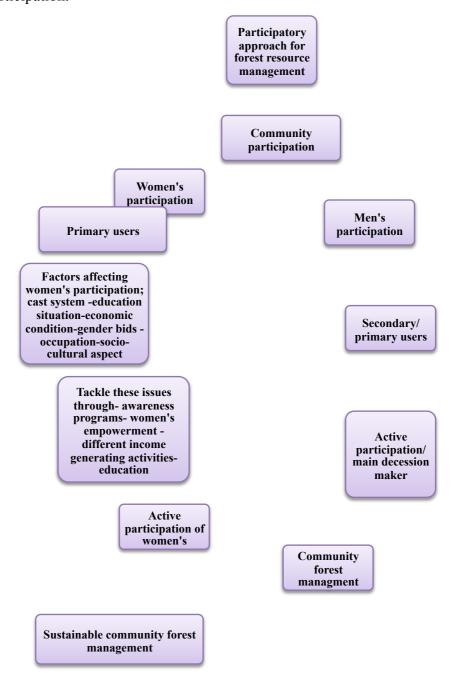
2.1.6. Theoretical Framework

The relationship between people and natural resources is very close, and their participation play a vital role for the sustainable management of theses resources. Local people participation becomes a great deal more meaningful and effective when local population are involved not only as cooperating forest users but also as forest managers and owner managers in their own right (Alden-Wily in Sam and Shepherd, 2011:9). Women are primary managers and users of forest products. Low levels of their participation create problems in the protection and management of forest products in terms of firewood, grass, fodder and leaflet. Women have more idea about forest product and benefits receive from forest therefore, they can play a vital role to sustainable forest management (UN Rio declaration 1992). Deforestation is one of the most salient issues of Nepalese forest, which suffers the social and economic consequences of rural women and directly having to spend more time and linger in search of these essential forest products. Community forest program is a viable option for conserving, improving, using and managing of the natural resources in Nepal where women play a significant role in this endeavour. Women active and full participation is essential to success community forest management (Adhikari, 2001:21).

The community forestry program started on the base of community people participation, and in Nepal this program is mainly run by male and women participation is very low. Several factors have been affecting women's active participation, which is essential to understand improving their participation.

Men are decision makers, and they play a key role in community forest programs management where rural women have a close relationship with the forest for being primary users of it. Women are responsible for firewood; fodders, green grass, herbs and other forest product collection as well as they are responsible for household work such as; preparing food, baby take care and livestock caring although their role has not been evaluated properly. Without women active participation, community forest program would not be managing on a sustainable manner.

Several factors have been affecting women's participation in forestry programs, and become essential to tackle for improving their participation. The following framework deals with the way to achieve sustainable resource management through women active participation.



Source: Author

The community forestry program has been running in Nepal since the last three decades, and the community participation is the backbone of the program where

women's participation is low mainly because of socio-culture factors, poor education and economic condition, gender bids and occupation. Women are dominating by men in every developing activity. They are dominating in different stage of project management (from problem identification to benefit sharing). On the other hand, men's out migration is really high especially in rural Nepal where women's active role is needed to manage community resources. According to Hadi (2001), in the absence of their male guardians, women may have better access to resources. Women may also face an expanded space where they can make their own decisions and develop their own coping strategies. In addition "as per FAO (2005) participation of women in CFUG can lead to a restructure of traditional gender roles and a modification of cultural values. It can also lead to change in the gender division of labour including a 'feminization of agriculture'. Sometimes, the absence of their husband makes left-behind women more active in community development activities and farming (Adhikari, 2011:24)". Involvement of real community forest users can incorporate their knowledge into forest management and stimulate to sustain conservation. Women's are primary users of community forest who are responsible to collect most of the forest product and forest activities. Therefore they have developed traditional knowledge based on forest use and its management. That knowledge is essential for sustainable forest management, which can be used through active women's participation from problem identification to decision making and benefit sharing stages of forestry program.

Chapter Three

3.0. Methodical Approach

3.1. Research Design

This research has been regulated as a case study of one community forest management program (Shikharpur Community Forest) Program. Case study approach supports researcher focuses on the specific case. It will be give more in-depth knowledge in different focus areas. Community forest program is one of the government priorities with an important participatory forest management program of Nepal, where participation of women is the most determining factor for the success or failure of the program. Case study approach is an effective tool to analyse women's situation in community forest program in a micro level. This approach entails vigorous analysis of a given phenomenon or group of people within a context (Bryman 2008:52). The study has tried to analyze the existing level of participation of women in a Shikharpur Community Forestry as a study area. Besides that this study made an attempt to describe the socio-economic condition of women users and the main problems associated with them. Similarly, the study also describes the origin composition and history of community forest, which is based on descriptive research design.

3.2. Qualitative Research

The research uses a qualitative research approach to determine women's everyday activities related to the forest, which can be effectively analysed through this method. According to Goodwin "qualitative data allows us to investigate people's, values and action [....] and to examine the meaning of the social activities and enable us to situate these in a proper context" (Goodwin cited in Bond, 2006:29). Qualitative methods enabled the researcher to get detailed information about women, forest, their socio-economic situation and surrounding zone. This research is mainly focused on women and local people participation in community forest program as well as an understanding of their participation situation, challenges and intends to find out suitable solutions where qualitative research provides an effective tool for tackling theses issues.

3.3. Sampling

Purposive sampling is one of the main tools of qualitative research, which embraces respondents directly related to the issue of analysis (Bryman 2008:375). Purposive sampling is under the category of non-probability sampling where respondents are selected based on their assumed thematic appropriateness (Bryaman 2008:458). In addition, respondents are not randomly selected.

This research uses non-probability sampling; snowball sampling for semi-structure interviews and focus group discussion participant selection. Which allocates women's participation through, established chain of social networks and relations (Bryman, 2008:184). Purposive sampling becomes an important tool of sampling, which essentially selects units with direct reference to the research questions being asked (Bryman, 2008:375). It was used to select members of district development committee, members of district forest committees, community leaders, and social organization representatives.

3.4. Primary Data Collection

This research followed the qualitative approach to collect primary data specially semistructured interviews and focus group discussions with local women's and governmental officials in Kavre district. Furthermore, participation observation was used as a bi-method complementing the finding of the verbal responses. The qualitative method is suitable to exploring people's lives, histories or everyday behaviours (Silverman, 2001:25), which is quite effective for this research.

3.4.1. Semi-Structure Interviews

This is the main tool for qualitative data collection, which is effective for this research because it gives participants opportunity to choose their own words especially in a particular subject (Bryman, 2008:196). Verbal interviews have been done in same cases. Semi structure interviews conducted with different stakeholders where questions were asked in the context of nature of stakeholders and the purpose of the study. However, as women are the main stakeholders the interviews were focused on their community forest management and related activities. Meeting with women and

other different stakeholders creates a suitable environment to understand the research purpose in a community level. The researcher can understand the real situation of the study area and the stakeholder feelings in the context of research issues. Stakeholder involvement plays a vital role in the research process.

3.4.2. Focus Group Discussion

According to Bryman focus group discussions used to emphasize a specific theme or topic that is explored in depth (Bryman, 2008:473) and creates an opportunity to find out what different stakeholders think in different issues. It is organized in the context of stakeholders' nature, gender, caste and ethnic diversity upon community forest and women involvement in management. This creates a suitable opportunity for stakeholders to express their opinion openly, which is highly effective to find out stakeholders pros and cons arguments in the context of women role in community forest management. It was organized in different places and social groups and found out their view upon research issues. The local political, religious, ethic leaders can play vital role for effective participation of people in focus group discussions. So focus group discussions were organized with the help of these leaders. These methods allow the researcher to observe body language and hierarchical position of the participations (Bryman, 2008:378), which is also needed to understand for individual interview. This method is effective to find out different stakeholders opinion upon women in community forest management argument.

