#### **CHAPTER ONE**

#### **INTRODUCTION**

## **1.1 Background of the Study**

Forest is one of the important natural resources of Nepal. Forest is complex ecological entities with a multitude of productive, protective and regularly function as for the production function of forests, the most important forest production include logs, timber, firewood, fodder, fruits, flower, fibers, medicinal herbs etc. firewood from the forest is the most important energy resources for about 85% of the Nepalese people who live in rural areas. The protective function of forest include the role of forestry in preventing soil erosion and landslide prevention, protection and conservation of plant diversity, and an enhancement of scenic beauty in the countryside. The regulatory function of hydrological cycle of water regime, minimization of air and water pollution by absorbing carbondioxide as well as other harmful elements, moderation of adverse effects of light, heat, wind and other climatic process. Forest, which is a renewable resource, performs multifarious function by providing various valuable services and products. It conserves watershed, protect from flood and soil erosion, help to regulate climate and is also habitat for various animal and plant species. Also, the forest provides fodder forage and litter to the livestock, wood for domestic use and trade, composting and thatching materials, farm implement fruits, honey, oils and medical herbs. In brief the forest has been playing crucial role in sustaining the farming system in Nepal since long (Devkota and Joshi, 1991).

Nepal, popularly known as Himalayan, is situated in between China and India. About 83 percent of total area is covered by hills and High Mountain and remaining by flat lands in Terai. The forest area of Nepal is 5.8 million hectares (40% of the total geographical area of the country) of which 4.2 million ha (10.6%) is shrub land (MFSC, 2004). MFSC (2008) claimed that, the overall deforestation rate of Nepal is 1.7%, which is well above the Asian average (1%) and global average (1.3%).

Forest is the life blood of society for a developing country like Nepal and also a great element for human survival. It provides daily life subsistence materials and services.

That is why forest and human beings have mutual relationship. It is also regarded as valuable and renewable resources (Bajracharya, 1975).

Property rights over forest in Nepal have a long history of dramatic changes. Before 1957 there was no strict rule and regulation for the protection and use of the forest. Believing that there was enough forest and the government paid no attention to develop the forest and allowed forest use to continue at higher rate which results in rapid deforestation. Rapid deforestation has created a serious problem e.g. soil erosion, flood, landslides, scarcity etc. To solve the increasing problem of deforestation in 1957 the state first nationalized forests and brought most forest tracts that were under private or community ownership under its control (Regmi, 1978). Nationalization of forests provoked many owners and users of forest to avoid losing access.

During the seventies, hill district forest offices were established and forest officials were appointed to manage the hill forests. In the hills, forests are scattered, therefore, large scale management by the government as in the Terai were not possible. Therefore, government concluded that the best strategy for protecting the scattered and degraded hill forests would be to have the forest managed with people's participation. Realizing the importance of people's participation in forest management, the national forest plan of 1976 accepted the need for people's participation. In accordance with this plan, the forest Act 1961 was amended in 1977 to make provisions to hand over part of government forests to a local political unit called "Panchayat". According to the 1977 amendment to the forest Act, Panchayat Forest (PF) and Panchayat Protected Forest (PPF) rules 1978 were brought forward for implementation. These rules officially initiated the implementation of the community forestry program in Nepal. The PF and PPF rules allowed for the transfer of responsibility for forest management from the government to the local PF and PPF (Joshi 1993, Bartlett 1992). This practice was also impractical because the regulations were not clear and only isolated small patches of forest could be handed over. The local leaders took this program as a government program and they used the program simply to employ their people as forest watcher. The government field staffs concentrated on the reforestation of degraded lands because railing seedling and planting were easier than to work with user groups. Assessment of performance was also based on planting targets rather than on user group formation. As a result, even though the Community Forestry program was started in Nepal since 1978, there was a declination of total forestland by 3.4 percent from 1978 to 1988 (Chhetri and Baral, 1992).

