

**SOCIO-ECNOMIC IMPACT OF COMMUNITY FOREST IN  
CHITWAN DISTRICT:A Study of Surdebi Community Forest,  
Piple,Chitwan**

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By

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## **DECLARATION**

I hereby declare that the thesis entitled **SOCIO-ECONOMIC IMPACT OF COMMUNITY FOREST IN CHITWAN DISTRICT: A Study of Surdebi Community Forest, Piple, Chitwan** submitted to the Central Department of Rural Development, Tribhuvan University, is entirely my original work prepared under the guidance and supervision of my supervisor. I have made due acknowledgements to all ideas and information borrowed from different sources in the course of preparing this thesis. The results of this thesis have not been presented or submitted anywhere else for the award of any degree or for any other purposes.

.....

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Date: 2074-09-21

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## RECOMMENDATION LETTER

The thesis entitled **SOCIO-ECONOMIC IMPACT OF COMMUNITY FOREST IN CHITWAN DISTRICT:**A Study of Surdebi Community Forest, Piple,Chitwanhas been prepared by**PabitraPandey** under my supervision.I hereby recommend this thesis for the examination by thesis evaluation committee as a partial fulfillment of the requirements for the Degree of Master of Arts in Rural Development.

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The thesis entitled **SOCIO-ECONOMIC IMPACT OF COMMUNITY FOREST IN CHITWAN DISTRICT: A Study of Surdebi Community Forest, Piple, Chitwan** submitted by **Pabitra Pandey** to the Central Department of Rural Development, has been found satisfactory in scope and quality. Therefore, we accept this thesis as a part of the degree of Masters of Arts in Rural Development.

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## **ABSTRACT**

This study “Socio-economic impact of Community Forest in Chitwan District” has been conducted in Piplesurdebi Community Forest Users’ Group of Rapti Municipality of Chitwan District. This study aims to analyze whether the community forestry is beneficial to the local people or not and is it success to generate income and employment in the community level. The main objectives of this study are: to analyze the CFUGs socio-economic improvement through community forestry and to find the problems face by SCFUGs.

Descriptive and explanatory research designs are used to fulfil the objectives. 50 CFUs has been selected as sampled users out of 500 users of SCF. In this research both primary and secondary data has been used to collect the necessary data. Stratified systematic sampling technique is used to collect primary data through Structured Questionnaire, Key Informant Interview and Focus Group Discussion techniques to gather information. The data are tabulated and analyze simple statistical tools like pie-chart, percentage, frequency, etc.

The demographic characteristics of users and socio-economic structures of Surdebi community forest users are well explained compare and analyzed before and after the formation of Surdebi community forest. The Study analyzes the direct and indirect benefits derived from community forest. Major benefits were increased in the supply of fuel wood, leaf litter, fodder, water supply, timber and other forest products as well as increased in the employment opportunities. Based on the primary data, the findings of this research reveal that Surdebi community forest improves the socio-economic status of Surdebi community forest users. However, the findings of research also reveal that there is a conflict between users and Surdbi Community Forest management team as well in benefit sharing. It is recommended that all of the political ideology should be forgotten for the common benefit of the society.

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## ACRONYMS

CF	Community Forest
CFU	Community Forest User
CFUS	Community Forest Users
CFP	Community Forestry Program
CFUG	Community Forest Users' Group
DFO	District Forest Office
ETC.	Etcetera
FUG	Forest Users' Group
FY	Fiscal Year
GON	Government of Nepal
INGOs	International Non-Governmental Organizations
NGOs	Non-Governmental Organizations
NTFP	Non-Timber Forest Product
Resp.	Respectively
SCF	Surdebi Community Forest
SCFU	Surdebi Community Forest User
SCFUG	Surdebi Community Forest Users' Group
VDC	- Village Development Community

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Forest is one of the most important natural resource of Nepal. Forest resources play a major role in the development of human society. The importance of forest products has been increasing day by day for all (Bhattarai, 2016). Forest plays vital role in promoting local livelihoods by providing various valuable service and products. Forest is not only fostering to the agriculture system but also one of the sources of basic need of the rural people. It conserves watershed, protects from floods soil erosion help to regular climate and is a habitat for various animal and plant and species. In brief, the forest has been playing crucial role in sustaining the farming system in Nepal since long (Pandit & Bevilacqua, 2011).

The forest has been contribution to the social, religious, cultural, economic and environmental sector from the early human civilization; livestock rearing the forest sector have jointly contributed to the agricultural development of Nepal. While the agricultural contributes two third percent of total income in average, the forest sector has occupied one fourth percent of it. This sector has played an important role in providing agricultural inputs as required for the agriculture system(Chhetri, 2013). Livestock raising and other organic matters required for compost fertilizer, fodder, plants and pasture for cattle. In addition to this it gives support to irrigation and electricity projects by conversing watershed areas and ground water resources(Bhattarai R. C., 2011).The conservation and development of the natural resource like forest is impossible from the government effort alone. Regarding this fact, the concept of community forestry development programme was introduced in Nepal since 1978/79 in the name of "Panchayati Conservation Forestry." After the experience of about a decade, there was made a contemporary change and it was again started from the beginning of 1990 as the aim of 'Master Plan' for the forestry in 1988. Since then community forestry development programme is being implemented with collaboration of the local people and financial support of donor agencies. Community forestry is involving in developing sectors like road construction, help to the school, scholarship management, blood donation, temple renovation etc(Khanal, 2017).

Community forest refers to any specific part of National forest land over for local user group for the development preservation and utilization of forest. Community forestry is a village-

level forestry activity, where local people participate in the planning, establishing, managing and harvesting of forest crops, and so receive a major proportion of the socio-economic and ecological benefits from the forest (K.C, 2017). Community forest is a partnership program between government and community organization in which government staff play a role as facilitator and catalyst to identify real user groups to prepare operational plan of forest and constitution of group and in implementation of community forest activities whereas community users group is responsible to manage, protect and utilize the forest on the sustainable basis (HMG/N, 2013). Community forest management (CFM) has been recognized over the past two decades as a potential approach for achieving forest sustainability. It focuses on improving the livelihood and welfare of rural people and conserving natural forest systems through local participation and cooperation (Rai et al., 2016).

Income generation and employment are catalyst to poverty alleviation. Understanding the existing social institutions and resource availability through community participation is vital in coordinating. Income generation activities that match people needs and capacities are market demands. There is variety of activities for income generation activities in community forestry such as non timber forest production, cash crops production, eco-tourism activities, cottage industry related to the forest and so on. All these activities generate the employment directly and indirectly as well (Pathak et al., 2017).

Community forestry has a great potentiality to generate sustainable economic benefits to the local communities at households' level and also to support to community developments. As community forest was launched two decades ago to make people participation on various forest activities, they no doubt direct and indirect benefits from the forest. It provides adequate forest products such as firewood, fodder, leaf litter etc. to its users. Similarly, it also provides employment opportunities. These would certainly change the lifestyle of Surdebi forest users (Rai & Neupane, 2016).

People in rural areas depend on the resources available in the area for their living. Local people around Surdevi community forest also depend on the resources for their living. With regard to rural livelihoods, Surdevi community forest is playing central role in economic and social life of local people. Surdebi community forest is the backbone of local people but still peoples are not completely participating in forest management. There is lack of awareness

programs related to forest management from the side of local government. For the management of forest, there need to active participation of local people.

## **1.2 Statement of the Problems**

Many Researcher have been studied about the issues occur in the sector of community forest but still there is no conclusive result for the solution of problems that occur among CFUs. The problems, which are being grown nowadays concerning forest, are serious in our country. The legislative and administrative efforts are not the solution of these problems. Being unsystematic management to forest development, people are facing the problems of good utilisation of all forest resources.

In Surdebi community forest, CFUs are using a lot of resources which adversely affect in ecosystem. Mainly over exploitation of forest without being conscious to other is becoming main issue, deterioration that is indirectly or directly related which affect to the human life as well as bio-diversity mechanism of natural process. Similarly, the major problems are the lack of grass, fodder, dry leaves, firewood, timber, water sources, fresh air, natural scene, environmental balance, different scarce places and herbs through deforestation. Conflict among CFUs is also another major issue in this community forest in terms of benefit sharing, protection and management of community forest. Therefore, this research fulfils the gap between management system of community forest and utilisation pattern as well as provides knowledge about the environmental protection to the SCFUs. Therefore, the study is highly significant and relevant.

## **Research Questions**

- ) What is the socio-economic status of SCFUs?
- ) Does community forestry help to the development of local level infrastructure?
- ) What are the problems faces by CFUs?

## **1.3 Objectives of the Study**

A general objective of this study is to find out the socio-economic impact of community forest in PipleSurdebi Community forest user Groups. The specific objectives are:

- i) To assess economic status of the CFUs,
- ii) To analyze the social changes of CFUGs
- iii) To identify the problems face by CFUGs

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

In Chitwan district, very limited studies have been carried out about the community forestry management system. This research provides valuable information about the role of community forestry to uplift the socio-economic status of the study area. Similarly, this research also helps in making the policy of PipleSurdebi community forest in community level. The study is useful to policy makers, planners, researchers in forestry to consider roles, importance and people's participation in forest management more seriously. It helps to protect the community forests as well as biodiversity. It also contributes the theoretical knowledge regarding how to understand the community forestry from sociological perspective and provides the empirical knowledge regarding social background of Community Forest Users' Group of the study area i.e. how people participate and share benefits of the community forestry.

#### **1.5 Limitation of the Study**

Every study or research has some limitations. This study also has some limitations. The major limitations of this study are as follows:

- 1) This study is based upon the primary data and secondary data.
- 2) This study considers only those factors related to socio-economic impact of Surdebi community forest to its users.
- 3) This study selects 50 people for the sample out of total population taken due to the lack of time.
- 4) The findings of this research are applicable in the context of Surdebi CFUs. Therefore the conclusions and recommendations drawn from this study might not be appropriate to other community forests.

#### **1.6 Organisation of the Study**

This research is divided into five chapters.

**Chapter 1** is an introduction chapter which discusses the general background of the research followed by the statement of problems, objectives of the study, significance of this research, and limitation of the study.

**Chapter 2** includes the literature review about the research questions. The concept of community forest management and practices will include in this chapter.