3.4.3. Participation Observation

Participation observation is another important tool for qualitative data collection. Therefore, this research has also used observation methods during the primary data collection. It focused on women everyday activities, which were related with community forest as well as management activities of natural resources in Shikharpur community forest. It is in addition very effective to find people's behaviour, feeling and also their perception about women and community forest management. Where, daily research and field notes were effective to note participants' observation activities. The researcher observed these important activities through live with community for long periods.

3.5. Secondary Data Collection

Secondary data has collected through different previous researches and related literature. District Forest office, VDC office, National census and Central Bureau of statistics are the main source of suitable secondary data collection for this research and have given crucial part of the research.

3.6. Data Analysis

This research was focused on three different data collection semi-structure interviews, focus group discussion, participation observation for primary data collection, where grounded theory is an important framework to analyze these qualitative data, "Grounded theory is a theory which derived from data, systematically gathered and analyzed through the research process and concerned with the development of theory" (Bryman, 2004:401). All primary data has been transcribed through digital voice recording and field notes where transcription is suitable for time saving. Bryman argues on that transcription ability of researcher determines the quality of data analysis software (Bryman, 2008:541). Coding is a central part of the qualitative research (Bryman, 2004:415). This research mainly focused was to analyse the present situation of women participation in community forest management. In addition to their participation challenges and the way to improve their participation for sustainable forest management through the use of effective coding and analysis process. In addition, related literature and previous researches about community forest management cases have been effective to compare and analyse this research, which has been done during the data analysis period.

3.7. Limitations and Ethical Challenges

3.7.1. Limitations

There are many limitations in this research such as the financial factor as one of the most important ones and essential in every step of this research. On the other hand, there was limited time but lots of work load, which is hard to manage within a short time boundary. Local communities are divided different caste, religious, cultural, political groups and follow separate norms and values. So, There was several minor problems occurred during the fieldwork. In most of their norms and value promote

male in social leadership and activities are operated by male domination. They do not want women's active role in different social, cultural and environmental activities. In that way, problems had been faced during the filed work, such as one of community members blaming the researcher as encouraging their community women against their social cultural system. In some cases, they had some doubt with the researcher because they thought it provided valuable information of their community activities for international organization and the researcher own personal and financial profit. Where hard work had to be done in order to convince them. The use of digital voice recording affected the response of stakeholders in some cases where it provoked some hesitation. Security risk was raised during the data collection. Another limitation factor was the climate, during the time of the fieldwork where most of the villagers were busy on agriculture activities (potato production) although they managed to give some time for research. This research has followed a purposive (non-probability) sampling, which represents the population. It has focused on a micro level study of one particular area where generalization of data and theory may not be suitable for different community forest cases.

3.7.2. Ethical challenges

There were many ethical challenges such as during the time of data collection the researcher-collected data from governmental side and local people. In that process, the researcher seriously thought about sensitive information of both sides, which was well managed. Women deforestation and others anti forestry activities should not be shared with public officers that can create conflict between the state and the local community. During the fieldwork period, it was found one woman in illegal activities in the forest research area, but researcher did not share this information with the community people as well as with government officers. Ethics security is essential for every research fieldwork activities. At the same time, it concerns to the local community social, cultural, physical, psychological well being of the participants because the research activity should not affect their behaviour. The use of videotaping could affect on socio-cultural aspects of the community where risk was minimized. Corruption is another ethical issue. Government investment and community forest user group transparency is an important thing. Researcher had to think seriously and find the way of securing it during the data collection.

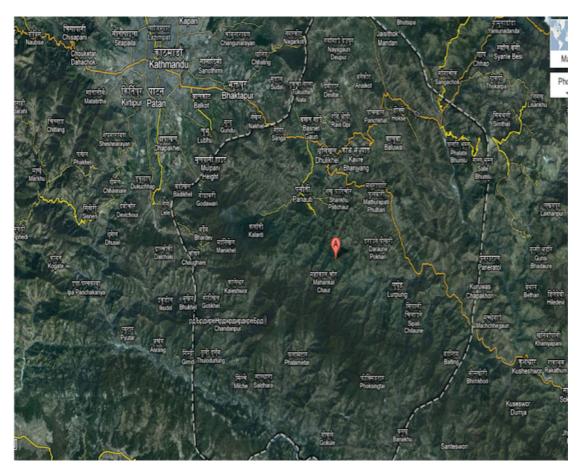
Chapter Four

4.0. Profile of the Study Area

4.1. Brief Introduction of Kavrepalanchok District

Kavrepalanchok district is one of the mid hills district of Nepal which is situated in Bagmati zone. It is located in 85' 24" eastern longitude and 27' 85" north longitude. Kaver district is surrounded by Ramechhap and Dolakha in the eastern part. Kathmandu, Lalitpur and Bhaktapur in the west, Sindhupalckowk in the north, Makwanpur and Sindhuli in the south. This district covers 140486-hector land and the elevation range is between 318m-3018m. According to the population census 2001, the total population of the district is 386267. Population growth rate is 1.72 percent and 51.01 percent is female, and 48.99 percent is male. From the total population, 93 percent live in the rural areas, and they depend on subsistence agriculture for their livelihood although they remain living in urban areas. Tamang, Brahmin, Newar, Chhetri are the main caste group in the district. Comprising 34.27, 22.65, 14.21 and 13.7 percent respectively. Out of them 61.7 percent Hindu and 38.2 percent, Buddhist (District Profile DDO, 2002). It has 87 VDC and 4 municipalities. The total number of households was 70,506 with an average household size of 5.47. In this district, 64 percent of the people (above the age of 6 years) are literate. Among them, male literacy comprises 75.5 percent and female literacy comprises 52.8 percent.

In terms of natural resources availability, this district ranks 3rd district among 75 district of the country. The land pattern of Kavre district is as shown following; total agriculture land is 61,598 hectors (43.85%). Forest area is 39,565 hectors (28.2%). Shrub land is 34,236 hectors (24.37%) and other land is 1341 hectors (0.95%). Potato is the main cash crops of the district. Kavere district is one of the biggest suppliers of Milk and vegetable to Kathmandu valley, and it is the founder district in the production of vegetable central development region.



4.1. Map of kavrepalanchok district (source Google earth, 2012)

4.1.1. Climate

The climatic condition of Kavrepalanchok district varies according to its altitude. Warm, cold temperate, and sub tropical climate are prominent. The subtropical climate is found below 1,000 m. Warm temperate is found 1000-2000 m. and cold temperate is above 2000 m. The temperature varies from 10c to 31c, and the average rainfall is 1500 ml.

4.1.2. Resources

In general, land, forest, water and mineral are important natural resources of this district. Most of the population of this area depends on the agriculture that is their main subsistence factor.

4.1.3 Land

Land is one of the most utilized and exploited natural resources in this district. Since most natural resources come from the land it represents the basic source of livelihood of the people, where out of the total land 62100 hectors represent to the cultivable area.

4.1.4 Forest

Forest is one of the most renewable natural resource of the study areas. It supplies fuel-wood, fodder, gross, timber, medicinal herbs and other various products. The total forest area of this district is 39,565 hector (28.20%) and bears 37520 hectors potential for community forest. Until June 2003, 393 FUGs are formed and handed over the 18,193.64 hector area of 26,432 households. The district shrub land is 34,263 hector and grazing land 3751 hector.

