CHAPTER I

INTRODUCTION

1.1 Background of the Study

Land-locked and sandwiched between two neighboring giants, China and India, Nepal is a land of enormous geographical diversity possessing natural resources where forest plays pivotal role. Nepal bear attractive package of nature embracing rich biological diversity it occupies 0.09% of land area in the world, which has 2.3% of global bio diversities. Green forests are the wealth of Nepal, different types of forests are found in different region of Nepal (GACF Secretariat Nepal), (ND).

Nepal is a mountainous country, where people largely depend on forest resources for their subsistence. As a result the forest resources have faced disturbing threat during the last century. The present situation suggests that this trend will continue to be so in the future as well. Many studies have shown and stressed for sustainable management if we have to realize the importance of the forest and forest products. Forest gives us many products under timber and non-timber categories. The contribution subsistence of local population and the macro-economic development differ very much from region to region. The forest products have been categorized into three major groups those used for subsistence, those used for industrial, inside the country and those that are exported. (Edwards 1996). Products use under farmer group play a vital role to maintain the life and economy of the rural people. It has the direct impact especially upon the tribal society. Non-Timber Forest Products (NTFPs) are major source for off farming employment and income generation and low income household.

Nepal is a small country but, it is rich in Natural resources. These natural resources are the free gifts of the nature. Natural resources are these living and non-living things/matters which can get from natural environment. In other words natural resources are the means and ends for the progress and development of the people. Nature has been providing the unlimited supply of natural resources to us. Indeed, nature really kind to us to providing these valuable resources. All the rural inhabitants are totally depending upon the natural resources in Nepal. Rural people accumulate or utilize the natural resources in order to meet their needs. Proper utilization of natural

resources creates a quality life of rural people. These natural resources are: Water, Soil, minerals Land and forests.

Forest is one of the important natural resources. Different types of Forest are found in different regions of Nepal. It occupies about 37.6% of the total land of Nepal (CBS, 2010). Forest occupies a total of 5.96 million ha which is 40.36% of the total area of the country. Other Wooded Land covers 0.65 million ha (4.38%). Forest and OWL together represent 44.74% of the total area of the country(Department of forest survey 2015).

Forests are rich in herbal products which have medicinal values. Many medicines are made from these herbs. Timber and herbs are valuable Forest products having high values in the world market.There are many kinds of animals in the Forest of Nepal. Forest provides food and shelter for these animals. Animals and birds add to the natural beauty of the country. People from many countries come to Nepal to see these beautiful birds and exotic wildlife and thus we can earn foreign currencies. Many types of fruit and grasses grow in Forest. People depend on them for their living and also to rear their livestock.

Forest plays a vital role to improving the livelihood of the people. Forest has been the main source of livelihood in the developing countries of the world. Nepal is not exception; it is the mainstay of the national economy and provides employment opportunities to the people. Forest products are basic need for survival of human beings. Without forest no one can survive either they are human being or non-human beings.

The rural people totally depend on forest products. They use the forest products from beginning their life to end of life of them. Forest supports agriculture. It influences climate, causes rainfall and keeps the soil tight. So, Forest help control soil erosion, landslides and floods. Nepal government is trying to preserve Forest. It has established many National Parks and Wildlife Reserves. We get raw materials for fuel, raw materials for furniture, matches and paper. Forest regulates the temperature of the surrounding areas. Villagers graze their cattle in the Forest and they also get fodders for their cattle.

Forest Products & Rural Livelihood

Forest products are the basic consumption goods of the rural people. These products are the foundation of the rural people. Forest provides the unlimited supply of the products includes: firewood, fodder, timber, grasses etc. In addition of these products fruits, herb and other edible thing can be found in the forest. Forest provides services, timber and non-wood products. With effective conservation and sound management the forest resource offers multidimensional opportunities for socioeconomic development, especially in rural areas. Forest resources are one of the means of livestock farming, inputs for agriculture and supply of timber and non-timber forest product to the people. Since, forestry, agriculture and animal husbandry are related in the farming system and are the basis for rural livelihoods in Nepal (Paudel, 2012)

In rural Nepal, forests are an integral part of the farming system as there is a heavy dependence on forests for the essential elements of fodder, fuel wood and construction timber (Gilmour 1992). Eighty percent of fuel wood for domestic consumption is obtained from forests and fodder from forestland provides more than 40 percent of livestock nutrition (FAO 1978). Most of the hill farmers rely heavily on maintaining a flow of nutrients and energy from the forest to their farms. Nutrients contained in grass and leaves flow from the forest to the agricultural terraces to maintain agricultural productivity (Gilmour, 1992).

Social and economic conditions are changing rapidly in Nepal. External events affect the way of life of the country's citizens, its institutions and it's Forest. Forest provide timber and non-wood products; more importantly they contribute significantly to the beauty of the landscape, preservation of the national heritage, protection of water supplies, rural life, village communities and the general well-being of Nepalese citizens; they attract visitors from abroad on whom the national economy is heavily dependent. The future prosperity of the country is bound up with its Forest and what happens to them. The sector generates incomes, employment and trade from which the whole community benefits.People sold the forest products to the market for improving the livelihood of the people such as firewood, herbs and agricultural instruments.

In recent years there has been extensive discussion of the linkages between forests and livelihood. It is clear that rural people in Nepal make extensive use of the forest resources as a part of their livelihood system. There are many aspects of this use including direct consumption of forest products and services (food, timber for construction, fuel wood, fodder for livestock, water, forest farming), collection of forest products for sale (hunting, NTFP collection etc.) and the use of forest products for food security in times of seasonal shortages, drought and economic stress. The extent of use and level of dependency is highly variable (GACF secretariat). Nevertheless forests are often of great importance in these ways. In addition to the use of forest products for livelihood support and risk management, forests are potentially valuable to rural people as means of income generation and poverty reduction. The problem with forest resources in both of these contexts is that forest resources are frequently under the official control of state forest agencies which generally restrict the use of forest by rural people, particularly where serious income generation is concerned. Thus, the potential for forests to contribute to poverty reduction usually involves question of tenure, access and benefit sharing between the state and the forest users.

1.2 Statement of the Problem

The problem of poverty has a big challenge to Nepal. The improvement of livelihood of rural community is one of the major issues in the economy of Nepal. Poor economic status or lack of proper livelihood means creating serious problem. The rural community becomes more dependent on forest to fulfill their daily needs as forest products. Community people are more or less familiar with forest products, rural users, who have adopted this occupation, have very limited knowledge of propagation, silviculture processes and physiology of such species and their role in ecosystem.Nature has given us valuable resources but our knowledge is very limited. So far, we are not able to utilize them in proper way. Rural people are showing interest in the cultivation of NTFPs but cultivation has not been seen in large scale. They produce only for domestic use because of limited knowledge and market for trading for those products.

Trading of Forest products seems to be profitable and easy work to earn money. It may not sustain because of heavy extraction without proper management and

propagation that may raise problem in the near future. FPs plants growing in the wild state may not mostly survive in the domestic condition. Thus, FPs should be managed in natural as well as CF. Many cultivators even including forestry technician are lacking the skill of propagation of FPs. Therefore, the essential task of personnel working in rural development has to think seriously about the problems.

Most of the CFs in Nepal has no sufficient data of FPs in their forest in natural way. So, these data in every CF is essential for future planning. If the data are available, there is limited scientific knowledge of new technology of production, processing and marketing. Community people somehow fail at the production and utilization level. Therefore, there is need of new technology and research support for sustaining income to enhance the livelihood upliftment of rural people. So, identification of FPs data, expected income from CF through FPs, problems and constraints of FPs management in selected CF and CFUGs are the main theme of the study. It has been thought that such types of information are essential for the sustainable CF management and to get maximum output from FPs cultivation.However, little knowledge about NTFPs collection, utilization, and marketing in Nepal despite their great potential to positively affects communities and households.

The demand of forest products is increasing day by day in the country and major share of forest product consumption is met through forest. Forest products like: fuel wood, timber grasses and fodder are the highly consumed throughout the year. Forest products are the key element of rural livelihood. Rural people depend on the forest products to sustain their livelihood, likewise the inhabitants of Budhakot VDCs main source of livelihood is agriculture which is directly and indirectly depend on forest products.

Forest products are the key determinants of the livelihood of the poor community. Forest products are comparatively advantageous than other resources. Forest products improve the lifestyle of the rural people if rational uses of these products. There are many forest products but not properly identified and properly used. The villagers use the forest products to their every aspect of life. Whereas they have no proper idea to conserve the forest. Peoples cut the small trees of the forest due to their ignorance.The increasing population is exerting heavy pressure on the forests of Budhakot VDC. The Villagers depend on forests for firewood as well as for timber, medicinal plants and

other forestry products. They also use forests to graze livestock and to collect fodder, to feed the large number of livestock raised to supply the manure essential for agricultural crops. As a result of this pressure, the area of forests has been reduced and the number of trees depleted. Thus, it has become increasingly difficult for the people to meet their basic need for forestry products. Pressure on the remaining healthy forests has consequently intensified, thus creating a vicious cycle and aggravating the already serious problems of environmental degradation and declining agricultural productivity.

In Budhakot VDC no one researcher has not yet research about the forest product and their impact on people's livelihood. The peoples of Budhakot VDC always collecting the forest products like: firewood, fodder, timber and non-timber forest product. Forest has been plays an immense role to fulfillment of basic need of the Budhakot VDC people. So, this research would try to assess the contribution of forest product on people's livelihood. Nowadays the inhabitants of Budhakot VDC Uses the forest products from the nearest Forest for meet their basic needs. Therefore, this research aimed and focused at throwing light in the contribution of FPs in rural livelihoods upliftment. The study would be mainly raised the following questions to address the problems seen at the Budhakot VDC. In view offulfilling the objectives of the present study, this research answers these following questions.

- What are the Major forests products people have been using?
- What is the Status of Forest Products?
- What is the relationship between forest products and people livelihood?
- What are the impacts of forest products on socio –economic condition of the study areas people?

1.3 Objectives of the Study

General objective is to analyze the contribution of forest products in livelihood of study Population and Specific objectives are:

- To analyze the various uses of forest products.

- To assess the relationship of forest products with people livelihood.
- To find out the socio-economic impact of forest products in rural communities.

1.4 Significance of the study

There is no doubt, forest products are the major input of livelihood of the rural people. Nepal is an agriculture country and livestock farming is one of the important components of agriculture. The agriculture sector is dependent on the forest. Most of the thing requiring in the agriculture can get from the forest like: fodder, grass, plough and other instruments. This study is helpful to the researcher who involve on studying the situation of forest products. Very few people give interest on this issue, so we all need to give emphasis in this subject, although the study is very useful for knowing about forest products to develop rural livelihood.

This research on identity and development is innovative because it brings together analysis of national discourses about Nepalese with a study of the practices and choices of the individual Nepalese whose identities are at issue. I believe this research can be helpful to the nation, development agencies, and indigenous organizations as Nepal works out what a multicultural identity will mean for its people. I am particularly committed to sharing the results of my analysis with the Budhakot VDC people with whom I work, in the hopes that my work would not just be an extraction of truths, but would give them information with which they can better control their lives and resources.

- This study is beneficial for local planners, INGO /NGOs and development activist.
- This Study also beneficial for District forest office, Ilaka forest office, DFO and others forest related programme conducted in Achham District.
- The study may provide the information for students and academicians to build further knowledge about forest products and its impact.
- This study about forest products may lucrative for next researchers.

- The study may aware the local people to knowing the impact of forest product on livelihood who are interested in this sector.

1.5 Delimitation of the Study

This study is based on and limited to the forest users of Budhakot VDC of Achham district. This was a research work mainly conducted for an academic purpose based on the information from primary sources and Because of time, budget, methodology and other facilities, the researcher had some constraints and limitations as follows:

- This study was conducted by the student of Master of Rural Development, with the purpose of thesis Making.
- The limitation of time is another limit of this study; it was completed within very few days, the field survey was conducted only at a community forestry user group. Thus, the generalization made in this study may or may not represent the country as a whole.
- The data is used in this study was collect from the primary and secondary sources: direct observation, questionnaires, different publications, Newspapers, website and books.
- Limited resources were used to conduct this study: financial, human etc. It was based on and limited to the peoples of Budhakot VDC. And the studies were very specific like that of case studies emphasizing on forest products and its contribution on rural livelihood.
- Limited of tools and techniques and lack refinement.
- The calculation and analysis made in this study was based on the simple statistical tool used i.e. percentage, average, range, mean and simple bar and pie chart.
- Respondent literacy level was another main limitation of the study.