**Chapter 3** is dedicated to the research methodologies used for this research. Research methodology, rationale of site selection, nature and source of data, study population, sample, sampling procedure, data collection techniques and tools of data collection are widely discussed in this chapter.

**Chapter 4** is the data analysis and presentation chapter of this research. This chapter deals with the description of data collected from primary and secondary sources like individual interview, observation, focus group discussions, journals, articles, relevant books, magazines and newspapers.

**Chapter 5** provides the summary of entire research. It includes the findings, recommendation and contribution of research.

## CHAPTER II

### LITERATURE REVIEW

#### 2.1 Introduction

The purpose of this chapter is to provide sufficient and necessary literatures regarding the community forest. In this chapter, literature related to history of community forestry, forest act, policy and regulation, empirical review, conceptual framework, women in CF, income and employment generation and benefits from CF are presented in details.

#### 2.2 History of Community Forest in Nepal

During the period of Rana ruler in Nepal, the resources were the private property of Ranas especially in terai region; the accessible forest of Terai has good commercial value. So, the Terai Forest was totally controlled under the Rana Rulers(Pathak, Yi, & Bohora, 2017). But in the case of Hills, the local farmers had practiced indigenous management of the local forest on their own initiatives. These systems involved locally accepted rules through which a clearly fixed group of beneficiaries regularized forest use and excluded outsiders (Bhattarai, 2016). The government was failed to manage the forest resources through bureaucratic machinery up to 1976. After that a remarkable event was taken place in the history of community forestry. The villagers had already started managing local forest on their own initiative. This system involved locally accepted rules and it fixed the group of beneficiaries who were mainly known and respected in the society and excluded outsiders as users. Considering this fact, His Majesty's Government of Nepal implemented Community Forestry Development Program (CFDP) in 1978 to encourage initiatives of local people in the management of the forest resources. HMG/N began CFDP's first phase in 1980 (Pandey & Paudyal, 2015).

The Decentralization Act of 1987 introduced the concept of "User Groups" for local control of resource management and development. CF is a term used to describe forest resources. The CF program build on local peoples' and technician', knowledge using the participatory approaches to improve the organizational structures and managements of trees and forest resources(FAO, 2000). The latest Forest Act was launched in 1993, Act 1993 defines CF as any part of national forest which is handed over by DFO to Users Groups in the form of CF as prescribed entitling to develop, conserve, use and manage the forest products

independently by fixing, their prices according to the work plan (DOF, Community Forestry Inventory Guidelines, 2013). According to Bhattarai R. C. (2011), community forest was established in Nepal for the following objectives: To meet people's basic needs for fuel, wood, timber, fodder, and other forest products, to provide social and economic benefits to the CFUGs, to enhance capacity of local people for planning implementation forestry and other development works and to achieve positive results for local economic development through the utilisation of community forest. By 1997, the FUGs were given total authority over the use of forest produce, complete autonomy of develop forest management plans, and total discretionary authority over their own fiscal allocations (Poffenberger, 2000).

In 1990, the end of Nepal's Panchayat system of government change in the status of Panchayat Forest (PF) and Panchayat Protected Forest (Manandhar N. , 2002). Today, the term Community Forest (CF) is used to refer to any forest under user group protection and management. Now a day, the community forest policy focused mainly on:

- ) Handing over accessible forest to the forest user groups (FUGs) irrespective of political boundaries. FUGs are made up of households living nearby who have been traditional users of the forest resources.
- ) FUGs to get all income generated from the community forest resources. As FUGs starts management they get forest products from cleaning, Pruning and thinning operations. They are distributed among the users and surplus is outside the FUGs.
- ) Orientations of the entire forestry department staff to cater for changing of their traditional role as a policeman then extension worker (Pandey & Paudyall, 2015).

In Nepal, current forest policy emphasis on community forest management. Community forestry is based on the nation of people's participation of the forest users to manage their resources. Consequently, the management of nation forest is being systematically handed over to identify community of user (Rai et al., 2016).

### **2.3 Present Status of Community Forestry**

The government has handed over an additional 14,745 hectares of national forest to 19,361 Community Forest User Groups (CFUGs) this year. The community forests occupied an area of 1,798,733 hectares of land across the country until last year. Under the Forestry Operation Plan, the government hands over a part of national forest to the CFUGs each year. The user groups form committees for the management and protection of forest areas that has numerous

households working under it. They are also the beneficiaries of the forest products (Pathak et al., 2017).

According to Khanal (2017), at present 2,461,549 households are under the CFUGs directly benefitted by the community forests. People living around mid-hills are benefited more from the community forests. The concept of community forest was launched in Nepal in the late 1970s under the participatory forest management program. At present, around 1.45 million households, or 35 percent of the country's population, are involved in the community forestry (ibid).

The households or grassroots communities that live around forests use timber, grass and bamboos, medicinal plants, forest-based agriculture for their own use along with the forest grazing by livestock. "Until the trees have potential to expand in the forest area, community forest grows every year," said Prakash Lamsal, community forest development officer at the DOF. Among other projects in Nepal, the community forest has covered larger household beneficiaries (Khanal, 2017).

#### **2.4 Community Forestry and Community Forest User Groups**

Nepal Community Forestry Program was initiated with financial and technical assistance from the World Bank (WB), United Nations Development Program (UNDP), Food Agricultural Organization (FAO) and other donors. CF has been defined as Small scale, village level forestry practices where decisions and actions are made on a collective basis and where the rural people participate in planning, establishment, management and harvesting of forest crops and receive a major proportion of the socio-economic and ecological benefits from the forest(HMG/N, 2013). Since, the late 1980's C. F. has emerged to embrace participatory forest management and rural development issue(Bhattarai B. , 2016).

Nepal's forestry sector policy envisage handing over in order to control the local forest's to a group of people who have locally recognized rights to use a forest called forest user group(Devkota, 2010). The Forest User Group (FUG) is a group of individuals consisting two or more interdependent interacting persons that perceive themselves as having a unique relationship with members as distinguished from interactions with members (Lawson, 1998). This definition means that the group can vary in size and the level and type of interaction with each other. like, Some forest user groups of SindhuPalchok and

KabhrePalanchokdistricts of Nepal have initiated user group development planning processes for preparation of community development plans to address the needs of all forest user groups and have included these plans in forest operational plan(Bhandari, 1997). Saving and credit activities from forest user group money for loan to all group members in operating(Manandhar & Shin, 2013)

In community forests, parts of government forests are handed over to a group of local households known as Community Forest User Groups(Chapagain & Banjade, 2009). CFUGs prepare a forest management plan according to their needs and forests are managed according to the plan for the purpose of resource utilization as well as protection and conservation (ibid). The basic assumption of the CFUG is that users become united and become capable of managing community forests for their mutual benefits. However, requirement and interests of the households participating in community forests is different depending upon their economic status. Poor people want to use it more for subsistence such as fodder, food and firewood while rich people are more interested in its commercial value such as timber(Chapagain & Banjade, 2009).

## **2.5 Objectives of Community Forestry**

Community forest programs 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 and improve living standard of CFUs(Bhattarai B. , 2016). Community forest is a community oriented forest management system where local users of the forest control, manage and utilize forest resources for their own benefits. The ultimate objective of community forest is to raise the standard of living of the local community (ibid).

Today, progressive policies and legislative provisions of community forestry favourably promote rural development. Like, the objective of government's five year development plan (1992-1997) is "increase income and employment opportunities from the forestry sector for small and marginal families" (HMG/NPC, 1992). The plan further adds "forest will be raised on marginal lands in all the areas and emphasis will be placed on forestry based occupation" (HMG/NPC, 1992). These policies give priority to community forestry in the overall development programs for Nepal have a tool for generating income and employment for the FUGs from their community forest(Rai & Neupane, 2016).

In Nepal, the Community Forest policy combines with environmental objectives of preventing land degradation and deforestation with social and economic objectives. The latter objectives are to meet the people's basic needs for fire wood, fodder, timber and other forest products on a sustainable basis and also to contribute to food production through effective interaction between forestry and farming practices (HMG/N, 2013). Therefore all the accessible forest area in the middle hills of Nepal has been over by District Forest Office to the local communities themselves (K.C, 2017). Like, other community forests, Surdebi community forest of Chitwan has also its own significance such as: Increase the socio-economic status of CFUs, provide equal opportunities to use community forest resources for CFUGs, conservation of soil quality and ecosystem, facilitates the use of local knowledge, and opinions in designing plans, programs and projects.

Similarly, Surdebi community forest was established on 2052 BS at Rapti municipality -01, Piple; eastern part of Chitwan district with objective of increasing socio-economic status of SCFUs and to decrease the deforestation and to conserve the land, biodiversity and ecosystem by soil erosion and floods, etc.

## 2.6 Government's Master Plan for Forestry Sector

Long-term and mid-term objectives are government's master plan for forestry sector.

**Table 1 : Government's master plan for forestry sector**

<b>Long-Term Objectives</b>
1. To meet the people's basic needs for fuel wood, timber, fodder, and other forest products on the sustained basic, and to contribute to food production through and effective interaction between forestry and farming practices.
2. To contribute for the growth of local and national economies by managing the forest and creating opportunities for employment and income generation
3. To conserve the ecosystem and natural resources
4. To protect the land against degradation by soil erosion, floods, landslides, desertification and other effects of ecological imbalance.
<b>Mid-Term Objectives</b>
1. To promote people's participation in forest resources development, management and conservation
2. To develop the legal framework needed to enhance the contribution of individuals and institutions to forest resources development, management and conservation
3. To strengthen organizational framework and develop the institution of forestry to enable to carry out their mission.