4.1.5 Water

There are many water resources in this district including rivers, lakes, waterfalls etc. There are 492 small and large rivers. Among them, the main rivers are Sunkoshi, Indrawati, Rosi, Kokhajor, Punyamati, Chakhola, Jhiku khola, major lakes like Narayan Pokhari, Khaseko Pokhari, Deu Pokhari, Mahadev Pokhari, Daraune Pokhari etc. Tindhari Khola and Shasipani are major waterfalls in the district. However, the water is not proper used in the study areas. Drinking water facility is good in both sides, but there are not proper irrigation systems.

4.1.6 Minerals

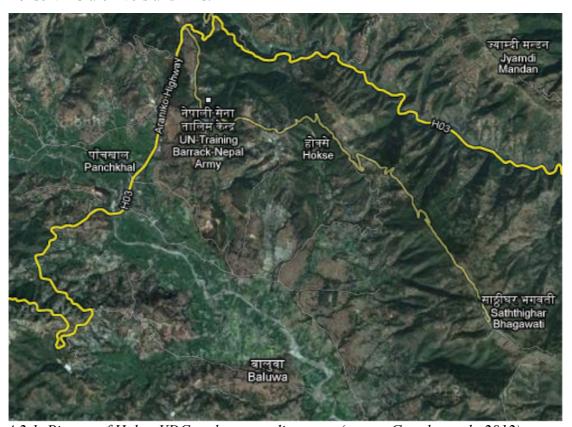
The minerals like coal, limestone, copper, kerosene, dolomite, ceramic clay, lead, etc. are found, but these are not prominently found in the study area.

4.2. Introduction of Hokse VDC

4.2.1 Physical Setting

Hokse is one of the VDC among the 87 VDCs and 4 municipalities of Kavrepalanchok district. It is located at 85'38" east longitude to 27'41" north longitude towards north east of Kathmandu corresponding to the distance of 45km Araniko highway, (the trade road Tibetan the boarder of neighbouring country). China has passed through this VDC, touches the 6 ward and covers about 10km of the distance with in these VDCs. The elevation of this VDC is 1231.4 hectors.

The structure of land pattern in this VDC is not uniform that is higher in the northeast part and lower in the southwest part. Hokse VDC is surrounded by many other, VDCs. They were Panchkhal VDC in west Sathighar Bhagavati in east, Jyomdi and jaisithok in north and Devabhumi balwas VDC in the south. The natural boarders of Hokse VDC are rivers and hills.



4.2.1. Picture of Hokse VDC and surrounding zone (source Google earth, 2012)

4.2.2 Climate

The weather condition of this study varies around the year. The climate of this area is sub-tropical however it can be divided into three (I) winter, (II) summer and (III) rainy season. The winter (December to January) is cold. During the rainy season, the climate is moderate hot. The average annual rainfall is 160ml (Department of Meteorology Kavre). The rain season usually starts in July and continues till October.

4.2.3 Population

The population of VDC is found due to urbanization process and migratory habit. The population increased from within the district and out of the district. The total

population is 4839, female population in 2446 (50.54%) and male is 2393 (49.46%). This VDC has 813 households having an average households size of 5.95 (VDC Record, 2001).

There are many ethnic groups found in Hokse. Among the different ethnic groups, Brahmins, Chhetri is the most dominant, which represents 41.24 percent of the population. Tamang, Newar are other major ethnic groups found Hokse VDC, which represents to 22.01 percent and 10.26 percent respectively. Similarly, Danuwar and Dalit are a group according for 6.92 and 12.16 percent respectively. Other ethnic groups like magar, sanyasi, Gharti and other all together represent to 7.41 percent.

4.2.4 Forest Resources

Forest is the main natural resource of Hokse VDC. There are two types of forests, private forest and community forest. The forest has covered about 36.52 percent area of the VDC. There are three community forests. The average maximum and minimum temperature of Hokse VDC is 30'c and 4'c climate constructs are reflected in natural vegetation. Sal, Chilaune, Sallo, Banyan tree, Panuri, Champ, Sisau, Simal Harro etc are found in this forest.



4.2.4. Picture of Shikharpur community forest and surrounding zone (source; Google earth 2012).

4.2.5 Water Resources

Throughout the study area, the problem of water resources scarcity has been faced. Jhiku Khola, Danfe Khola, Chakhola, Dhap khola and Sobarne Khola are the main permanent sources of water. Jhiku and Danfe khola flow through southern boarder of VDC. Chakhola flows through the northern part of VDC. Those kholas are not sufficient for irrigating the whole land and the VDC. For drinking water, people used to collect water from natural sources like (Kunwa) that was found throughout the VDC along with the drinking water taps, which were jointly made by NGOs and INGOs.

4.2.6. Education Status

Education plays a vital role in overall aspects of human life. The literacy rate is 67.19 percent (age above 6 years) of Hokse VDC, 77 percent having male and 58 percent female literate. In Hokse VDC, there are 14 educational institutions. There is a great opportunity for people to study in this VDC, and gradually this VDC is going to be transformed into an educational centre, which is a good sign for further economic development commercialization.

Before community forestry program, there is only Brahmin family that had educationally aware, but after the project other groups started to have awareness of education. They also started to send their children to school.

4.2.7 Economic Status

The economic status determines the condition and lifestyle of a country. Nepal being a poor country has separated economic status i.e. agro economy. Agriculture is the main sources livelihood for the residents of the study wards too. The subsistence of the people of Hokse VDC is based on agriculture. Mix types of agriculture (agriculture livestock) activities were practiced in this VDC area. Beside this, the people have occupied business, factory, service daily labour and various other works. A small number of villagers were found engaged in income generation programs like milk selling, vegetable farming etc. and all villagers in this VDC raise cattle for

draught power, manure essential for agriculture, milk and meat. Animals play an important role in socio-cultural life.

4.2.8 Transportation

Transportation is one of the main foundations of development, which links the developing to the developed, rural to urban places. The pitch road is almost 20 km far from Araniko Highway as well as Lamidada to Palanchok Bhagawati road. Araniko Highway is the main trade highway to China, and Palanchok Bhagawati road is another pitch road, which is a famous religious place for Hindus. Around 30km gravel road is also found in different parts of DVC. Bus, Minibus, Trucks, Tractors and motorcycles are the means of transportation.

4.2.9. Electrification

Nepal is rich in water resources, but the electrification system is very poor. Less then 50 percent of total population has access to it. They have a big problem of long hour power cuts. Mainly the people in the study area are using electricity since 1989 (2046 B.S). They used it for different purposes such as; lighting, cooking, communication (Radio, TV, and computer cable networks) saw mills and small-scale industry.

4.2.10. Health

'Health is Wealth', it is widely popular in every society, but in reality the main problem till the date is health, in this research area, they have several health issues such as maternity rate, birth rate and mortality rate are very high etc. They do not have the capacity to control it. They do not have sufficient health centres in their society. When researching the health condition in the area, one health post was found, which did the government run. In addition, local people ran one medical shop. In comparison with neighbouring VDCs, the health condition is quite satisfactory in the study area. If they face a major problem in health they transfer their patients to the Dhukhel hospital, Sir Memorial in Banepa or any hospital of Kathmandu.

4.2.11. Social Organization

Organizations that are run by the community or the society for welfare or benefits to uplift the society or a community as a whole is known as social organization, such as Clubs, Community Forest, NGO, INGO, political parties, community schools and so on. Normally, the same community or locality runs the social organizations because they have experience and knowledge of that society or community. For example Community Forestry, this type of organization is entirely run by the same community for development, benefits and conservation of the environment.

In Hokse VDC, every nine wards has its own local clubs like; Aama Samuha¹⁰, Youth Clubs, Community Schools, and Community Forest etc. Normally they are involved in public awareness programs and social and cultural development programs. The Janata Yuwa Club and Shikharpur Samaj Sewa Yuwa club are famous local clubs of this VDC.

