## **CHAPTER-I**

#### INTRODUCTION

# 1.1 General Background

Nepal is a mountainous and independent country with an area of 1, 47,181sq.km. The country is surrounded by the people's republic of China in the north and India in the east, west and south. This is a landlocked country of south Asia. Its nearest sea through India is at a distance of about more than 1000 km from the border. It is located between 26° 22' north and 30° 27' north latitude and 80° 40' east to 88°12' east longitude on the globe. Nepal occupies about 0.1 percent of the world's land but it occupies 0.03 percentage of the world and covers 0.3 percentage of Asia. It has diversified topographical condition comprising of the highest peak of the world viz. The Mount Everest at 8,848 meters descending down to about 60 meters at Kechana in Jhapa. The climate of Nepal is diversified as per latitudinal differences. Therefore it has divided into three geographical regions from the south to the north viz. Mountain region 15 percent, Hilly region 68 percent and Terai region 17 percent (CBS)

Nepal has a great variety of topography which is reflected on the diversity of climate, vegetation, plants, animals and eco-systems. This country is one of the richest in the world in terms of bio-diversity. Likewise, it has abundant natural resources, land, mountains, waterfall etc. The natural resources, in the context of its consumption, are classified into non-renewable and renewable. The water and forest resources are renewable resources. If the natural resources are utilized and conserved properly, it is no doubt that tourism, conservation of bio-diversity and human resources mobilize simultaneously.

The abundant of natural resources only cannot be the panacea of the economic development. For example, Nepal is the second richest country in the water resources of the world. Different study of hydro power shows feasibility that Nepal has 83,000 mw hydro-electricity powers and 42,000 mw can economically generate. But only 560mw hydro-power has generated till now in Nepal which is 0.67 percent of total capacity (Ministry of Energy).

Forest resource is another important resource after the water resource in Nepal. This is also the renewable resource. Forest resource has both national and international significance. In other words, if forest of Nepal depletes, it is the worry of the south Asia and the world because the environmental aspect of the forest does not separate the boundary of the country. Likewise, valuable and atypical plants, herbs, animals and birds can be kept in the world heritage.

Forest is one of the most risky natural resources in Nepal. Deforestation has been continuing from Rana regime to present. In 1964 A.D 45 percent of the land area was

covered by forest. It is the estimation now that 29 percentage of land area is covered by forest. All these are estimated statistics. Therefore nothing can be stated with certainty; however it is clear that the forest of Nepal has been decreasing badly.

Forest of Nepal can be classified into three types through the geographical diversity viz, tropical, temperate and alpine forests. The southern parts, up to a height of 1200 meters are known as tropical forest. Sal, Sissoo, Khair, Peepal, Simal, Chilaune etc are a few of the plants found in this kind of forest. The famous Charkoshe Jhadi also lies in the tropical forest area. The height from 1200 meters to 2100 meters of Mahabharata range forest lie in temperate forest. Pines, walnuts, palms, bamboo, Khashru, deodar, etc lie in such forest. Nepal has alpine forest above 2100 meters height. There are abundant growth of Rhododendrons, Briches and Coniferous alpine forest. Valuable Himalayan herb Yarsagumba is found there (Ministry of Forest and Soil conservation)

Water resources, forest resources, bio-diversity, ecosystem etc are interrelated aspects of ecology. In agricultural country like Nepal, agriculture and forest recourses are complementary. Forest is the major sources of governmental revenue since ancient history to till the date. The forest contributes about 15 percentages to G.D.P of Nepal. Forest conservation is the most essential for the environmental balance, biodiversity, eco-tourism and the existence of all living beings in the world. In this context about 18.5 percent of total land of Nepal is under the conservation area. There are altogether nine national parks, four reserves and three conservation areas throughout Nepal. Likewise, Nepal nature conservation (NNC) is conducting conservation programs at local level. Some other organizations such as IUCN (International union for conservation of nature and natural resources), the world conservation union and WWF (World wildlife fund) are also conducting some conservation programs at community level.

Forest have divided into four types from the management point of view in Nepal viz. Government or national forest, contracted forest, private forest and community forest. The community forest program of Nepal is one of the first positions for forest conservation in Nepal and world too.

Absolute poverty, vicious circle of poverty, high population growth rate, illiteracy, subsistence oriented agricultural economy, unemployment are the major problems of agriculture based rural economy of Nepal. Such area's people utilize land, forest, small and cottage industries, livestock farming, horticulture etc for livelihood. Poor people consume the forest products highly. As we know the source of firewood is the forest, the poorest people entirely depend on forest to get fuels to cook, fodder to graze cattle, timber to shelter and earn some money by selling forest yield. In case of Nepal, there is no alternate source of energy. So nearly 80 percent of the domestic energy is fulfilled by firewood which decreases the forest resource and the farmers are greatly depend on domestic animals. The animal fodder comes from the forest. This also decreases the forest resources. Likewise an increase in the population

increases the demand for timber, wood which ultimately decreases forest resources (Ministry of Forest and Soil conservation).

In this perspective, the main responsible factor of deforestation of Nepal is poverty. That's why poverty elimination programs and forest conservations are simultaneously conducted by community forest programs now with local people participation so these programs are famous and successful in forest conservation.

DANIDA and other various organizations are supporting community forest programs of Nepal by providing assistance in cash and kind. The Ministry of forest and soil conservation plays vital role for the management and supervision of the community forest programs. These programs have been implemented in 38 districts in Nepal. Around 16,54,529 households are connected to 14,389 consumer groups under the community forest programs at present. The community forest area covers 12 percent (12, 00,000 Hectors) of geographical area in Nepal. Likewise these groups are conducting various programs at local levels of socio-economic mobilization viz. Poverty alleviation programs, women empowerment, infrastructure development etc.

## 1.2 Statement of the problem

A healthy and balance relationship between nature and environment are deteriorating due to deforestation, over-exploitation of resources, vehicles, industrial factories etc. So the effect of climate changes reflects in the world now. Deforestation plays vital role to climate change. Generating Carbon dioxide, Methane, Sulphurdioxide, dust, smoke etc play crucial role for global warming because these gases and smokes pollute the atmosphere. The polluted atmosphere affects the ozone layer. A study has shown that the portion of carbon dioxide covers 17 percentage out of its total adds due to deforestation yearly. Every year the temperature is increasing at the rate of  $0.06^{\circ}$ c in Nepal. That's why, the effect of climate changes are realizing in agriculture, flora-fauna directly and indirectly.

In 1964, the forest area covered 45 percent, 38 percent in 1979 and 36 percent in 1984 of the country. It was reduced to 29 percent in decade of 90s. Jhapa is the least forest area district of Nepal. Flooding, Soil-erosion, Floods, Drought, Low agricultural productivity etc problems are arising in Jhapa now. So the protection of forest is most essential. The community forest programs are running in Jhapa effectively for the conservation of forest with local peoples' participation (DFO,Jhapa)

Bhelagadhi community forest consumer group is the only community forest program Garamani VDC. Almost 500 households get benefited from various programs. Since its establishment this community group has been conducting various efforts to conserve the forest. However, qualitative achievements still lack there. Deforestation, poverty, infrastructure developments are existing problems.

Thus, the study tries to explore the solutions of the following research questions

- i. What are the key factors of deforestation?
- ii. What are the causes of passiveness of Dalit people in forest conservation?
- iii. What kinds of programs are conducted for Dalit people's awareness?
- iv. How many people are getting jobs under the poverty alleviation programs?
- v. What are the condition of Dalit people between income growth and distribution?
- vi. What are the reasons to be failed poverty alleviation programs?
- vii. What are the suitable suggestions and recommendation for the socio-economic mobilization along forest conservation?

## 1.3 Objectives of the study

The general objective of the study is to analyze the impact of Bhelagadhi community forest on socio-economic mobilization and forest conservation. However these specific objectives of the study can be shown as follows

- i. To analyze demographic and socio-economic status of Dalits in the study area.
- ii. To study the accessibility of Dalits in forest resource management.
- iii. To analyze the provision of Forest User Group to empower women, poor, Dalits and landless groups in the study area.

## 1.4 Significances of the study

Nepal has adopted inclusive policy to uplift the socio-economic status of the marginalized groups. As we are aware of the fact that Dalits, women, Madhesi, Indigenous-ethnic people, disabled people and backward region's people are categorized as deprived groups. The study is focused on Dalits on this ground. Poverty alleviation plays a crucial role in the forest conservation. Reduction of poverty certainly reduces the forest-dependency effectively. So, the community forest programs aim at poverty elimination as well as forest conservation. Since the dawn of its establishment Bhelagadhi community forest has launched a forestation, forest conservation, awareness and poverty alleviation programs. This community forest generates incomes from timber sales and mobilizes fund justifiable among the community's people. Certainly, this study helps to formulate and implement policies and strategies of community forest programs at micro level.

#### 1.5 Limitations of the study

Generally, the study is expected to have the following limitations

- i. This study is confined to Garamani VDC ward 4. So it may not represent the whole nation.
- ii. Conclusions and generalizations of this study may or may not be applicable to another part of the country.
- iii. This study is mainly based on primary data, but secondary data are also used in need
- iv. Simple statistical tools are used to analyze the data.

v. This study covers only five years' trend and data analysis.

## 1.6 Organization of the study

The study has been organized into five chapters. The titles of each of these are as below-

Chapter-1 Introduction

Chapter-2 Literature Review

Chapter-3 Research methodology

Chapter-4 Presentation and Analysis of Data

Chapter-5 Summary, conclusion and recommendations

Chapter one contains the introduction part of this study. As already mentioned this chapter describes the major issues to be investigated along with the general background, brief introduction, and statement of the problems, objectives, hypothesis and finally limitations of the study.

Chapter two is divided to review of previous theories of conceptual framework and review of the major studies in general. It mainly contains theoretical analysis and brief view related pertinent literature available.

Chapter three states research methodology applied in the study. This chapter deals with research procedures, statistical tools etc as required of the study.

Chapter four describes the data presentation, analysis, hypothesis testing and major finding of the study.

Chapter five is summary, conclusions and recommendations. This chapter presents the major conclusions comparisons them with empirical evidence to the extent possible and provides some suggestions. The bibliography and appendixes are at the end of the study.

## **CHAPTER-II**

#### LITERATURE REVIEW

There are many scholars and researchers who have devoted their time on forestry issues of Nepal. Their efforts to find out the forestry problems and solutions are considered as valuable contribution. So that an attempt has been made to review the publications of some scholars related directly to community forest management system. The disserting likes to be benefited from their expertise for the present study, which gives emphasis on the use of people's participation for proper management of forest resources.