To address these issues and find a good solution in protecting and increasing forestland, The Master plan for Forestry Sector (MPFS) was published in 1989 as a concrete forest policy supporting the people's participation concept. This MPFS adopted the concept of Forest User Group for the management of forest in local level irrespective of political boundary. The regulations were subsequently revised after the change of the political system in 1990 and then the Forest Act- 1993 and forest policy-1995 was approved following the norms of MPFS. Thus, the name of Panchayat Forest and Panchayat Protected Forest was changed to Community Forest managed by community forest user group (CFUGs). Community forest are managed according to the operational plan (OP) prepared by CFUGs, approved by the district forest office (DFO). According to the Act, CFUGs has to be established and registered at the District Forest Office (DFO) before handing over of the forest and they are self sustained institutions (Kanel, 1993). The Community Forestry is a participatory approach. It necessarily recognize the involvement of local user from the beginning (from identification of users) until the implementation in which Forest User Group is responsible to manage, utilize and protect the forest while Government officials involve as a catalyst or facilitator to provide technical knowledge and other relevant support.

Community forest emphasis a gradual shift form a highly technical "Classical Forest Management Approach" to a "Participatory Approach" which is people oriented. Community forestry in Nepal is about stabilizing a partnership between HMG and the forestry user group in which community forestry is seen as a deliberated and conscious application of business methods and technical forestry principal to help village community. People participation is the most essential feature of community forestry in Nepal. Because of mass illiteracy and backwardness it has been termed very difficult to get people's participation in forestry projects in Nepal (Gilmour and Fisher, 1989). The principle aim of community forestry in Nepal is to involve people in all stage of participation e.g. decision making to benefit sharing.

#### **1.1.1 Concept of the Community Forestry in Nepal**

Community forest is defined as "The Forest protected, managed and utilized by local forest user group". The community forestry is a small scale, village level forestry practice where decision and action are often made on a community/collective basis. And where the rural population participates in planning, establishment, management and harvesting of forest crops and receives a major proportion of the socio-economic and ecological benefits from the forests (Kayastha, 1991). The right investment, profit as well as implementation of programmers depends on forest user group.

The Community Forestry program is a largest program among six major programs of protection implemented in Nepal. Different International Non-government forest Organization (INGO) and Non-governmental Organization (NGO) have great interest in such conservation program. They directly take part and are also involve in funding the Community Forestry program. They see this program as a tool in the improvement of environment as well as upgrade of existing lively hood of local people. In this respect, they use Community Forestry as a tool for community development. During last 24 years, the experience has shown positive indication in the improvement of environment and community development (Shrestha, 1999).

People's participation is the most essential features of community forestry in Nepal. It is increasingly being recognized as a critical component of community forestry. Transfer of power to the people is the surest means of promoting people's participation in community forestry (Karmacharya, 1987).

People's participation is directly concerned to make decision for planning, implementation, benefit sharing and distribution, monitoring and evaluation training and opportunities and leadership. The inclusion of lower cast, occupational caste poor and marginalized people in the program and equal distribution of benefit is an important achievement in the management and protection of existing forest resource (Nadkarni, 2000).

#### **1.2** Statement of the Problem

Forestry sector plays a central role in economic and social life of Nepalese people. Forestry encircles many objectives: economical, rural development (poverty alleviation, employment and empowerment creation, self-reliant) tourism, natural biodiversity conservation. Majority of Nepalese people depend on Nepal's immense natural resource for their livelihood. Once green forest was national wealth of Nepal, but now the situation has greatly changed. With the growing population the need and demand of forest have greatly increased. At present the area of forest has estimated about 37% only (Neupane, 2005). Subsequently, there are very few forest that are not under severe pressure from the nearly population. The responsible causes for this are rapid deforestation, weak conservation system, unscientific cultivation and management system and uncontrolled population growth.

The concept of community forestry is based on the principles of people's participation. In other words it is thought that forest can be effectively managed under the responsibility of the local people rather than government control. The users' awareness level of the forest resource is important as well as necessary element for their livelihood.

Community forestry is a mechanism of rural development and it is a tool of poverty alleviation and empowerment or rural people through resources allocation, management and distribution. The primary focus of the community forestry was an institutional strengthening, greenery maintenance, protection of forest areas and fulfilling subsistence needs of forest products to the local people. Now, time has come to address the second generation issues by applying scientific knowledge for sustainable forest development, maintaining good governance in CFUGs and promoting livelihoods of the local poor people. Various objective based studies on Nepal CFUGs showed that, it is often observed and widely debated that in most cases, community forest has not addressed the problems of poor and indigenous people as well as or women through much income from the sale of forest products had been generated (Dutta,2007). Stakeholder's full participation in decision making process is in scanty (Koirala et al; 2008). Rich and male members of the community user group's have gained comparatively more benefits from the community forests (Yadav et al; 2003).