4.2.12. Historical Places

Each and every place got its own identity or historical evidences. Nepal is culturally rich in its natural heritage. Eight historical places have been selected for World Conservation Heritage. In the Hokse VDC, we have many historical important places. Such as, one of them is the bank of Sobarneshori River, where we got a famous Hindu temple. It has called Shobarneshor Mahadev, which is the main god for Hindu devotees and famous temple of surrounding zone.

¹⁰ Mothers groups

Chapter Five

5.1. Rise of Sentiments for Participation in Community Forestry

Due to various natural calamities, population pressure and the shortage of forest resources for fodder and firewood the consciousness among the local people for participation in the community forestry activities has increased in the Hokse VDC.

Community forestry thus becomes survival strategy for the people of Hokse VDC-3 surging to overcome to the problem of deforestation. During 1978-1983 (2035-2040 B.S.) when there was strong deforestation in this area. People were worried about animal husbandry fodder for cattle and manure for farming. To face this difficulty people become united to support the Plantation Program, which was supported by the Government of Japan.

In fact before 1957 (2014 B.S) there was enough forest in this village, but due to over grazing and increasing population the forest started to decline. In addition, soil erosion and landslide started in a large scale. According to villagers the "Talukadar" was the local headman with responsibility of managing the local forest.

The "Talukadar" were functionaries of the state whose responsibility was revenue collection along with control of access to the forest. Under this system, a lot of deforestation happened in Shikharpur, Hokes VDC-3. Only the close relatives and local "Thalus" were allowed entry in the forest, and they had the access and monopoly over forest resources. The land reform act and the forest nationalization act of 1957 (2014 B.S) caused much of the forest to be destroyed. After this act the people though that this is not their property, so they had no responsibility to conserve it. The level of awareness was very low, and people they did not know about the impacts of deforestation. After these reforms, the deforestation was faster in Nepalese forests. During the period of political instability, much of the forest of Nepal was destroyed and the same happened during the political crisis of 1979-1989 (2036 BS and 2046BS).

Due to these reasons large parts of the forests were converted into barren land, and the people of Shikharpur realized the seriousness of the situation too late.

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¹¹ Local recognized person who have lots of economic resource, respect in society. They always influence the policy-making process in local level.

Landslides were a common activity in Shikharpur, one of Shikharpur CFUGs members says with tears in his eyes. He had lost 12 Ropanises¹² of land in that incident. Such incidents and the daily problem of mitigating household demands for firewood and fodder forced people to think for a way of solving the problem, but all were confused what to do. At such time, the forest department of Kavre district lunched the concept of community forestry.

5.2. People's Forest Management Committee: An Overview

This section describes the origin, composition and the aims of the people forest committee (consumer or user group). The Community Forestry program is developed on the basis of People's Forest management committee or user group committee, which is the main executive body of community forestry. This description will serve as background materials to a sub sequent discussion on people's participation in community forestry resources management.

When the forest department of the Kavre district introduced the concept of community forestry some people began to oppose the project. They were claiming it would occupy space for cattle grazing. Ultimately the village department committee decided to provide barren land for plantation as well as for community based forestry.

5.3. Formation of Community Forest Committees

The forest activity conducted by the people in developing their community forest in Shikharpur, Hokse VDC-3 was the formation of the people's community forest committee, which was to be empowered with decision-making, informing FUG members about the decisions made, inviting user group members to join meetings and participate in decisions.

Several meetings were held before constituting community forestry committee for this community forestry. It was finalized that memberships will be of two types:

- i.) Simple or ordinary
- ii.) Executive

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¹² Nepalese land measurement unit.

The FUG consists of ordinary members who through election select their Executive members. The district forest office in Kavre approved this committee.

After that, a large-scale plantation was completed in Shikharpur, Hokse VDC-3. The community forest of Ward no. 3 has 156 houses under FUG or Forest Consumer Group. The area historically had "sal, sallo, chilaune, cheuri" and wild animals before 1950 (2007 B.S), but the reckless destruction converted this forest in to a naked barren land with only shrubs of "Ansuro" and "Kapo" as a consequence of deforestation and over-grazing. In a few years, a lot of forest was destroyed, and the result became a nightmare. Then consequence was a great landslide in Shikharpur. Thus, it was believed that community forest in the hands of forest committees would be the best solution to the deforestation issue.

The study area (Shikharpur CF) covers 59.41 hectors. This forest mainly contains sallo, Sal that planted in 1982 (2039 B.S.), and it was observed regularly. The people in this region were dependent on firewood, so they were eager about it, and they had a spirit of conservation. In the beginning, the district forest office provided a watchman with Rs. 14 600 salary per month until the vegetation had grown to a size where it would manage itself against the harm of cattle.

5.4. Forest User Group

Only persons who are living in Shikharpur, Hokse VDC-3 are general members in the committee. It was made in the assembly help in 1997 (2054-3-30). The duration of the committee members will last until they think user welfare and the protection and management of the forest are satisfactory. If any members of the committees violate the rules or his work is unsatisfactory he is replaced. This is only done when 51 percent of the total users sign against accused member and submit this signature to the forest user committee about this case. If it is responsible they will ban the membership of the accused member of the forest user committee, but if the member who submitted from the committee realizes his crime and begs pardon the committee will think about this, and again they could include him in the committee again.

¹³ These are local forest trees local name.

¹⁴ Rupees Nepalese currency short name.

5.5. Formation of Forest User Committee

Forest user committee is formed by conference of forest users group members. The forest user committee consists of only 11 members. The following points are taken under consideration to form FUG

- 1. At least one representative from each hamlet
- 2. The representative is nominated without any conflicts by FUG.
- 3. If any conflicts arise during the nomination of members is applied to know the majority decision of the FUG (solved by voting system)
- 4. The forest user committee members are also taken from political parties. Following table shows the structure of FUG.

Table No. 5.1
Formation of forest user committee

President	1
Vice President	1
Secretary	1
Co-secretary	1
Treasurer	1
Members	6

Source: FUG (field visit 2012)

The duration of each committee member is three years to give necessary advice, suggestion etc. An advising committee is formed from the FUG. The members of this committee are formed from the social workers, clubs library and mother groups etc. these committees formulate the rules and regulation related to forest protection and management, which are discussed as following. The main aims and objectives of the community forest condition and management are:

- 1. To fulfil the requirement of timber, fuel wood and fodder without deforestation of the forest condition and its productivity.
- 2. Conservation of soil and water resources.

- 3. To protect wildlife and genetic materials.
- 4. To maintain a healthy environmental condition.
- 5. To establish the forest as well as managed community forest to demonstrate it to other forest user groups.
- 6. To call the FUG's meeting every month essentially.
- 7. To undertake weeding re-plantation once every year and co-ordinate with related agencies for technical help.
- 8. To prohibit people from entering the forest except for weeding.
- 9. To equally distribute grass and fodder among the user group.

Chapter Six

Research Findings and Analysis

6.0. Women's Participation in Community Forest Management

Data presentation and analysis is the main part of report writing. The collected data from the field were analyzed and presented under separate heading with the help of tables.

6.1. Social and Demographic Characteristics

6.1.1. Age Structure

The respondents, who were asked to fill up the questionnaire on the field, were from different age group. The age groups of the respondents are presented in the following table.

Table No. 6.1

Distribution of the Respondents by Age Groups

Age Group	No. Of Respondents	Percentage (%)
20-30	7	14
30-40	20	40
40-50	16	32
50 & above	7	14
Total	50	100

Source: Field Survey, 2012

The above table reveals that, out of total 50 respondents of individual interview, 20 are found in age group of 30-40 and remaining 14 respondents are found in two different age group i.e. 20-30 and 50 above equally, and 16 are from age 30-40. The percentage of respondents is a different age group, majority of the respondents are in between 30 to 50. They are the main user of community forest as well because most of the women who are in the age of 30-50 are housewives. They are responsible for household work, baby care, livestock, and to make food for the family as well as gather forest products for their daily use.