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Review

Chamber and Conway argued that on their article topic "Sustainable rural livelihoods: practical concepts for the 21st century" that provoke discussion by exploring and elaborating the concept of sustainable livelihoods. It is based normatively on the ideas of capability, equity, and sustainability, each of which is both end and means. In the 21st century livelihoods will be needed by perhaps two or three times the present human population. A livelihood comprises people, their capabilities and their means of living, including food, income and assets. Tangible assets are resources and stores, and intangible assets are claims and access. A livelihood is environmentally sustainable when it maintains or enhances the local and global assets on which livelihoods depend, and has net beneficial effects on other livelihoods. A livelihood is socially sustainable which can cope with and recover from stress and shocks, and provide for future generations. For policy and practice, new concepts and analysis are needed. Future generations will vastly outnumber us but are not represented in our decision-making. Current and conventional analysis both undervalues future livelihoods and is pessimistic. Ways can be sought to multiply livelihoods by increasing resource-use intensity and the diversity and complexity of small-farming livelihood systems, and by small-scale economic synergy. Net sustainable livelihood effects and intensity are concepts which deserve to be tested. They entail weighing factors which include environmental and social sustainability, and net effects through competition and externalities. The objective of sustainable livelihoods for all provides a focus for anticipating the 21st century, and points to priorities for policy and research. For policy, implications include personal environmental balance sheets for the better off, and for the poorer, policies and actions to enhance capabilities, improve equity, and increase social sustainability.

1992 Robert Chambers and Gordon Conway

A livelihood is a way of making a living or obtaining the necessities of life. Livelihood comprises the capabilities assets (stores, resources, claims and access) and activities required for a means of living. A livelihood is sustainable and can cope with

and recover from stress and shocks, maintain or enhance its capabilities and assets and provide sustainable livelihood opportunities for the next generations, and which contributes net benefits to other livelihoods at the local and global levels and in the long and short term. A person's livelihood refers to their "means of securing the basic necessities -food, water, shelter and clothing- of life". Livelihood is defined as a set of activities, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments (both human and material) for meeting the requirements of the self and his/her household on a sustainable basis with dignity. The activities are usually carried out repeatedly. For instance, a fisherman's livelihood depends on the availability and accessibility of fish.

In social sciences, the concept of livelihood extends to include social and cultural means, i.e. "the command an individual, family, or other social group has over an income and/or bundles of resources that can be used or exchanged to satisfy its needs. This may involve information, cultural knowledge, social networks and legal rights as well as tools, land and other physical resources. The concept of livelihood is used in the fields such as political ecology in research that focusesonsustainabilityandhuman rights.

Sustainable Livelihood

The SL concept offers a more coherent and integrated approach to poverty. The sustainable livelihoods idea was first introduced by the Brundtland Commission on Environment and Development, and the 1992 United Nations Conference on Environment and Development expanded the concept, advocating for the achievement of sustainable livelihoods as a broad goal for poverty eradication. Sustainable livelihood as people's capacities to generate and maintain their means of living, enhance their well- being, and that of future generations.

The concept of Sustainable Livelihood is an attempt to go beyond the conventional definitions and approaches to poverty eradication. These had been found to be too narrow because they focused only on certain aspects or manifestations of poverty, such as low income, or did not consider other vital aspects of poverty such as vulnerability and social exclusion. It is now recognized that more attention must be

paid to the various factors and processes which either constrain or enhance poor people's ability to make a living in an economically, ecologically, and socially sustainable manner.

Sustainable livelihoods approaches

Sustainable livelihoods approaches are based upon evolving thinking about poverty reduction, the way the poor live their lives, and the importance of structural and institutional issues. They draw on three decades of changing view of poverty. In particular, participatory approaches to development have highlighted great diversity in the goals to which people aspire, and in the livelihood strategies they adopt to achieve them. Poverty analysis has highlighted the importance of assets, including social capital, in determining wellbeing. The twin influences of the policy framework and governance, which have dominated much development thinking since the early 1980s, are also reflected in SL, as is a core focus on the community (Ashley and Carney, 1999).

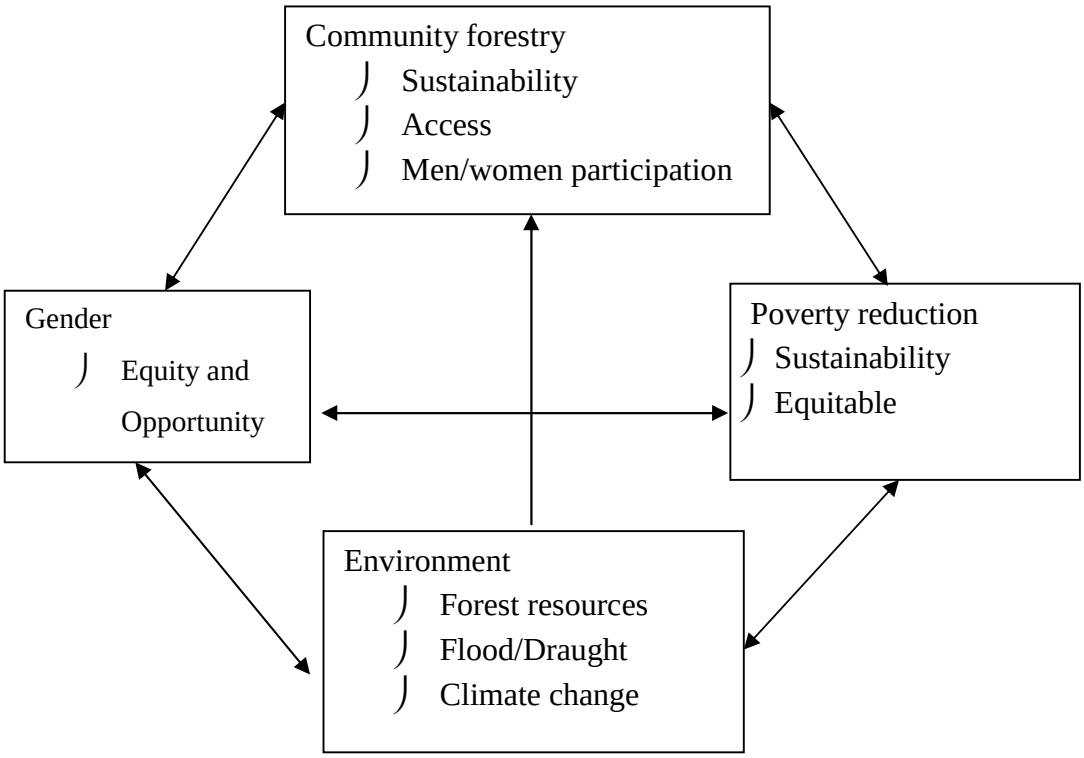
Pokharel (2010) the SLA is a way of thinking about the objective scope and priorities of development. It is a way of putting people at the Centre of development, thereby increasing the effectiveness of development assistance. Adopting the SLA improves the identification, appraisal, implementation and evaluation of development programmes so that they better address the priorities of poor people, both directly and at a policy level. This approach differs from other approaches in that it recognize the multiple dimensions of poverty as expressed and defined by the poor, in whatever way and using whatever indicators. Under themselves who identity the baselines.

Forest Resources

Mangala shrestha (2004) tried to explain on her article "Community forest in Nepal: women's Role for sustainable Development". Nepal is very rich in terms of forest resources and biodiversity. A broad range of eco- systems flourish on relatively small area of land in Nepal. The forest resource has made a significant contribution to economic and social development of the country. Besides forests are indispensable as a life support system for women in the hills and mountains, where agriculture, livestock and vegetation influence the ecology of the area and the lives of the local population. In Nepal two categories of forests are found based on ownership. Those

are private forest and national forest. National forest again has five categories namely into government managed forest, protected forest, community forest, religious forest and leasehold forest.

Figure: 2.2 Relationship between community forestry, Environment and socio economic Development



Source: Community forest in Nepal: women's Role for sustainable Development (2004)

The main forest management strategy of Nepal, based on forest dependent peoples' participation, is known as community forestry. This approach was formally introduced in the late 1970s to encourage active participation of local people in forest management as a means to improve livelihoods. The community forestry policy of Nepal is regarded as a progressive method for establishing rights of local people over forest resources; however, the promotion of forest-based enterprises has been limited. Recently, more CFUGs are initiating poverty alleviation activities, helping to establish community forestry as a recognized pro-poor program. The main areas of intervention include the promotion of income generating activities and establishment

of concessions for forest products distribution. The income generating activities include domestication of non-timber forest products, support to livestock production, and establishment of Forest-Based Small-Scale Enterprises. After twenty-five years of program implementation, most of the community forests have regenerated, but many new issues related to social aspects have emerged. These issues, which need further discussion and resolution, include selling surplus products from community forests, value additions of these products through enterprise development, multiple forest management, and better coverage of the program, use of community forests for income generation and poverty alleviation, and better fund utilization by CFUGs (GACF Secretariat Nepal).

Department of Forest Research and Survey, 2015

1. Forest occupies a total of 5.96 million ha which is 40.36% of the total area of the country. Other Wooded Land covers 0.65 million ha (4.38%). Forest and OWL together represent 44.74% of the total area of the country.
2. Out of the total area of Forest, 82.68% (4.93 million ha) lies outside Protected Areas and 17.32% (1.03 million ha) inside Protected Areas. Within the Protected Areas, Core Areas and Buffer Zone contain 0.79 and 0.24 million ha of Forest, respectively.
3. Out of the total area of Forest, 37.80% lies in middle Mountains physiographic region, 32.25% in High Mountains and High Himal, 23.04% in Churia and 6.90% in Terai. In case of OWL, Terai, Churia, Middle Mountains, and High Mountains and High Himal physiographic regions share 1.47%, 3.50%, 9.61% and 85.42%, respectively.

Forest products

A forest product is any material derived from forest for direct consumption or commercial use, such as lumber, paper, or forage for livestock. Wood, by far the dominant forest product, is used for many purposes, such as wood fuel (e.g. in form of firewood or charcoal) or the finished structural materials used for the construction of buildings, or as a raw material, in the form of wood pulp, that is used in the production of paper. All other non-wood products derived from forest

resources, comprising a broad variety of other forest products, are collectively described as non-timber forest products.

Since 1947, the Food and Agriculture Organization of the United Nations has published an annual yearbook of forest products. The FAO Yearbook of Forest Products is a compilation of statistical data on basic forest products for all countries and territories of the world. It contains series of annual data on the volume of production and the volume and value of trade in forest products. It includes tables showing direction of trade and average unit values of trade for certain products. Statistical information in the yearbook is based primarily on data provided to the FAO Forestry Department by the countries through questionnaires or official publications. In the absence of official data, FAO makes an estimate based on the best information available.

FAO also publishes an annual survey of pulp and paper production capacities around the world. The survey presents statistics on pulp and paper capacity and production by country and by grade. The statistics are based on information submitted by correspondents worldwide, most of them pulp and paper associations, and represents 85% of the world production of paper and paperboard.

NTFPs are all the products of biological origin other than timber, fuel wood, and fodder. They include the forest products which are used as food additive (edible nuts, mushrooms, fruits, herbs, spices, and condiments), aromatic and products used in medical, cosmetic, and used these products. They find uses in almost all the sectors of human lives and development including soil conservation, natural resources management, fisheries development, human and animal health and welfare (sigdel, 2003; cited in Ranabhat, 2006). NTFPs are the major components of rural livelihood. Millions of rural households worldwide depend heavily on NTFPs for their subsistence. About 80 percent of the world's population depends on traditional natural medicines which are derived from plants, insects and other animal products. Also about 20 % of drugs in modern medicines are derived from plants, both wild and cultivated. It is estimated that some 30000 plant species have been used at one time or the other in some culture or other for medicinal purposes worldwide (Aryal 2002).

Nepal is rich in medical plant species. There are over 1750 flowering plants having medicinal properties and over 250 of them have commercial value in Nepal (Aryal, 2002). It is estimated that 10 to 15 thousand tons of NTFPs worth some US 8.6 million dollar are traded from the middles hills and high mountains of Nepal to india and other third world countries every year (Edwards 1996). In a remote and high mountainous region NTFPs are potential source of income and employment opportunities. Medicinal and aromatic plants have been used widely in the traditional medical practices. Other NTFPs like bamboo and rattan, nuts, fruits, vegetables, spices, pesticides, gums veins, have become potential source for subsistence of rural lives. NTFPs, in Nepal, have been used for traditional food, medical and ritual uses.

NTFPs are being increasingly recognized because of their effective role in rural livelihoods, export values and conservation of biological diversity. They are substantial source are revenue to the government and central point for sustainable rural development. However, these valuable rural natural resources underutilized and undervalued and local people could not have achieved the benefit from them on the one hand and on the other unsustainable uses of these resources illegally and indiscriminately have created another problem in the management and conservation.