(Bhattarai B. , 2016)

## 2.7 Forest Management Policy/Act/Regulation of Nepal

**Table 2: Forest Management Policy/Act/Regulation of Nepal**

Year	Policy/Act/Regulation	Remarks
Up to 1846	Conversion of forest to agricultural land protection of Terai forest.	Increase the tax base of the state as a buffer against foreign invasion.
1846-1950	Forest land given as Birta to influential officials. Exploitation of Terai forest	Conversion of forests to agricultural and land export of timber of india
1957	Private forest nationalization act	Indiscriminate cutting of forest.
1961	Indiscriminate cutting forest	Projection, Management and Utilization of forests entrusted to the DFO
1967	Forest Preservation Act (Special Provision)	The power of the DFO as a law enforcing agent strengthened further.
1976	National Forestry Plan	Recognized the need for people's participation in forest management.
1978	Panchayat Forest Regulation and panchayat Protected Forest Regulation	Handling over of limited areas of government forestland to the control of Panchayat.
1981	Forestry Sector Policy of the Sixth Five year plan(1981-1985):	Emphasized community participation in the management, Conservation and use of forest resources.
1982	Decentralization Act	Moves towards transferring the control of forests to local people strengthened.
1988	Master Plan for the Forestry Sector Nepal:	Covered all aspects of forestry designed to take Nepal's forestry into 21st century; strongly emphasized community forestry; and recognized the role of real user in forest management.
1993	Forest Act	Regulatory function of DFO still intact but significantly softened. Forests can be handled over to FUG by the DFO.
1995	Forest Regulations	Procedural guidelines for implementation of the Forest Act 1993



1998	First Amendment of Forest Act 1993:	Seeks to restrict some of the right of CFUG and gives more power to DFO
2000	Forest Policy	Withdraw some of the rights of local forest users in the plains are of Terai, with the intention that the forests would be better managed by the active involvement of the government
2001	Revision of Community Forestry Operational Guidelines	Imposition of additional technicalities on CFUG's management of forest, without the accompanying delivery of needed services. Provides room for manipulating through technical reason.
2001-2006	Forestry Sector Policy of the Tenth Five year plan (2002-07)	Emphasis on people's participation in forestry management in general and community forestry in particular
2003	Government financial ordinance for levying 40 percent tax on CFUG forest product sales	Tries to restrict the rights of users to use their resources.
2003	Collaborative forest management (CFM) guidelines	Emphasizes on collaboration with different stakeholder in the management of forest.
2007-2010	Forestry Sector Policy of the Three year interim Plan (2007-2011)	Ecological balance and nature conservation through effective forest management through communities and private sector involvement.
2014	Thirteenth Three Years Plan (2013 -2014)	Plan emphasized that CF for creating income generating opportunities for the poor and focuses in the involvement of INGOS and CBOS (community Based Organizations) in carrying out income generating activities for poverty reduction of rural development.
Under these Act, plan and policy documents, a CUFG requires preparing its constitution and operation plan and managing the forest affaires accordingly. Government has emphasized the community forestry program since 7th plan and regularized it to 12 <sup>th</sup> fifth year plan.		

(DOF, 2017)

## 2.8 Participation of People in Community Forest

Community participation is generally agreed to be important for the long term success of local resource management system(Joshi, 1995). People's participation has been used in a different context such as community development, social mobilization, community participation, public participation etc. However, conceptually people's participation includes their participation in identifying needs, decision making, implied benefit sharing and evaluation(Bhandari, 1997).

Sundaram(2002) claims that the participation of beneficiaries can be understood in terms of participation in decision making, implementation of development programs, monitoring and evaluation of the program and sharing the benefits of development. Participation, the people will be in a better position to assess their own rights and responsibilities. The aim of community forestry is to involve people in all stages from decision making to harvesting, so it is the most essential feature of community forestry(Bhattarai B. , 2016).Nepal has successfully implemented community forestry programs with the active participation of local people. Forest committee formed by user groups take the responsibility of protecting, plantation, and conserving natural forest. Even, the poor people are being to participate in community forestry programs because they can collect fuel wood and fodder from the community forests and save their time for earning wages (Rai, Neupane, & Dhakal, 2016).

Community participation is process in which people are encouraged realizing that they themselves have the abilities, energies and some of the resources to make initiatives to improve their lives. This approach is being fulfilled through the community forestry project, which requires community participation(Manandhar & Shin, 2013).

The willingness to participate in community forestry clearly varied 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 harvesting, so it is the most essential feature of community forestry(Dahal, 1994). The main strategy of HMG a master plan was to promote people's participation in forest resource development and to develop CFUGs as one of the important alternatives for the forestry sector in Nepal (ibid).

## **2.9 Women Participation in Community Forest of Nepal**

In Nepal, Women are mostly responsible for household chores like; making food, taking care of the babies, collecting firewood, fodder, and 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. Therefore, the forestry sector of Nepal has realized that women can play vital role for protection, proper utilization, management and development of forest resources at local level(Lama et al., 2017).

The participation of women in forestry is being seen as essential to the advancement of women in rural community, where life and subsistence are directly dictated by nature and quality of available renewable natural resources women for forestry and forestry for women both are valid, highly desirable and non contradictory concepts. Women are the main agents of natural resources management particularly in rural areas where forest is the main sources of timber, litter and animal fodder that are mainly collected by women Nepalese agriculture system is predominantly subsistence in nature in which crop live stock and forest have very close interrelationship and population growth and rapid Socio-economic changes poses diverse impacts on the interrelationship(Uphdhyay, 2008).

The proper management of community forest (CF) is mainly depends on women's participation because in rural communities they have a vital role in environment management and development their full participation is essential to achieve sustainable development (Kanel, 2004). It is very important to explore and understand their role in rural area because every rural household is dependent on wood for cooking and heating, and on forests land for feeding domestic animals, almost all of these activates are carried out by women(Gurung, 1997).

Being involved in the collection and management of forest resources, women have developed a traditional knowledge base about their management and utilization. Despite this, women are generally excluded in the decision-making process of CFUGs. As a result, most CFUGs decisions, including funds management, are made in favour of relatively wealthier households(Gentle, 2000). The exclusion of women in the resource management process has serious negative consequences not just for gender equity, but also for the efficient functioning

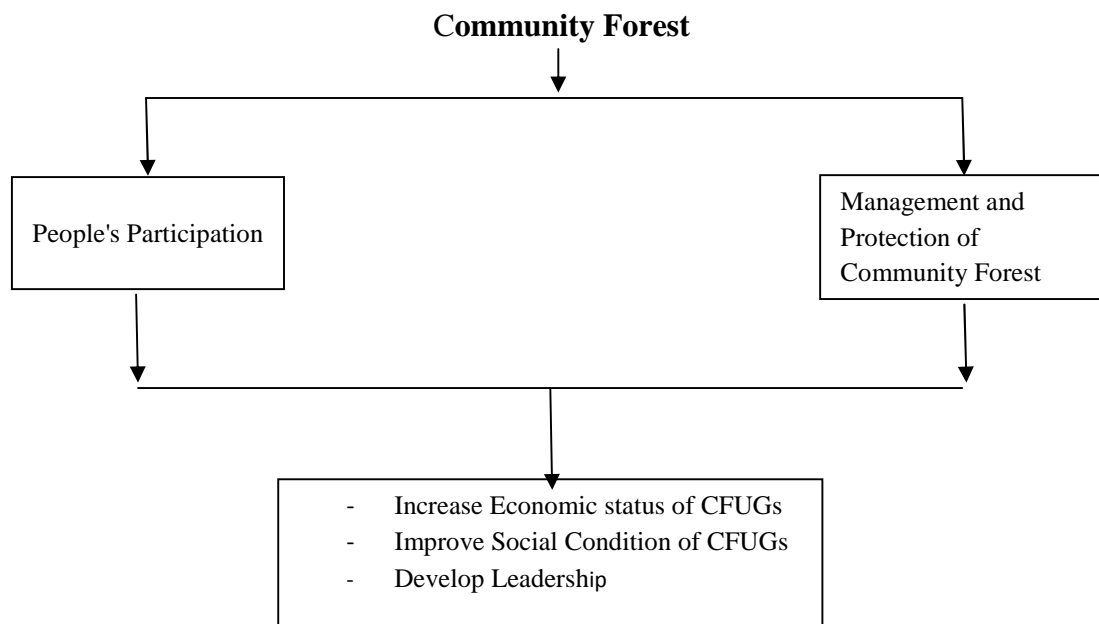
and long term sustainability of these initiatives, and for women’s empowerment(Uphdhyay, 2008).

Similarly, in Surdebi community forest, women participation in using forest products is high. Women are active in executive committee of SCF management team also. 45% members of executive committee are women.

### 2.10 Conceptual Framework

The conceptual framework of Mobilization of Natural resources development by Bhattarai (2016) has been used. It consists of three factors: “Resources”, “Institutions “and “Norms”. Natural “Resources” (community forest) are the base of local development and utilization, and an “Institution”, such as CFUG acts as the user of the resources. The CFUG acts as the user of the resources. The CFUG is based on a “Norm” such as forest Management Rules for the sustainable use of resources.

Community forests provide products with value such as timber, fuel, food, as well as an indirect benefit from the forests as pathways to peripheral populations. Likewise, the community forest policy can make changes in the status of CFUG and “forest management” rules can be adapted at the national level. Overall, these factors supposedly contribute to “poverty reduction”. The following conceptual framework has been developed to study the socio-economic benefits of Surdebi Community Forestry User’s Group(Bhattarai B. , 2016).



In this study, Surdebi CF focuses on people’s participation in the activities of community forestry such as, general assembly and meeting, formation of users group, selection and

structure of executive committee, collection of grass/fodder/timber like forest products, penalties, reward, plantation, sharing of benefit and so on, which protect and conserve the forest as well as increase income and employment, develop local leadership, improve social and economic status of CFU.

### **2.11 Socio-economic Contribution of Community Forest**

Since 1990, NSCFP has been supporting the implementation of the National Community Forestry Programme in Dolakha, Ramechhap and Okhaldhunga districts through multiple-partnerships modality with different actors with the aim of reducing poverty through forestry and contribute to the national poverty reduction strategy. It is mainly concentrating on four thematic areas namely forest governance, sustainable forest management, and livelihoods improvement and pro-poor enterprise development programs mainly for disadvantaged households and provide policy feedback(Bhandari, 1997). Similarly, community forest has contributed in these sectors such as, improvement of socio-economic status of local people and helps to reduce poverty of the rural population in Nepal(Rai et al., 2016). Community forestry is put up on the principle of devolution of power and authority to local communities. Community forestry facilitates to develop mutual trust and cooperation between forest departments and local communities. CF has played crucial role to get better living standard of CFUs in Nepal. Community forestry is the most important treasure of a nation. Government, civil society, and local bodies are the main stakeholders that help to promote community forestry(Devkota, 2010).