6.1.2. Caste/Ethnic Composition

There are different caste/ethnic groups in Nepal. The Shikharpur community forest user group is a multi caste/ethnic user group, which comprises different caste/ethic groups such as Brahmin, chhetri, Newar, Danuwar, Tamang etc. The following table has shown the different caste/ethnic group remained in the study area.

Table No. 6.2

Distribution of Respondents by Cast/Ethnic Group

Caste/Ethnic Group	No. Of Respondents	Percentage (%)
Brahmin	22	44
Newar	8	16
Magar	8	16
Kami	6	12
Sarki	4	8
Majhi	2	4
Total	50	100

Source: Field Survey, 2012

According to the table, out of 50 respondents, 44 percent are Brahmin. The percent i.e. 16 percent is from two different castes i.e. Newar and Magar. Similarly 12 percent are from kami, and only 8 percent are from Sarki and 2 percent are from Majhi. From this table, it is clear that the majority of the respondents are Brahmin community, which is the major community in surrounding zone.

6.1.3. Educational Status

Education is the foundation for the development. If the people of the community are educated, the probability of success of the program will be higher. The following table shows the total respondent's literacy status.

Table No. 6.3

Distribution of the Respondents by Literacy Status

Literacy	No. Of Respondents	Percentage (%)
Literate	32	64
Illiterate	18	36
Total	50	100

Source: Field Survey, 2012

From the above table out of total 50 respondents 32 are literate, and remaining respondents are illiterate. The main criteria of literate and illiterate is reading and writing skill of respondents. People who are unable to read and write has categorized them in illiterate Column. In addition, the total literate respondents have a different level of education. Following table present education level of literate respondents.

Table No. 6.4

Distribution of Respondents by the Level of Education

Level of Education	No. Of Respondents	Percentage (%)
Primary Level	18	56.25
Lower Secondary Level	10	31.25
SLC and Above	4	12.50
Total	32	100

Source: field Survey, 2012

From this table, it has seen that 56 percent of respondents have primary level of education. Around 31 percent has lower secondary, and 12 percent have SLC and Above. From this table, it is clear that the number of literate respondents is gradually decreased as per level of education increase.

6.1.4. Occupational Status

The respondents who were interviewed during the field survey were found having in different occupational background i.e. agriculture, teaching, business and tailoring. The number of respondents according to their occupation is presented in the following table.

Table No. 6.5

Distribution of Respondents by Occupation

Occupation	No. Of Respondents	Percentage (%)
Agriculture	30	60
Teaching	7	14
Business	4	8
Iron Works	3	6
Tailoring	4	8
Fishing & others	2	4
Total	50	100

Source: Field Survey, 2012

The above table indicates that out of total 50 respondents 60 percent are engaged in agriculture where agriculture is the main occupation for their livelihood. The remaining respondents 14 percent are engaged in teaching. 8 percent are in business and tailoring, and 6 percent in Iron works. At the same way, 4 percent is in fishing or other professions. Thus, it is clear that the majority of the respondent's occupation is agriculture and minority are in service and business sector. Most of the agriculture activities are dependent on nature where forests play a vital role for agricultural sectors.

6.2. Forest and Energy Consumption

Firewood is the main energy source in rural Nepal. More then 85 percent people use firewood to cook the foods in everyday life. Forest is the main source for firewood fodder, green grass, hubs etc. for rural people. A Rural life cannot be imagined without a forest. Agriculture is the main occupation in rural Nepal where every house has different types of livestock, which is sub part of agriculture and necessity for daily life. In that case forest is most important factors, which can play a vital role in Shikharpur Village. On the other hand, forest is most determining factors for surrounding zone where weather role is very important in agriculture activities. Forest support to clean air and increase the water sources as well as balance the temperature, which is most essential in Shikharpur and surrounding areas. Firewood is the main

source of Energy in Shikharpur, Hokse VDC. Here is energy using pattern in Shikharpur.

Table No. 6.6
Source of Energy for Cooking

Source of Energy	No. Of Respondents	Percentage (%)
Firewood	42	84
Gas	2	4
Bio-gas	4	8
Electricity	1	2
Others	1	2

Source: Field Survey, 2012

According to the above table around 84 percent respondents are using firewood as the main energy source for cooking food. So, firewood is most important factors in Shikharpur and Surrounding zone. At the second position, Biogas is another source of energy; around 8 percent respondents use it. The supply of electricity is very poor condition in Research area not only in Shikharpur it is one of emerging issues of Nepal. Still, electricity supply board has been implementing more they ten hours power per day schedule in the whole country.



6.2.1. Women's collecting firewood in community forest (source; field visit, 2012)



6.2.2. Local women using firewood to cook their foods (field visit, 2012)

6.3. Situation of Women's Participation

Situation of women's participation is analyzed on the basis of different sub heading which are described one by one with the help of following tables:

6.3.1 Representation of Women in CFU Executive Committee

Community Forest User Executive Committee (CFUEC) is an executive body of the CF. It has full executive authority of the forest by preparing the operational plan and making other decisions. It contains both male and female members. In Shikharpur CFU executive committee, the representation of women is very low. This was observed in the operational plan where clear provision was not found about this, and specific quota was also not separate for women's representation. The following table shows clearly about their representation in such committee.

Table No. 6.7

Representation of Women in Executive Committee

Representation	No. Of Respondents	Percentage (%)
Male	10	91.91
Female	1	9.09
Total	11	100

Source: Record Book and Field Survey, 2012

The above table show that out of total 11 members on the committee, only one member in represented by women, which are only 9 percent of the total members. It means representation of women in committee is very low which is not satisfactory.

6.3.2. Participation of Women in Preparation of Operational Plan

The preparation of an operational plan is the initial step of community forestry. In such step men & women used to participate, but this study, mainly concentrates about the participation of women that are why it is needed to know the women's participation in such step. So the respondents were asked about it. The responded

differently as participated and not participated which is presented in the following table.

Table No. 6.8

Participation of Women in Preparation of Operational Plan

Response	No. Of Respondents	Percentage (%)
Participated	20	40
No-participated	30	60
Total	50	100

Source: Field Survey, 2012

According to the above table, majority of the total respondents were not participated in preparation of the operational plan only 40 percent were participated in such step. From this figures, we can say that the participation of women in preparation of the operational plan was low.

6.3.3. Familiarity with Executive Committee Members

Women's participation in community forest depends upon how much they are familiar with the executive committee member. So it is needed to identify that how many of the total respondents are familiar with the executive committee member and how many are not. This is presented in the following table.

Table No. 6.9

Distribution of Respondents by Familiarity the Executive Committee Members

Response	No Of Respondents	Percentage (%)
Familiar	18	36
Not Familiar	32	64
Total	50	100

Source: Field Survey, 2012

The above table shows that out of total 50 respondents only 18 are familiar with their community forest executive committee members, and 32 members are not familiar with their executive member. It can support to show low women participation and knowledge about Shikharpur community forest and user group committee.

6.3.4. Participation of Women in Regular Group Meeting

Participation of women in regular group meeting helps to identify the situation of women participation in the whole community forestry. The level of women participation can be affected by several factors. The following table has presented their frequency of participation in regular group meeting.

Table No. 6.10

Participation of Respondents in Regular Group Meeting

Frequency of participation	No Of Respondents	Percentage (%)
Frequently	8	16
Moderately	13	26
Occasionally	29	58
Total	50	100

Source: Field survey, 2012

According to the table above out of 50 respondents only 16 percent are participated in regular group meeting frequently, where as 26 are participated moderately. Majority of the total respondents i.e. 58 percent is participated occasionally. It has clearly seen that women participation in regular meeting is very low, and it has needed to be promoted.