Forestry in Nepal

The Forests Division was established in 1942 for the scientific management of forests under state ownership (GON 1976). During the period from 1942 to the mid 1970s forest management was exclusively protection oriented. Because people live near and are dependent on forests, management must include local people as they fulfill their needs for firewood, fodder and timber.

Before 1957 there were no strict rules and regulation for the protection and use of the forest. The government paid no attention to develop the forest and allowed forest use to continue at higher rate, forest rehabilitation was simply ignored, so rapid deforestation has been seated serious problem e.g. floods, landslides, water security, decreased agriculture and livestock productivity etc. Generally the factors responsible for deforestations increased demand of forest and forest products due to population growth, clearance of the forest to increase the agricultural land and grazing livestock in the forest. To solve the increasing problem of deforestation, in 1957 the

government nationalized all forest to preview the destruction of national wealth to nationalize private forests for their adequate protection (Regmi, 1978). Unfortunately, the government was not prepared to assume the technical and administrative responsibilities of forest ownership. Villagers reacted negatively to nationalization, believing that their traditional rights of access and use had been curtailed. As a result, local responsibility for forest protection disappeared whereas previously these had been communal responsibility for managing the forest, but after nationalization, no one took responsibility of managing the forest. The forestry Act of 1961 and its subsequent amendment and rules became the basic law governing forest administration in Nepal. Likewise the forestry act and the forestry protection Act 1967 attempted to establish empowering community too protect and manage the forest.

Although the forests have been nationalized and forest officials made very powerful, as a result, deforestation continued and forest management was practiced in vain. Forest management as practiced exclusively by the department was not successful. Including local people in forest management and providing an incentive for local management became a crucial issue. The National Forest Plan of 1976 was highly committed to initiate people's participation in forest management and made provisions to hand over a part of government forests to local political units or village councils called "*Panchayats.*"The MPFS (1989) was approved in 1989 providing a 25 year policy and planning framework and remains the main policy and planning document for the continuing development of the forestry sector.

Community Forestry and Non-Timber Forest Products

In 1978, the government, recognizing the rapid depletion and deterioration of the country's forest resources and the Forest Department's limited capacity to handle the problem alone, introduced community forestry policy to seek local communities' cooperation in the sustainable management and use of the country's forest resources. The policy puts control of forests in the hands of the users of the resource, with the role of the Forest Department staff shifting from that of manager and controller of forests (policing) to that of adviser for forest users (GON 1989).

Community forestry is most accurately and usefully understood as an umbrella term denoting a wide range of activities which link rural people with forests, trees, and the products and benefits to be derived from them. Gilmour and Fisher (1991) define community forestry in terms of control and management of forest resources by the rural people who use them especially for domestic purposes and as an integral part of their farming systems.

The way community forestry approach used to be defined and interpreted in Nepal up until late 70s, suggests that community forestry implies 'community-resource' relations, commonly known as 'indigenous system of forest management' (Fisher 1989), which was widespread in Nepal's hills. During 80s and beginning of 90s, nevertheless community forestry was further conceptualized and internalized, new policy framework was crafted (GON, 1988), legal instruments have been in place (GON 1995), various processes, methods and tools have been developed, modified, re-modified and experience gained. During this period, community forestry was understood and recognized as government's priority programme, for which the role of forest bureaucracy in the hills changed from policing to facilitating leading to the evolution of community-resource relations towards a triangular interface among community, resource and government bureaucracy.

The present form of Nepal's community forestry is guided by the Forest Act of 1993, Forest Regulations of 1995, and the Operational Guidelines of 1995. These legal instruments have legitimized the concept of Community Forest User Group as an independent, autonomous and self-governing institution responsible to protect, manage and use any patch of national forest with a defined forest boundary and user group members. CFUGs are to be formed democratically and registered at the District Forest Office with CFUG constitution, which defines rights of the users to particular forest.Community forestry has received high priority in the forestry sector program to the government as reflected in both the master plan for the forestry sector GON, 1988 and the eight five year plan (NPC,1992). The main thrust of the community forestry policy of the government is the phased handover of management and utilizations of community forest to the actual users based on simple operational plans which are prepared and endorsed jointly by the forest user and the assistant ranger from the district forest office. Assistant rangers are supposed to apply the rules, schedule and

other institutional arrangements made for forest production management and utilization (Adhikari 2001).

The NTFPs that enter India as raw materials are collected, ported, taxed and traded as a discrete group of products referred to in Nepali as Jaributi. A close definition of Jaributi is “medicinal, aromatic and spice plants”. It also equates to the officially used term “minor forest products”, all of which are taxable if collected from government-managed land and traded from the district of origins. NTFP is the term used to describe a broader range of goods than those defined as non-wood forest products and include small products made of ligneous or woody materials, such as wooden stools, masks, drums, or other hand crafted items which are not industrial timber or pulp etc. (FAO, 1995). Subedi (1999), tried to define NTFPs as all biological origin other than timber, fuel wood and fodder from forest, grasslands or any land under similar use. The example of NTFPs includes medicinal aromatic plants, bamboo, and rattans, nuts, fruits, tubers, berries, grasses and leaves, resins, insect and insect providers, wild animals and birds. Wickens (1991) defines NTFPs as “all biological materials (other than industrial round-wood and derived sawn timber, wood chips, wood based panels and pulp) that may be extracted from natural ecosystems, managed plantations etc., and be utilized within the household, be marketed, or have social. In the past other than wood products such as bamboo, NTFPs, gums, resins, honey, fodder, fruits, nuts, oil seeds, bark, medicinal plants, mushrooms, wild life and many other materials obtained/harvested from the forests were classified as minor forest products. These products are now grouped as NWFPs or NTFPs.

The community forestry user groups can obtain greater economic benefits through improved management of (NTFPs). It is also expected to generate information useful to policy reform in the forestry sector Gautam et al. (2002) viewed that current trend of NTFPs management are focused on raw materials, but NTFPs ought to be viewed from the process of ecological processes, cultural heritage, and livelihoods of the local people, economic value and incentive for sustainable forest management. The government of Nepal is committed, as a part of the community forestry initiatives for transferring the rights of forest management and use through local communities. However, there is still a number of policy and practical issues that need to address the

potential of NTFPs as sources of livelihood, economic growth and biodiversity conservation.

Master Plan, regarding community forestry programs, highlighted of handed over all the accessible hill forests of Nepal to user groups (not to the *Panchayats)* to the extent that they are willing and capable of managing them and the priority of community forests is to supply forest products to those who depend on them with the adequate involvement of women & the poor in the management of community forests.

'Forest sector Policy 2000' withdraws some of the rights of local forest users in the plains area of Terai, with the intention that the forests would be better managed by the active involvement of the government. The new policy has created antagonism between the Terai users and the government, and the government has not been able to manage the forests better. Presently, the government is trying to pilot an approach called "collaborative forest management" in the three Terai districts with the financial support of the Dutch government.

The 'Tenth Plan (2003-2007)' was prepared in the context of MDG, and is also considered as the PRSP. The plan has as its target the reduction of poverty in Nepal from 38% to 30% by the year 2007 and to further reduce the poverty ratio to 10% in about fifteen years' time. It has four pillars for intervention - broad based high economic growth, social sector development, social inclusion/targeted programs, and good governance. The plan also allows farming of NTFP and medicinal plants within community forest areas.

Contribution of NTFPs in Rural Livelihood Improvement

NTFPs, also special, non-wood, minor, alternative and secondary forest products, are useful substances, materials and/or commodities obtained from forests which do not require harvesting trees. They include game animals, fur-bearers, nuts, seeds, berries, mushrooms, oils, foliage, medicinal plants, peat, fuel wood, and forage. Research on NTFPs have focused on their commodifiability for rural incomes and markets, as an expression of traditional knowledge or as a livelihood option for rural household needs, and, as a key component of sustainable forest management and conservation strategies. All research promotes forest products as valuable commodities and tools that can promote the conservation of forests.

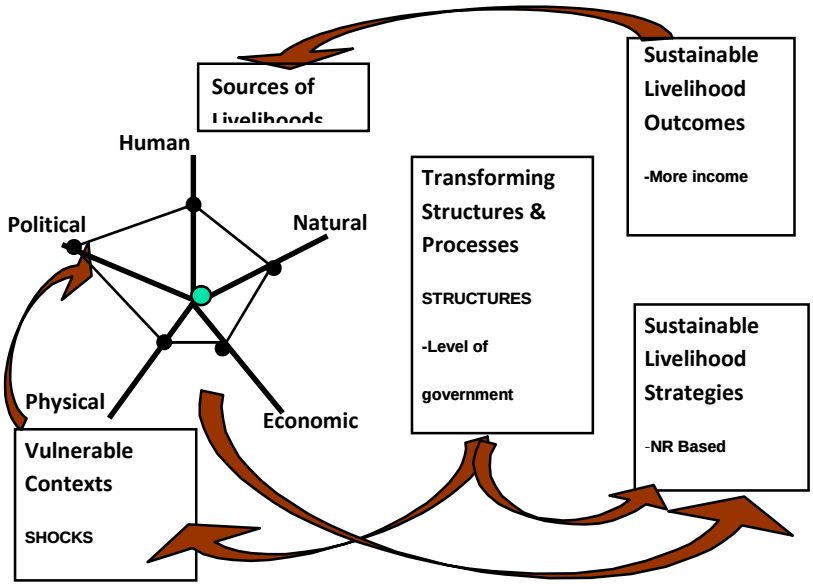
People from a wide range of socio-economic, geographical and cultural contexts harvest NTFPs for a number of purposes, including but not limited to: household subsistence, maintenance of cultural and familial traditions, spiritual fulfillment as well as physical and emotional well-being, scientific learning and income. NTFPs also serve as raw materials for industries ranging from large-scale floral greens suppliers and pharmaceutical companies to micro-enterprises centered upon a wide variety of activities (such as basket-making, woodcarving and the harvest and processing of various medicinal plants). NTFPs as a commodity with a focus on rural incomes and markets, as an expression of traditional knowledge or as a livelihood option for rural household needs, and, finally, as a key component of sustainable forest management and conservation strategies. In some contexts, the gathering and use of NTFPs can be a mechanism for poverty alleviation and local development.

Community forestry has become a means to increase natural, social, human, financial and to some extent the physical capital of community forest users for the analytical propose the idea if capital assets is borrowed from sustainable livelihoods approach with in which an integrated, holistic approach to rural development is now being explored by a number of donor. The livelihoods framework identifies five types of capitals that determine the ability of users to respond to both exogenous and endogenous pressures, known as the vulnerability context.

The term ‘sustainable livelihoods’ relates to a wide set of issues which encompass much of the broader debate about the relationships between poverty and environment. Yet in the existing literature, there is often little clarity about how contradictions are addressed and trade-offs are assessed. Many of the definitions of livelihood security currently in use derive from the work of Chambers & Conway (1992). A livelihood comprises the capabilities assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (DFID Guidance Sheet 2001)

Livelihood resources: Livelihood resources are often seen as the foundations of people's lives. Resources can be material and social, tangible and intangible. As well as identifying available resources, a livelihoods assessment should understand the different access to resources by vulnerable groups.

Figure: 2.3 Sustainable Livelihood Frameworks



Source: Department for International Development Sustainable Livelihood Guidance Sheets 1999

The important feature of livelihood definition is to direct the links between assets and the option, people possess in practice to pursue alternative activities that can generate the income level required for survival (Ellis, 1999). Assets comprises the numbers of components, these are natural, financial, physical, human and social capitals (Johnson, 1997).

NTFPs play an important role in addressing poverty issues for marginalized, forest dependent communities. NTFPs contribute to livelihood outcomes, including food security, health and wellbeing, and income (FAO 1995; Falconer 1996). The issues of rural and forest dependent people were understood unanimously by various donor agencies, hence the focused on poverty alleviation was emphasized. The pro-poor focused livelihood approach is to examine or understand individual or household economy to improve their standard of living, as natural resources are only sets of capital assets available to and used by the poor as part of their livelihood strategies (Carney, 1998; 1999; Farrington et al. 1999). Belcher et al (2005) of CIFOR reported that NTFPs are main sources of household income for value of the products and employment opportunities. NTFPs are more important to the low-income people. NTFPs can play a greater role in livelihoods of the poor people if their extraction and

sale are mange carefully. Local, regional, national, and international trade of NTFPs can significantly contribute to community and household economies. As a result, marketable NTFPs can provide an important means for economic growth and sustainable forest management in local communities.