#### 2.1 Forest:

Forest refers to an assemblage to trees growing closely together so that their individual leaf canopies generally overlap due to variation in temperature, rainfall and humidity, soil and terrain, the forest various in type from evergreen, deciduous to coniferous. Forest area denoted to the estimated total forest cover, provided by natural forest and plantations and is defined in terms of canopy cover, which is the percentage of an area on the ground that, when considered in plan/map, is covered by the crowns of trees (Pardhahan and Pradhan, 2008). In a dense forest where the branches of trees grown in an interlaced fashion and there is no space between tree crowns, the canopy cover will be 100 percentages, except for occasional small opening or meadows.

The forests are the primary sources of fuel for the Nepalese people. Almost 98 percent of the fuel is obtained from forest (Pandey, 1990). There is an annual use of 190 million cubic feet of wood for fuel. In addition, 140 million cubic feet of wood used every year for making house, furniture etc. The increasing demand for fuel wood farm land and fodder resulting from population growth has led to the encroachment of forest land in recent years. The forest land has been converted into farm land and grazing land.

# 2.2 Participation

De Groot (1989) has proposed five major relevant Dimensions of participation for the environmental projects (Drijver, 1992). The first dimension is the 'social reach' of participation. The social reach can be elaborated in terms of its width and depth. A width of the 'social reach' means that numerous sections of the local community participate in the project or program in an actual sense. The depth of 'social reach' is the extent to which the specific target groups of the project participate without intermediaries.

'Functional reach' is the second dimension of the participation mentioned by De Groot. It focuses on the content of participation. A wide 'functional reaches' of participation in this term means that people participate in many of the project component and phases.

The third dimension of participation is that the decision power of the participation may be nil if people only labor or provide information, but do not take decisions. On the other hand people may have some participation in decision if they give opinions and formulate questions. The relevant terms of people's participation may include autonomy, self-reliance, self help, self design, and self-evaluation. If the people themselves take all the major decisions concerning the design, implementation, monitoring and evaluation and drawing out lesson of the project, it can be considered as actual participation.

De Groot gave less importance to the fourth dimension, the direction of participation. In this dimension participants may support the planning and implementation of any activity or not. The direction of participation is towards the adjustment of people, who may resist projects feeling that may damage and pre-existing practice and values in which they have an interest.

Motivation is the fifth dimension of participation mentioned by De Groot. It is important to know why people participate and why they support, adjust or resist the project. Motivation might be based on the expectation of materials advantage including project funding. It is based on not only to material motives but also to motives such as status, social pressure or expressing interest and the wise to learn.

# 2.3 Management:

The word management is multifarious word. It includes the stage from the very beginning (inception) to the stage of benefit sharing. Management of forest in the absence of Dalits cannot be successful. Participatory management means gathering individuals widely in the community to make quality decision and to develop ownership by way of responsibility on people. Management of forest resource is essential for sustainable supply of forest product and to preserve the environment as well as to protect bio-diversity. Resources management approach has been practiced at local level before the revolution of 1951. They were of practice on traditional knowledge about the conservation and utilization of natural resource. After 1940 and subsequent privatization processes of the 1950s, rotation and seasonal use of resource was the preferred technique of the resources utilization and management system. At the community level they provided socially equitable and economically profitable ways of distributing resources that encouraged self-reliance and south to minimize losses rather than maximize gain using the conserving resource (Rai 1996). Rai's views on the resource mobilization is that without the participation of the local people the proper management of natural resource or sustainability or its self- reliance cannot be thought of. A well known Swiss expert indicated that if the community forestry concept and process were followed in other development sector, Nepal would soon become a Switzerland in Asia as quoted by Pokharel (2002).

There are more than 14,000 CFUGs who are managing 1.22 million hectors of forest lands involving 1.65 millions households. The annual income of CFUGs in Nepal is estimated to be over Nrs. 913.8 million where forest products contribute major share (Ministry of Forest and Soil conservation). In 1957, the government brought all forest under the control and introduced the private forest Nationalized Act. Its intension was to conserve, protect and better management of forest resource. Unfortunately, this act become unable to attract public support for its preservation; it was because of the government control over the resources. The first Act, 1961 was the first comprehensive forest legislation in Nepal's history. It was an attempt to institute

better management of the forest. And the forest preservation Act, 1967 was also introduced to define forest offenses and prescribe penalties, thus strengthening the forest department as a policy and law enforcement agency, but both acts were weak.

Considering the above reason, in 1977 and 1978 Panchyat forest (PF) and Panchayat Protect Forest (PPF) were introduced under the Community forestry Development Program (CFDP), with the purpose of handing back their protection and management responsibilities of forest to the people (Chhatri and pandey, 1992). The Decentralization Act 1982 clearly discusses on the formation of user groups at local level, empowers the local people to manage forest resource themselves and encourage people to participate in decision making process. Since 1980, government of Nepal has banned export of round log swan timber. The only surplus forest products (Such as fire wood, timber) of any FUGs should be sold within the District. Non timber forest products if not used by the FUG could be directly sold to the outsiders. It is found that most of the forest user groups have developed consolidated institutional capacity and adopted locally suitable forest management system.

The socio-economic factors like age, income, caste and education of local people significantly affect their perception in management and distribution of forest resources. Many people from rural areas have been involved in off-farm employment which has changed the resource management strategies of rural people. The entire products are distributed to registered-users to a particular community forest. Forest products such as firewood, timber, leaf litter, grass etc are collected and distributed among FUG members. The effectiveness of the management system depends on proper distribution process of the products.

NTEPs may be as important as cultivated crops for rural people (FAO, 1982). This is because during crucial period and famine years, these products constitute the source of basic food for peasants. Many people directly and indirectly depend upon forest for daily needs. Some are highly involved in collection and selling of forest products for their consumption and household income. This practice has been carried out since the last century for subsistence needs as well as for income generation. For example, a study in a rural village of West Bengal, India estimated that 38 percent of total income of tribal villagers comes from forest-product sales and two-thirds of it comes from fuel and fodder.

The forest Act 1993 and Forest regulation 1995 emphasize on forest management. It has defined different types of forest such as government forest, private forest, leasehold-forest, religious forest and community forest. These act and rule have eased the implementation of community forestry-program. Today, the term 'community forest' is used to refer any forest under user group protection and management. Bartlett and Malla (1992) point out that the term "community forestry" originated in the late 1970s, the practice of common property forestry management is long established in Nepal and the concept is very old.

In 1975, a conference was held in Kathmandu to consider issues relating to management of forest in Nepal. The participants of the conference were the officials from divisional Forest throughout the country and senior members of department of Forest and Ministry of forest. The planned three days meeting was extended to 23

days because of the great interest that was generated and desire to make a strong statement on the need to address the deterioration condition of the country's forest. This conference formulated the National forestry plan (NAFP) 1976. NAFP recognized that the department of forest had ignored forest of hills which led to the deterioration of watershed. To overcome this problem, the concept of "Panchayat Forest" which aimed at plantation of bared land. NAFP provided basis for the formulation of "Panchayat Forest and Panchayat protected forest act, 1978. Thus it can be thought that the community forestry program in Nepal formally commenced in 1978 (Gilmour et al 1991).

The available data shows that 59 percent of the land was covered with forests in 1951. By 1955, it was reduced to 45 percent. It was further reduced to 29 percent in 1981. The rapid decrease in forest led to the fear of desertification of the country within two decades. 55 lakhs ha forest decreased to 42 lakhs ha in between 1987 to 1998. Himal 34 percent, Hill 33.8 percent and Terai 29.9 percent of land is covered by forest now and it is 39.6 percent of total land area of Nepal.

In Nepal, Nepal forestry plan (NFP) 1979 proposed the need of community forestry plan for the management of forest. The seventh national plan also emphasized the need to encourage the maximum participation of the people in the management of forest resource and fulfilling their daily life needs (NPC1985). In many parts of hill regions, numerous local forest management systems are still in action. Many research studies on forest resource and their protection and management have made it clear that indigenous system of forest management are widely distributed throughout Nepal (Budhakoti1987, Chetri 1994, Fisher 1991, Fox 1990). These systems of forest protection and management have effectively and successfully operated within the local environmental context. Similarly, the community forestry programs which are in operation in most part of Nepal have the user groups as the units of forest management and also as decision makers in community forestry.

The forest Ministry was established in 1959. The forests were demarcated into national and private forests in 1978. The forest Act 1993 has given emphasis on forest management and categorized forest into different categories. The Act authorized the villagers to manage and conserve the forest themselves. The forest Act has been supplemented by forest rules of 1995. The government has shown commitment to institutionalized forest user group as legal entities. There is a provision for the users group to mortgage the community forests. The district officer grants approval to the user groups who want to obtain loans for the development of community forest from any financial institutions.

The Tenth plan (2002-20007) has recognized the importance of management and trading of NTFPs in poverty reduction, biodiversity conservation and ecotourism development (NPC2002).

There are conflicts within the user groups, which have hampered in the effective management and utilization of resources. The conflicts can arise at various points (ICIMOD1995). The low cast (Dalits) and disadvantaged people may be excluded from user groups. The conflicts can also occur in sharing of benefits and assuming leadership of user groups. In addition conflicts also can arise in the participation

aspect of members. The active members can also be reluctant to provide equal participation in decision making and in benefit sharing to inactive members.

Community forestry program is partnership program between local communities and the staff of Department of forest (DOF) for the management of locally accessible forest. Community forestry includes the control and management of forest either natural or planned by specified user group. Several amendments in community forest policies were made supporting for better people participation. The term forest management encompasses both technical and social arrangements. Forest management includes the planning, protection, harvesting and distribution of forest products.

## 2.4 Dalits Participation in Forest Resource Management

Detail study and research work are not done so much about the Dalits participation in forest resources management in Nepal. Dalits are one of the least studied communities by both the Nepalese and foreign scholars. Till now there has been no detail study about the nature, intensity of caste-based untouchability and also about the strategy of comparing of its elimination.

Dalits are being exploited everywhere in every sphere of life, such as exclusion from temple, public drinking water system, employment, education and other opportunity. Majority of Dalits themselves are still unknown of constitutional provision and unaware of their fundamental rights because of illiteracy, poverty and discrimination in every sphere public of life. Government has not yet fully implemented any of declared programs against caste discrimination and unsociability.

Social discrimination on the basis of caste, ethnicity, and gender difference plays a significant role in maintaining social inequality in Nepal. In the same way the structure of the agrarian economy of traditional form is also at the roots of poverty. The caste-based discrimination is very much alive today, though the cast discrimination is more flexible in the eastern region compared to the western and the far-western regions. The caste-based discrimination to Dalits is not found only from the high caste Hindus and the Indigenous Nationalities but the kind of discrimination is also equally observed within the Dalits group even today. The cast based discrimination is noted in the everyday life of people and this is equally noted in the government offices, corporations and NGOs (Dahal.2002).