Deforestation is the main problem in our country and people were the main users of forest and to stop the illegal activities, it is very necessary to participate people on community forest management. This potential activity helps the people of that particular area in community development. In this study, it is felt that in order to develop the forest or even to stop the rapid increasing deforestation process, only government efforts are not enough, people themselves should be made conscious for their active participation in community forest promotion. So people participation plays vital role of the forest product.

However there has not been studied which examines the participation of people in the user committee and some recommendation to improve the organization and participation of people in forest resources management. So to fill the gap this study plays a vital role for management.

This study is carried out to answer the following sequence of questions

1. What is the socio-economic status of CFUGs?

What is the educational status of CFUGs?

What is the family size of the study area?

What is the demographic setting of user respondent?

What is the age and sex composition of CFUGs?

What is the occupation of CFUGs?

What is the caste and ethnic composition of FUGs?

What are the livestock type and their distribution in the study area?

2. How people participation in community forest management?

How they participate in decision-making?

How they participate in implementation?

3. What are the benefits of community forestry?

## **1.3** Objective of the Study

The overall objective of this study is to examine the people's participation in community forest management, benefit sharing, decision making and conservation practice in Chobhar, Kirtipur-14 of Kathmandu district from socio-economic perspective. The general objective of this study is to analyze people participation in forest management in the light of gender, class and caste. The specific objective of this study is

- 1. To analyze the Socio-economic characteristics of the Forest User Group.
- 2. To assess peoples participation on Community Forest management system.
- 3. To study the Socio-economic benefits of Community Forestry.

## **1.4** Significance of the Study

This study tries to examine peoples (FUGs) of Jal Binayak Community Forest, their role in the formation of committees, their role in monitoring and evaluating the community forestry activities, managing the community forest resources and others benefit sharing. This study also analyses the level of peoples participation in community forestry resources management activities in Jal Binayak Community Forest and the factors related to peoples participation in community forest committee.

## 1.5 Organization of the study

The text of this research consists of five chapter. The first chapter deals with the introduction of the study, ststement of the problem, objectives of the study, rational of the study and significance. the second chapter is devoted to review of literature related with the research issues, this also presents the conceptual framework of the study. The third chapter describes the research methodology adopted for the study such as site selection, research design, nature and sources of data, universe and sampling process, data collection tools and analysis. The analysis of research data are presented in fourth chapter. Fifth chapter includes summary, findings and conclusion. Finnally references are given.

#### **CHAPTER TWO**

#### **REVIEW OF LITERATURE**

Literature review is a part of the research. Literature reviewed for the study is from different studies, which had been conducted regarding community forest indifferent part of Nepal. The review ranged from the native and foreign researcher's efforts as well as articles published in various journals. The review work made to synchronize the objectives of this study. This helped to outline the objectives and develop guideline or the ways to the study.

## 2.1 Community Forestry in Nepal

Community forest (CF) is a policy meant for the benefit of the poor, by bringing about social changes and establishing efficient institution at the local level. "Community forest is any situation, which intimately involves local people in forestry activity"(FAO, 1998). Community forest is a community oriented forest management system where local users of the forest control, manage and utilize forest resources for their own benefits. The ultimate objective of community forest is to raise the standard of living of the local community (FAO, 1992).Community forestry is "a part of national forest handed over to a user group under specific rules and regulations for its development, conservation and utilization for collective benefits". Community forestry is thus the management, control and utilization of accessible forest resources by the local people (Forest Act, 1993).

In 1950, the nation got political change and democracy came into existence. After seven years of democracy the private forest nationalization act 1957, brought all forest under government control. Trickle down policy was totally adopted. Because of this system people thought that 'forest is not ours" it is the property of the government, anyone can take advantage form it, so that deforestation took place heavily. Due to above reason His Majesty's Government of Nepal (HMG/N) realized the need of involving local communities in the forest management in 1961. From 1957 to 1977, subsequent amendment was made in rules and Act (Joshi, 1991). The legislation proved to be completely ineffective because the act controlled the utilization of forest products and only gave importance on controlling the users to enter the forest. The department of forest was incapable of maintaining effective control over thousands of small patches of forest throughout the hills (Fisher 1990 cited in Uprety, 2000). In the1970's, the community Forest Development program (CFDP) introduced the concept of Panchayat Forest (PF) and Panchayat Protected Forest (PPF), Leasehold forestry with the purpose of handing back the protection and management of the forest to the people The forest Act of 1978 has introduced the concept of Panchayat forest and Panchayat protected Forest, Based on that concept the forest was managed at village level by village Panchayat. The forest user Group concept was introduced in the Decentralization Act of 1982 where the concept was promoted as the most effective approach for development and management of natural resources in local communities.