Participation of women in specific group meeting seems high because there is a provision of fine to those households. Household, who do not present their one member in such meeting, this type of meeting is held to punish those members, who use the forest illegally i.e. to cut down the trees to collect fire wood to hunt the wild animals etc. The specific group meeting were held not only for this but also to make the decision on specific cases such decisions were found in a record book of community forest.

6.3.5 Participation of Women in Forest Protection

Forest plays the crucial role for socio-economic development and environmental protection, which is essential for sustainable development. Many countries do not care about environmental factor during their economic development, and it is a big challenge for sustainability of the development process. As a result, we are facing

several challenges such as global warming, water, air, sound pollution etc. So, it is a great need to protect in the proper way. In the process of forest protection, frequency of women's participation has been analyzed in the following table.

Table No. 6.11

Distribution of Respondents by Frequency of Participation in Forest Protection

Frequency of Participation	No. Of Respondent	Percentage (%)
High	7	14
Moderate	25	50
Low	13	26
Never	5	10
Total	50	100

Source: Field survey, 2012

According to the above table very low percentage of respondents were highly participated in forest protection. It means only 14 percentage of respondents are highly participating in forest protection. It may be due to household burdens 50 percent of the total respondents were moderately participated. About 26 of total respondent were found lowly participated because they have mix types of economy. Animal husbandry and farming are the main cause of long work hours, so they do not have time to participate. Remaining 10 percent of the total respondents have never predicated in forest protection. There was one family in the study area where the male used to travel out of the country. The woman has to maintain her family and farm works, so they do not have time to participate. There is also the gender issue. They do not want to contribute too much because society cannot accept it easily.

6.3.6. Women's Participation in Distribution of Forest Product

Forest provides various products such as fodder, timber, leaves, grass etc. These products are needed to distribute among all users of the forest. In such process, it would be regarded as positive if women used to participate highly in community forest. Following table shows the frequency of women's participation in the distribution of forest product.

Table No. 6.12

Distribution of the Respondents by Frequency of Participation in Distribution of Forest Product

Frequency of participation	No. Of Respondents	Percentage
High	8	16
Moderate	17	34
Low	20	40
Never	5	10
Total	50	100

Source: field survey, 2012

According to the above table, only 8 respondents of total respondents are highly participated in the distribution of forest product similarly 17 of total respondents are participated moderately. 20 of them are lowly participating in these activities. In the rural area people do not have extra time to be involved because mostly they are engaged in agricultural work, livestock and their household activities. When they have time they used to go such works. Remaining 5 of total respondents are found never participated. There are some families who have the problem of daily necessity. It means they have to go to work because their family is dependent on their daily wage. If they do not go to work, it will be hard to manage their daily basic needs. They just sustain on other families, so they never participate in communal works. It is clear that the majority of the total respondents are not highly participating in the distribution of forest products. So, there is a great need to increase their participation.

6.3.7. Women's Participation in Plantation

Plantation is the major activity of community forestry. In Shikharpur CF plantation activity is not optimal. The forest itself is dense, and it is dominated by natural regeneration. So, the frequency of involvement of the respondents in this activity is not found in field survey.

6.3.8. Women's Participation on Operational Activities

Forest operation activities are one of the major activities of community forestry, and users should perform it. It comprise the different activities such as:

a. Pruning

- b. Thinning
- c. Bushes clearing
- d. Singling
- e. Fire-line construction
 - **a. Pruning:** It means to cut off the branches from trees, which support to grow trees better and stronger. It should be done as instructed by the forest technician. Generally, it should be done during October to February (Kartik to Magh). In Shikharpur CF, this activity is not found. So, Women's participation in this activity is also not found.
 - **b.** Thinning: It means to keep the trees in the same line with the same distance. This activity is also done as the instruction of forest technician. This activity is also not found in Shikharpur CF therefore women's participation on such activity could not be analyzed.
 - **c. Bushes Clearing:** It means to make cleaned the forest by removing the thorny and unnecessary bushes. Such types of activity are found Shikharpur CF to the same extent, but women's participation in this activity was very low because most of the respondents were not participated is this activity.

Table No. 6.13

Distribution of the Respondents by Participation on Bushes Clarity Activities

Responses the Respondent	No. Of Respondents	Percentage (%)
Participated	15	30
Not Participated	35	70
Total	50	100

Source: field survey, 2012

The above table shows that only 30 percent of the total respondents are participated in Bushes clarity activity. Majority of the respondents i.e. 70 percent are not participated in these activities. Many of male people of this area are out of the country or out of town for income generation and other purpose. So the women in the family are too occupied to participate in bushes clearing activities. It has proven that there is very low participation of women in bushes clearing.

d. Singling: It refer to the process of developing the bushes in the forest and making trees grow higher to some extent this activity is found in Shikharpur CF. Knowingly or unknowingly users of this CF are doing this activity where women's participation is found low. Following table has presented the participation of women in singling activities.

Table No. 6.14

Distribution of the Respondents by Participation of Singling Activities

Responses of the	No Of Respondents	Percentage (%)
Respondents		
Participated	13	26
Not participated	37	74
Total	50	100

Source: field survey, 2012

The above table reveals that only 26 percent of the total 50 respondents are participated in singling activity. The majority are not participated in such activities. From this, it is cleared that the participation of women in singling activities needed to be promoted.

e. Fire line Construction: the fire line construction is made to control the forest from fire. This should be constructed in March to June (Chaitra, Baishakh and Jestha)

15 but this activity is not found in Shikharpur CF. So, women's participation is not found in this activity.

6.3.9 Involvement of Women in Different Forest Related Work

In Shikharpur community, different tasks have been separated for women only however, the involvement of men and women in each and every work should be equal. Here, women's involvement in different forest related activities, such as firewood collection, fodder collection, cattle grazing and medicinal plant collection has been analyzed by the help of tables under separate headings.

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¹⁵ Nepalese months

6.3.9.A. Firewood Collection

It is one of the main activities highly performed by women in rural area where firewood is used as a major source of energy. It is one of the major activities related to forestry. So, how much is their involvement in this work has been analyzed by presenting their frequency of involvement in the following table.

Table No. 6.15

Distribution of the Respondents by Frequency of Involvement in Firewood collection

Frequency	No. Of Respondents	Percentage (%)
High	28	56
Moderate	15	30
Low	7	14
Total	50	100

Source: field survey, 2012

According to the above table among the total 50 respondents 28 are highly involvement in firewood collection. Similarly, 15 are moderately participated. Only 7 women are found less participated. From the above description, we can say the majority of respondents are highly participated in this work.

6.3.9.B Fodder Collection

Household, who have a large number of livestock used to collect fodder, in this field, the involvement of women of the rural area used to be high. It is also a forest related activity. During the fieldwork, respondents were asked about their frequency of involvement in such work. They response differently, which is clearly presented in the following table;

Table No. 6.16

Distribution of respondents by Frequency of Involvement in Fodder Collection

Frequency	No. Of Respondents	Percentage
High	30	60
Moderate	15	30
Low	5	10
Total	50	100

Source: Field survey, 2012

This above table shows that 60 percent of the total respondents are highly involved in this work. Around 30 percent of the respondents are involved in this work moderately. 10 percent of the total respondent has a low involvement in fodder collection. From this table, we can say that the majority of the total respondents are highly involvement in this work.

6.3.9.C. Grazing

Most of the rural households have cattle, and they used to graze their cattle on forest. Although both male and female used to be involvement in this work but mostly women are found involving in this activity. Following table presents women's involvement in grazing cattle.