Dalits are denied of participation in many public activities; such activities dampen their self-confidence and injure their ego. The denial of access to common resources is the drinking water resources. The non-Dalits states that Dalits themselves hesitate to participation wherever they are invited to do so due to the lack of self-confidence. Most of the Dalits are poor and are homeless. Dalits do not raise livestock because of lack of access to forest. Dalits are least represented in the executive bodies of the community forest. They are denied of such resources.

#### 2.5 Review of Related studies

The grown-up human civilization entirely relied on natural resources such as rivers and streams, forests and its surroundings there upon. It is of the fact that the wise use

of natural resources has driven human civilization up to now. In the name of development, over-exploitation and little accessibility on its use by vulnerable groups has drawn attention to carry out study on usage, accessibility and availability of natural resources. It is honest to mention that a number studies has been done on the management of entire natural resources by various persons, institutions and organizations, however the study-documents of Dalits' participation on the community forest management are rarely been found. During this study while looking for literatures related to it, found a study-document on the marginalized-people's (women, Dalits, Indigenous-people) participation on community forests of Jhapa districts carried out by an NGO named Sahara Nepal in 2008. The study has depicted a fact that there is a domination of elite-groups and limited participation of marginalized groups on the management of community forest. Poverty, lack of awareness and ineffectiveness of targeted programs are the prime causes for limited participation are the findings of the study.

The Ministry of forest and soil conservation has shown on its publication that encroachment of forest in the name of land-mafias, resettlement of landless and freed labors, and development of physical infrastructures have caste the doubt that whether government can maintain its commitment of retaining 40 percent of the country's total area under forest. In addition, ever-declining status of forest is adversely affecting biodiversity, thereby aggravating climate change in Nepal. Investment in the forestry sector is dismally low as compared to its contribution to GDP.

Economic survey of fiscal year 2010/11 published by the Ministry of Finance has also stated that physical distribution of district, area forest offices and range posts during the conflict period has been causing difficulty in program operations. Lack of equipments like vehicles, arms and ammunitions, has created a difficulty to combat smuggling of forestry products and controlling poaching activities. Difficulty to prevent uncontrolled poaching activities, inability to check encroachments and inadequacy of resources to control forest-fire are some challenges traced out in some national parks, reserves and buffer zones.

Table 2.1 Forest Resources Data of Nepal

Description	Quantity	Percent
Total forest Area	4.27 Million Ha	29%
Bush and Shrubs	1.56 Million Ha	10.6%
Total Stem volume	388.0 Million Cubic Meter	
Shorea Robusta (Sal) in		
Total Volume	-	28%
Total Biomass	429 Million Ton	
Average stem Volume	178 Cubic Meter per Ha	
Number of Average Trees	408 per Ha	

Source: MOFSC - 2012

Ministry of forest and its related departments have been conducting various project and programs every fiscal year. Those programs are financed with government's internal resources and foreign aid. National and leasehold Forestry, Resources Convocation, Sail Conservation and Watershed Management, Herbs and Aromatic plant and other forestry products related programs are some of the examples of them. Altogether 29,025 square Kilometers(19.7%) land are covered by National Parks, Wildlife Conservation, Protected Areas, Hunt protection and Buffer Zone. (Economic Survey, Fiscal Year 2008/090)

Table 2.2 Forestry at a Glance

Description	Quantity
	Community
	Forestry
Number of Community Forest User Groups	14,559
Area of Handed over Community Forests	1.23 million
·	На.
Number of Beneficiary Household	1066 million
Number of Woman managed CF	795
-	Leasehold
	Forestry
Number of Leasehold forest Used Groups	4194
Area of Household over leasehold Forest	23,423 Ha.
Beneficiary Household of Leasehold Forest	36,478
·	Partnership
	Forestry
No. of partnership Forest	4
Area of Partnership Forest (Ha)	8,639
Bara	2,058
Parsa	3,138
Rautahat	1,437
Mahottari	2,006

Source: MOFSC - 2012

Study is conducted on the contribution of the forestry sector to GDP. The study report concluded that the direct and indirect contribution to forestry sector account to 9, 4 percent and 18.1 percent respectively totaling 27.5 percent(Forest Resources and Survey Department, 2007).

The CF is not a new concept but as a legal measure it has come recently. In 1998, the project was launched and since then several investigations have worked on the strengths, weakness, success, and failures of the project.

Through the CF program following right are given to the forest user groups which plays important role for forest resources management.

- O Any part of the forest can be handed over to the forest user groups who are traditional user for the forest irrespective of the political boundary.
- o There is no limited of forest to be handed over as community forestry to forest user group that depends upon their willing and capability.
- Forest user group must be registered at district forest office with their constitution and manage the community forest according to their operational plan approved by district forest office.
- o Forest user groups can independently fix price, transport and market the forest product form the community forest.
- o Forest user groups can grow long term cash crop applying inter cropping system inside the community forest.
- o Forest user groups are allowed to establish forest based industry that can be run with the raw material yielded form the community forest.
- o Forest user group can utilized the fund generated through the sale of forest product in any development work but amendment of forest at 1993 make compulsion to utilize 25 percent of fund in forest plan.
- o Forest user group can take action to the members of forest user group who break the rule of constitution of operational plan.

In terms of function there are two basic types of groups: expressive and instrumental. Expressive groups are formed primarily for the purpose of the individual relating to each other. Instrumental groups are formed to reach a specific goal. Forest user groups are combination of both of these types. It is primarily a task oriented (instrumental) groups. It is designed to mange forest. To reach their goal, forest users become close well knit number of community.

Although, Community forestry program is the effective participatory program of Nepal, it is no free of debate. One of the major issues of debate is revenue from forest especially in Terai. Baral, Dahal and Pokhrel has discussed the issues of revenue from Terai forest in the process of community forestry program. They argued that there is a need of a new model which should ensure community forestry's contribution on the national treasury without affecting local enthusiasms for participation "Success can be achieved through the joint efforts with Community and Department of forest. This could be done by sharing the revenue between two parties"(Pokhrel, 1999). But Federation of Community forestry user Groups (FECOFUN) is against of sharing of revenue through and model of participatory forest management. They argue "Terai people want an area that would be enough to match their needs and be granted the right according to the provision of forest act 1993(FECOFUN, 1999, cited in Aryal 2000).

The sustainability of community Forest Management in Nepal depends upon economical, social and cultural diversities of Nepal. Diversities of socio-cultural setting make diverse natural resource management practice and allied resource use conflict. Conflict in community Forestry in Nepal is one of them which rooted at the communities themselves.

## **CHAPTER-III**

# RESEARCH METHODOLOGY

## 3.1 Research design

In order to fulfill the objective of this study, exploratory & descriptive methods are used. In tune with the set objectives; the study is carried out in a systematic way. Besides this one focus group discussion is also conducted to strangulate and generate new information/ideas from them. Interview with key informants is also designed for different perspective on the research problem.

## 3.2 Rationale for the selection of the study area

The proposed study is a micro - level study of Garamani VDC of Jhapa district. Bhelagadhi Community forest user group is selected for the study. From this community Forestry, only Dalits are selected. The proportion of user group members are of mix types i.e. different gender, cast, and ethnicity. The area of bhelagadhi forest is 91 hector, there are 60 household of dalits in garamani vdc.

Many studies in Nepal, argue that people's participation in forest management is crucial for the success of forestry program. Since Dalits in rural society of Nepal are important components for the management of forest resource, their participation is one of the major concern. However, very few micro-level studies have been carried out to access about how effectively Dalits are participating in forest resource management. The researcher is familiar with the ecology and the landscape of the study area.

#### 3.3 Nature and source of data

Both primary and secondary data are used for the study. Primary data is acquired from the field survey with the help of questionnaire, observation, focus group discussion and key informants. Secondary data is collected from publication of different institutions to complete this task.

## 3.4 Universe and sampling

It is not possible to have interview with each and every community forest members, and would be same response from the members representing different socio-economic status. This study only focuses on Dalits. Total Dalits households among users are taken as Universe sample. In this Bhelagadhi community forestry and users groups, there are 145 households as general members who select the community forestry user's executive committee. Sixty households of total Dalits (Kami,Damai, Chamar, Musahar, Sarki, Santhal, Sonar etc) are taken as universe sample for this study. Census method is used for this study. Among 60 households of dalits, 20% households of dalits is12 households of dalits are taken as universe sampling. the population of Dalits is 330, where male are 137 and female are 193.

# 3.5 Data collection techniques and tools

To collect the required data, following methods were adopted

## 3.5.1 Household survey

Household survey is conducted to gather more information about the population characteristic, such as caste and ethnic composition, family size, educational status, occupation etc. Similarly information regarding the Participation of Dalits and non Dalits in the Bhelagadhi community forestry and user committee as well as other aspect of CF are gathered. The data is collected by interviewing the head of the household using structural questionnaire.

#### 3.5.2 Key informant's interview

Key information is very in providing data and information which won't be gathered from the structured methods. Community Forestry Users Group (CFUG) members, other forest users, Dalit members of the UFUG, Dalit-users, ex-chairperson of ward/village, local leaders, female members, local influential Dalit leader and staff members of district forest office are taken as key informants for the study.

# 3.5.3 Focus group discussion

Focus group discussion with the local people including Dalits is held to find out the problems and constraints in Participation of Dalits in Forest Resource Management. The discussions are held by focusing the main objective of the study.

#### 3.5.4 Observation

The observation method is used especially to know about the participation of Dalits in Forest Resource Management through CF program. In the course of field work, present condition of forest, applied forest management operation (thinning and pruning, fire line construction) is observed participation of Dalits, Women and their activeness in the meeting.

Information regarding Participation of Dalits in Forest Resource Management and various activities of CF are generated from the CF record book, minute book and operational plan.

## 3.6 Data analysis method

Data so collected are processed and analyzed to fulfill the objectives of the study. To illustrate the research work tables and figures are used for the data presentation. For the purpose of this study, the different data obtained by using different source are scanned and tabulated under different headings. Data collected from both primary and secondary sources are coded, edited in appropriate formats.

## **CHAPTER-IV**

#### PRESENTION & ANALYSIS OF DATA

# 4.1 Introduction of Jhapa District

Jhapa district is one of the resourceful districts among 4 districts of Mechi Zone, located at the eastern development region of Nepal. Geographically, it lies within 87°39' to 88°12' eastern latitude and 26°20' to 26°50' Northern longitude. This district is extended with West Bengal Province of India in east and south, Morang district in west, Ilam in North. The district is situated approximately 70 to 75 meter above the sea level. Chandragadhi, which is headquarter of Jhapa district, lies at 75 meter from sea level. Due to hot geographical features, there is a little variation in weather and climate, generally hot. The total area of Jhapa district is 1606 sq km. The maximum and minimum temperature recorded in this district is 35.8°c and 8.2°c respectively (CBS). Climatically, it is called hot.