FUGs generate funds and use such funds to provide for their own local development such as, improving the drinking water supplies, constructing roads, schools, building house , etc. CFUs have strong interest in management, sustainability and use of forest resources in their proximity because they depend on such resources for survival. Rural farmers get opportunities for income and employment generation with protection and management of CF. CFUGs lunch income generating activities by using non-wood forest products like, medicinal herbs, fruits, sal leaves, etc. these products are collected by individuals or groups and supplied to the market. As it may be, FUGs could be provided with the necessary support to collect, process and market locally available non-wood forest products and benefits goes to everyone in the FUGs(Pandey & Paudyall, 2015).

The community forest operation cost of poorer households exceeds the benefits received by them because free access to collect forest products has been restricted in order to improve the

forest condition. This directly affects poorer people in keeping livestock. In addition, some poorer households living near town and roadside were selling fuel wood in hotel and teashops. This has now been stopped and has created problem to these poorer households for generating day to day income for survival. As a user, every household whether rich or poor should pay an equal amount as monthly membership fee and buy once freely collected forest products based on forest operational plan rules and regulations(Chapagain & Banjade, 2009).

Forest resources play a crucial role in rural livelihoods in Nepal and elsewhere in the developing countries(Dev et al., 2003). The forest resources directly fulfill forest related subsistence needs of women, poor and backward people as well as commercial needs of well-off people. The recent studies show that the Community Forestry in Nepal has contributed to the improvement of forest condition and people's socio-economic status mainly in two ways: Capital formation in rural communities and policy and governance reform of various organizations and agencies(Pokharel & Nurse, 2004). Likewise, Income-generation activities and employment opportunities to poorer households in community forest development and management activities have been started on the basis of community development plans of forest operational plans. This kind of community development practice needs to be adopted throughout Nepal to deliver more benefits of community forests to poorer households(K.C, 2017).

In the same way, SCF also helps to increase socio-economic status of SCFUs and to decrease the deforestation, to conserve the land, biodiversity and ecosystem by soil erosion and floods, etc.

## **2.12 Empirical Review**

Pokharel B. K.(2017) studied on the topic of community forestry and people's livelihoods, a case study of impact of community forest on its user's livelihood. The main objective was to identify the socio-economic impact of community forest on users' livelihood. He found that community forestry contributes in a number of ways to improve user's livelihoods.

Kaskayo, Mohammed, & Inoue, (2017)in their study "Impact of community forest program in protection forest on livelihood outcomes" a case study of Lampung Province of Indonesia has found that different people are involved and they are getting benefits for their livelihoods from community forest. Study found that community forest helps its user to uplift their economic status; in addition more people have been involved in forest based industry which

is the major economic source of Lampung province. The revenue from the community forest is used in different community development activities like road construction, construction of water taps, and donation in temple, in schools etc. the livelihood, of villagers is become easier.

Chhetri(2013) has suggested that participation in community forest management activities is dependent upon various social, economic and biophysical factors. Larger size of households has represented in forest user committee who has own less land and they have involved in protection of forest .Numerous of Women households has closed to the forest and market which has showed their strong positive influence on participation in forest resource utilization. Lack of education opportunity and traditional customs are the key factors for the low participation of women and lower caste in decision making in forest user group committee.

Subedi (2014)has supported a number of CFUGs to provide exclusive management rights to groups of poor households, for cultivation of income-generating crops and agro forestry. Although currently few in number, some CFUGs do provide community lands to their landless or near-landless members, so that they can earn their living through cultivation of medicinal herbs or other crops. Several CFUGs give preference to poor members or women in locally created jobs, such as for processing of handmade paper or working as a nursery labourer

Forest Action Nepal (2015) has depicted that community forestry is related with ‘Carbon-offsetting’ projects which are widely seen as the ideal solution change, biodiversity and socio economic development. Hopes are being pinned on the potential of Reducing Emissions from Deforestation and Degradation (REDD) schemes, which after 2012 will represent the most likely route for bringing the currently excluded community forest into officials & climate change mitigation.

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The objective of this chapter is to design a suitable research methodology as an instrument for achieving the objectives of this research. This chapter includes the different research methodologies which are adopted in this research. This research is about the study of socio-economic impact of surdebi community forest located at Rapti – 1 Municipality Piple, Chitwan.

#### 3.2 Research Design

The study adopted both the descriptive and explanatory research designs. Explanatory research design is concerned with describing the characteristics of particular individual or of a group. CFUG's character and their rules and process in CF activities are descriptively discussed. Explanatory research designs find out some problem and then analyze these problems applying different research methods. Participation of different level of people and conflict resolution process are discussed on the basis of descriptive design. This study used both descriptive and explanatory research designs.

#### 3.3 Rational for the Site Selection

Surdebi community Forest of Rapti Municipality – 1, Piple, Chitwan is selected for this research because this community forest is one of the biggest community forests in Chitwan district as well as different kinds of trees, medicinal herbs, shrubs, animals and birds are found in this forest. Similarly, this community forest is taken as a sample because large number of people is depending on this community forest for their daily uses. Likewise, I am familiar, have knowledge about this community forest and also located in an accessible area.

#### 3.4 Nature of Data

There are three types of research methods in research methodology; qualitative research method, quantitative research method and mixed method. This study used both qualitative and quantitative methods. i.e mixed method.

#### 3.5 Sources of Data

Primary and Secondary sources are used in this research.



### **3.5.1 Primary Sources**

The primary sources of data are Individual Interview, Key Informant Interview (KII) and Focus Group Discussion (FGD).

### **3.5.2 Secondary Sources**

The secondary sources are books, journals, articles, newspapers, internet, etc. related to community forest.

## **3.6 Study Population, Sample Size, and Sampling Procedures**

There are 500 community forest users of Surdebi community forest. Therefore, all the CFUs of this community forest is taken as a population whereas, 50 CFUs of this community forest is selected as a sample for this study. Systematic sampling procedure is used for the selection of the sample users. These selection procedures are used because all the population (500 CFUs) couldn't be taken as sample due to the time limitation of this research. Out of total population, 50 CFUs is selected with the help of random sampling.

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

The secondary data are collected from books, journals, articles, newspapers, internet, etc. related to community forest. Similarly, primary data are collected from following methods:

### **3.7.1 Individual Survey**

Individual survey is conducted as techniques for which structure questionnaire is developed as tools. The questionnaire cover the information about the socio-economic impact of Surdebi community forest, personal information, family background, participation in different activities and its utilization pattern of income.

### **3.7.2 Focus Group Discussion**

Focus group discussion is conducted as guidelines which focus on discussing problems of the community forest users on different heading like management, protection and development of community forest.

### **3.7.3 Key Informant Interview**

The primary data is collected from Key Informant Interview (KII) by using KII guideline as a tool. Information is collected from wide range of people including community leaders, professionals and residents who have firsthand knowledge about the community forest (Kothari, 2004).

### **3.8 Conclusion**

As discussed above the data are collected through various sources using various data collection techniques and tools. Qualitative and quantitative data are gathered from the field visit. The information related to demographic structure, education, socio-economic status and participation status are quantified. Qualitative data are discussed analytically on the bases of findings. Quantitative data are tabulated and analyzed descriptively. Simple statistical tools like frequency and percentage were used to present quantitative data.

## **CHAPTER IV**

### **DATA ANALYSIS AND PRESENTATION**

#### **4.1 Introduction**

The prime objective of this chapter is to analyse and compare the social and economic impact of Surdebi community forest to user groups before and after its establishment. This chapter also explore the types of problems occur in SCF. To achieve the aim and objectives of this research, descriptive analysis of many social aspects and economic aspects are presented in this chapter.

#### **4.2 Characteristics of Sample**

Surdebi community Forest of Rapti Municipality – 1, Piple, Chitwan is selected for this research because this community forest is one of the biggest community forests in Chitwan district as well as different kinds of trees, medicinal herbs, shrubs, animals and birds are found in this forest. Similarly, this community forest is taken as a sample because large number of people is depending on this community forest for their daily uses. Likewise, I am familiar, have knowledge about this community forest and also located in an accessible area.

#### **4.3 Formation of Forest User Group and Forest User Committee**

Surdebi CF was formed in the end of 2050 B.S. and it was officially handed over to Surdebi FUG in 2052 B.S. Surdebi FUG has 500 households members most of which are Brahmin and other cast like Chhetri, KumalMagar and other occupational cast are also found in the area. Forest user group committees are comprised of 11 member representing 55% male and 45% female.

##### **4.3.1 Forest Management**

Forest management is essential for sustainable use of the forest products. To fulfil everyday demand for forest products of the user group and to sustain the supply of forest products, Surdebi FUG has prepared forest management plan for next seven years.

##### **4.3.2 Mission**

Surdebi CF management committee has set the mission as increasing the capacity of development timber supply to user group by strengthening the forest management practice

and developing the user group as self sustaining institution as well as improving livelihood of user group members.

### **4.3.3 Goals**

The goals of the forest management are as follows:

- To supply grass, fuel wood, timber in future.
- To carry out soil conservation, watershed conservation, spring water and natural resources conservation activities.
- To conservation the wild life and biodiversity.
- To improve the social, educational and financial condition of users.
- To restore environmental stability.
- To promote income generating activities with effective forest management.

### **4.3.4 Objectives**

The objectives of forest management of Surdebi community forest are as follows:

- To fulfil the basic needs of users from forest products such as fuel wood, fodder and timber on a sustainable basis.
- Effective utilization, management and development of community forest from the collective efforts of all users.
- To increase the Economic status of the local people by the proper utilization and management of CF.
- To organize training, workshops and interaction programs related to community forest.
- To develop technical knowledge and skill of FUG members on forest management related activities.
- To increase the density and greenery of the forest.
- To improve the forest condition by protecting, promoting and developing appropriately.
- To conduct community development activities and income generating activities by the fund created by CF.
- To increased people participation in the development of the forest.
- Conservation of biodiversity and promotion of ecological balance.
- To increase the productivity of land and conserve soil fertility and water resources.

#### 4.4 Demographic Characteristics of Sampled User Group

Among the various components of population composition, age and sex composition hold a prime place for demographic study. The balance of sex affects the social and economic relationship within a community. Similarly, the age structure of the population guides many types of planning, particular planning of community institutions and services, manpower supply etc.