Table No. 6.17

Distribution of the Respondent by Frequency of Involvement in Grazing

Frequency of Involvement	No. Of Respondents	Percentage (%)
High	27	54
Moderate	12	24
Low	11	22
Total	50	100

Source: Field Survey, 2012

According to be the above table majority (i.e. 54 percent) of the total respondents are involved in grazing work highly. Similarly 24 percent respondents are involved in this work moderately, and 22 percent of the total respondents are involved lowly. From these facts, we can say that women of rural area highly involved in cattle grazing work.

6.4. Problem Faced by Women to Participate in Community Forestry Activities

Social and cultural system has own values and norms, which interfere females to participate in different activities of community development including CF program. So, during the study period, the total respondents were asked a question (i.e. Do you have any problem to participation in community forestry activities?) to know weather

they are facing problem or not. They responded differently (i.e. Yes and No) which is presented in the following table.

Table No. 6.18

Distribution of the respondents on the basis of problem in participation

Frequency	No. Of Respondents	Percentage (%)
Yes	35	70
No	15	30
Total	50	100

Source: field survey, 2012

The above table shows that most of the respondents i.e.. 70 percent are facing problem to participate in community forestry activities, and remaining i.e. 30 percent are not facing problem to participate in different activities. Those respondents, who were facing problem, were asked about the reason of creating problem for them to participate in different activities. They said different reasons, which are presented in the following tables.

Table No. 6.19

Distribution of the problems Faced Respondents by different Factors

Frequency	No Of respondents	Percentage (%)
Caste domination	5	14
Poor educational status	15	43
Poor economic conditions	8	23
Gender Bids	4	11
Occupation	3	9
Total	35	100

Source: field survey, 2012

The above table indicates that 35 respondents are facing problem. The factors are different such as caste domination, lack of education, poor economic status, gender bids, and occupation and other. Among the total 35 respondents 15 are facing problem due to poor educational status. Participation will be meaningless without educated people. Caste domination has become an obstacle for 14 percent respondents because in the study area most of the people are following Hindu religion where, Brahim community dominate other castes of their society in different social organization and

function. Brahim people play a key role in the decision-making process. Other caste has been dominating participation and others activities of community forestry.

The poor economic conditions become a problem to 23 percent. The low-income family should also have to concentrate on basic needs, and they do not have time to participate in such activities.

Similarly, gender discrimination also creates a problem to participate women in community forestry activities. The society expect that women should do work inside the house not outside. This factor also creates problem for 11 percent of the total 35 respondents.

Occupation has become a problem for 9 percent of the 35 respondents to participate in community forestry activities. The people who are engaged in other services i.e. teaching government job cannot give time in such activities.

6.5. Encouraging Factors for Women to Participate in Different Activities and Meeting

Different factors are used to encourage a person to participate in a different program and activities. In studied Shikharpur CF, some respondents were found regularly participated in different group meeting and different activities. The researcher asked those respondents about the factors, which encouraged them to participate in such activities. They answered different factors such as family support, education, absent of male in house, self-motivation and other (i.e. encouragement from the general users, DFO staffs as well as different social organization, NGOs and INGOs. The answers were multiple in natures, so it is not presented in table.

Chapter Seven

Summary, Conclusion and Recommendation

7.1. Summary

Community Forest refers to any group of persons united by a community of interest. It resembles the forest, which is run by local people, and they have a substantial role in decision-making. Women's Participation in Community Forest A case study of Shikharpur Community Forest user group are a descriptive and analytical study. The study reveals not only the study about the forest but also all affiliation with their socio-economic, geopolitical condition around Shikharpur, Hokse VDC. The study was mainly focused on Hokse VDC word no. 2 and 3. The study area was selected for the convenience for the researcher, his access in resource, budget and so on. The size of the universe was 156 households. The sampling method was purposive and sample size was (50 households) 32 percent. The user group was a mixture of various castes. To make represent of all caste purposive sampling was procedure employed. The nature of data is qualitative, and the source was primary and secondary both. Primary data were collected from the field and secondary data from published and unpublished reports and journals. The data collection techniques were semi-structural interviews, structured, unstructured interviews, focus group discussion and participation. Observing the data analysis and presentation was on the basis of the nature of data. Simple statistical tools for percentage were used to analysis women's situation and their participation in different community forest activities. Qualitative data were analyzed by using tables, description and explanations.

There were different data of respondents such as age group, literacy rate, and ethic composition and so on. In age group structure, 40 percent of the respondents are from age group of 30-40 years and 14 percent of respondent from 20-30 years as well as 50 and above. In ethnic composition, 44 of the respondents are from Brahmin and 2 percent are from Majhi out of 50. In education status, 64 percent respondents are literate, and remaining is illiterate. In the level of education, majority (56 percent) of respondents have primary level education. On the other hand, 66 percent of respondent is engaged in agriculture and 8 percent in tailoring. The representation of women in community forest user group committee is very low where 91 percent male

and only 9 percent female representation. In occupational planning female represents are only 40 percent and male are 60 percent. Familiarity with the executive committee and not familiarity with the executive committee are 40 and 60 respectively. In regular group meeting 16 percent of the respondents frequently participate and 58 percent of the respondents occasionally participate, and 10 percent of the respondents never participate. In the distribution of forest products, 40 percent of the respondents participate little and 10 percent respondents never participate. Women participation on operational activity such as in bushes clarity 70 percent of the respondents are not participating and only 30 percent are involved in this activity. In singling activity, 74 percent of the respondents are not participating, and only 26 percent of the respondents participate. In firewood collection, 56 percent of the respondents are involved, and 14 percent are not involved. In fodder collection, 60 percent of the respondents participate highly and only 10 percent of the respondents little. In gazing 54 percent of the respondents are highly involved and 22 percent of the respondents little involved. In the problem of participation, 74 percent of the respondents accepted it, and 26 of the respondents rejected. In other problem faced by the respondents 43 percent is because of poor education and other cause such as cast domination, poor economic condition, big family size, gender bids and 9 percent of the respondents are because of their occupation.

Participatory approach was introduced late 1970s in the forestry sector of Nepal, which is one of the high priority programs of Nepal government in the forestry sector. People's participation is the main foundation of this program. Active participation of both genders is essential for sustainable resource management. Women's are the primary user of forest because most of the rural women are responsible for making food, collecting firewood, caring baby and livestock as well as others household activities. They have good knowledge about forest, forest product and better management of forest. They have a vital role on environment and development management therefore, their participation is necessary, to achieve sustainable development (UN Rio Declaration principle 20:2). Although; women's participation is very low in community forest program. There are several factors affecting women participation in community forestry such as; socio-culture norms and values, big family size, gender bids, cast domination, poor education status, poor economic condition, occupation etc. Women active participation is essential for community forest sustainability as well as forest resource sustainable management because they

are the main user of forest and forest product. They are most directly the having problem because of deforestation. It means rural women have to spend more time and walk longer in search of forest product therefore, their participation should not be considered in isolation and total community participation should be effective (Kayastha, 1991).

7.2. Conclusion

Community forestry is one of the successful programs of forest management in Nepal. After the nation forest changed into the community forest the Shikharpur CF user groups have got some knowledge, and gained experience about the importance of forest and management of forest. In the study area, it was found that all of the users could say more or less about community forest, and they are also aware about their responsibility about the forest management and the roles they should play. They were also satisfied with the forest use, protection and management procedure.

From the finding of the study some conclusions has been made as follows:

- a. The users living in a subsistence level mainly supported by agriculture farming and livestock. They are practicing traditional farming method. The main source of income generation of the villagers are; i. agriculture, ii. Livestock, iii. Off-farm labour. Some have government service, and some are teachers.
- b. Participation is affected by age because most of women between 30-50 years age are participating in such forest.
- c. The main occupation of the respondents is agriculture, and they are dependent upon forest.
- d. The level of education status seems not encouraging because most of the respondents are literate rather then educated.
- e. Representation of women in the executive committee is very low.
- f. Women's participation on group meeting during the presentation of operational plan is low.
- g. Most of the women are not familiar with the executive committee member.