They such as given below

- 1.Subtropical\_<1500m
- 2.Temperate 1500-2000m
- 3. Temperate cold -2000-3000m
- 4. Alpine -3000-4500m
- 5.Tundra -<4500m

The average rainfall recorded annually in this area is 3068mm to 3553.3mm.

We can see Jhapa district is divided politically in such ways which is given in table below.

Table 4.1 Political Division of Jhapa District

Description	Quantity
Parliamentary Elected Area	7
Ilaka	17
VDC	47
Municipality	3
Wards	1337
Hamlets	420
Population	688109

Source: District profile of Jhapa District, 2010.

# Land use

On the basic of land use pattern the total area of Jhapa district is categorized as below.

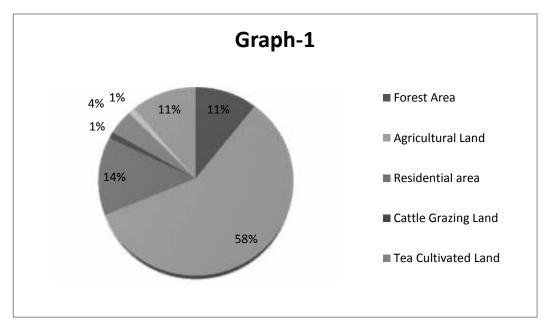
Table 4.2 Land Use Pattern of Jhapa District

Land Obe I determ of Shapa District		
Land use	Area(Ha)	Percentage
Forest Area	17,057	10.62
Agricultural Land	93,252	58.06
Residential area	21,782	13.56
Cattle Grazing Land	1,743	1.09
Tea Cultivated Land	6,975	4.34
Nuts Cultivated Land	1,810	1.13
River, Stream, Road and	17,981	11.20
Other		
Total	1,60,600	100

Source: District profile of Jhapa District, 2010.

The land use pattern of Jhapa District is below is shown in pie-chart below.

Graph- 4:1
Land Use Pattern of Jhapa District



Source: District Profile of Jhapa District, 2010.

# **Division and Management of Forest of Jhapa**

On the basic of forest management, total forest area 19557 hectors is classified into four groups.

# (a) Community forest:

The district office classified the area 1934 ha. in the form of community forest till the fiscal year 2064/065. For its conservation, development and management the community is divided into 446 sectors. The main function of DFO is to motivate the community for the conservation of forest, to regulate the rules and regulation strictly and to supervise the community activities on forest resources management.

#### (b) Conserved forest:

District office classified 1167 (6% of total forest area) hectors of area as the conserved forest. For its conservation joint team of armed police force and district forest office are deployed.

## (c) Productive Forest:

DFO classified the area 10,513 hector of total as productive forest. On the basics of its products purpose such forests are categorized. From such type of forest, about 1009 household gets benefit.

## (d) Plantation area and old community forest:

Remaining 5,943 hectors of total 19,557 hectors forest is categorized into this group.

# 4.2 Introduction of Garamani Village Development Committee

Garamani VDC which is present study area located at Jhapa district of Mechi zone. It is a neighbor VDC of Chandragadhi city. The Village is situated at  $26^{0}42'$  at  $26^{0}44'$  north latitude and  $88^{0}6'$  to  $88^{0}10'$  east latitude. The VDC is entirely bordered with other VDCs of the district. Garamani VDC is situated approximately 70 to 75 meter above the sea level. The total area of this VDC is 57.30 sq Km. The maximum temperature measured in this VDC is  $38^{0}c$  and the minimum is  $12^{0}c$ .

The terrain of Garamani VDC is Jhapa east Nepal; the major forest consists of subtropical Sal forest. The Bhelagadhi Community forest is rich in Bio-diversity. Latahar, a kind of plant species available in a limited quantity throughout the country, are estimated to be 100 to 200 trees in this forest. Even though this forest is rich in Bio-diversity, no survey and enumeration has done yet to know what kinds of plants and trees avail within it. Estimate is that the number of various plant species has increased due to better management of community forest after handover.

#### Climate

The climate of the study area is sub-tropical humid with distinct hot and wet summer and cool is dry winter season. The maximum temperature record at Garamani is  $38^{\circ}$ c and minimum is  $12^{\circ}$ c. The annual mean temperature of this area is  $35^{\circ}$ c. Due to climatic condition, the climate of Garamani VDC is hot. The VDC gets 2500m to 3000mm annual rain fall.

#### Land Use

Topography of Garamani VDC is plane. The elevation of the present study area only ranges from 70 to 75m. Land utilization pattern of Garamani VDC is shown in table and pie-chart below.

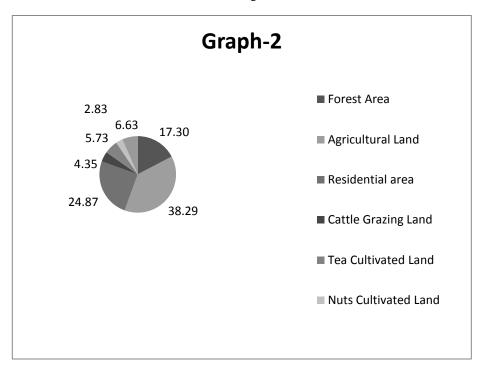
Table 4.3
Land Utilization pattern of Garamani VDC

Land use	Area Hector	Percentage
Forest Area	991.25	17.30
Agricultural Land	2194.01	38.29
Residential area	1425.2	24.87
Cattle Grazing Land	249.18	4.35
Tea Cultivated Land	328.2	5.73
Nuts Cultivated Land	162.26	2.83
River, Stream, Road and		6.63
Other	379.9	
Total	5730	100

Source: VDC profile of Garamani, (2068 B.S.)

Graph 2:1

Land Utilization pattern of Garamani VDC



Sources: VDC profile of Garamani, (2068 B.S.)

#### **Natural Resources**

Garamani VDC has fame in natural resources due to cultivated land, vegetations and rivers. From the above table, we came in a conclusion that above one-fourth of (38.29%) total area has been used as agricultural land. The vegetation in this forest is Sal,sisou,dhagero,haldune,kadam etc. Many medicinal herbs are shrubs are also available here. Similarly wild animal Rabit, Jackal and different types as well as species of birds are found in this forest. Community forest user groups and district forest office are working together to protect forest from degradation. The main function of such organization is to maintain environmental balance by conserving and managing natural forest, and to supply forest product to consumers who do not possess private forest.

## **Population**

According to 2068 population census, total household was listed as 3435 and total population was 18512, of which males were 9202 and females were 9310 at Garamani VDC. At present total population of this VDC is about 25000 on the basic of Nepal's Population growth rate i.e.; 2.24, the average size of population is 5.5 person per household. The cast/ethnicity of Garamani VDC comprises. Brahamins, Dalit(Sonar, Sarki, Damai, Santhal), Janajati(Limbu, Rai, Rai, Tamang) Chhetri, Newar are shown in table below according to their population.

Table 4.4
Caste/Ethnicity of Garamani VDC

Cast	Population	Percentage
Brahmins	9478	51.2
Dalits	4184	22.6
Janajati	4850	26.2
Total	18512	100

Source: Field Survey, 2012, VDC Profile.

## **Occupation**

Nepal is known as one of the agriculture country therefore obviously the most of people in this VDC are engaged in agriculture. Besides agriculture, some people are engaged in trade, Business, Labor, foreign employment etc. The occupation structure is shown in the below.

Table 4.5
Occupation Structure of Garamani VDC

Occupation	Population Percentage
Agriculture	82%
Trade	1.4%
Service(National/Foreign)	10.2%
Wage labor	4.1%
Other	2.3%
Total	100

Source: VDC profile, 2068.

Due to variation in property and discrimination in cast, rich people of upper cast follow the modern occupation works where as Dalits were limited in traditional occupational works.

## **Educational Status**

In Garamani VDC which is the selected area for the study, has one Higher Secondary school at Sainikmode, two lower secondary schools, ten primary school within it. 13 schools are contributing to education there. The education status of the VDC is shown below.

Table 4.6
Educational Status of Garamani VDC

Total	57%
Male Literacy	67%
Female Literacy	47%

Source: VDC profile, 2068.

#### **Economic Status**

Due to majority of landless people, unavailability of sufficient number of agriculture labor and rely on rain-irrigation, the productivity of this study area is insufficient. Thus, few households have sufficient agriculture land for their livelihood. The reality of Garamani is that many people have hand to mouth problem. Among different ethnic groups, Brahmins are holding more land than others. It is totally different in Dalits case. Due to limited land, for their livelihood they depend upon others' land and work as wage-labor. Table below shown is the distribution of household by holding the size of land.

Table 4.7
Land Holding of Garamani VDC

S.N.	Land holding	No. of Household	Percentage
	(in Katha)		
1	Landless	446	13%
2	<10	1236	36%
3	10-20	1031	30%
4	>20	722	21%
	Total	3435	100%

Source: VDC profile, 2068

Use of modern tools and technology on agriculture can be found in this VDC now days. Cultivation of fruits and vegetable become the means of economic upliftment to some extent. During the survey it was found that most of the young people have gone for foreign employment especially in India and Gulf Countries.

# Garamani Village (Ward no. 4)

Garamani village is known as ward no. 4 of Garamani village Development Committee. There is caste as well as ethnic diversity of Garamani- 4.

Table 4.8
Population status of Garamani-4

Total households	145
Total Population	797
Total Male Population	358
Total Female Population	439

Source: Field Survey, 2012

# 4.3 Brief introduction of Bhelagadhi community forest program in Garamani-4, Jhapa.

Garamani VDC is located in the northeast part of Jhapa district. Likewise, it lies between 26°42′ to 26°47′ north longitudes and 88°12′ to 88°14′ east latitudes on the globe. It has 9 wards and it is surrounded by Anarmani VDC in north, Duwagadi VDC in east, Charpane VDC in west and Haldibari VDC in south. The total area of this VDC is 57.30sq Kilo meters. The total population of VDC is 18,512 (male-9,202 and female-9, 310) according to population census 2011. The Brahmins (25.07%) have dominated population. The others are Chhetris, Newars, Magar, Tamang, Rai, Limbu, Muslim and Dalits etc. The main occupation of the village is agriculture. The literacy rate is about 60 percent people here. Nuts and tea are famous cash crops in this VDC. Garamani VDC has been suffered from elephant-terror. For this reason, it is known as wild elephant-terror VDC both nationally and internationally.