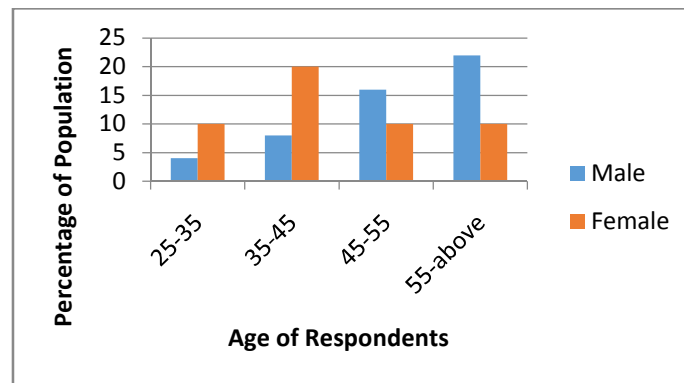
**Table 3: Age and Sex-Wise Distribution of Sampled Users**

Age of Respondents	Respondent's Sex					
	Male	Percent	Female	Percent	Total	Percent
25-35	2	4	5	10	7	14
35-45	4	8	10	20	14	28
45-55	8	16	5	10	13	26
55-above	11	22	5	10	16	32
Total	25	50	25	50	50	100

*Source: Field Survey, 2017*

The information given above can also be shown in the following figure:

**Figure 1: Age and Sex-Wise Distribution of Sampled User**



*Source: Table 3*

The table and above figure show that the population of sample users. Out of 50 users where 50% is female and 50% is male, it is further shows that 14% is below than 35 years, where percentage of male and female are 4% and 10% respectively. 32% users are in 55-above age groups, where male and female percentages are 22% and 10% respectively which is the highest percentage of age groups.

#### 4.4.1 Education Status

Researcher has tried to show the educational status of total population of 50 users, because educational status particularly represents the human capital. It depends on economic condition of the people, degree of urbanization, stage of technology development, transportation and communication, religion, etc.

Here the levels of education have been divided into four categories like who couldn't read and write at the time of data collection (illiterate), user who studied primary level (1-5), user who studied secondary level (5-10), user who studied higher education level (10-12) and user who studied above higher education level (above 12).

**Table 4: Education Status of Sampled Users**

Respondent's Sex	Respondent's Education				
	Illiterate	Primary Level	Secondary Level	Higher Education	Above Higher Education
Male	3	15	1	2	4
Female	1	18	2	3	1
Total	4	33	3	5	5

*Source: Field Survey, 2017*

The above table data indicates that most of the users of Surdebi CF users just achieved the primary level education. Out of 50 users, 33 users just attain primary level consisting 15 male and 18 female. Similarly, 4 users are illiterate whereas only five users passed the higher education level. Only 8 users get education from secondary level and higher education level.

#### 4.4.2 Religion Status of Surdebi CF Users

Researcher found the qualitative answers of community forest users that, majority of the village dwellers are following Hinduism. Beyond Hinduism, some of the village are practicing Buddhism along with Hinduism.

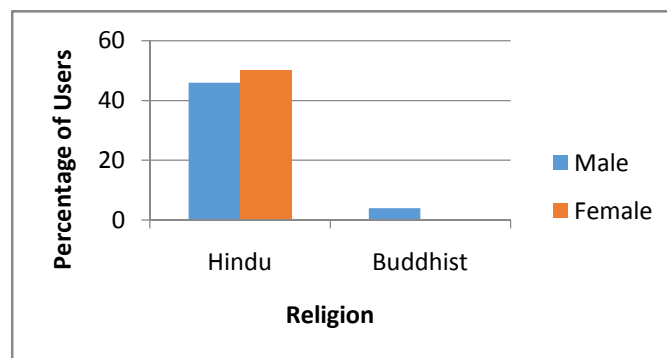
**Table 5: Religion Status of Sampled Users**

Users Sex	Users Religion				
	Hindu	Percent	Buddhist	Percent	Total
Male	23	46%	2	4%	50%
Female	25	50%	0	0	50%
Total	48	96%	2	4%	100%

*Source: Field Survey, 2017*

The above table indicates that most of the users are Hindu. Out of 50 users, 48 users are Hindu. Only 2 male users are Buddhist. 100% female users are Hindu. The information given above can also be shown in the following figure:

**Figure 2: Religion Status of Sampled Users**



*Source: Table 5*

#### 4.5 Social and Economic Impact of Surdebi Community Forest to Its Users

Nepalese economy is based on agriculture. CF is playing a major part in earning live hood of farming and contributing in farm production. Socio-economic structures of selected SCF users are presented below.

##### 4.5.1 Occupation Status of Surdebi Community Forest Users

Agriculture is the main occupation in Nepal. Likewise, agriculture is also the main income source of Surdebi community forest users. When the primary resources of a country are utilized on a commercial scale, a country is industrialized and when the new technologies are

introduced, it generates diversification of occupation structure. Due to lack of these factors, there is no alternative opportunity in non- agriculture sector for employment in Nepal.

**Table 6: Occupation Status of Sampled Users**

Occupations	Income source of Users Before		Income source of Users After	
	Frequency	Percent	Frequency	Percent
Agriculture	49	98	30	60
Agriculture and service	1	2	10	20
Agriculture and Business	0	0	10	20
Total	50	100	50	100

Source: Field Survey, 2017

Similarly, the jobs provided by the SCF to its user groups are shown below:

**Table 7: Job Types Provided by SCF**

Job Types Provided by SCF		
	Frequency	Percent
Pale	3	6
Office Secretary	1	2
Nursery Work	6	12
Total	10	20

Source: Field Survey, 2017

The forest could be a source of income for the local people through the sales of forests products and income generating activities associated with community forest. No individual household was found involved in business before the community forest was formed. 98% households were depends on agriculture for income before, however; it has been declined to 60% who are now being depends on agriculture. Some of the users are getting service like security guards, nursery workers and office secretary in Surdevi community forest nevertheless nobody was used to work in community forest. Security guards and nursery workers get salary from minimum NRS 1,000 to maximum NRS 10,000. Office secretary get more than NRS 10,000. Likewise, Households are now doing business also getting forest products such as furniture business. CFU's are getting forest materials or products like herbs,



shrubs, timber, firewood etc. from SCF which they can sell for their income. After the formation of community forests, it provides more than enough fuel wood and leaf litter to the users and also generates employment for them directly and indirectly.

#### 4.5.2 Land Holding

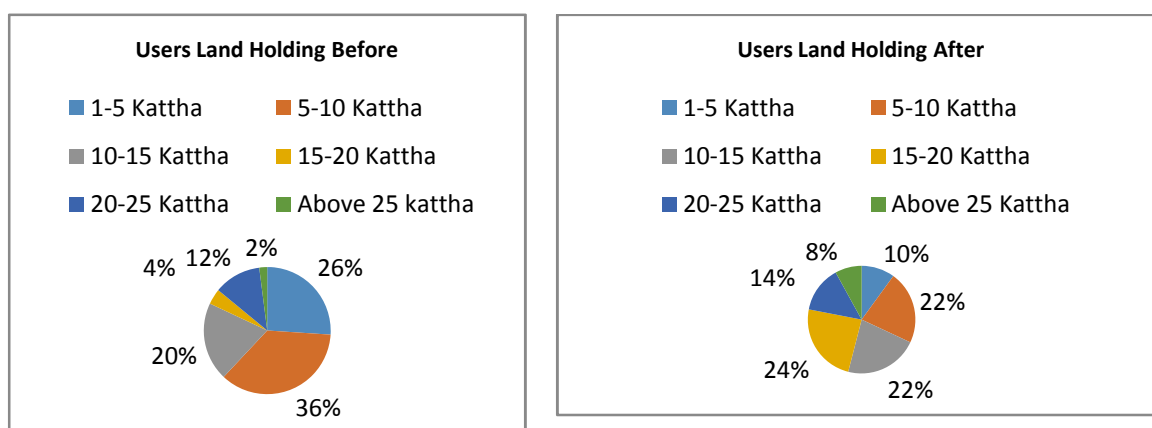
Land holding determines the food sufficiency of the people. It also indicates the income of the people. The more land the more income and the less land the less income. Majority of the households have land for paddy cultivation. The following table shows the average land holding pattern of sampled household.

**Table 8: Land Holding Status of Sampled Users**

Users Land Holding Before			Users Land Holding After	
In Kattha	Frequency	Percent	Frequency	Percent
1-5	13	26.0	5	10.0
5-10	18	36.0	11	22.0
10-15	10	20.0	11	22.0
15-20	2	4.0	12	24.0
20-25	6	12.0	7	14.0
Above 25	1	2.0	4	8.0
Total	50	100.0	50	100.0

Source: Field Survey, 2017

**Figure 3 : Land Holding Status of Users Before and After the SCF Established**



Source: Table 8

From the above table, we can see that the land holdings of community forest users were increased after the establishment of SCF. 13 community forest users out of 50 had 1-5

kathain average; however after the establishment of Surdevi community forest, users increased their land holding. Only 5 people had 1-5 katha after the establishment. Similarly, 4% people had 15-20 katha before SCF formation and were increased to 24% after SCF formation. It shows that the economic status is not poor of the people living there.

After the seeding of community forest, agricultural activities have been increased by which people are getting extra income from agriculture. The main crops produced in this area are paddy, wheat, maize; potato etc. Farmers have been attracted towards vegetable production. Cauliflowers, cabbage, Radish, carrot, tomato, Rayo-sag, garlic, are some remarkable vegetables produced in this area. Before community forestry, people used to make dung cake for fuel, but after community forestry, the number of animal husbandry has been increased and manure for the agricultural purpose is enough. People used to buy vegetables for daily use before community forestry but now they can sell vegetables. Thus, vegetables production is the extra source of income. In conclusion, the economic status of SCFUGs had uplifted with the help of SCF.

#### 4.5.3 Agriculture Information of Community Forest User Groups

There are direct and indirect relationship between the forests and the agricultural production. Leaf litter, fodder, agricultural implements, water supply, etc. were some of the products available from community forest. The majority of SCFUGs are depends on agriculture.