2.2 Empirical Review

Oli (2016) has emphasized on his research study the contribution of community forestry in rural development has only concerned with the forestry and rural development of Nawalparasi district. This research focuses the access of different rural development opportunities and socio-economic status of people. It is not specific on the rural livelihood and forest products. He has Studied CFUGs in purposively selection method. In Consideration to rural development through livelihood assets generation, the positive indicator of improving forest condition after the handover was observed. 87% respondents believe that the condition of forest was being improving. The expense of group fund had contributed to build different infrastructure like community buildings, irrigation, drinking water, school buildings, agricultural roads, conservation ponds etc. Each selected CF has its own community buildings with necessary Furniture. CF Practices have contributed to build the social cohesion among the users. Users have developed the culture of discussion for doing collective action for common benefit without any discrimination. The CFUG had contributed in awareness and skill generation activities in community level. The researcher has come in conclusion that CF has contributed positively in rural development but rich and medium users have captured the assets in comparison to the poor and very poor users.

Bhatta (2012) has made the study in her article on the topic "utilization pattern of forest in chitwan district, gitanagar village has emphasized the protection of forest. Women are the primary users of forests so it is necessary to make a use of women's skill and knowledge for the development and conservation of forests and include them in the planning design of forestry program. She also emphasized on the fulfilling the need of people from the forest by planting the fast growing tree.

Paudel (2012) "The Magar managed community forest in Arkhala village of Nawalparasi district" Has concluded as community forest is the long term goal in forest resources management, team spirit should be promoted by conducting

awareness programs among local people. The distribution of forest products should be appropriate and effective as per community forest rules. As the policies and role of the government vis-à-vis community forest management were found unsatisfactory, necessary attention should be paid from the government level in the area. Community forest should not be limited for the use of local people rather it should be developed as a supportive mechanism for sustainable development and environment protection as well.

Rai (2012) has focuses on his article of "participation and benefits sharing in community forestry" – the CFUG has contributed significantly in community/rural development basically in supplying the needs of forest products, generating seasonal employment opportunities and investing the earning from the forest on social capital. But still there are enough rooms for improvement especially adopting the equitable benefit sharing policy or mechanism and making governing bodies substantially inclusive.

Pandey; Subedi & Dhungana, Opines that on "Economic potential of forest resources of Nepal"-Nepal forest resources underpin the livelihoods of rural people in important ways. During the countries planned development over the past 50 years the government donors and policy makers have viewed these resources as a key vehicle for ushering in economic growth and for meeting basic needs. They underscore the potential value of forest resources for achieving conservation and socio-economic objectives. To what extent have economic incentives been generated to effectively harness these resources to meet the said objectives is an open question. To address these question this paper reviews briefly and broadly the economic potential of the countries forest resources. In terms of forest goods and services estimates of economic potential of timber and non-timber forest products and environmental services have been assessed. A number of recommendations for realizing the potential for achieving development and poverty reduction objectives are provided.

Mulenga; Richardson; Mapemba and et. Al (2011). Contribution of NTFPs to rural household income in Zambia. NTFPs play an important role in supporting rural livelihoods and food security in Zambia. NTFP dependent households are poorer, have younger household heads with lower levels of education, and are located closer to district towns than other rural households are. NTFPs are a particularly important

source of income in Luapula, Northwestern and Western provinces. Income from wood fuel represented the greatest share of income for households that participated in NTFPs, and it was the most commonly reported business activity, with 68% of NTFP households reporting income from charcoal and firewood. NTFPs contribute an average of 32% to total household income among participants, with the poorest being more dependent on these sources. Given the widespread demand for wood fuel and other forest products, it is likely that rural households will continue to engage in the extraction and trade of NTFPs as a business activity. However, charcoal production, if left unchecked, could compromise the integrity of forests and adversely affect the availability of other NTFPs. In order to reduce households' reliance on charcoal/firewood as an income source, outreach efforts could promote other NTFPs such as wild honey, ants, and mushrooms as business activities. Mushrooms, ants, and caterpillars may particularly be important activities for female- headed households, as more female-headed household's derived income from these sources.

Bartaula, (2008). Has made the study in her thesis on the topic of "*contribution of non-timber forest products inrural livelihood through community forest."*Jhirghari is suitable places from the NTFP point of view. Here is available more than 100 species are found there in the Daman area but 13 are use in CFUG. The species having good quantity with market value are Laliguransh, Jhyau, Chiraito, Majitho, Bisphase, Banmula, Kurilo, Tholeokhati, Pakhanbed, Kaulo and Dhasingare. Out of them Jhayau, Bisphase, Jhulo, Kaulo, Majitho are most preferred and important NTFPs from the livelihoods point of view from which more royalty has been collecting for Jhighari CFUG.

CFUGs have also been found involved in rhododendron flower collection for juice making and dhasingare (*Gaultheria fragmentissima*) leaves collection for essential oil extraction. The major source of cash income in the CFUG is sale and distribution of NTFP production. NTFP cultivation has been recognized as recently practiced IGAs in the study area and noticed as most significant income generating activities in the near future. Particularly available NTFPs contributing local users mainly in four ways such as;

i. Increasing annual income by selling NTFP species;
ii. Developing skills by establishing rhododendron processing enterprise;

iii. creating local employment opportunities by NTFP cultivating, collecting and selling and

iv. contributing to social development activities.

Community development activities have been found more in Jhirghari CF. Around 19% of income by Jhirghari CF has been found expended in community development activities annually. Scholarship to the poorest students, foot trial maintenance and the forest management works are some exemplary evidences for which the CFUG has provided financial support. Involvement of poor and women in IGAs has been found significant. It seems that protection and sustainable management of the available NTFPs in the study area should be done in order to increase livelihoods opportunity of the local community people. To promote NTFPs concerned GO and NGO should lunch supportive programs such as NTFPs nursery, plantation, establishment of demo plot, NTFP based IGA etc. involving all most all the CFUGs and individuals in the Daman area. Since, some of the local users do not have adequate knowledge and skills on NTFPs, it is necessary to enrich their knowledge and skills on NTFPs identification, management and processing. In the same way, market arrangement should be done for NTFPs selling and distribution.

Adhikari, (2008). In recent years, rural households have faced greater hardships in earning their livelihoods from their own production due to rapid population growth and degradation of the resource base, mainly land and forest. As a result, they are shifting their emphasis from subsistence v farming to other sources of income to maintain their livelihoods. In the past, the proportion of household depending on multiple sources of income for survival was comparatively small as their farming could fulfill all requirements of basic food stuff like food grain. Although almost all households needed some non-farm income to purchase goods such as a cloth and salt that were not produced locally, nowadays the majority of rural households depend on many sources of income for survival. Depending upon geographical location, access to resources and infrastructural facilities, the sources of income or survival strategies have also been changing one study in kaski district has shown that village households alternate among strategies, utilizing whatever opportunities are available to them (Adhikari 1996: cited in Adhikari 2008). The same study has a documented change in farming system, exchange systems and labor migration pattern to take a advantage of

new income opportunities. Most of the rural households in the area studied now adopt strategies to serve the needs of the urban and wealthier household by supplying them quality village products such as milk, rice, ghee, herbs, wild foods, timber and stone slates. Seasonal and short term labor migration has also increased. Yet another strategy of rural households to extend livelihood security is to consume cheap and low quality food products while selling their home produced quality goods at higher prices. These livelihoods strategies have become possible because of greater integration of rural areas with the national and international marketing channels.

GACF secratarian-Community forestry bears potentiality in contributing poverty alleviation and the improvement of rural livelihoods. However, community forestry to be genuinely successful in sustainable poverty reduction, women as well as minorities needs to be involved and empowered (Ellis, 1999) is closely associated with low lends of education and lack of skills. Training and extension program organized through CF increases the skill and knowledge of the users and thus helps to select, design and implement the appropriate livelihood strategy for them. CFUG funds (Financial capital) and CFUG institution (Social Capital) has been used to develop physical capital such as roads, drinking water supply, school and irrigation canal at local level which has certainly help in improving the wellbeing of the people. This creates immense impact on poverty reduction and livelihood diversification.

Community forestry program has explored many learning in terms of empowering women groups depending on forest resources. There are many community forests which has been solely represented and managed by women committee in Nepal. CFUG has driven women capacity from household chores to societal representation. Women in CFUG bears equal roles and work hand-in-hand with male community. Even the disadvantage and ethnic community of rural areas has been empowered from different program implemented in CFUG. Different advocacy tools viz. collaboration, coordination, constituency, slogan, protest, press release, lobbying etc. used by community forestry users group, its federation has been success enough to tackle back for their basic rights to resources. Federation of community forestry users Nepal has always been tackling against social and governmental hindrance to secure the users' rights to forest.

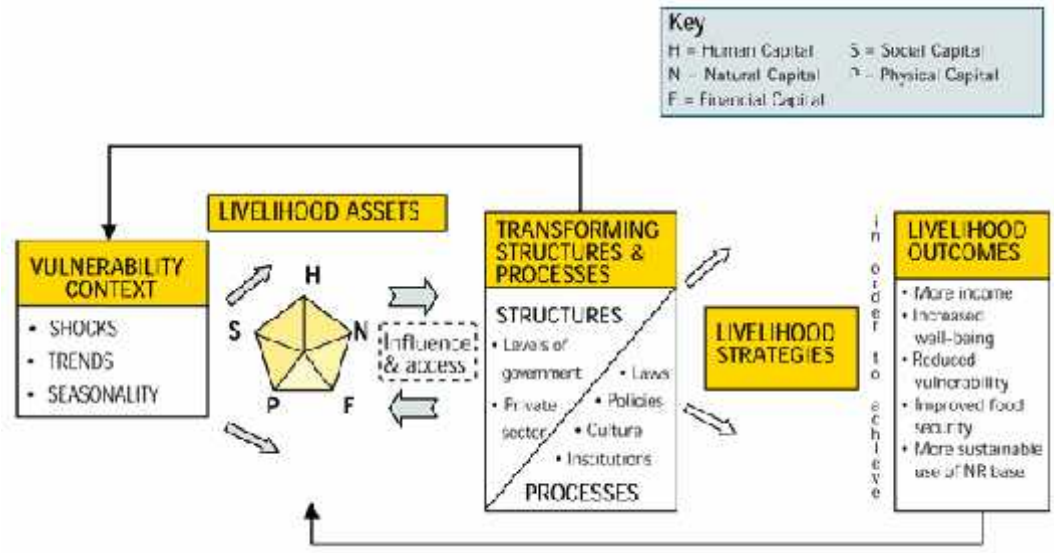
Livelihood study of this CFUG shows that the community forestry program has been supporting rural livelihood more or less sustainable. Improved participation in decision making, different income generation activities is enhancing the interest to developing new schemes for further improvement of livelihood and forest condition. This CFUG shows the cases of rural people who are farmer by occupation being dependent on forest resources for sustainable income earning and dependency of their farming system lies on forest resource. However, with numerous benefits exist; CFUG faces different issues from time to time. Either it's of forest policy amendment or it's of land right, tax and contribution CFUG throughout the nation fights for its rights to live with dependency on forest resources. Though there are plenty of income generation activities, it's always tedious to find easy market hub for the rural population to be sustained. In case of Sundar, CFUG establish number of enterprises, small scale business, market of non-timber products for supporting livelihood viz. broom, Muda (wooden chair), vegetable but it's some-how difficult to market channel and right marketing value. Users are selling their product in low price due to lack of abundant skill on product valuation and market strategy.

2.3 Conceptual Framework

With these issues in background, the study has adopted a research framework based on the Sustainable livelihoods Framework (DFID, 1999) to discuss the impact of forest on various livelihood assets of the households. The existing DFID framework has been modified by grouping the vulnerability context into forest and its Products stressors. The research framework of the study has been presented in figure 1. The vulnerability context is the external environment that affects the livelihood options significantly but peoples have 'limited or no control' over these. The DFID framework identified this vulnerability context as the trends, shocks and seasonality (DFID, 1999). the trends constitutes the trends of population, resources, economy, governance and technology; shocks constitutes human health shocks, natural shocks, economic shocks, conflicts and crop/ livestock health shocks; and seasonality constitutes the seasonality of prices, production, health and employment opportunities.