12.6 percent (19,557 hector-OFPM-1996) total area of Jhapa district is forest covered. Garamani VDC has 76.75 hector area of community forest which is less than 1percent of total forest area. The climate is tropical in this VDC. So, the tropical plants are found in this VDC. Sal, Sissoo, Dhagero, Haldune, simal, , Peepal are some examples of such plants.

This VDC was covered by dense forests prior to Rana-regime. Various political fluctuations, malaria elimination and timber smuggling etc are the prime causes for comprehensive deforestation since the Rana-regime to till the date. Then human migration and extension of settlement are the other grounds of deforestation.

Now, in this VDC, there is Bhelagadhi community forest consumer groups under the community forest programs. These community forest consumer groups are playing vital role for the conservation of flora and fauna with bio-diversity, economic development and environmental importance too.

DFO (District forest office) handed over this forest to local community in 1995. Now, local consumers of the community forest have launched awareness programs, forest production collection and income generations, fund mobilization, women empowerment; landless, Dalits, marginalized groups upliftment programs, physical infrastructure development along a forestation and forest development.

#### 4.4 History of Bhelagadhi forest User Group

Bhelagadhi Forest User Group is located at Garamani Village on the eastern border of Jhapa district. Bhelagadhi is the natural forest area, whereas Nursery and Phiro are the plantation area. It comprises of members from the ward no. 4 of the Garamani VDC. The total number of FUG member households are 145 which includes the different caste and ethnic groups of Brahmin, Rai, Limbu, Tamang, Newar and the caste groups labeled as untouchable, such as Kami, Santhal, Sunar, Sarki and Damai. The total size of the forest area is 91 hectors. The area was previously famous with

happenings of various academic activities despite of very low literacy rate in Jhapa district.

Each particular ethnic and caste group has been settled in a distinct particular area of the village since the past. Rai ethnic group settlement is at the western and off the FUG boundary separated by a small strip of forest and some agriculture land from rest of community. A fair-weather east-west road passes through the middle of the village. The Limbu, Tamang, Damai, Sarki, Santhal, Meche settlement are on the upper part of the road. The Brahmins have been settled on the lower part of the road.

The popular belief is that ancestors of Dahal sub-group of Brahman came there together with the ancestors of the Sarki and damai. The Villages have also found some evidences of settlement in the area long before than the coming of the ancestors of Dahal in Garamani. Some disasters, most possible the epidemics might cause the mass death and enforced the remaining population to leave the area for another place. The ancestors of the Rai ethnic group also came and settled in the area some 6-7 generations ago. Around four generations ago the ancestors of the Rai helped to settle a family of Limbu ethnic group in this area.

The village-head called *Patuwari* and the landlords controlled the common property resources before the end of Rana regime and the emergence of the democratic government with the constitutional Kingship for the first time in the country in 1951. In 1940 Brahmin and Rai power holders had brought a large position of the forest land under their entitlement. The Patuwaris mobilized the local people for the protection, promotion and utilization of the forest resources introducing and developing local system. This was quite different from the industrialized silvicultural forest management system. The deprived caste at the lower class people had either to ask the private owners for the forest products they needed or get permission of Patuwari to collect forest products from the government forest under the "Sanad' decree. Instead, they had to provide free labour service to the landlords and Patuwaris; and offer the vegetables, agricultural products fruits and domestic animals as gift in different occasions.

Under *Talukdari-system* village has constructed irrigation canals, community building called, Thanti' constructed and maintained the trails, dug public ponds to collect rain water for the livestock in the leadership of Patuwaris. The villagers had to provide compulsory free labour for these activities. This was an enforcement of collective work from the *Patuwari*, which was accepted as a way of life for the village in those days. In this period the village head of *Patuwari* used to influence the decision and announce the instruction through others. The decision used to be mostly top-down. In 1934 government of Nepal (Rana regime) had carried out registration of the private land to set up a bench mark for separating one's land from that of others and from the public land thereby reducing the disputes on land holding. At that moment the local power- holders became able to register a large area of forestland also under their title. The boundary was demarcated with one or another natural of permanent structure such as rivers, streams, and big rocks and alike. It was not done on the basis

of the actual measure of the land of field. In this way, clever people had brought a large of the forest under their private tenure.

The rulers in Kathmandu issued an instruction called 'Sanad' to the local Patuwari to look after and utilize a fixed area of Bhelagadhi sal forest involving the 'subject' under his jurisdiction. Other people had to either ask these families for the forest products to meet their need or to go to the remote areas or to ask the Patuwari to collect the forest products they need from the state forest under his jurisdiction. Except a certain area of the Bhelagadhi forest which was under 'Sanad' system, rest of forest was registered in the name of two Rai Brahmin and one Rai families in 1934 AD. Two Brahmin and one Rai families who got the forest registered under their title and their and their relatives used to slash and burn a patch of forest and sow the seeds of cereal crops, Such as millet. They used to cultivate in that area for a few years and leave it for five to twelve years fallow to grow the vegetation again. After slash and burn cultivation in several pitcher this way they used to get back to the first patch after and five to twelve years of interval(Shifting cultivation).

Before the revolution of 1951 the trend was not to migrate from the village. There was big flooding 1952, which victimized a number of households and they left the place. Though, the flooding was occurring from time to time before, it was so severe in 1952 that it eroded a big area of agricultural land in the village, which deposited the huge mass of boulders and soil in the low land fertile agriculture area.

The village could not trace back exactly when the *Patuwari* system started, but they could recall that this system continued until 1964. Thus, the descendants of previous Patuwaris remained as the local power holders still. Government officials replaced the 'Patuwari' to collect the land revenue only after 1963. After 1965, local government body called village Panchayat replaced the *Patuwari* system. Moreover in order to abolish the former Patuwari system the 'land Reform Act, 1964' was introduced. Even after these efforts the previous Patuwari and the forest land owners continued to use the nationalized forest area and even turned a large part of them into agricultural land.

Forest use system was still affected by the previous ownership on forestland. The people who hand their private forest before starts to extract the forest products of their daily need more from the forest strips near to their private agricultural land. Others at the earlier part of this period were either still dependent on the people who had the de-facto control over a part of forestland or stared to use the nationalized forest areas without any ownership feeling. People in Garamani started to use the Bhelagadhi Sal Forest, Which was previously under the local Patuwaris' supervision as manner that it was everyone's forest or no one's forest.

The cadastral survey of 1965 separate the private land and the forest land and transformed the private ownership of the forest to the state ownership. The survey applied the chain survey method, which was much successful. In 1976, again the cadastral survey was conducted with plain table survey, which was more convenient in separating the private land and other community land as well as forestland. In

1978, the forest range office was established and an office building was constructed inside the forest. The government forest division staff started to patrol the nationalized forest areas and in case they find the people collecting or cutting down trees from the forest they would punish and fine them. Gradually, a number of people started to negotiate with the government staff to collect forest products they need from the nationalized forest areas with some gifts or fees. Thus the Haphazard use of the forest continued since once started.

After the nationalization of forest, the government division office had the legal authority to regulate the forest protection and use system thereby making forestry related decisions. However, in order to strengthen the local governance, the responsibility of forest conversation and the utilization was given to the Village panchayat. The Village Panchayat leaders formed the forest protection committees at local level. Those committees were making the decisions on how timber a village can extract from which part of the forest. Through it was not a legally articulate prevision.

When the government started the resettlement program in the southern plain area of the country particularly in Jhapa distributing a fixed size of land to a household in 1961, a large number of households migrated to that area. As the Malaria was declared eradicated from Nepal in the mean time the migration of the hill people towards the more fertile but previously Malaria Prone Plain area of Terai increased significantly. The migration from hill to Garamani continued for four years since 1961 and gradually the rate has been decreased.

# 4.5 Forest Resources Management Practice of Bhelagadhi CF in the Study area

Forest area is an inseparable port of farming system in the context of Nepal. Rural communities are dependent upon forest production such as fuel wood, fodder and timber. Therefore the area and quality of forest depends on the effectiveness of the forest management activities. The Management activities cannot be successful without the active participation of users as well as Dalits users. Keeping in view, the importance of community participation in the protection and management of forest Government of Nepal has launched community forestry programmed in this area too. In this study area forest is managed by two community forest groups. They have rules and regulation concerning forest resources utilization and development on the past local forest watcher was appointed to protect these forest and the watcher used to receive monthly salary. Now, the FUGC and users controlled and managed their forest by their own way, which directed by their CF Plan.

# 4.6 Protection Activities of Bhelagadhi Forest

The system of forest protection committee initiated by the village panchayat was continued by the villagers of Garamani- Bhelagadhi up to 1985. During This period protection and religious was the major activities done by the committee and on other management activities were introduced in the forest. The village Panchayat started to carryout different local development activities such as, establishment of schools, Panchayat offices, trail construction, improvement and maintenance of water sources

mobilizing the local people. The Panchayat representatives mobilized the villagers to participate in the development activities voluntarily. In 1983, CARE Nepal selected the Garamani area for its integrated watershed management project. The project initiated plantation on the flooded area. Digging of conservation ponds, trail improvement and water sources conservation along with agro-forestry promotion are some of its activities towards the conservation side.

CARE Nepal initiated a massive embankment and plantation program in the flooding and other barren areas of Garamani in 1985/1986. All the cost of plantation and embankment was afforded by CARE Nepal. There was a debate on the plantation particularly in the barren areas rather than the land slide area. According to the local villagers those barren areas were the grazing spaces allocated for them from the previous time and they cannot stop grazing in those areas for the plantation. Some local activities stood on the side of Care point of view. CARE Nepal project staff negotiated with the villagers after the assurance to provide labor employment to the local villages. Thus the project employed the local laborers for seeding transportation, pitting, plantation, fencing and other soil conservation activities. The project also employed three villages at forest watchers. Later, Plantation increased the vegetative cover and started to stabilize the flooding and the villagers started to appreciate the project activities.

The village formed three separate protection committees for each of the two nature forest one plantation area also having an umbrella coordination committee. The protection committees got recognition from both the local forest user and the government. The local forest users selected the committee's members and provided full authority to make the decisions in terms of protection, conservation and promotion of the forest conserved. At least a representation forms each settlement and cast/ethnic group was selected in each protection committee. However, as mentioned by the lower cast representation, the decisions were highly influenced by the Brahmin and Rai community. There were only two women representatives' one from Rai ethnic group and another from Brahmin cast group in the three committees.