**Table 9: Agriculture Information of Sampled Users**

Agriculture Information Before			Agriculture Information After	
Food Crops	Frequency	Percent	Frequency	Percent
Paddy, Maize, Wheat, Potato and Mustard	50	100	50	100

*Source: Field Survey, 2017*

The following shows the agriculture information of Surdevi community forest users. The main crops produced in this study area are paddy, wheat, maize, potato and Mustard, etc. There was not any different production before and after the establishment of CF however; many users were attracted in the vegetable production like cauliflower, cabbage, radish, etc after community forestry. People are now selling vegetables for income.

#### 4.5.4 Food Sufficiency

The table given below show that out of 50 household survey 8% users did not have sufficient food for their family consumption however, it has been decreased to 2% after the community forestry. Almost all community users were found who have sufficient food for living life after the community forest established in Piple community. The following tables show the food sufficient status of Users and product selling status before and after the SCF established.

**Table 10: Food Sufficient Status of Sampled Users**

<b>Food Sufficient for Users Consumption Before</b>			<b>Food Sufficient for Users Consumption After</b>	
	Frequency	Percent	Frequency	Percent
No	4	8	1	2
Yes	46	92	49	98
Total	50	100	50	100

Source: Field Survey, 2017

**Table 11: Product Selling Status of Sampled Users**

<b>Selling Products Before</b>			<b>Selling Products After</b>	
	Frequency	Percent	Frequency	Percent
No	24	48	8	16
Yes	26	52	42	84
Total	50	100	50	100

Source: Field Survey, 2017

Similarly, we can see in the above table that only 52% percent CFU's sell their agricultural production in the market before community forestry but it has been increased to 84% after the formation of community forest. Before community forestry, people used to make dung cake for fuel, but after community forestry, the number of animal husbandry has been increased and manure for the agricultural purpose is enough. People used to buy vegetables for daily use before community forestry but now they can sell vegetables. The selling percentage has been increased due to the development of community forest. Lastly, more people increased their income by selling agriculture products after SCF formation and they improve their economic status.

#### 4.5.5 Livestock

Live stock holding is an essential component of rural livelihood and agriculture in rural area depends in the livestock. As the study area is comprised of rural hamlets, livestock reserves a special position in contributing village economy. Livestock is one of the important occupations of Nepalese people for getting milk, meat, manure, ghee, eggs and plugging etc. The following tables show the total number of livestock holding at present in Surdebi CFUGs.

**Table 12: Livestock Status of Sampled Users**

Livestocks	Users Livestock Before		Users Livestock After	
	Frequency	Percent	Frequency	Percent
Buffalo	13	26	3	6
Cow	5	10	9	18
Goat	1	2	2	4
Hen/Cock	1	2	1	2
Buffalo, Cow and Goat	11	22	18	36
Cow and Goat	9	18	9	18
Goats and Hens	2	4	2	4
Above All	6	12	6	12
Total	48	96	50	100
Don't Have any Livestock	2	4	0	0
Total	50	100	50	50

*Source: Field Survey, 2017*

Animal resources have been playing an important role in influencing the socio cultural life of the rural people. The above table shows the increment of livestock after the formation of community forest as compare to before. The percentage of people who have more livestock as buffalo, cow and goat has been increased from 22% to 36%. Users were encouraged to rear livestock after because community forest provides fodder, grass, leaf litter, etc. The data shows 4% people of sampled users did not have any livestock before but they were encouraged to rear livestock after community forestry. All users of community forest have now number of livestock. Environment for livestock rearing has increased after the formation of community forest. It shows the most of the households are able to use of

community forest and they are getting benefit from this CF as well as enhance their socio-economic condition.

#### 4.5.6 Feeding Pattern of Livestock

In Piple community, livestock is the life of the people and backbone of local economy. Forest is the main source of fodder and green grass for livestock. Surdevi CF is providing enough grass and fodder for the animals.

**Table 13: Feeding Status of Sampled Users**

Feeding Patterns	Feeding Pattern of Livestock Before		Feeding Pattern of Livestock After	
	Frequency	Percent	Frequency	Percent
Stall Feeding	38	76	47	94
Grazing	5	10	1	2
Both	5	10	2	4
Total	48	96	50	100
Don't Need Fodder	2	4	0	0
Total	50	100	50	100

*Source: Field Survey, 2017*

The table shows that some of the sampled households keep their livestock by stall feeding, some households take their livestock for grazing and some people take their livestock for both. The data indicates 76% people practice stall feeding before whereas 94% people take their livestock for stall feeding after SCF development because SCF is providing enough grass and fodder for the animals so they didn't need to take their livestock for grazing.

#### 4.5.7 Sources of Energy

The villagers of the study area are dependent upon fire wood as main source of energy. Almost sampled 50 households have the firewood as main source. There is some practice of using alternative source of energy like Bio-gas, electricity and Gas.

**Table 14: Sources of Energy of Sampled Users**

Sources of Energy	Source of Energy Before		Source of Energy After	
	Frequency	Percent	Frequency	Percent
Firewood	50	100	2	4
Bio Gas/Gas	0	0	2	4
Both	0	0	46	92
Total	50	100	50	100

*Source: Field Survey, 2017*

The above data indicates that the income of CFU's increases after the formation of community forest. Therefore, users are now using gas an alternative source of energy. 96% users are now using both firewood and biogas/gas. Similarly, households are also using bio-gas using dung of livestock.

#### 4.5.8 Firewood and Timber

Firewood is the major product that forms the community resources, supplemented from the private resources depending on availability. Users have been utilizing firewood for cooking and heating. The sampled users used to get firewood from government before however they are getting firewood from community forest in systematic system. Smuggling of firewood is now decreased.

Similarly Surdebi community forestry provides timber to its members. Timbers are distributed indiscriminately to the users as per their needs. Users was facing very difficult rules and policy of government but after the Surdevi community forest was established they are now getting timber in nominal rate and without facing complex rules of government. Similarly, smuggling of timber is also controlled because the management team recruits security guards for the protection of CF. Community forest office collects over matured and fallen trees from the forest and carries out a need assessment of the users' timbers especially to those who need timbers for house, kitchen and shed construction, furniture and maintenance. Besides the private purposes, the timber can be given to those people who are

suffered by natural disaster i.e. flood, fire etc. The community forest provides timber without any charge to those people who are extremely poor in the community. If the society needs timber for social infrastructure building such as electricity, schools, hospitals, road construction, bridge construction, timbers can be used in free of cost.

#### 4.5.9 Forest Products Getting From Surdebi Community Forest

Forest is the main source of firewood. SCFUGs of survey village is also depends on firewood for daily cooking. Users were going to forest for the collection of firewood, timber, medicinal herbs and plantation.

**Table 15: Forest Products Getting From Surdebi CF**

Reason for going to the Forest Before			Reason for going to the Forest After	
Reasons	Frequency	Percent	Frequency	Percent
Forest Products Collection	27	54	1	2
Fuel Collection	15	30	3	6
Forest Products, Medicinal Herbs Collection and Plantation	5	10	35	70
Above All	3	6	11	22
Total	50	100	50	100

Source: Field Survey, 2017

Most of the SCF users were going only for forest products collection like firewood, leaf litter, grass, etc. which are using in daily basis before Surdebi community forest established. 84% households used to go forest for firewood, leaf litter, grass, timber, etc. However, the percentage of going for forest products and fuel collection has been decreased to 8%. This shows that households are attracted in collecting medicinal herbs. Users are mostly going to Surdebi community forest for the purpose of forests products, medicinal herbs and plantation. Medicinal herbs like *Bojo*, *Kyamuna*, *Harro* and *Amala* are the main medicinal herbs found in Surdebi community forest. Community forest users are taking these medicinal herbs as a main source of income. *Kyamuna* and *Harro* are the main medicinal herbs users are mostly intended to accomplish.

#### **4.6 Skill Development Training Provided by SCF**

Nowadays Surdevi community forest is giving skill development training for the users of forest. Skill development training like nursery training, uses of medical herbs, sewing training, handicraft training, awareness building training, training about the benefit of community forest, importance of community forest and its significance to community forest users, etc. are regularly provide by SCF to its users. There was not any training before to users nevertheless SCF regularly doing the skill development training for uplifting the livelihood of users. Out of 50 respondents, 43 community forest users had taken skill development training given by SCF. Nursery training and awareness building training are the most given training to users. More than 50% trainings given to users are about the awareness and skill development building training in a year.

#### **4.7 Management Team of Surdevi Community Forest**

Community forest users were not satisfied by the management of forest before because of the difficult rules and policies of government officials. Government handover the forest to community then the management team was totally changed and they took new rules and policies in the favour of users. Management team was also started to elect from the polling system of users. BasudevAcharya is the president of SCF. Management Team are making the rule and policy in the consensus of members and the users of SCF. Management team is making rule according to the importance of users and the community forest itself. Security of SCF is very good. Smuggling of herbs and timber is totally decreases in compare to before. Similarly, the rules, regulation, policy, active participation of users, women involvement in CF was very poor before. However, it has been drastically changed after the establishment of SCF. Most of the users was not seen any necessary improvement in SCF. Only 10% users are seen some problems to be improve by SCF.

#### **4.8 Income Source of SCF**

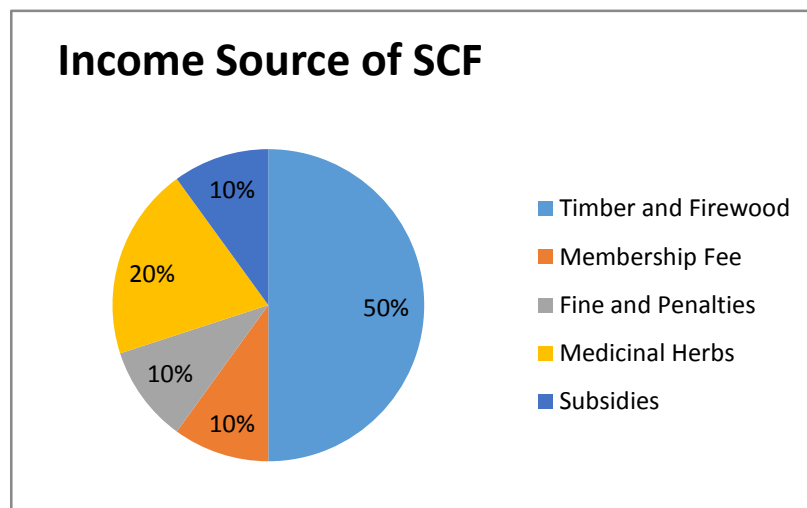
Before the implementation of C.F., people could collect timber and firewood from the forest without any restriction. The income source was just accomplished by selling some selected timber and firewood before establishment of SCF but now the C.F. has made plan with long run vision for the conservation of forest. People are allowed to collect firewood from the forest only two days Saturday and Tuesday in a week. People have to purchase all kinds of timber from CF after its formation. If they are found violating the rule of C.F., they are fined. Fund collection by the punishment or penalty system is one of the income generating sources of SCF.