The study was identified the important livelihood assets of the household, DFID framework has identified five critical livelihood assets-human capital, natural capital, financial capital, physical capital and social capital that ensures positive livelihood

outcomes (DFID, 1999). Human capital comprises of formal and informal education, local ecological knowledge, ability to work and good health; natural capital is the natural resource flow and stock in the locality; Financial capital comprises of cash saving, supplies of credit, or regular remmitances and pension; social capital comprises of interpersonal network, membership in group, relationship of trust, access to wider institutions of society; and physical capital constitutes the productive assets owned by the households and communal assets. The composition of these households' assets determines the vulnerability and influence the choice of the adaptation strategies at household and community level. These adaptation strategies coupled with meso-level formal adaptation strategies by the government in turn impact the household assets and hence determines the livelihood strategies too. So the right mix of assets and the adaptation strategies minimize the vulnerability of the community and results to sustainable livelihoods outcomes.



Source: DFID Sustainable Livelihood framework (1999)

Vulnerability context: The vulnerability context frames the external environment in which people exist. This includes things like trends, shocks and seasonality, over which people have limited or no control.

Livelihood Assets: Assets are the capital of peoples which help to sustain the livelihood of the peoples. People's choice of livelihood strategies, as well as the degree of influence they have over policy, institutions and processes. Combination of

these assets is required by people to improve their quality of life significantly on a sustainable basis.

Transforming Structures: The institutions, policies, and social processes within the sustainable livelihoods framework shape people livelihoods. They operate at all levels, from the household to the international level, and in all spheres, from the most private to the most public. They also have a direct impact upon whether or not people have a feeling of inclusion and rights over resources.

Livelihood Strategies: Livelihood strategies are the range and combination of activities that people undertake and choices that they make to achieve their livelihood goals, such as productive activities, investment strategies and reproductive choices including: Farming, fishing, migration, business and self- employment etc.

Livelihood outcomes: livelihood outcomes are the achievements or outputs of livelihood strategies. More income, improved food security, physical security and peace, a secure job, shelter and good health, are some examples of livelihood outcomes.

CHAPTER - III

RESEARCH METHODOLOGY

Methodology is an important aspect to conduct any research. This study describes the research design, study of population, sources of data, sampling procedure and sample size, data collection tools, finalization of the tools, data collection procedure, data analysis and interpretation .

3.1 Research Design

This study aims to expose the status of livelihood of the Budhakot VDC; especially it focuses on the pale CFUG and Jamaldhara CFUG. The study applied both descriptive and exploratory type of research design which attempt to identify the uses of forest products and its impact on livelihood of the people. It is exploratory since it attempts to dig out the context of vulnerability, analyze the access of assets and influences, observe the policies, institutions and process and declares the scenario of livelihood sustainability of the Budhakot VDC. It is also descriptive because it is attempted to describe the assets: human, natural, physical, social and financial of the Budhakot VDC that they have at the present living place.

3.2 Rational of the Selecting Study Area

Based on the availability of different kinds of FPs, living maximum number of FPs collectors there and conducting by the CFUG. The study was conducted in Budhakot VDC Achham is located in the far western part of the country having abundant natural resources and covered by the Forest. This VDC was selected on randomly because of the following considerations:

- The VDC located in Hill region having abundant forest resources.
- Direct involvement of local community in collection, harvesting of FPs and looking other possible management through processing and marketing linkages for commercial benefits
- No one Researcher have not been study yet of this VDC.

- The diversity of forest resources and also in social dynamics motivates the researcher for doing research in this VDC.
- High volume of Forest products are is not properly recognized.
- Relevant secondary data are substantially available in the DFO.

3.3 Nature and Sources of data

The nature of the study was based on both qualitative and quantitative data. Qualitative data include like: field visit, observation and KII and quantitative data include like: HH survey and interview. Likewise, the study was based on mainly primary source of data for this study data collected from the field survey/observation of Budhakot VDC, selected community forest and surrounding forest and its products and KII, FGD, with the Teachers, VDC secretary and member of forest user groups. Secondary data were collected from different journals, CBS data, District forest office, and department of forest. Magazines, articles, books, email, internet and various dissertations are used to make the study which is more authentic.

3.4 Population and Sampling Procedure

The Budhakot VDC consists of nine wards. Total population of Budhakot VDC is 2877 with male 1309 and female 1568 and the total number of household is 517. The total numbers of CFUGs of Budhakot VDC are 10, from the listing which is 20% forest user group has been selected for the study purpose on the basis of simple random sampling by using lottery method so as to ensure the well representation of people of different income groups.

1. Pale CFUG
2. Jamaldhara CFUG

3.5. Sample Size

Based on simple random sampling techniques, samples of 53 user households were taken out of 172. The size of the sample is 30 % of the total user households. Sample household were taken in such a way where representatives of all wellbeing categories and different social strata can be captured.

Name of CFUG	Total Household	Sampled Household	Percentage
Pale	103	35	66.04
Jamaldhara	69	18	33.96
Total	172	53	100

3.6 Data collection Tools and Techniques

In this study, interview schedule was used for collection of information the structure of interview schedule has been open and close type.

3.6.1 Household Survey

Household survey were conducted to acquire detail information about population characteristics like caste, age and sex composition, religious, occupation education as well as landholding size, livestock number and their types and availability of FPs and its market status and Number of HHs collecting the FPs. The household survey questionnaire was finalized after incorporating comments from the supervisor and field pretest.

3.6.2 Observation

Observation methods were applied for getting holistic picture about socio-economic condition and collection of forest products of the community, CFUGs and available FPs and income generation activities lunched by the FUGs. The researcher observed collected FPs of community forests and discussed with local collectors. Direct observation method were used including observe forest product and human activities in forest sector.

3.6.3 Focused Group Discussion

Focus group discussion was conducted with both men and women falling on different socio-economic strata in CFUGs. Altogether 6 members (4 men and 2 women) were involved in focus group discussion. A focus group discussion carried out to explore the existing and the potential community based FP management practices, available timber and non-timber FPs, potential risk, threats and their management options. Group discussion provided the qualitative information on benefit of forest and socio-economic impact of forest products.

3.6.4 Key Informants Interviews

Executive committee members, school teachers and Secretary of VDC were taken as key informants for getting different kinds of information regarding the study. They shared the information about the FPs species availability, harvesting season, local storage methods, problems and prospects associated with FP marketing. The information obtained from group discussion was further cross-checked.

3.6.5 Reliability and Validity of Data

To maintain the reliability of data, cross–question method was applied after collecting information from the field. Unreliable and doubtful information was checked and corrected by the help of key informants and from available literature. Field observation and focus group discussion as well as key informant interview was still made the data reliable. The secondary data was also helpful to check the validity and reliability of empirical data.

3. 7 Data Analysis and Interpretation

During and after the fieldwork, the first-hand information and preliminary finding was discussed with local level stakeholders. Simple data analysis tools such as comparison, trend, percentage and other basic calculations were used to assess the contribution of FPs resources on the local livelihoods of CF users. The result of benefit sharing pattern among different socio-economic, castes, of the users were presented in tabular form, graphical and diagrams. The qualitative data were analyzed by descriptive measures and also presented in the form of charts and tables. Collected data are checked, verified editing, coding on the field manually to reduce error them the researcher simple descriptive statistic tools were used analyzed according to tables, figure and graph .Then the interpretation has been done according, the simple statistical tools like SPSS, percentage frequency is used in this study.

CHAPTER – IV

PROFILETO THE STUDY AREA

The chapter presents the general information about the people and the place of study area including general introduction of the VDC and the district. It describes the natural resources, physical condition of the study area as well as their Socio-economical life.

4.1 General Introduction of Achham District

Achham district is situated between 280 45' – 290 22' North latitude to 810 7' – 810 35' East longitudes, in the seti zone of far western development region province No. 7 of the country. It covers 1692 square kilo-meter with altitudinal range 540- 3820m from mean sea level. Comprise 52 VDCs, 3 Municipality and 13 Ilakas. Topographically the district is very steep and slopes with middle hills. It's headquarter is at Mangalsain. The district is politically bordered with different districts such as Kalikot and Dailekh, are the eastern part of the Achham district, Doti is the western part of the Achham District and Bajhang and Bajura are the Northern part of district and Surkhet and Dailekh is the South part of the district. According to the Census 2068, the total population of Achham district is 257477 with 120008 male and 137469 female having 48351 households. There are 80.6% population are economically active in Achham District.

Table: 4.1 Situation of the Total land

SN	Land use	Area (sq km)	Percent
1.	Forest sector	872.00	51.69%
	a) Hard forest	142.63	8.43%
	b) Soft forest	227.58	13.49%
	c)Mixed forest	267.41	15.85%
	d) conserved forest	236.38	13.95%
2.	Shrub/Bushes	40.43	2.40%
3.	Grazing Land	149.56	8.81%
4.	Agriculture land	564.47	33.41%
5.	Barren land	48.61	2.60%
6.	Rocky area	4.02	0.18%
7.	Sandy area	11.91	0.63%

Source: District development committee district map 2067

From the above table we can see that the total area covered by the forest is 872 (51.69%) is the highest area of the total area of achham district. The agriculture land occupied 564.47 land of the Achham district. Grazing, barren, rocky and sandy sector are covered 214.1 land of the total area of Achham district.

Table: 4.2 Different forest and covered land

SN	Name of forest	Number	Area (hac.)	Benefitted Household
1.	Community Forest	364	36402.04	53361
2.	Religious Forest	1	3.70	……
3.	Leasehold Forest	139	629.65	1482
4.	Private Forest	0	0	0

Source: District forest office, Achham - 2072

4.2 General information of Budhakot VDC

Budhakot is one of the VDC of the Achham Dsitricts at distances of about 90 KM far from headquarter of Mangalsain. VDC of the same district lies in the North-East, Devistan VDC, in the North–West Patalkot VDC, in west-south Marku and Jwalpadevi VDC, in the east-south devistan from the study area. The altitude of this VDC ranges approximately from 1200 to 2500 meters above the mean sea level. Thetotal population of the Budhakot VDC is 2877 where 1309 male and 1568 are females.

The Budhakot VDC is heterogeneous in terms of castes composition such as Brahmin, Chhetri, and untouchable castes. Kami, Damai, Wod, Sarki, Sunar, Mijar are belongs to untouchable caste. Bhatta and subedi belongs to Brahmin community and Kunwar, Thapa, Saud are as a Kshetri in Budhakot VDC. There are 61.28 % populations of Budhakot VDC are literate including 78.06 male and 47.80 are female. The main occupation of the people of Budhakot VDC is agriculture as 90.12 percent of people are depended on agriculture, 1.38 percent of people are depended on service, 1.95 percent of people are depended on business and 1.47 percent of people are depended on different sector and 5.09 percent population are unemployed. Agriculture livestock farming and temporary job in India is the main occupation of the people in this region and having occupational works as addition.

4.2.1 Forest Condition in Budhakot VDC

Budhakot VDC is rich in biodiversity due to a high variation in altitude and climate. The total area of the Budhakot VDC is 2656 hacters. Out of total land of the VDC Forest and shrub together covers 1571 Hectors (59.14%) of the total area of the VDC. Major forest types found in Budhakot VDC are Sal forest in the lower region of VDC, upper mountain hardwood forest; it is the most dominant forest with 50% of the total volume of reachable forest in the VDC. The forest resources in Budhakot VDC are managed through major four approaches i.e. community forestry, leasehold forestry, government managed forestry and protected areas. Main tree species found are Sal, Saj, Baj, Kharaj, Katuj, Gurans, and Salla. Main Crops grown are Rice, Wheat, Lentils (Mas, Bhatmas, Gahat), Major crop Paddy and some vegetables on irrigated land where as maize, wheat, Mustard and Barley are grown on non-irrigated lands.

- The occupation is agriculture as well as working in india especially in winter season that play the important role for the livelihood of the peoples of this VDC.
- The climate condition of VDC is tropical and average annual rain-fall in this district is 1706 mm. Average temperature ranges from 2.5 º Celsius to 35º there is mild and cool temperature in the hilly area.
- Tropical forest of Sal mixed forest, Khayar mixed forest and Mango mixed forests are found in natural forest whereas, Baj, Kharaj, Katuj, Gurans mixed forest are found in upper side of the VDC. There are 10 CFs covering 936.69 hectare of forest.

Table 4.3 Land use of Budhakot VDC

S.N.	Land Use Type	Area (Ha.)	%
1.	Barren Land area	630	23.72
2.	Bush area	561	21.12
3.	Cultivated area	432	16.27
4.	Forest area	1010	38.03
6.	Water body	2.31	0.09
7.	Pond or Lake	0.56	0
8.	Other	20.13	0.76
	Total	2656	100

Source: VDC Profile, 2011

4.3 Description of the Selected CFUG

4.3.1 Pale community forestry user Group

This study was conducted in Budhakot VDC Achham. There is various Community forest in Budhakot VDC. The Pale Community Forest lies in the northern temperate region (about 1200 m above from mean sea level). Community Forestry 106 ha of mixed forest was handed over to 101 households in 2053 B.S.