There was some conflict on access to the forest resources existed in Garamani-Bhelagadhi at the moment. In the late eighties the villagers of Garamani again formed a forest protection committee to regulate the harvesting of the timber especially from the Bhelagadhi forest. For the effective protection of forest area of Bhelagadhi, three watchers were employed by the CARE Nepal. A protection committee for forest areas was also formed under an umbrella co-ordination committee. The villagers started to protect and conserve the forest area of Garamani ward number 4; two separate patches of natural forest and one plantation are including three small patches of plantation with the initiation of the CARE Nepal. Three patches of plantation areas were fenced with the stone walls. The three separate forest areas have been using by the same user's household of ward no. 4 of Garamani VDC.

CARE Nepal also initiated the conservation activities such as conservation pond, trail improvements with the labor participation and consultation of village. The villagers

were involved in the daily wages in these development activities. The project initiated group formation, income generating activities, trail construction and collaborative construction of the community building in the later part of the project that is 1990 onwards. The negative impact of the wage labor participation of the people is that the village lost their creativity in a greater extent and development the feeling that the local can do anything in development process everything can be done only with the outsiders fund mobilization.

In 1991, a big fire took place in the Bhelagadhi Community forest and destroyed the ground cover as a whole. The fire destroyed the pole-size trees of Sal, Bamboo and many other species. Bamboo was also destroyed but it has been reviving after a decades of struggle of protection and wise use. The total forest users had controlled the fire collectively.

The CARE Nepal helped to prepare an operational plan for forest area in order to have them legally handed over to the FUG for their Management. An executive committee for each of them was also formed to execute the operational plan. Principally the FUG members have to discuss among themselves and formulate the rules and norms of forest and group management. Substantially, the operational plan was prepared by the CARE Nepal staff, DEO staff and a few village leaders. In 1993 DFO handed over the Garamani Badhi Plantation/Embankment area and Bhelagadhi natural forest area to the FUG. Bhelagadhi Natural Forest was handed over in 1997 only other resolving the serious forest boundary conflict between the villagers of Ward no. 4 and 5 of Garamani VDC. CARE Nepal field staff mediated the negotiation process. In this way at the end BTRT under CARE Nepal helped to establish a local institutional base for the management of forest resources.

Table 4.9
Caste wise Training Participants of FUG members

S.N.	Caste	No. of Participants	Percent
1.	Bramhin	11	22
2.	Chhetri	18	36
3.	Indigenous	12	24
4.	Dalit	5	10
5.	Others	4	8
	Total	50	100

Source: Bhelagadhi CF office 2012

The table shows that numbers of participants from Dalits and indigenous group is comparatively least than the so-called elite groups viz. Bramhim and Chhetris of the society. This figure still states that there is a domination of elite groups in capacity development activities.

# 4.7 Socio-economic condition of the Respondents

Socio-cultural characteristics of the respondents play an important role in conducting research works. In line with this, the researcher has made his attempt to explore social calculation aspect in the following ways:-

# 4.7.1 Caste/Ethnic Group of Garamani-4

There was caste/ethnic diversity in the study area. The study has shown that there was the majority of Dalits in the study area. Caste/ethnic status shown in the table below:-

Table 4.10 Households of FUG Garamani-4 on the Basic of Caste/Ethnic Group

S.N.	Caste/Ethnicity	No.of Households	Percentage
1	Dalits	60	41.37
2	Brahmins	42	28.96
3	Bhujel	13	8.96
4	Rai	12	8.27
5	Magar	18	12.41
	Total	145	100.00

Source: Bhelagadhi CF office 2012

Table 5.1 shows that 60 households of Dalits are the general members of Bhelagadhi C.F. Brahmin's has 42 households, Bhujel has 13, Rai has 12 household and Magar has 18 households in the study area (Garamani-4).

## 4.7.2 Educational status of Dalits in Garamani -4

Table 4.11
Dalits' Education status in Garamani-4

Educational level	Total Population			
	Male	%	Female	%
Literate	82	59	102	52
Illiterate	55	41	91	48
Total	137	100	193	100

Source: Field Survey, 2012

Table 5.2 shows the literacy level of Dalits in the study area. Most of Dalits have no formal education but somehow they are literate. 59 percent of male and 52 percent of female were literate. Education is the major problem of participation.

# 4.7.3 Occupation of Dalits in Garamani-4

Table 4.12
Distribution of the Respondents on the Basic of Male Occupation Status

S.N	Occupation	Percentage
1	Agriculture	36
2	Trade	1.6
3	Wage Labor	48
4	Service(National/Foreign)	12.4
5	Others	2
	Total	100

Source: Field Survey, 2012.

Table 5.3 shows that the occupation status of Dalits in the study area. Majority of Dalits (48%) worked as Wage labor, 36 percent of Dalits made agriculture as a major occupation in the study area. Research findings shows 12.4% of Dalits were engaged on service. Trade has small figure at the study area it takes 1.6%.

# 4.7.4 Average Income of Dalits

It is no doubt that income of the people determines the level of their living standard. It also influences and directs the policy of forest Resource Management and exploitation of forest. Those who have economic prosperity are able to grave more opportunity from forest resources. Therefore, the income level of the sampled Dalits HHs under the study area has been presented below.

Table 4.13 Distribution of the Dalits Households Number by Income Level

S.N	Annual Income	Household	Percent
	Level (Rs.)	Number	
1	Less than 5000	12	20
2	5000-1000	18	30
3	10000-15000	20	33.33
4	15000+	10	16.66
	Totatl	60	100

Source: Field Survey, 2012

The table 5.4 shows that the Annual Income (Rs.) of the Dalits of Garamani 4. In the study area 20% of Dalits have less than Rs 5000 income annually. Some like that 30% of Dalits have annual income between Rs. 5000-10000. Majority of Dalits in the study area, 33.33% have their annual income Rs. 10000-15000. Among 60 households of Dalits in the study area, 16.66% have more than Rs. 15000 annual incomes for their livelihood.

Table 4.14
Distribution of the Dalits Households Numbers on the Basic of Landholding size

S.N	Land Procession	Н	House hold			
		Number	Percentage			
1	Landless	17	28.33			
2	Landholders	43	71.66			
	Total	60	100.00			
Land	Land Size (in Kaththa)					
1	Below 5	7	16.27			
2	5-10	11	25.58			
3	10-15	19	44.18			
4	15+	6	13.95			
	Total	43	100.00			

Source: Field Survey, 2012

The Table 5.5 shows that 17 (28.33%) Dalits households of the study area are landless and 42 (71.66%) households have their own land. Of the total 43 household having land, 7 (16.27%) of Dalits households possess land below 5 Bigaha, followed by household 11 (25.58%) having land- piece of 5-10 Bigaha, 19 (144.18%) if Dalits household possess land 10-15 Bigaha and 6 (13.95%) household hold more than 15 Bigaha land.

Table 4.15
Food Sufficiency of Dalits in the study Area

S.N	Particular	Households	%
1.	less than 3 months	17	28
2.	3-6 months	37	62
3.	More than 9 Month	6	10
	Total	60	100

Source: Field Survey, 2012

Above table 5.6 shows that the food sufficiency of the study area, Majority of Dalits (28%) has no food sufficiency for their Livelihood. They had food only for 3 Months. It shows that there is hand to mouth problem for the Dalits.

In the study area most of Dalits have no food sufficiency because of unfertile and hard type soil. Irrigation is the major problem for production. Lack of irrigation facility they couldn't improve in their production. The rain- fed land further expose Dalits to vulnerability for food deficiency and intensifies poverty. The poor Dalits living in poverty is the major obstacle that discourages them to participate in forestry activities.

# **4.7.5** Forest User Group (FUG) Formation Process

Bhelagadhi Community Forest User is of ward no 4 of Garamani VDC. The executive committee conducts meeting once a month. The general meeting of assembly is conducted every year. In general meeting of members the discussion is made on current issue of forest management and process of forest user groups. The executive committee meeting was held in during the harvesting and benefits sharing time.

Table 4.16
Description of the FUG Formation

of FUG				iciaries	t Handed to FUG in	FUG Committee member	
Name		Area		Total Benef Hh	Forest Over t Year	Mal e	Female
	Bhelagadhi CF		91.00 HA	145	2054/03/23	8	6

Source: Operational Manual of Bhelagadhi CF, Garamani VDC, Jhapa

Bhelagadhi Community forest User Group was formed with the help of District Forest Office in 2054 BS. Now the executive committee comprises 14 members with 11 executive members and 3 advisory members. The Constitution of Bhelagadhi Community Forest Group has mandated that there will be compulsory representation from Backward Society. This provision mandates to be a Chairperson and a treasurer from that society. So then, in that committee there are 4 members from Dalits Community. The president of Bhelagadhi community forest named Bir Bahadur Besara is also from Dalits caste and the Treasurer named Som Maya Sarki is also from Dalits caste. Majority of Dalits cannot be seen on the Bhelagadhi community Forest user executive committee. Even though there is a reservation for backward society, the participation of such society still not remarkable.

Table 4.17
Castewise members in CF executive committee

		Number		
S.N.	Caste	Male	Female	
1	Bramhin	3	2	
2	Chhetri	2	1	
3	Indigenous	1	1	
4	Dalits	2	2	
5	Others	1	0	
	Total	9	6	

Source: Bhelagadhi CF office 2012

The table shows that provision of reservation has helped Dalits to represent them in CF executive committee.

Table 4.18
Castewise designation in CF executive committee

			Number	
S.N.	Caste	Designation	Male	Female
1	Bramhin	Secretary, members	3	2
2	Chhetri	Joint Secretary,	2	1
		Members		
3	Indigenous	Vice-President,	1	1
		members		
4	Dalits	President, Treasurer,	2	2
		Members		
5	Others	Member	1	0
	Total		9	6

Source: Bhelagadhi CF office 2012

# 4.8 Dalits Participation in Forest Resources Management

People participation is an important part of development activities. Without peoples participation nothing can go ahead in proper way. In other words, no activities can run in appropriate and sustainable way without people's participation.

Dalits are playing dominant role for the use of forest resources at Bhelagadhi community forest of Garamani -4, Jhapa among all people. Dalits are essential factors and effective means for the sustainable management and development of the community forest. The community forest program itself defines the participation of people in management, utilization and development of their local forest.

The good participation shows the division of labor according to sex, age, field and loyalty of work (Devkota, 1998). People participation is the most essential features of community forestry. It should be the principal aim of community forestry to involve people in all stages from decision making to harvesting (Kayastha, 1991).

In the study area, active participation of people was identified in three different activities of community forestry activities.

- Participation in executive committee and meeting.
- Participation in silviculture (Ban Godne) Activities.
- Participation in community forestry activities, such as afforestration, benefits sharing.

In these activities participation was found to be different in degree and frequency according to the nature of activities.