Similarly, Selling Timber is the main income source of Surdebi community forest. Timber is the main source of construction material in village not only for making of houses but also for making of agricultural tools, furniture and shed for livestock etc.

Likewise, selling medicinal herbs such as *Kurilo*, *Neem*, *Harro*, *Barro*, *Amala*, *Kyamuna*, *Bojo*, etc. are also another main income source of SCF. The SCF office regularly sells the herbs and shrubs from which they achieve income. Membership fee is also another income of SCF. SCF committee collects 100 rupees per year as a membership fees. Similarly, Subsidies are also one of the income sources of SCF. Some NGO and INGO regularly provide subsidies for the preservation of community forest.

**Figure 4: Income Source of Surdebi Community Forest**



Source: Field Survey, 2017

The above figure shows the income source of Surdebi Community Forest. The data indicates the timber and firewood are the main income source of SCF. 50% incomes achieve from the timber and firewood. Medicinal herb and shrub is another source which contains 20% of total income. Likewise, SCF generates 10% income from membership fees, 10% from fine and penalties and 10% from subsidies.

#### **4.9 Economic Prospects of Surdebi Community Forest**

Surdebi community forest has a number of economic prospects such as the condition of matured trees does not seen good; the regenerating and reproducing of the plants and their condition seem to be very good. As a result in future, villagers will get forest products sufficiently. Similarly, Piple to Korak road goes by Surdebi community forest. Korak is a

historical place. If we conserve this forest many tourists are attracted from its natural beauty or it can be a model community forestry or tourist area in Nepal. Business of people can be increased. Likewise, some people of this area are getting chance to produce the herbs in this forest. Therefore, this forest seems to have potential for herb production, also there is potentiality of non- timber production specially *Amliso, Kurilo, Tejpat, Betbas, Titepati, Chuttro, Kimboo*, etc. These are cash crops. People can get direct benefit from these productions.

#### **4.10 Social Development Activities and Prospects of Surdebi Community Forest**

After formation of Surdebi Community Forest, social development activities have been increased. These activities were minimal before its establishment. Some social development activities done by SCF are:

- It has constructed roads and temples in village.
- It has conducted the *Ghumti* Fund program for very poor and target group.
- It has conducted the women literacy classes.
- It has provided goats to very poor and target groups.
- It has provided the sewing machine to very poor women for tailoring purpose.
- It has provided scholarships to the poor and intelligent students of study area.
- It has helped in drinking water supply program for villagers.

Water supply was considered to be the major benefit and there is increased flow of drinking water in the village. This increased could be developed to promote irrigation facility to increase agriculture production. However, community have perceived the possibility but they are waiting for additional source of money to develop irrigation facility in the village. These benefits could be translated into monetary values if the irrigation facility provided to villagers.

#### **4.11 Women's Participation in Surdebi Community Forest Management**

There are 11 members in the committee. The researcher was able to approach chairperson, vice-chairperson, secretary, committee members, and ex-treasurer of the community forest. Current committee they have elected one female as vice chair person, one female as secretary, there are five female members in the committee that comprised of 45% of the total committee member. It is positive sign towards women's participation to leadership development. The Disadvantaged Group women and other lower cast are also involved in this

committee. It helps to empower to the disadvantage group women and women in society. However, there was not any women's participation in Forest Management Committee before.

#### **4.12 Information System of Surdevi Community Forest**

Executive committee of SCF flow the information about agenda of meeting through local media, letter and notice board. For general assembly and other meeting and information of Surdebi community forest, the FUC members put the notice of information in their notice board and send the letter as well to all FUG members as much as possible. If some of the FUG members do not happen to receive the mail, the neighbouring members do inform them by home visit. Most of the FUG gets information of general assembly and other notice of SCF either written or verbal. From that information SCFUGs get opportunity to take part in development activities skill development programs, awareness building programs, forest management activities, etc. as well which help to upgrade their socio-economic living standard. Nevertheless, there was not any systematic method to forward the information of forest to its users before it was established.

#### **4.13 Problems and Conflicts in Surdebi Community Forest**

Problems can occur when people have different views or perception on issue when someone's interest is not considered or fulfilled when a decision is made or when other's interest is encroached upon. These problems can be between groups or even between institutions. Similarly, community forestry conflicts are also seen within a forest user groups (User group level) or between a user group and District Forest Office (office level).

The main problem of Surdebi Community Forestry is conflict and lack of coordination among the users because of the different political ideology rather than personal or socio-economic intellectual people. People with different ideology cannot come into an agreement. There seem disputes in making plan, budget allocation and developmental activities. Executive body is selected from voting system people choose executive body not as capacity of the person but their political ideology. Some of the community forest users are not satisfied with the executive committee members because the view of executive committee member to their opposition groups seems somehow partial.

Similarly, In Surdevi CF conflict is arising from the beginning due to the discrimination between users in providing forest products. In the same way, another problem of Surdebi community forest is the conflict between CFU in the name of benefit sharing, using forest resources, management of CF, etc.

Likewise; another serious problem is lack of active participation of women and lower caste in decision- making, committee and Assembly. Although women are committee members, they can't change the decision, which is made by male members.

#### **4.14 Socio-Economic Improvement of SCFUGs after the Formation of Surdevi Community Forest**

Surdevi community forest helps to upgrade the socio-economic status of its users by providing different facilities, job opportunities, training programs, forests products, etc. to its users and by helping community in different social development works.

**Table 16: Improvement of Socio-Economic Status of SCF**

<b>Improvement of Socio-Economic Status of SCFUs Before</b>			<b>Improvement of Socio-Economic Status of SCFUs After</b>		
	Frequency	Percent		Frequency	Percent
Strongly Disagree	2	50	Strongly Agree	3	75
Disagree	2	50	Agree	1	25
Total	4	100	Total	4	100

*Source: Field Survey, 2017*

The above table indicates the key informants of SCF were disagreed about the improvement of socio-economic status in users before SCF formation. There was not any social and economic development works seen before doing by forest committee. However, after formation of Surdevi community forest, it helps in socio-economic development of community. Therefore, all respondents are agreed about the improvement of socio-economic status of SCFUs after Surdebi community forest formed.

#### **4.15 Summary**

It is found that users are attracted to service and business for income. Land holding position, income, food sufficiency status, livestock status, etc. of users found increased after the formation of SCF. Similarly, SCF helps in social development works and also encourage users for employment providing forest products and job opportunities. It is found that Surdebi community forest helps in socio-economic development of its users and community.

## CHAPTER V

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary of Findings

The study summarizes that there is positive effect as well as impact of community forest on users' group. Such impacts are revealed form of income generation, construction of social works, social overheads and awareness of people. This study aims to analyze whether the community forestry is beneficial to the local people or not and is it success to generate income and employment in the community level. The main objectives of this study are: to analyze the CFUGs socio-economic improvement through community forestry and to find the problems face by SCFUGs.

Major findings of this study are found that 98% users were depends on agriculture for income before, however; it is declined to 60% who are now being depends on agriculture. This is because some of the users are getting service like security guards, nursery workers and office secretary in SCF. Likewise, SCF provides forest materials or products like leaf litter, herbs, shrubs, timber, firewood, fuel wood etc. to its users which also generate employment for them directly and indirectly. No any users used biogas and gas before however 96% users are now using both firewood, biogas/gas. This shows that income of CFU's increases after the formation of community forest. The percentage of people who have more livestock as buffalo, cow and goat has been increased from 22% to 36% and 4% sampled users did not have any kinds of livestock before but they were encouraged to rear livestock after community forestry. It is found that Surdebi community forest provide fodder, grass, leaf litter, etc. sufficiently for the livestock. It is found that 52% users sell their agriculture products in the market before however; it has been increased to 84%. This shows the animal husbandry has been increased and manure for the agricultural purpose is enough which helps for more agricultural production.

Out of 50 respondents, 43 community forest users had taken skill development training given by SCF. This shows that SCF is providing training regularly to most of its users. The vice-president and secretary are women in SCF executive committee. 45% members of committee are women. It is found that there is active participation of women in committee. The

Surdebi community forest was found implementing very effective role for the betterment of social and economic lifestyle of SCFUGs by providing different kinds of programs such as; awareness building, skill development, employment opportunities, social development activities, etc.

The Surdebi community forest has been providing timber for the construction of house, furniture, business and regular maintenance in minimum cost. Similarly, it has providing forest products for the construction of school building, temple, roads, and social infrastructure works in community in free of cost. It is found that sometimes there is arisen some conflicts in some points however it has been solved by mutual understanding. Conflict with the management team and users group due to different political background, conflicts in name of benefits sharing, unequal and inequitable benefit of boundary, etc. are the causes of conflicts. There was not any improvement in socio-economic aspects of users before; however, it is found that key informants of SCF are satisfied and agreed in the socio-economic improvement of users due to Surdebi community forest.

## **5.2 Conclusion**

SCF has positive impact on socio-economic development of the local community of Piple community. Agriculture has been found as a main occupation in the study area. This community forest fulfils the basic necessities of SCFUGs by providing timber, fuel wood, fodder, green grass, leaf litter, etc. The community development activities initiated by SCFUGs are road construction, building construction, funding to school support, scholarship to the poor and intelligent student etc. The Surdebi community mobilize its fund annually in the name of poverty reduction. Through this program, it helps to generate income and employment the poor and disadvantages people by giving loan for goat keeping, ox/cow keeping etc. CF conflict is arising from the beginning due to the discrimination between users in providing forest products. Unequal and inequitable benefit of boundary, conflict with DFO for imposing strict terms and conditions, conflict among ethnics, conflict in the name of benefits sharing, conflict with the management team and users group due to different political background are some major causes of conflicts that have been found in Piple Surdebi forestry.