Nepal's community forestry has become an example of progressive legislation and policies in the decentralization of forest management. It has attracted international attention because in Nepal, decentralization is linked with emerging issues-sustainable forest management, forest governance, policy advocacy, equity gender, poverty and role of civil society in community forest. Nepal has initiated efforts towards decentralization of forest management via the road map in the master plan for the forestry sector of 1988 (Hobley, 1996). Nepal published its policy of forestry sector through master plan for the forestry sector (MPFS) in 1988. The master plan provides the main basis and framework for developing policies for managing the country's forest sector. It aims to mobilize, conserve and manage forest resources in a sustainable way and thereby maintain a balance in the demand for and supply of forest products, create income and employment opportunities within the sector for poor and marginalized households, promote people's participation, enhance productivity, and develop appropriate land use plans. All the accessible over to local communities with the formation of user groups. This plan opened up avenues for participation by local people in the management of forest resources (MPFS, 1988).

Community forestry has opportunity to be grown up after democracy reformed in Nepal in 1990. Government passed "Forest Act 1993". This act legally accepted people's participation in community forestry programmer in Nepal. Forest by laws under this act published only in 1995.

This act provides a legal basis for the implementation of community forestry and build on the MPFS of 1988. Major goal of this act were to meet the basis needs of local people, attain economic and social development, promote a healthy environment, promote development and conservation of forests and forest products by

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managing national forests, and provide assistance for the conservation and development of private forests. After the enactment of the forest Act of 1993, the formation of forest user groups began throughout the country. There are now around 17,685 FUGs formed in Nepal during the period of 23 years with nearly 2,177,858 household members, which account approximately 25% of the country's population who have taken over responsibility to manage about 1243897 hectors of forest areas, nearly 48% of the total land of the country (DOF, 2011).

Nepal's community forestry program involves the transfer of responsibility for management of forest resources to local people. As these resources are to be managed collectively by the community. The effective management of common property by a collective is not the theoretical problem that is asserted to be simply because the theory assumes that economic behavior is played out as if it were a game disembodied from social relations in general. The reason why people conform to practices, which are against their short-term economic interest, is that they have other interests besides narrowly defined economic ones, including the desire to maintain social relationships (Fisher, 1988).

Nepal has successfully implemented Community Forestry Programme (CEP) so that Nepal is also recognized as a world leader in the field of community forestry. CF has not only influenced the economic development of rural people but also has influenced the community life. According to one of the founder of FUG, community management of forest has changed the concept of community life. Villagers do not think in terms of personal benefits. Rather, they think in terms of collective benefits. The money earned from the forest can be spent in community development works like widening of trail roads and supplying potable water (Poffenberger, 2000).

Community forestry has received the highest priority in the forestry sector program of the government as reflected in both the Master Plan for the forestry sector (HMG, 2004) and the Eight Five Year plan (NPC, 1992).the main thrust of the community forestry police of the government is the phased transfer of management and utilization of community forest to the actual users based on simple operational plans, which are prepared and endorsed jointly by the forest users and the assistant users in preparing the operational plans. The operational plan is a simple document, which describes the rules schedule, and other institutional arrangements made for forest production, management, and utilization (Acharya et al; 1993 Cited in Neupane, 2005).

It is necessary to involve users in starting of management plan and clearly in identified the users who are responsible for management and will be benefited from forest. The management plan therefore should be able to respond to the particular situation, ecology as well as Socio-economic of the people where the forest patch is situated (Khadka, 1991).

Community forestry is not just a special technology but rather a process of socioeconomic change that requires continuous participation of the community in planning, implementation and problem solving. Community forestry is not just planting trees; it is a bundle of activities which generate supplementary flow of income to the community by utilizing either unutilized or ill-utilized land (Kayastha, 1991).