## 4.8.1 Participation in Decision making process

Since the handover of the forest area to the FUG, the committee meeting and assemblies have been institutionalized. The executive committee of Bhelagadhi have been conducting meeting regularly once a month and once in three months during monsoon and assemblies once a year. However the executive committee of plantation

area has not been holding any meeting for more than three years. The chairperson, secretary and/or few influential members of the committee usually set agenda for the meeting. There is no any system of involving the general members in setting agenda. So there is not much chance of incorporating the view of the general members. It is assumed that the representatives would bring up the opening and interest of their respective constituencies.

Although the local decision making has promoted the ownership feeling among the local forest users thereby improving the condition of their community forest, there are a lot of new challenges noticed during the field study. When we look at the FUG in different sub-systems the marginalized sector of the community still feel that they are not able to participate at every activities of forest resources management. The poor and the deprived caste people such as Besara had less ownership feeling in CF activities; it has been improving as compared to the past. Participation of women and the marginalized caste people in decision making is very low. Many of the decisions are made without the participation of those people and whatever decisions are made in the committee meeting or in the assembly they are not effectively communicated to all the users. It may be the cause of low educational status and lack of awareness. Dalits participation in decision making process of any forest related subject is very poor.

# 4.8.2 Attendance of Dalits User in FUG Assembly

User should be aware with the decision making process which also effects them. So they should attend the assembly which is directly related with the decision making process. However participation of Dalits in assemblies is relatively low in comparison with non-Dalits. Furthermore, they are yet to play active role in such assemblies.

70 60 60 55 50 45 40 40 ■ Non Dalits 30 ■ Dalits 20 10 0 YES NO

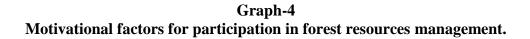
Graph-3 **Attendance of Respondents in FUG Assembly** 

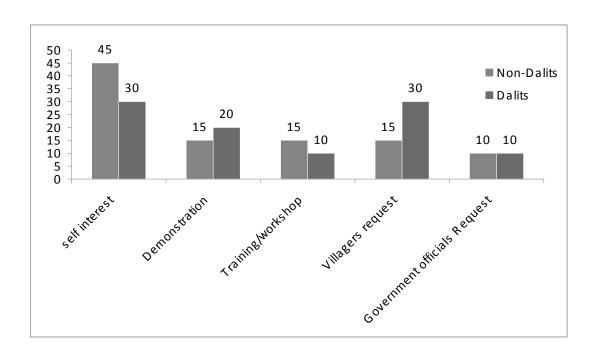
Source: Field Survey, 2012

Above chart reveals that the attendance of Dalits in FUG Assembly is comparatively low is comparison to non-Dalits. About 60 percent of non-Dalits respondents said that they usually attend the assembly while only 45 percent Dalits said they are also attend likewise, 40 Percent of non-Dalits, they usually don't attend the assembly where 55 percent of Dalits are not attend the assembly.

# 4.8.3 Motivational factors for Dalits Users to Participate in FUG Activities.

Motivation is required to take action toward a desired goal. For the participation of Dalits in forest resources management, there are different sources of motivation.



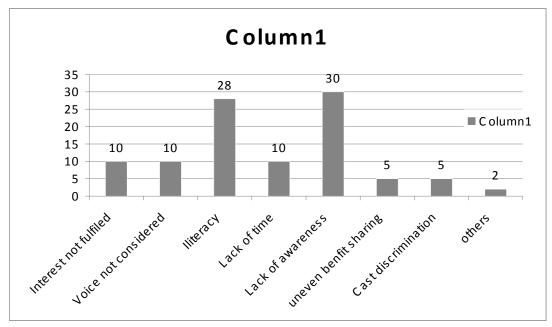


Motivational factors for participation in forest resource management among Dalits and non-Dalits shows that 45% of non-Dalits and 30% of Dalits are engaged at forest resources management activities by their self-interest. Demonstration is another motivational factor for participation in forest resource management. Demonstration takes place as a factor of 15% of non-Dalits and 20% of Dalits. Study found out that 15% and 10% of non-Dalits and Dalits were motivated by training and workshop. 15% of non-Dalits and 30% of Dalits are participating in forest resources management by villages' request. Government officials request become the motivational factors for participation in forest resource management for 10% of non-Dalits and 10% of Dalits.

# **4.8.4** Problems of Dalits in Active Participation

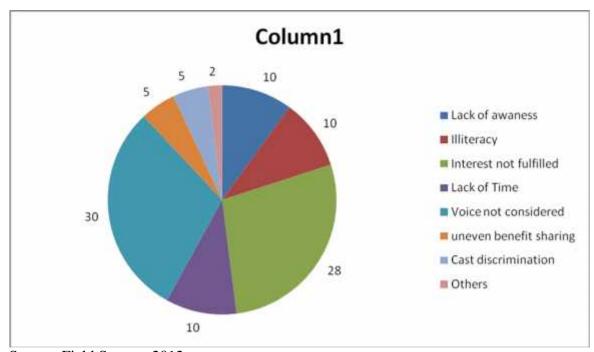
In the study area, it has been found that the participation of Dalits in different level of community forestry and forest resources management works is not satisfactory. Their prudence is limited just in the physical presence virtually. They are not still able to influence the process of decision making in their favor. They are not able to represent themselves in comparison to other cast/ethnic group in every activity of forest related subjects. By time period the condition of participation of Dalits in forest resource management is increasing day to day. The major problem behind the active participation mainly constitutes illiteracy, caste discrimination, lack of awareness, careless etc.

Graph 5 (a)
Respondents view about the problem of Dalits in Active Participation.



Source: Field Survey, 2012

## (b) Respondents view about the problems of Dalits in Action Participation is shown in pie chart below. (At percent 12% households)



Source: Field Survey, 2012

It is found the field survey that, the highest portion or 30 percent of respondents were of a view that the main problem for Dalits activities participation in forest resources management is lack of awareness, similarly 28 percent of respondents pointed out that illiteracy is the main problem for active participation. Another 10 percent indicate that interest not fulfilled, 10 percent told lack of time and next 10 percent point out the voice not considered. Five (5) percent of the respondents answered that uneven benefit sharing is the main problem and same 5 percent show cast discrimination is the main problem. Among all only 2 percent of respondents show other as problems for Dalits active participation.

Still some sort of socio- cultural problems like discrimination on the basis of caste, their low level of education and awareness, their lack of confidence, carelessness about forest are creating hindrance to their active participation. Dalits also poses some indigenous Knowledge for the management of forest resources and protection of forest but was not realized and incorporated.

### 4.8.5 Respondents view for Improvement in Dalits Participation in Forest Resources Management

Dalits participation in forest related works are not satisfactory, their status of participation should be improved and increased in order to improve their standard of living and to involve them actively in different forest activities and in the committee.

Table 4.19
Respondents view for Improvement of Dalits Participation in Forest
Resources Management

View for Improvement of Dalits Participation	No. House holds	Percentage
By increasing educational and awareness level	3	25 %
By sharing equal benefit	5	41.67 %
By eliminating any short of discrimination	1	8.33 %
By making familiar about the ruler and regulation of CF and benefit of forest Resources Management	1	8.33 %
Others	2	16.67 %
Total	12	100

Source: Field Survey, 2012

It is found from the field survey that, the highest portion or 25 percent of respondents were of a view that the status of Dalits participation can be increased through increasing education and awareness level. Similarly 41.67 percent of respondents said improvement can be done by sharing equal benefits. Another 8.33 percent respondents pointed out that the discrimination as a means to improve in their

participation. About 8.33 percent focus on making familiar about forest activities and remaining 16.67 percent respondents have said as means for improvement of Dalits participation in forest Resources Management.

#### **4.8.6** Participation in Protection Activities.

The improvement in equality of forestry is the major indicator of successful forest resource management practice, which is achieved only after the collective and supportive action of all FUG members including Dalits. In the study area the Dalits perceive that the quality of forest is being improving day by bay. For improving and protecting of forest resource the following reasons are effectively applied.

- Controlled over illegal which helped to increase protection efforts.
- ➤ Increased growth of tee-seeding protection of natural regeneration and nursery plantation.
- Fire control Mechanism(Awareness)
- > Strictly applying and following the rules of CF.
- > Trainings by different ING0s, GOs and CBOs are also played vital role for the protection of forest resources.

In the study area, for forest Resource Management the credit goes to CARE Nepal. The Project (CARE) Planted trees in the bare hills if the study area. Those activities made the people to wakeup. Education and awareness increasing day by day is also one of the components for forest resources management activities on the study area. There is the Garamani Range Post situation at the boundary of Garamani -4, which is also play the vital role for the protection of forest resources.

#### 4.9 Utilization Pattern of Forest Resources in Dalits Community

In Cause of the research work, the researcher concluded that Dalits in the study area were utilizing their forest resources in the basis of their needs. In the name of fulfilling the needs of them nobody could cross the rule and regulation of CF. Utilization pattern is shown as below:-

#### 4.9.1 Utilization Pattern of forest Resource.

- Fuel wood (Daura) for cooking and heating.
- ➤ Leaf for bedding (Sottar) Livestock.
- Leaf litter for production of compost mature.
- > Green grass for feeding livestock.
- > Twigs (Jhikra) for support climbers.
- Bamboo, wood (Timber) and Khar for construction of house.
- ➤ Medicinal plants for Self-user.
- Running Sawmill. (There is one saw-mill in the study area.)
- > Small wood Carving Cottage industries: produce such kind of woody materials like, halo, Juwa, Date, (traditional Plugging materials) Gauwa, Theki,

Madani (traditional materials for preparing Ghee), Mana, Pathi and Many more handicraft from wood.

#### **4.9.2** A Shift in Occupation of Dalits

Kami Sarki, Sunar and Meche caste group's people have been put a board category of Dalits. These people have been traditionally labeled as the untouchables under the Hindu caste system. They have less agricultural land because traditionally they are not the agriculturist but they are the artisans. However their clients are the agriculturists. So the social mobility among the agriculturists and the increasing flow of the industrial products into the rural market affected the occupation of the Bishwokarmas to be changed. Social is characterized by several factors including economic, institutional and technological change.

At present Dalits people are involved in various different jobs such as marking and repairing traditional agricultural and forestry tool, agricultural labor, labor work in foreign countries, woodcarving or wooden pot making, carpentry and masonry works. As the present woodcarvers mentioned in a group discussion they were traditionally involved in the iron work of making and repairing the iron implements for the thinking and pruning of the forest, to cut grass and tree fodder, to plough, dig and harvest the agricultural crops. However, they mention that the shift in their occupation from the traditional ironwork to the wooden pot (Theka, Madani, Mana, Pathi, Chauthie, etc) has been proved more beneficial to them. At present they are earning at least NRS 1000.00 per day from woodcarving but they are getting in maximum of just NRS 300.00 as agricultural labor wages. The crisis they are facing in these days is the growing scarcity of trees for woodcarving.