Pale CF lies at an elevation of 1260 miters Bhuwathana to 2,060 meters at top of Ranisain. It is totally steep in topography and is full of biodiversity. The climate of this forest is sub- tropical. Most of its forest area faces towards Western and Northern sides. There are human settlements downwards as well as the periphery of the forest. This community forest provides drinking water and water for irrigation for most parts of Luyata village, school and adjoining areas. The pale community forest also gives valuable herbal products, firewood, timber fodder, grasses as well as edible products to the users.

This is the area of high-hills of lower temperate forest i.e.Baj, Kharaj, Katuj, Laligurans, Kaphal, etc. Pale community forest users group was formed in 2053 after new Forest Act (1993) proclaimed. The research site is located about 9 km far from Sanphebagar municipality, connected by local bus service. The different types of FPs are distributed uniformly in Pale CFUG.

The Pale CFUGs in Budhakot are managing FP successfully; however they lack adequate technical knowledge and technology in terms of preparing plan and implementation of harvesting, processing, marketing and trading system. Other issues such as equitable benefit sharing are always the burning question for securing livelihoods of the poor under heterogeneous socio-economic setting of common pool resources management. The study about contribution of FPs in rural livelihoods is essential for sustainable conservation, cultivation, and utilization of the resources to secure livelihoods of people and contributing towards attaining the Sustainable Development Goals through poverty reduction.

4.3.2 Jamaldhara Community forest user group

(A) Nature of the Forest: Jamaldhara community forest lies in the ward no 6 of Budhakot VDC. The forest is natural forest. Total area of the forest is only 4.73 ha. It was established in 2053. The composition of the forest Sal, Saj sisau, khayer and Jamun but dominated by sal trees.

B) User Group: Jamaldhara CF is a community forest managed by mixed group consisting mainly is dalit, and so called high caste Brahmin and Chhetri. There are altogether 69 households as user of the community.

C) Management Practices: Being the natural forest, users groups are practicing singling, thinning, and selection feeling based on their operational plan. Users groups kept forest watchers for regular watching the forest to control illegal activities. Users are getting sufficient grass, fuel wood, Fodder, herb and timbers from CF. The users of CFUGs sell the surplus forest product to adjoin Users and near market. Being the plantation forest, in the beginning this CF was managed through collecting monthly fee from users. Users getting sufficient grass from CF but everytime they can't get timber and firewood from the forest.

Jamaldhara Community Forestry 4.73 hac of mixed forest was handed over to 69 households in 2050 B.S. Jamaldhara CF lies at an elevation of 1200 miters khali to 1300 meters at top of gerukhana. It is located in ward number six of Budhakot VDC Achham. The climate of this forest is sub- tropical in temperate. There are human settlements upwards of the forest. This community forest provides a lot of thing like herb, Grass, timber, fodder, firewood etc.

Forest Products and its uses

Table: 4.4 Availability FPs and their uses by the Cast

Local Name	Use parts	Chhetri	Dalit
Chiraito, Timbur	All parts	To control high fever and heal to cough.	To control high fever and heal to cough.
Kurilo, Banmula, Jhyau	Root fruit	Vegetable	For selling
Nigalo, Bans	All parts	To make doko dalo	Making doko dalo and selling handicrafts
Laligursh	Leaf and flower	Flowers are eaten as pickle and fresh flower are believed to be able to dissolve fish bone stuck in the throat	Headaches problem and using for simply pickled
Jhyau,	All parts	Menstrual irregularities	Menstrual irregularities
Thakra, mushrooms, Firewood, Nigiro, Mango, Herbal products, grass, fodder, Amala	All parts	Housing purposes	Housing purposes
Timber, Agricultural instruments, Berry /Firewood	All parts	For selling	For selling
Bojho,	All parts	Mouth fresh, control cough	Mouth fresh, control cough
Kaulo	Bokra	To save evil eye	To save evil eye
Jhulo	All part	For selling	For selling

Source: Field Survey, 2016

Linking Farmers livelihood with Forest

Budhakot VDC, landscape and forest endowment reflect the topographic and physiographic diversity, intermixed with the mosaic of agriculture farming with forests in between. Farming, forests and livestock rearing have traditionally been integrated, but now with demographic pressure, and market penetration, the dependence on forests for livelihood is receding in and around urban centers. In the study area, fuelwood and other biomass still provide 96.5 percent of household energy. Although subsistence agriculture is still the main occupation of Budhakot

VDC, their contribution is a meager to GDP of Nepal- indicating that productivity of and thus the returns from agriculture are quite low.

Rural life is closely related to the forest. In Nepalese context, traditionally rural people have been fulfilling their basic daily product needs from forest. Total Nepal national income is being generated from agriculture sector. Farmers are the main contributors to add the national income. Farmers are the rural communities their livelihood support depends on agriculture and livestock. So far the livestock is concerned it is dependable on forestry. Livestock play an important role in local food security in developing countries especially for the farmers. Farm manures are often the sole means of soil fertilization in areas that are far from the road and where farmers are unable to afford fertilization. Apart from the livestock rural community are interlinked with their daily needful resources such as construction material, furniture, medicinal goods, fuelwood and other income generating involvement from forest products.

CHAPTER V

RESULT AND DISCUSSION

This Chapter presents the socio-demographic characteristics of the respondents, livelihood strategy, livelihood assets, and access to the assets, employment generation and future potentialities and present status of forest products and its use in different purposes.

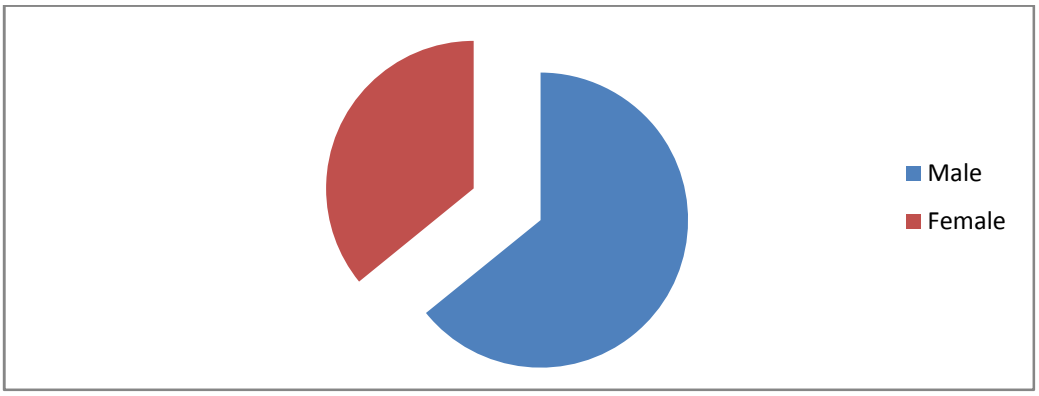
5.1 Socio-Demographic Characteristic of Respondents

The socio-demographic figure of the respondent's sex and age of the respondents are presented as bellow:

5.1.1 Respondents by Sex

There are 65 percent of the respondents were male as the female has hesitation of express their ideas and lack of leisure time. Other cause for fewer female respondents was also due to cause of nothing the female as household head. Out of 53 respondents 34 respondents are male whereas, 19 respondents are female.

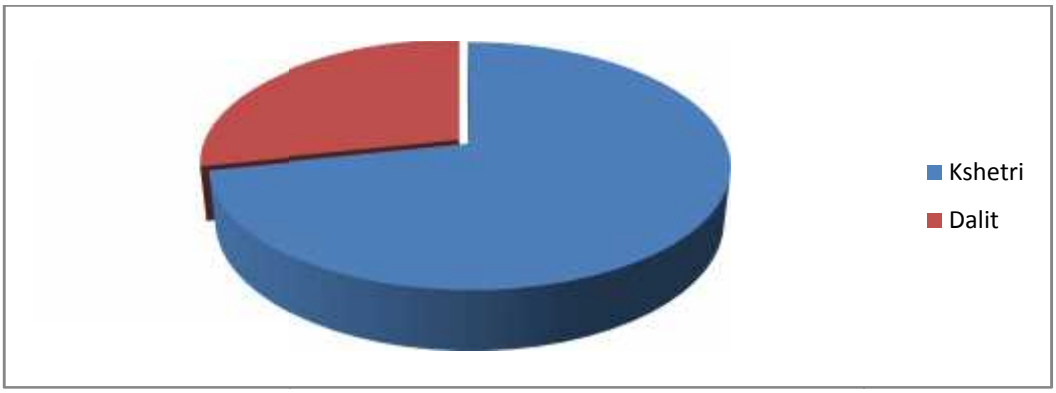
Figure: 5.4 Respondent by sex



5.1.2 Caste Composition of Respondents

The average family size is 5.56 people per family, the population demography constituted by Chhettri, and Dalit. The CFUGs is combined by two different caste compositions Chhetri and Dalit.

Figure: 5.5 Caste Composition of the Respondents



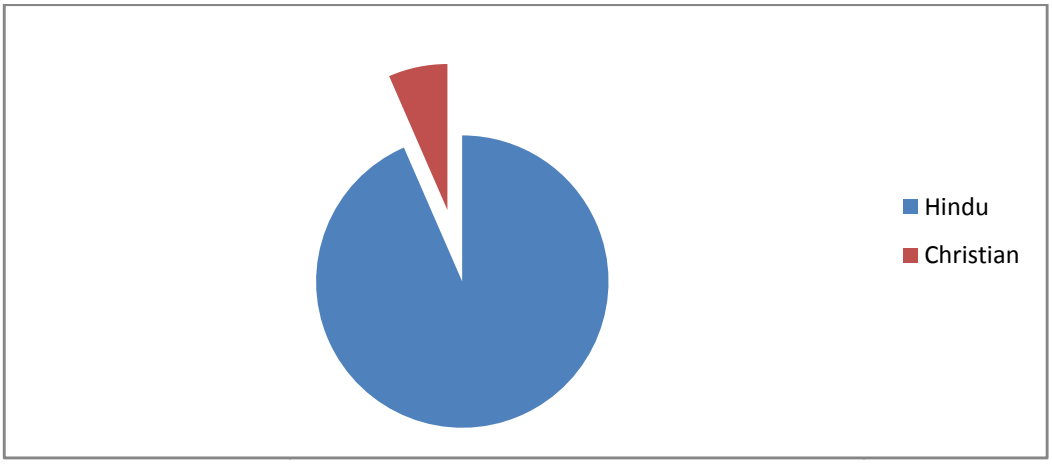
Source: field survey 2016

Total Respondents of the CFUGs are 53. Out of total population dalit constitute only 28.30% kshetri constitute 71.70%. The Figure no. 3 shows that kshetri is the highest group having 38 users in the study area whereas, untouchable castes are 15

5.1.3 Religions of the Respondents

Most of the users were associated with Hindus 93.44(%) and 6.56(%) are followed Christian. The religion distribution of selected CF is shown in table no. 5.

Figure: 5.6 Religion of the Respondent



Source: field survey 2016

From the above table we can see in the figure about 93.44% users are from the hindus whereas 6.56% the negligible portion of the users are Christian.

5.1.4. Age-wise Population Compositions of the Respondents

The total users of selected CF were found 899 with 414 males and 485 females. Out of total respondents 53 were selected based on different age groups. There are different age-groups population stay which is shows in the table no 4 below.

Table: 5.5 Age-wise Population Composition of respondents

Age-group	Male	%	Female	%	Total	%
15-30	5	14.71	6	31.58	11	20.75
31-45	15	44.12	8	42.11	23	43.40
46-60	10	29.41	4	21.05	14	26.42
60 Above	4	11.46	1	5.26	5	9.43
Total	34	100	19	100	53	100

Source: field survey 2016

As shown in table 4, out of total users, 65.86 % population is economically active, whereas 34.14 % respondents are considered dependent population who has below 15 years age group and above 60 years age group. However, in the field observation it was found that the age below 15 years old children provide crucial assistance to their parents for domestic task (Fetching water, animal pasturing cleaning house, clothing, cooking, and gathering fodder, firewood and others).

5.1.5 Education Statuses of the respondents

There are only one education institutions in the study area. The educational status of the study area is shown in the table no. 6, which is found comparatively not good of education than the other surrounding VDC.