Community Forestry policy is recognized as one of the most progressive policies in the world (Kanel et. al; 2003 and Shrestha, 2001). The policy has transferred the responsibility of managing government forest to the communities and provided right of using the forest products in a sustainable way and the with the ultimate policy objective of improving livelihood of rural communities (Kanel et.al; 2003). This program promotes the control and use of forest resources by the local people. To ensure their legitimate right, the Forest Act 1993 defines the forest user group as an autonomous and corporate bodies with perpetuate succession. The FUGs are legally authorized to sell and distribute the forest products independently fixing their price (Kanel et. al; 2003 and Chapagin et. al; 1999).

Community forestry in Nepal has now found a certain direction through the support of forestry policy, legislation, department guidelines and extension oriented forestry, passing over different obstacles and difficulties (Singh, 1998).

Upreti (2000) stated that the community forestry have positive impacts on gender, equity, poverty, biodiversity and forest management which are significantly contributing to social changes. The poverty reduction aspect is relatively weak as compared to the achievement made on gender and equity. It is possible from community forestry to reduced poverty by securing resources for the poor, increasing

the availability of resources and providing potential for income generating activities. Community forestry contributes to improve people's livelihood. It has contributed significant in building social capital.

## 2.2 People's Participation in Community Forest Management

Participation refers to a development program effort in enabling people to take initiative in related activities and mobilization for overall development (Maharjan, 1997). People's participation is the most essential feature of community forestry. A genuine participatory approach is important and association of participation in the program should grow out of the community organizing process (Kayastha, 1991).Community participation is now generally taken as a necessary precondition to the successful implementation of any renewable or rehabilitation project. Community participation is generally agreed to be important for the long term success of local resource management system (Joshi, 1995).Community forest management includes decision making in forest protection, conservation and utilization of natural forest. An increasing effort is necessary to plant more trees on community owned land. This help to reduce the pressure on natural forest.

Nepal has successfully, implemented community forestry program with the active participation of local people. Forest committee formed by user groups take the responsibility of protecting, plantation and conserving natural forest. People participate in all stages of decision making, planning and reaping benefits. They show ample interest in nursery and plantation works. According to one study it has been found that private planting is the most successful components of the community forestry program. Even the poor are willing to participate in community forestry program because they can collect fuel wood and fodder from the community forests and save their time for earning wages (Kayastha, 1991).

The main strategy of Nepal Government (then HMG) a Master plan was to promote people's participation in forest resources develop community forest user groups as one of the important alternatives for the forestry sector in Nepal (Dahal, 1994).

Indigenous people and their communities and other local communities, have vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development (Sponsel, 2000).

Chhetri and Pandey carried out eight detailed case studies of forest user groups in Baitadi and Achham distrcts in Far Western Nepal. These eight studies suggest that people's active participation is a key solution to effect protection and management of common property resources particularly forests (Chhetri and Pandey, 1992).

No development effort can without the people's cooperation and commitment and effective development take place through a top-down process alone. In other words, people's participation is an imperative. People participation means different things to different people. People's participation can be at many levels of a continuum. Participation is a process by which people become involved in all stages of situation that affect their lives. Involvement includes studying, making decision and acting. Stages include appraisal, planning, implanting, monitoring and evaluation (Desmond, 1996).

People's participation is the most essential feature of Community Forest. Infield practice, idea of people's participation in Community Forest has gained high level of popularity in Nepal. The institutional arrangement and policy behind this program is quite good in the sense of people's participation and empowering the people could be effectively put into practice. His research on Hagam Village Development Committee of Sindhupalchok district gave feedback to know that there is no real participation of people in plantation work carried out by Forest User Group with the help of District Forest Office. Most of the users involved in plantation in return for wages. This involvement is given name of full participation. All researchers asked to users during his field visit about such behavior; it is known that they were thinking that plantation of government seedlings means losing their convenient grazing land. From this research it is concluded that the type of people involved in decision making were elite while some other people were not fully informed and the need of general people was not recognized (Chhetri, 1994).

It is realized that people's participation is the best way to achieve the objective on effective protection and management of forest research. It is suggested for popular

participation that exiting local particles, institution, organization structure and local use group should be recognized. People should be convinced that they are not only the protector but immediate beneficiaries as well. Effective participation can be further increase if people are well informed about the program and sense of belonging is created through motivation and awareness (Chhetri and Pandey, 1992)

Lamichane (2000) carried out his research in Ramechhap district and he found that before the involvement of District forest Office and other line agencies in providing training to users, need of interest group was not addressed in most of the community. The local elite controlled most of the forest resources. The group was not mobilized effectively. But after awareness training to local users, users started to adopt democratic decision-making process. Involvement of lower caste in Forest User Committee also increased from 2% in 1997 to 7% in 1999.