#### 4.10 Rules and Regulations

The following rules and regulations are in-face in both forest user groups.

- No one will cut green trees and branches without permission.
- Animal grazing is strictly forbidden. It is also restriction to collection fodder and fuel wood.
- Nobody is allowed to start a fire inside the forest areas for any purpose.
- Forest products an equally distributed among all member households.

## CHAPTER V SUMMARY, CONCLUSION & RECOMENDATION

#### 5.1 Summary

Forest of Nepal has great important in fostering the agricultural system and in protection of the slope and fragile land of Nepal. Most of the forest area of Nepal is being managed as community forest by users themselves on the basis of their own values and norms/traditional system before the forest was nationalized in 1957.

The community forestry approach has been highly successful in the protection of forest in the hills of Nepal. Community forestry has evolved as one of the major components of Nepal's forest development strategy. The program aims to fulfill the basic need of the people and also increases their capability in managing the resource. It encourages people to get involved in forest management for their own benefits. Although community forestry has been very successful since its implementation, it is blamed that this program has further marginalized the weaker section of the society. Dalits, poor, women members who normally participate less in community forestry management activities and elite people cannot influence in the comparison to other, so called upper caste and elite people cannot influence in the decision making. The management and utilization decisions also rest with the FUGC where the local elite people usually form so called upper caste hold the major position.

Forest resources are of vital important in the development of human society directly and indirectly. Basically in case of rural areas where almost hundred percent of energy supply in heating and cooking purpose in gained from forests are closely interrelated with daily livelihood as well as other activities for example farming. Forest resources is central source of energy, fodders, construction materials, firewood equally contributes to agricultural production. Unlike the effort in preservation and protection, increase in human and livestock's population have been creating deep pressure in natural forests especially through expansion of agricultural land and grazing areas lands where cutting down more trees (timber/non-timber) to meet fuel, fodder and timber requirements are day-to-day events. To fulfill loosing green forest and the manage forests resources, concept of community forestry way adopted by Nepalese government since 1978.

The main objective of this research was to find out the participation of Dalits in forest Resources Management on the basis of case study at Garamani VDC ward no-4 of Jhapa District. The specific objectives are to analyze the socio-economic condition of Dalits FUGs members, to identify existing practice of Dalits for Forest rescores management and to evaluate utilization pattern of forest resources in Dalits community.

#### 5.2 Conclusion

On the basic of facts, figures, opinion, literature, and the experience gained by researchers during the field visit, it is concluded that the effectiveness of Dalits participation in forest Resource Management is not satisfactory because of literacy,

poverty, low awareness level, and to some extent discriminatory practice of the socalled upper caste. But the Dalits participation in Monitoring and evaluation is satisfactory. The effectiveness of Dalits participation in benefit sharing and executive community of CFUGC is fully effective.

Most of the Dalits have no options to use all the forest products from forest as they have very few livestock to use fodder and grasses from the forest in comparison with other so-called upper households and rich who have relatively large number of livestock. In addition, most of Dalits do not have own enough land, private forest and construct houses using timber they can harvest from their forest. In the context, it would be beneficial for Dalits if they are always to swap their share of forests products such as fodder, grasses and timber with firewood they required.

#### 5.3 Recommendation

Based on the finding of the study, opinion of Dalits and key informants and the observation and experienced gained by researcher, some suggestions are put forward to further research, planners and policy makers related to the forest development program to make more inclusive for Dalits participation. The researcher hopes, it will help to reduce the living standard of Dalits by encouraging them to participate in forest Resource Management process.

Recommendation for the increment of Dalits participation in forest Resources Management.

- ✓ To raise positive of non-Dalits towards Dalits educational and awareness level of Dalits and non-Dalits should be increased.
- ✓ The traditional occupation of Dalits in the study area such a making agricultural tools (Halo, Kodali, Aanshi), wood carving (Theka, Mana, Pathi etc) should be promoted.
- ✓ Informal education and awareness raising programmers based on forest related matters should be lunched to raise awareness level of Dalits.
- ✓ People from all background regardless of caste, gander, religious affiliations should be involved should be involved in the formation of forest user committee.
- ✓ Dalits participation should be increased not only in the process of benefit sharing but also in evaluation, decision-making and other forestry related subject.
- ✓ Regular field visit by technical staffs like rangers, extension organization, DFO officials should be made effective and increased.

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#### Annex- I

# Tribhun University Dapartment of Rural Development Mahendra Ratna Multiple Campus, Ilam Socio Economic Survey

#### **Questionnaire for Participation of Dalits in Forest Resource Management**

Age:

Municipality:

Ward No:

Sex:

1.

Name of respondent:

Caste:

	Education:		Occup	anon:	Mari	tal Status:
2.	Family Stru	cture:				
S.N	Name	Age	Sex	Relation to Head	Education	Marital Status
1.						
2.						
3.						
4.						
5.						
3.	Occupation:					
S.N.	Occupati	on	Main		Subsidia	ry
S.N. 1.	Occupati Agricultu		Main		Subsidia	ry
		ire	Main		Subsidia	ry
1.	Agricultu	ire	Main		Subsidia	ry
1. 2.	Agricultu Business	ire	Main		Subsidia	ry

4.	From	where do	you	bring	your	animal	fodder?
----	------	----------	-----	-------	------	--------	---------

- i. Own agriculture land
- ii. Private forest.
- iii. Community forest.
- 5. Where do you get firewood, fodder, and other forest products products from? (Muliti answer).

S.N.	Forest Types	Fire Wood Bhari	Fodder Bhari	Other forest
				Product
1.	Community Forest			
2.	Private Forest			
3.	Own Agriculture			

- 6. How much fuel wood, fodder do you need day?
- i. 1 Bhariii. 2 Bhari iii. More than 2 Bhari
- 7. What do you use as main cooking food and animal fodder?
- i. Energy
- ii. Fuel wood
- iii. Kerosene
- iv. Elecricity
- v. LP Gas/biogas
- 8. What do you think about the decline of Forest?
- 9. Do you think forests are declining? If yes can tell main cause of decline?
- i. Timber demand
- ii. Firewood demand
- iii. Fodder demand
- iv. Land demand
- 10. Is it necessary to preserve the forest? If yes what would you suggest to preserve the forest?

11.	If you are a member of CF	TOO, you reer!
a.Posi	tive b. negative	c. Neutral
12.	If positive? please provide	e(priority 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> )
a.Fodo	der	
b.	Firewood	
c.Buil	ding material	
d.	Natural beauty	
e.Mai	ntain ecological balance	
13.	How many times the gene	ral assembly convinces annually?
a.once	b. twice	c. thrice
14.	Which is the appropriate s	eason for reforestation?
a. sum	mer b. winter	
15.	How many times will the	forest be opened for firewood in a year?
a.once	b. twice c. m	nore than twice
16.	What types of tree will give	ve to cut?
a.decayed		d. ranches
b. cro	ocked	e.All of
c.useless wo	ood	
17. Ar	re Dalits involvement in fores	t management activities? Yes/No
18. Ha	as the involvement of Local D	Palits woman in community forestry forestry been
successful to	o improve in their living stand	dard? Y/N
19. Do	Dalit have any problem to h	ave equal access to community forestry? y/N
20. Ha	ave you been involved in com	munity forestry operational plan preparation and
do you know	w the rules and regulation of t	he community forestry activities/N
21. Ha	ave you participated in any kin	nd of forest related trainings/N
22. W	hat do you think the commun	ity forest is under the control of?
) So called	upper cast people.	User community members.
J Local elite	es.	) FUG
23. W	hat are the motivating factors	for your involvement on forest resource
managemen	nt?	
J Self intere	est.	J Husband/Wife advice.

Demonstrastration.		J Villager/Neighbor request.			
J Training/ Workshop.		Government official request.			
J Radio/	TV.				
24. Is there any short of cast discrimination in forestry activities/N					
25.	25. Are you satisfied with CF management practices in your village/N				
If yes, w	hy?				
If No, w	hy?				
26.	What o you think are there problems of Da	alits in participation actively in the			
forestry	activities?				
a.My int	erest are not fulfilled				
b.	My voice is not considered				
c.Uneve	n benefit sharing				
d.	Too busy to go there				
e.Others	(specify)				
27.	27. Do you ever raise any agenda about the well being of a particular group				
(Dalits/V	Vomen) in assembly/meeting/N				
28.	28. What is your perception about Dalit participation in community forestry				
activities	s?				
J Are als	so helping to manage forest.				
) Respec	ets and follows FUG rules and regulations.				
J Equal	member of CF.				
J They s	hould realize their status.				
) Can be	e a good medium for them to increase their	leaving standard.			
Other	(specify)				
29.	Do you think that is equity is equity in ber	nefit sharing sharing between Dalits and			
non-Dal	its? Y/N				
30.	What is your status of participation in benefit	efit sharing?			
J More					
J Moder	ate				

) Less
) Never
) Others (specify)
31. How the benefit sharing process can be made equitable between Dalits and non-
Dalits?
Recognition of their involvement and participation in forestry activities.
) By providing equal opportunity in representing the committee.
Tallying their delivery and supply of forest products.
J Eliminating any shorts discriminations.

Thank you

#### Annex-II

#### **Tribhuvan University**

#### **Department of Rural Development**

#### Mahendra Ratna Multiple Campus, Ilam

#### **Key Informant's Survey**

- 1. What was the condition of forest before it was handed over to the community?
- 2. Did you find any significant changes before and after managing the forest by community?
- 3. What is the system of distribution of forest resource?
- 4. How do you participate for forest resources management?
- 5. What is the procedure to make rules and regulation about forest management of its conservation?
- 6. Are you a member of FUGC of your village?
- 7. How the FUGC is functioning?
- 8. What are the criteria that can be FUGC member?
- 9. What is the processer that can be implemented to better management of forest resources?
- 10. Is there any problem for users in access forest resources?
- 11. Are there any kinds of discrimination in sharing benefits and in other forestry activities?
- 12. How is the Dalits participation in this community forestry?
- 13. What is the status of participation of Dalits woman in community forestry?
- 14. Are Dalits actively participating in meeting and assemblies?
- 15. What are the perception of Dalits and non-Dalits about Dalits participation?
- 16. Are Dalits properly following the rules and regulations made by the committee in comparison to non-Dalits?
- 17. What are the main problems in terms of Dalits participation?
- 18. What are the motivational factors for Dalits participation in forest management activities?
- 19. Is there any initiatives taken to increase active participation of Dalits?
- 20. What should be done to increase the Dalits participation in user committee?
- 21. Do you agree that Dalits has equal access in forest resource use and management?
- 22. Do you have any suggestions regarding improvement of forest and Dalits participation?