Table: 5.6 Education statuses of the respondents

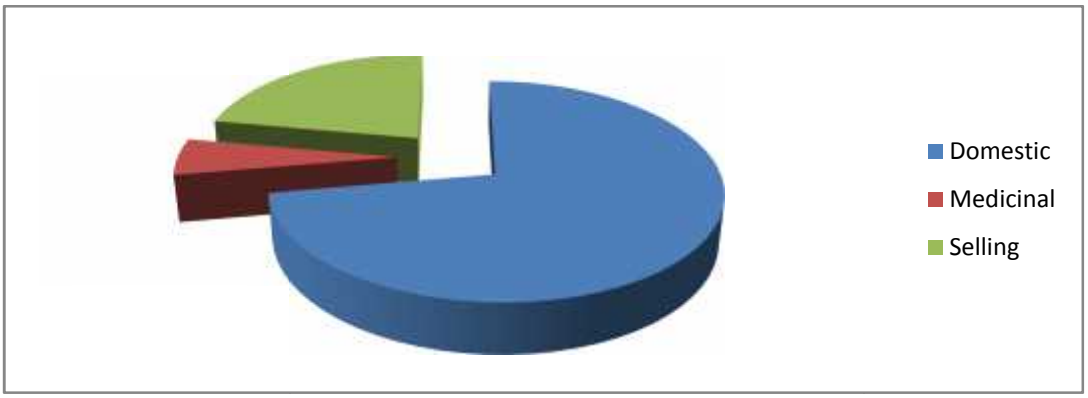
Level of education	Male	%	Female	%	Total	%
Illiterate	2	5.88	1	5.26	3	5.66
Illiterate	5	14.71	4	21.10	9	16.98
Primary	8	23.53	4	21.10	12	22.64
Secondary	5	14.71	6	31.58	11	20.75
SLC	6	17.65	2	10.53	8	15.09
SLC above	8	23.53	2	10.53	10	18.87
Total	34	100	19	100	53	100

Source: Field survey 2016

As shown in table 6, illiterate users who cannot read and write are 5.66%, and literate people they can read and write their name and signature are 16.98%. Here, 18.87% users have got high school level education (up to grade 10). They expressed their interest to take higher education but they could not effort to spend money. Other hand, there is no higher level school in the study area; they have to go to Prabha dhamkot higher secondary school sidheswar for this. This is the main reason they could not take higher education.

5.1.6 Uses of forest products in different purposes

Figure: 5.7 Purpose of FPs Collection by users



Source: Field Survey, 2016

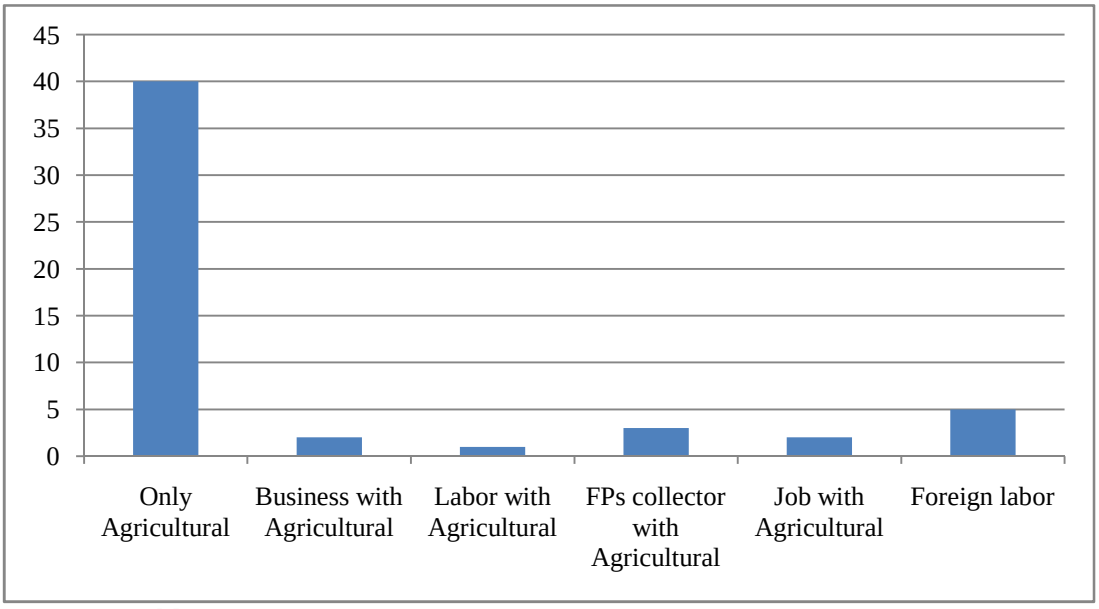
Available Forest products in selected community forest users are using these products for different purposes. Mainly they are using domestic purposes and orderly Selling and medicinal purposes.

5.2 Livelihood Strategy

5.2.1 Occupation of Respondents

Occupation is one of the important aspects in determining the status of the people, which can promote their economic condition & standard of living. As Nepal is the agricultural country, most of the peoples are engaged in agriculture. But in the study area, agriculture is not only one main occupation while the users are engaged in different occupations like agricultural and non-agricultural which is shown in table no. 7.

Figure: 5.8 Occupational Distributions of the Users



Source: Field survey 2016

Table no 7 shows that about 75.47 % people are engaged in agricultural occupation for their livelihoods. They do not have other sources of incomes. Remaining other users involve in other activities like farming with business, business, FP collection and wage labor. Though majority of them share farming with other occupation.

5.2.2 Landholdings of the Respondents

In the agrarian Country, landholdings determine the well-being status of any household. Having more land represent, the greater wellbeing status within society. On this assumption, land holdings was categorized in four groups namely, having the land less than 15 Ropani, 16 Ropani to 30 ropani, 31 ropani to 50 ropani and more than 50 ropani.

Table: 5.7 Landholding of the respondents

Land (Ropani)	Khet	Pakho	Bari
Below-15	8	0	2
16 – 30	25	2	12
31 – 50	15	30	25
51 – Above	5	21	14

5.2.3. Livestock rearing practices

Table: 5.8 Livestock rearing practice

Livestock Rearing System	Buffalo rearing Practice		Cow Rearing System		Goat rearing Practice	
	Before CF	After CF	Before CF	After CF	Before CF	After CF
Grazing	25	18	38	38	40	40
Stall Feeding	15	18	10	9	6	7
Mixed	10	14	5	6	7	6
Total	50	50	53	53	53	53

5.2.4 Collecting major forest products by respondents

Table:5.9 Forest products collect by respondents

Respondents	Duration	Firewood	Fodder	Grass
30	Per day	1 bhari	1 bhari	1 bhari
15	Per day	1 bhari	2 bhari	2 bhari
8	Per week	2 bhari	2 bhari	3 bhari

All of the respondents are dependent on traditional type of stove which needs more fuel wood. The users of selected community forestry uses the fuel wood more. The main source of energy is the firewood. Mainly the firewood uses to cooking, lighting and heating.

5.2.5 Forest Management Activities:

Different forest management activities are regularly practicing the community forest. The major programs of forest management are thinning and singling, sanitation and weeding activities. In addition plantation and re-plantation in the open area is regularly conducting the Pal than. However the management practices are overlapped. Management activities also generated the employment to poor users.

5.3 Livelihood Assets

The livelihood pentagon of the sustainable livelihood Framework deals about the five capitals of rural livelihoods. This study mostly focuses the assets developed due to the implementation of the community forestry program.

5.3.1 Natural Assets

Table: 5.10 Condition of the Forest before and after Handover

Condition of Forest	Pale	Jamaldhara	Total	Percentage
Very improved	14	6	20	37.74
Improved	14	6	20	37.74
No change	7	6	13	24.53
Bad	0	0	0	0
Total	35	18	53	100

5.3.2 Financial Assets

Annually Income of respondents selling by Forest products

All users had their own livelihood strategy. Within these most of them are earning money from the selling the forest product. Major income source of CF was selling of forest product mostly timber and fuel wood. Khar/Ghas selling had also contributing raise fund and income of CFUGs. Income by selling the forest products.

Table: 5.11 Annual income of respondents

Income	Pale	Jamaldhara	Total	Percentage
10000 – 20000	11	4	16	30.19
21000 – 40000	14	6	20	37.74
41000 – 60000	4	3	7	13.21
61000 – 100000	3	2	5	9.43
100000 above	3	3	6	11.32
Total	35	18	53	100

5.3.3 Physical Assets

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. It include housing pattern, Situation of toilet etc. Office building, support to school building, road, household toilets are created through CF fund. Each

CF has its own office building with necessary furniture. In Pale CFUGs supported to construct household toilet through fund. Every CF has as well as timber support form community forest.

a) Access in physical Assets

There was no discrimination in the access in the physical assets. Road, irrigational, were equal accessible to all users. In the case of electricity there was no subsided for poor users this this facility was not equally accessible to the poor users.

5.3.4. Social Assets

a) Participation in Meeting

Through the community forest Participation of women and dalit were increased. Total of 69% respondents agreed that they attained meeting. Out of 70% respondents who attain meeting always and it followed by 16% frequently often and regularly.

b) Access in Social Assets

Membership

In the executive committee, the representation from rich and middle class was 67% in sample CFUGs. The representation of very poor group was only 33 percent. Rich and middle class user captured the decision-making position of the executive committee.

Table 5.13: Representative in CFUG committee

CFUGs	Rich	Medium	Poor	Total
Pale	3	2	6	11
Jamaldhara	2	9	4	15
Total	6	20	13	39

5.3.5 Human Assets

Human capital refers the skills, knowledge, and capacity to labor and good health that together enable people to generate livelihood strategies and achieve their livelihood objectives. Human capital is increased by investment in education and

training/workshop as well as by the skill acquired through pursuing one or more occupations (Ellis, 2000).

a) Educational Level of the respondents

Among the total respondents, 5.66% were illiterate and 94.34% were literate. Among the literate 22.64% respondents were able to write the read simple text, 35.8% had the education up to SLC and 18.87% respondents have education above SLC.

b) Participation in Income Based Training

Only 13% respondents had taken income based training and income generation activities. Among the respondents who have taken the income based training, majority had taken agricultural and vegetable-farming took training followed by livestock farming, poultry and beekeeping. One respondent said that he took furniture making training and supported to uplift additional income to family.

- Doko/ Dalo makin: Both CFUs has been practicing Doko/ dalo making business for supporting their livelihood. Some users has been making other instrument like: kuru (Big container uses to kept paddy, wheat etc), suppo etc for selling. The final product from the Nigalo normally gets market in the local area and within the users' household. CFUG sell the products in a low rate.

- Wooden chair (Bamboo made-Muda) 18 household in the selected CFUG were given a training of making wooden chair from bamboo. This training was conducted by the CFUG committee with the urge to catering livelihood option for the rural poor. Household were selected from the well being ranking procedure. These kinds of chair are mostly seen common in the rural areas. Bamboos are planted in one ha of land for the raw product in the wooden chair (Muda). Market price of one chair is NRs 200 only.

c) Access in Human Assets

Table: 5.12 Awareness program with respect to well-being Rank

Awareness program	Rich	Medium	Poor	Total
Study tour	6	5	2	13
Seminars	2	1	1	4
Leadership	1	1	0	2
Forest Management (Field based)	2	2	3	7
Total	11	9	6	26

Generate Employment opportunities

Pale community forest users group provide employment opportunities to a single people called "Banpale" for looking the forest. All users of pale community forest gives to one pathi paddy and single pathi wheat per month according to rules and regulation of the community. Banpale goes to the nearest forest and search the forest product thief and punishes who is smuggling the product without rules of forest. In addition to this Jamaldhara community forest users group also provide employment opportunities to a single people for care to the forest and gets the same property by CFUGs.

Contribution of FPs in rural livelihood improvement

Traditionally, the local people have been using the FPs for the fulfillment of their subsistence need. But, nowadays, people have been promoting FP not only as medicine or consumption purpose but also as alternative source of income. The contribution and benefits through the FPs can be summarized in following points.

As mentioned in the chapter all families of the study area are more or less engaged in FPs collection consumption and selling that means its collection is also one of the major occupations of the community. Likewise, since about 30.19% people have less than NRs 20,000 annual income from Forest products selling. Similarly, 37.74% users are earned 21000 to 40000, 13.21% earned 41000 to 60000, 9.43% earned 61000 to 100000 and 11.32% earned above 1 lakh. In the study area mainly people are engaged in agricultural sector. The raw material for mass production can get from the forest. All people uses the fodder for agricultural production, grass use for cattle feeding, herbal production uses for heal the disease, timber and firewood uses for selling and cooking.

Livelihoods improvement through NTFPs: a case study of Pune B.K

Pune B.K is a 55 years old member of Dundaula CFUG, who is staying in Budhakot VDC since his childhood. He has Five children with his sick wife. His family background is very poor, so it was difficult to fulfill daily needs of his family. Making Doko, Dalo, Kuru (a container using to keep the grain), and Basket is his inherent occupation. He has starting to collect the Nigalo and make the different objects to using the household. He spend his maximum time to collect the Nigalo and making Doko and Kuru.