- h. Participation of women on regular group meeting seems low, but in a specific group meeting their participation is high then regular group meeting.
- i. Frequency of participation of women in protection and distribution of forest products are not high but so some extent satisfactory.
- j. Among the different forest operation activities purring, thinning, and fire line construction activities are not operated in studied community forestry. Bushes clearing a singling activity are in operation, but women participation in these activities is low.
- k. Participation of women in forest related works such as firewood collection, fodder collection and grazing is very high.
- 1. The encouraging factors for women's participation are family support, education, absent of male in house, self-motivation, other organization and DFO staffs.
- m. The obstacles for women's participation are caste domination, poor education, economic status, gender basis, occupation and other factors.

7.3. Recommendation

Based on the general findings of the study and focus group discussion the following recommendations have been proposed.

- a. More extensive awareness program should be conducted by district forest office to make women as an active user.
- b. Women's representation is very low in the executive committee, and they are represented post is only a member, so, it is necessary to encourage them to take responsibility.
- c. User group is involved only to protect the forest. They have no knowledge about effective forest management. So some specific training should be provided by concerned personal.
- d. There are some obstacles such as a big family size, caste domination, poor educational status, poor economic status, gender basic, occupation and others (age) should be minimized through different awareness program.
- e. Some factors, which encourage women to participate in community forestry, should be fostered.

- f. Special provision should be made in the operational plan about women's participation in community forestry and women's representation in the committee.
- g. Government should also be made special provision about women's participation in community forestry related policy plan and program.
- h. NGO/INGO's and development agencies, which are working in the field of community forestry, should promote women to participation in such program.

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Some Pictures from Shikharpur Community Forest zone

































Appendices

Appendices 1: Individual Interview Questionnaire

Interview date:								
Community:								
1. Name of the respondent:								
Age:	Sex:	Sex:						
Cast: Occupation:								
Marital status:								
2. Family size:								
Total members:	Male:	Male: Female:						
S. Name Relatio	n Sex Age	Education*	Occupation					
No with far head	0	Education	Cecupation					
No with far	0	Education						
No with far	mily							
No with far head * Education, A= Primar	ry, B= Lower Secon	ndary, C= Above						
* Education, A= Primar Certificate (SLC)	ry, B= Lower Secon	ndary, C= Above						
* Education, A= Primar Certificate (SLC) 3. When did you start to	ry, B= Lower Secon	ndary, C= Above unity? family?						

5. Land owned by the household: (in ropani- aana- paisa-dam system)								
Irrigated land:		r	non- irrig	gated land:		others land:		
6. Livestock owned by the household:								
Buffalo Co	w Ox G	oat Sheep	o Pig	Poultry	Others			
7. What type of	of forest proc	duct is esse	ntial for	your every	day life?			
8. What kinds of benefit you are getting from community forest?								
9. Do you familiar with community forest executive members?								
10. How many women members are participating in committee?								
11. How did they (women) become a member of the committee?								
12. Are you informed all the meeting of Community Forest User Group (CFUG) and Community Forest User Group Committee (CFUGC)?								
13. Did you participate in the group meeting during the participation of the statute and operational plan?								
14. How many times the meeting used to be held in a every year?								
15. Have you been participating in community forest activities like; plantation, firewood collection, fodder collection, grazing, medicinal plant collection?								
16. Which type of energy do you use for cooking food?								
Firewood	Kerosene	Bio-gas	L.P. gas	Electricit	y Oth	ers		

- 18. Who are responsible to collect forest product (firewood, fodder/ green grass etc.) in your family
- 19. What kinds of fodder do you use normally?
- 20. Do you have a problem to participate in Community Forest (CF) activities? If yes, what kind of obstacles have you faced?
- 21. What factors has encouraged to you in community forest activities?
- 22. Have you ever given your opinion in CFUG meeting? If yes, was it listening by educative members?
- 23. How is the present situation of women participation in community forest program?
- 24. What kind of obstacle women's are facing to participate in community forest program?
- 25. Do you think women can play a vital role for forest sustainable management in compare to male? If yes, how?
- 26. Is it essential women full participation in all level of community forest activities for forest better management?
- 26. What are the things need to be done for women full participation in community forest sustainable management?
- 27. Do you want to say anything about women's participation and forest better management?

Appendices 2: Questioner for District Forest Office (DFO) Staffs

- 1. When did community forest program launched in this district?
- 2. How many CFUGC registered in this district?
- 3. When did you organize Shikharpur community forest user group committee? Can you explain a bit about shikharpur community forest program?

- 4. What is the opening process of community forest program?
- 5. How dose community forest program work?
- 6. How is the present situation of community forest program?
- 7. Is it getting better to conservation local forest after handling forest ownership in the community?
- 8. What roles dose women play in Shikharpur community forest program at the present situation?
- 9. Do you have any special program to encourage women participation in community forest program?
- 10. How is the present situation of women's participation in community forest program?
- 11. How the local people are benefited by community forest program?
- 12. What are the main challenges of women's active participation in community forest program?
- 13. Do the women play a vital role to preserve forest in compare to male?
- 14. What role women are playing in community forest management process?
- 15. How is the present situation of women in the decision-making process of community forest program?
- 16. Is it necessary to women's participation in community forest program sustainable management? If yes, why?
- 17. Do you have any suggestion how women participation can be improved in community forest program?
- 18. How is the situation of women's manage community forest in compare male manage community forest program?

- 19. Do you have any idea how is women participation situation in others government program?
- 20. How can women empower in development activities?

Appendices 3: Questioner for Community Forest User Group Committee (CFUGC) Members

- 1. When did you join in community forest program?
- 2. What role are you playing in CFUGC?
- 3. Can you explain a bit more about community forest program and CFUGC role in forest management?
- 4. Can you tell me about operating process of community forest program?
- 5. How is the present situation of the community forest program?
- 6. How does CFUGC decision making process run?
- 7. How is the women representation in CFUGC decision-making process?
- 8. Are the local people benefited from this program? If yes, how they are?
- 9. Is it getting better on conservation process of forest before to handle local community?
- 10. Who is a primary user of this forest?
- 11. How is the women participation situation in this community forest program?
- 12. What factors has been affecting women's active participation in forest better management?
- 13. Do the women's can play a vital role to manage community forest in compare male? Why or why not?
- 14. What are the main challenges of women active participation in this community

forest program?

15. Do you have any suggestion, how women active participation can be improved in community forest program?

Appendices 4: Focus Group Interview Guide

- 1. What kinds of benefits you are getting from community forest program?
- 2. Who are the main responsible for forest better management?
- 3. Can you say something about community forest management process? How do they implement decision-making process?
- 4. Do you think effective participation can improve forest better management? Why and why not?
- 5. Who can play a vital role for this community forest sustainable management?
- 6. Who are the primary users of this forest?
- 7. How is the situation of women in community forest program? How they are contributing?
- 8. What types of forest product do you need for everyday life?
- 9. Do you think local community can manage forest effectively then government? If yes, in what ways?
- 10. Can you say something about male and female everyday work activities? It means what kinds of work they are doing in everyday life?
- 11. How is the situation of women participation in community forest decision-making committee? Do they listen women voice during policy formulation and implementation process?
- 12. Can women effective participation play vital role on forest sustainable management? If yes, how does it possible?

- 13. What types of challenge have occurred during women participation in community forest program?
- 14. Do you have any idea how can these challenges solve?
- 15. Why women participation is crucial for forest better management?
- 16. Do you have any idea how can community forest manage on sustainable manner?