Nevertheless, after SCF establishment lunched various development activities which are given opportunities to the local people to generate their income both directly and indirectly giving them short-term and long-term employment opportunity. So, it is effective way to solve their problems because it contributes in the community and targeted people. Consequently, SCFUGs increase their socio-economic status and clear up their problems.

### **5.3 Recommendations**

The recommendations based on the findings are as follows:

- Social and economic conditions directly affects the life of the people so it should be made strong by conducting various programs like small business (bee keeping, poultry farm, cow and goat keeping), skill development program like literary program, electrical training, tailoring training, etc.
- This forest seems to have potential for herb production, also there is potentiality of non- timber production specially *Amliso, Kurilo, Tejpat, Betbas, Titepati, Chuttro, Kimboo*, etc. These are cash crops. People can get direct benefit from these productions.
- Conflict among the different political ideology is the most crucial problem. It is recommended that all of the political ideology should be forgotten for the common benefit of the society.
- The success community forestry management is based on mobilization of local people's awareness, perceptions skills and attitudes. So it is recommended that conservation extension education should be conducted along with the implementation of community forestry program.

### **5.4 Opportunities for Future Research**

There have been many researches about the socio-economic impact of community forestry in Nepal. This research is also about the socio-economic impact of community forestry taking Surdebi community forest of piple, chitwan as a sample. Further research can be done taking sampling from anywhere. In this research, researcher described limited literatures about community forest and took all possible indicators for analysis because of the time limit restriction. Further research can be broad from this research. This research will be the best reference for studying community forestry especially in Nepalese context.

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## APPENDIX

### Appendix A: Individual Interview Questionnaire

#### 1) Identity of respondent:

Name: \_\_\_\_\_ Sex  M  F Occupation: \_\_\_\_\_

Age: \_\_\_\_\_

Education: \_\_\_\_\_ Marital status: \_\_\_\_\_

Religion: \_\_\_\_\_

#### 2) Land holding

Land holding	Khet		Katha		Bari	
	Before	After	Before	After	Before	After
1-5						
5-10						
10-15						
15-20						
20-25						
Above 25						

#### 3) Agricultural information

S.N.	Types of major crops [kg]		
		Before	After
1	Paddy		
2	Maize		
3	Wheat		
4	Potato		
5	Mustard		
6	others		

**4) Is your food production sufficient for household consumption?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**5) If yes, do you also sell your products in the market?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**6) If yes, what is your annual income from selling products?**

<b>Annual income</b>	<b>Before</b>	<b>After</b>
Rs.1000-10000		
Rs. 10000-20000		
Rs.20000-30000		
Rs. 30000-40000		
Rs.40000-50000		
Rs. above 50000		

**7) If no, for how many months will it be enough for household consumption?**

<b>Time period of sufficient food</b>	<b>Before</b>	<b>After</b>
3 month		
6month		
1 year		

### 8) Livestock

Livestock	Before	After
Buffalo		
Cow		
Goat		
Hen/cock		
others		

### 9) How do you get fodder to feed the animals?

Way of feeding animals	Before	After
Stall feeding		
Grazing		
others		

### 10) How much *bhari* of grass do you need to feed your animals?

Amount of grass	Before	After
1-5 bhari		
5-10 bhari		
10-15 bhari		
Above 15 bhari		

**11) What kind of product is available from CF?**

<b>Products</b>	<b>Before</b>	<b>After</b>
a) Timber		
b) Grass		
c) Fodder		
d) Firewood		
e) Bedding		
f) Leaf leather		
g) others		

**12) What is the source of energy?**

<b>Sources of energy</b>	<b>Before</b>	<b>After</b>
firewood		
Gas		
Others		

**13) If firewood from where do you get?**

	<b>Before</b>	<b>After</b>
Community forest		
Government forest		
market		
others		

**14) How much bhari of firewood do you need per week?**

<b>Amount of firewood</b>	<b>Before</b>	<b>After</b>
1-3 bhari		
4-6 bhari		
7-10 bhari		
Above 10 bhari		

**15) Who collects firewood in your family?**

<b>Members</b>	<b>Before</b>	<b>After</b>
Children		
Women		
Men		
Both men and women		
Others		

**16) Do you get timber from this CF?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**17) If yes, for what purpose?**

<b>Purpose</b>	<b>Before</b>	<b>After</b>
Building house		
Furniture		
Tools		
Business		



**18) What is your income source?**

<b>occupation</b>	<b>Before</b>	<b>After</b>
agriculture		
Business		
Services		
labour		
others		

**19) Have you got temporary or permanent job from your community forest?**

<b>Job</b>	<b>Before</b>	<b>After</b>
Yes		
No		

**20) If yes, what kind of job?**

<b>Types of job</b>	<b>Before</b>	<b>After</b>
Pale		
Office secretary		
Nursery work		
Others		

**21) How much salary do you get from that job?**

<b>Amount of salary</b>	<b>Before</b>	<b>After</b>
Rs.1000-5000		
Rs.6000-10000		
Rs.11000-15000		
Above 15000		

**22) How often do you go to the forest?**

<b>frequency</b>	<b>Before</b>	<b>after</b>
Everyday		
Once a week		
Twice a week		
Once a year		
Twice a year		

**23) Why do you go to the forest?**

<b>Purpose</b>	<b>Before</b>	<b>After</b>
Forest product collection		
Graze animals		
Fuel collection		
Medicinal herbs collection		
Plantation		
Others		

**24) Does Surdebi CF provide skill development training?**

<b>Training</b>	<b>Before</b>	<b>After</b>
Yes		
No		

**25) If yes, what was the training provided?**

<b>Types of training</b>	<b>Before</b>	<b>After</b>
Sewing training		
Awareness building		
Handicraft training		
Others		

**26) What type of medicinal herbs do you get from this CF?**

<b>Medicinal herbs</b>	<b>Before</b>	<b>After</b>
Kurilo		
Bojo		
Kyamuna		
Harro		
Amala		
Neem		
Others		

**27) How are transportation facilities to carry forest product?**

<b>Transportation Facilities</b>	<b>Before</b>	<b>After</b>
Good		
Need improvement		
No facility		

**28) Are you satisfied by the management and conservation of community forest?**

<b>Satisfaction from CF</b>	<b>Before</b>	<b>After</b>
Yes		
No		

**29) If no, what should be done?**

<b>Improve in</b>	<b>Before</b>	<b>After</b>
Rules and regulation		
Active CFUGs participation		
Women involvement		
Others		

**30) What are the problems faced by you in this CF?**

<b>Problem in access of</b>	<b>Before</b>	<b>After</b>
Grass		
Timber		
Fire wood		
Others		

**31) What do you think the solution of problems mentioned above?**

- a) Change in CF rules   b) Proper utilisation of CF resources   c) Women's involvement in executive committee   d) others

**Thanks for your kind information**

## Appendix B: KII Guidelines

### Key Informants Interview (KII) guidelines

#### 1. Identity of respondent

Name:

Age:

Sex:

Position:

Education:

#### 2. What are the main objectives of this CF management?

Objectives	Before	After
To improve economic status of CFUGs		
To bring social change		
To develop local leadership		
To conserve CF		
To increase CFUGs participation		
Others		

#### 3. Income source of Surdebi CF

By selling	Before	After
f) Timber		
g) Medicinal herbs		
h) Firewood		
d) others		

**4. What are the economic prospects of this CF?**

<b>Prospects</b>	<b>Before</b>	<b>After</b>
a) Tourism		
a) Medicinal herbs		
b) Wild animals		
c) Trees		
d) Others		

**5. What are the social prospects of this CF?**

<b>Access of</b>	<b>Before</b>	<b>After</b>
a) Temple		
b) Road		
c) Water		
d) Medicinal herbs		
e) Others		

**6. Are CFUs actively participated in forest management program?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**7. If no, why?**

<b>Reasons</b>	<b>Before</b>	<b>After</b>
Poor information system		
Social cultural factor		
Economic factor		
Political factor		
Others		

**8. How many women are in executive committee of your CF?**

<b>Members</b>	<b>Before</b>	<b>After</b>
1-3		
3-5		
5-7		
Above 7		

**9. What is the status of women's presence in CF management?**

<b>Presence of women</b>	<b>Before</b>	<b>After</b>
Active		
Passive		
Normal		

**10. Are CFUGs aware of formal rules regarding ownership, access and use of CF resources?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**11. If no, why?**

<b>Reasons</b>	<b>Before</b>	<b>After</b>
Lack of awareness		
Poor participation		
Weak involvement of women		
Lack of strong rules		
Others		

**12. How do you inform of changing rules?**

<b>Through</b>	<b>Before</b>	<b>After</b>
Local media		
Local people		
Notice board		
Others		

**13. Is there conflict among CFUGs?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**14. If yes, why?**

<b>Conflict in the name of</b>	<b>Before</b>	<b>After</b>
Benefit sharing		
Management of CF		
Using CF resources		
Others		



**15.) Do you agree this CF help to maintain for improving socio-economic status of CFUs?**

	<b>Before</b>	<b>After</b>
Strongly agree		
Agree		
Disagree		
Strongly disagree		

**Thank You**

## Appendix C: FGD Guidelines

### Focus Group Discussion (FGD) guidelines

1) When was CFUGs and its executive committee formed?

2) What are the social benefits that you have been getting from this CF?

Before	After

3) What are the economic opportunities that you have been getting from this CF?

Before	After

4) Where do you invest the income of CF resources?

Before	After

**5) Does the operational plan of this CF address the problems of CFUGs?**

	<b>Before</b>	<b>After</b>
Yes		
No		

**6) If no, how?**

<b>Reasons</b>	<b>Before</b>	<b>After</b>

**7) How often does your committee meeting conduct?**

<b>Frequency</b>	<b>Before</b>	<b>After</b>
Weekly		
Monthly		
Annually		

**8) What are the changes you have witnessed after the introduction of community Forestry program?**

<b>Before</b>	<b>After</b>

**9) In your opinion community forestry is**

<b>Before</b>	<b>After</b>

**10) How women's participation has influenced in the decision making process of the CFUs members?**

**11) What do suggest improving people's participation in CF development programs?**

**Thanks For Your Valuable Time**

**Appendix D: Photos Taken During the Survey and KII**



Conducting KII with the President of Surdebi Community Forest



Conducting Individual Interview



Conducting Individual Interview



KII with Office Secretary of Surdebi Community Forest