Income generation activities in Selected CFUG

From the very beginning, both CFUG has been focusing on income generation activities to uplift the living standard of users group. CFUG has performed income generation activities from time to time. There are different independent group within it like to perform each activities viz vegetable farming group, goat herding group, Handicraft group etc. In the present context the number income generating activities that is being performed by selected CFUG is depicted below:

a. Herbal products selling: Users always used to selling the medicinal plants collecting from the forest. These herbal have medicinal value. Herbal products have high value in the market. Users have started from the very beginning of aromatic, herbal, medicinal plants for income generation of the rural household.
b. Goat herding: Forest plays an important role to rearing the livestock. In the study area mostly people have some goats. This is one of the major income generating activities perform by users. There are altogether 50 household being involved in goat herding. Especially the hi-goats are selling to customer and generate income.
c. Firewood selling: Many users are used to sell forest products especially the firewood in nearest market and generate income. The income from selling the firewood users used to pay for their children education and buy some grossary goods like: kerosene, oil, soap, soda and cloths. Firewood selling contributes to sustain the livelihood to the users.

CHAPTER–VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Findings

Nepal is rich in forest products because of its diverse physiographical, altitudinal, and climatologically conditions. Many of these products provide important supplemental livelihood resources for families who can grow only enough crops to feed themselves for a few months of the year. Most of those FPs are open access and are over-harvested; as a result, their management is vital to any forest management scheme. FPs are important to reduce poverty in rural areas. Increased FPs production and sales have been impressive in Nepal and associated income generation has been a significant boost to the local economy.

The study "Contribution of Forest Products to promote Rural Livelihood" was conducted in Budhakot VDC of Achham district aiming to develop understanding about contribution of forest products to promote rural livelihoods linkage in the interface of livelihoods and forestry in Nepal. The main objective of the study was to attempts to find out the major FPs available in study area and contribution to the rural livelihood upliftment. This study also tried to analyze some socio-economic characteristics of the user's community forest.

This research is based on the descriptive and exploratory research design. The researcher along with the executive committee members collected the information through the KII and household survey and facilitated the assessment in every hamlet caste, class and gender groups and individuals. The study was carried out some sequential steps of research methodology such as defining research problems, reviewing literature, designing research, collecting data, analyzing data, interpreting and organizing the report. Required data and information were collected from intensive field works such as household survey, observation, focus group discussion, key informants interview.

There are 517 households having 5.33 persons per HH in Budhakot VDC and 10 Community forest user group which was universe of the study. From the universe, 2 CFUG (20%) were taken for study. Only two CFUGs were chosen for the sample by

applying simple random sampling technique. There were 34 male respondents and 19 female respondents were selected from the universe. Most of them are FP collectors with depend on Agriculture. 72% respondents were from Chhettri and 28% from Dalit were selected. Regarding the educational status of the respondents, 83% are literate and 16.98% are totally illiterate. In case of occupational status of respondents in Budhakot VDC, 75% respondents were engaged in agriculture activities, 5% are engaged on non-farm activities such as business, FPs collection and wage labor etc. Similarly, 15% of the respondents have below 15 Ropani of land. Thereby 47.17% of the respondents have 16-30 Ropani. 28.30% respondents have 31-50 Ropani and 9.43% respondents have above 50 Ropani of land. The average land holding size of the respondents is 20.5 ropani per household.

There were different types of FPs found in the study area some of them are important to uplift the economic condition of the users by selling and using FPs. Most of the respondents collect the forest products for their daily purposes and few respondents are collect the forest products for sale. The FPs such as Nigiro, Mushroom, Ban Tarul are collected for vegetable propose. Firewood, Timber, herbal products are for the selling.

6.2 Conclusion

Collection of firewood, berry, and agricultural instruments are some of major income generation activities of the VDC. The FPs available in the CF contributes not only in terms of cash income but also in terms of develop skills, employment opportunity and initiating social development activities towards FPs cultivation, processing and selling which ultimately converted into income generation among users and helps to uplift their livelihoods condition.FPs has highest contribution in increasing financial and social assets of the users.

The Pale community forest users earn about 29,901 from selling Timber, herb and firewood which is the highest in comparison to other FPs. Similarly, the Jamaldhara CFUG has earned Rs. 54,411 from Timber production only in the year of 2072.

It was found that 18 % of the respondents don’t have proper knowledge about FPs identification, using patterns, harvesting time and techniques etc. Out of 13 important

species of FPs identified in the study area, jhyau, berry, nigiro and herbs are the best preferred FP species followed by Timber, wild edible thing, mushrooms.

Pale CF located at Budhakot VDC and nearby area is very important and suitable places from the FP point of view. Here is available more than 100 species are found there in the Budhakot VDC area but 11 are CFUG. The species having good quantity with market value are Jhyau, Agricultural instrument, herbal products and spices.

The major source of cash income in the CFUG is sale and distribution of FP production. Significant income generating activities in the near future. Particularly available FPs contributing local users mainly in four ways such as;

i. Increasing annual income by selling FP species;
ii. Developing skills by establishing Committee and training;
iii. Creating local employment opportunities by FP cultivating, collecting and selling and
iv. Contributing to social development activities.

6.3 Recommendation

Community forestry bears potentiality in contributing poverty alleviation and the improvement of rural livelihoods. However, community forestry to be genuinely successful in sustainable poverty reduction, women as well as minorities needs to be involved and empowered (Ellis, 1999) is closely associated with low lends of education and lack of skills. Training and extension program organized through CF increases the skill and knowledge of the users and thus helps to select, design and implement the appropriate livelihood strategy for them. CFUG funds (Financial capital) and CFUG institution (Social Capital) has been used to develop physical capital such as roads, drinking water supply, school and irrigation canal at local level which has certainly help in improving the wellbeing of the people. This creates immense impact on poverty reduction and livelihood diversification.

Community forestry has given many facilities to the people and empowering women groups in the society. There are many community forests which has been solely represented and managed by women committee in Nepal. CFUG has driven women capacity from household chores to societal representation. Women in CFUG bears

equal roles and work hand-in-hand with male community. Even the disadvantage and ethnic community of rural areas has been empowered from different program implemented in CFUG. But, instead of some of the problem are there in the CFUGs which are follows

Recommendation for Users Level

i) Equitable benefit sharing system should be adopted during the distribution of forest products, group fund and other opportunities such training, capacity building.

ii) Some amount of fund should be allocated for pro-poor activities in every community forest in a regular manner.

iii) It is very important to include poor, Dalit, women and other disadvantaged members in the decision making position of CFUG s in order to be inclusive governance. That makes them accountable to represent poor in planning and implementation, and increase leadership as well.

iv) CFUGs should increase participation of their users in sharing of information and in decision-making process.

v) Recommendation for District Level

vi) Technical support for active forest management needs to be provided through DFO and/or other partner organizations.

vii) NTFP cultivation should be promoted with sufficient technical knowledge and well established marketing mechanism should be improved in district level.

viii) Identification and promoting of viable forest based enterprises can be established in a way provides sustainable benefits to the poor users. It could generate the green jobs

Recommendation for policy Reform

i) There should be provision of utilizing degraded and fallow CF land cultivating agricultural crops by poor users for the period of three to five year. This could additional income to poor and excluded users

ii) Policy should be shifted from subsistence level to commercialization of forest resources through active forest management in productive community forest.

Future Research

i) Economic valuation of CF "will provide the situation of real benefit of forest to the local economy.

ii) Marketing potentiality of both timber based as well as NTFP is recommended for future study.

iii) Study on identifying multiple memberships or duplication of households in community forests is recommended.

iv) Employment created by the CFUGs is recommended.

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ANNEX

Household survey questionnaire

Budhakot VDC, Achham

A. Personal detail of respondents

1. Name of respondent……2. Age…… 3. Language……

4. Village…… 5. Occupation……

6. Sex……

B. Demographic Information

1.	Name of Household head	…….
2.	Sex of household head	Male……. 1 Female…….. 2 Third gender……. 3
3.	Caste of household	Brahmin …… 1 Kshetri…….. 2 Dalit……..3
4.	Occupation of household	Job……1 Agriculture…… 2 Business…… 3 Labor……. 4 Others…… 5
5.	Types of family	Single…… 1 Double……. 2 Joint …… 3
6.	No. of family member	……..

C. Socio- Economic/ Occupation income source information

1. How much land do you own?

Types	Khet	Bari	Pakho
Amount (Ropani)			

2. Ownership of fixed property by men and women?

	Khet	Bari	Pakho	House	Others
Male					
Female					

3. How much your annual income is?

a) Less than 30000 b. 30000 - 50000

c) 90000 – 100000 d. above one lakh

4. What is the structure of the house?

a. Stone mud and tin/Slate b. Stone, mud and straw

c. Cemented d. Small huts

D. Information based on forest products

1. What are the major forest products have you been frequently used?

a) Firewood b) Fodder/ Grasses

c) Timber d) All of the above

2. For what purposes have you used the forest products?

a) Cooking b) Lighting c) Furniture d) others

3. What can be the benefits of forest?

a) For agriculture b) For animal pasturing

c) House building d) All the above

4. What are the forest products do you frequently carry from the forest per day?

a) Grass b) Fodder c) Firewood d)Others

5. How many luggages?

a) One bhari b) Two bhari c) Three bhari d) Four bhari

6. How many animals are there in your houses? And what are they?

a) Cows…….. b) Buffaloes……

c) Goats…….. c) Others……

7. How much time does it take to collect the grasses/fodder/ firewood?

a) Hours…….. b) Minutes…….

8. Is forest is important for your livelihood?

a) Yes b) No

If yes why it is important?.....

9. What are the practices have you been conducting to conserve forest?

a)……

b)……

c)……

10. Are you satisfied with the supply of forest products?

a) Yes b) No

11. What are the forest products do you used to sell frequently?

a) Firewood b) Agriculture instrument

c) Timber d) Doko/ Dalo

e) Others

12. What is your annual income to sell forest products?

a) 10000-20000 b) 20000-40000

c) 40000-60000 d) 60000-100000

13. Do you feel that forest has increased your life standard and prestige?

a) Yes b) No

14. Do you have any suggestions about forests, what it would be?

…….. ……

15. Have you taken trainings about utilization and management of forest?

a) Yes b) No

16. What are the problems you have been facing from forest management?

a)…….. b) …….

17. What is the role of women to forest conservation?

S. N.	Particular	Active	Passive	General
1.	Forestation			
2.	Collect firewood			
3.	Collect Fodder			
4.	Collect grasses			
5.	Animal pasturing			

18. How is the socio- economic impact of forest products to villagers?

a) Schools

b) Health services

c) Others Services

Checklist for the FGD

Focus Group Discussion with CFUGs

S.N	Name	Involves CFUGs Name	Post of CFUGs
1			
2			
3			
4			
5			

1. What are the timber and non-timber forest products of your village?
2. What is the forest products do you used to sell for your livelihood?
3. What can be the benefits of forest?
4. Has forest improved the livelihood of the villagers?
5. Do you feel that forest has increased your life standard and prestige?
6. Do you have any suggestions about forests, what it would be?
7. How is the socio- economic impact of forest products to villagers?

Checklist for the KII

Key Informants persons are,

i. Secretary of VDC

ii. Principle of Budhakot Ma. VI.

iv. Chairman of CFUGs

1.	Respondents Name	
2.	Institution	
3.	Post	
4.	Ward Number	
5.	Address	

1. What is the cultural value of the forest?
2. Would you please specify the condition of Forest products of your community forest?
3. Please specify the name of the Forest products found in your community forest?

S.N.	Name of the species	Used part	Uses	Availability	Remarks
1.					
2.					
3.					
4.					
5.					
6.					

4. What are the incomes from FPs or just using for household consumption?
5. If you make income from Forest Products, would you please quantify it?
6. Please list the species you used for selling?
7. To whom and where do you sell these forest products?
8. Are there any problems in marketing of these forest products? Yes/No
9. If yes, what are they?

Collection	Storage
Lack of market	Government policy
Processing	Others

10. Please mention the social works conducted by CFUGs in your community.
11. is there any conflicts regarding the distribution of forest products in your CF?
12. What can be done to increase the livelihood of the villagers from forest products? Share any information on this subject?

Checklist for the observation

Collection of forest products by the people

Forest products	Yes	No	**Forest products**	Yes	No	**Remarks**
Firewood			Wild edible things			
Grasses			Agriculture instruments			
Timber			Herbs			
Fodder			Thakra			