Participation of women is crucial for the success of Community Forestry. Women are the major collectors of the forest products such as fuel wood, fodder and dry leaf. So, consequences of deforestation directly impact on women. District Forest Office and other line agencies must motivate women to participate in Community Forestry Program through extension and awareness classes (Kasthaya, 1991).

Fisher (1991) pointed that the conservation and management of forest resources by the people themselves has been effective in most of the areas of Nepal. According to Collect et al; (1996) the successful community forestry depends absolutely on the willing participation of local people.

## 2.3 Forest User Groups

The forest User Group (FUG) is focus subject of community forest, which recognizes local user right and practices to considerable extend (Fisher and Gilmour, 1991). The concept of forest user group is derived for the concept of use right. The forest user Group is an institution based on the concept of "Common Property ". The group of people share specified use right (Gilmour and Fisher and Karke, 1994). The evolutionary background of user group is closely linked to the existence of indigenous forest management system of Nepal, thus the forestry profession may not doing no more than rediscovering and redefining the system (Chettri and Baral, 1992).

According to Timsina Netra (2001), FUGs have become a major umbrella institution to decide the use and management of the forest resources. In addition, it has been increasingly realize that FUGs have also become important local development institutions at the village level. At least one member from each household meets together once/twice a year or even more frequently to discuss the matters related to forest resource management and other development aspects of the village. There are hardly any other village level origination that gives opportunities to village even to meet at a place on specific issues. In this sense FUG is a strong mediums at local level that enables people to think and discuss about their resources themselves. It accommodates diverse interests and needs of the users and organizes various development activities such as supporting schools construction of irrigation channels, drinking water facilities, development of road facilities etc. users contribute to these activities voluntarily. In many cases, FUGs seen to be more effective than local government institution, i.e. village development committers.

Community Forestry planning process prescribed four separated phase to form Community Forest or Forest user group. Identification of Forest User Group is the first phase of Community Forest handover process. In this process, the field staffs within the village determined the real users of a particular forest by discussion and checking. Community Forest Extension worker need to debate more time with the forest users in this phase. The process also identifies Socio technical information about the use of forest and Community Forestry area (Joshi, 1991). "When a person is of low cast of disadvantaged, he or she does not easily mingle with the rest of the community and will have a low profile and therefore may not know what is happening around the village and so miss the chance to be included in the user group. Sometimes low cast people do not speak out in community dominated by high cast people. As a result, when a user group is formed such disadvantaged persons are left out. Later on at the time of benefit sharing, the conflicts will surface" (Shrestha, 1994).

The second phase of Community Forest process is negotiation phase in which user group is formed, their need and problems are identified and discussed on the problem and issue and find the solution themselves with the assistance of DFO staff. In this phase they prepared constitution of group and operational plan of forest. During the preparation of constitution they formed one executive committee is called Forest User Committee (FUC) on the basis of consensus or voting mechanism of forest protection, management and utilization are mentioned in the operational plan and Forest User Group is responsible to implement these. They have total right to fix price of their forest products, they can use forest products for their collective benefits and use surplus income in forestry development as well as community development work. These authorities can be practiced in a way that should not be affected on sustainability of forest. Third phase is implementation phase that includes carrying out approved forest management activities by the Forest User Group. Last phase is the review of operational plan at the request of Forest User Group of expiry of the operational plan after five years. It is continuous process. The first two phases are concerned with the formation of Forest User Group and the rest two are concerned with the strengthening of the Forest User Group (Karki et. al; 1994).

He further explain FUGS organize various programs such as street drama, discussion about village activities to be done etc. The lower caste people have also been represented as members in the user committee. The role of the committee is to implement activities assigned by general assembly of the users. Thus the poor and oppresses also have been represented in this day-to-day decision-making body.

CFUGs are not only provided with well-Stocked forests but also degraded forests. Out of the total hectares of community forests handed over to CFUGs, 74% were in good condition, 19% were degraded land and the remaining seven percent were not specified. Community forests have been categorized into four types based on the type of vegetation dominating them 83% of the total CF area is forest, 14% is shrub land, three percent is plantation and 0.2% is grassland (Kanel et. al; 2004).

## 2.4 Plan and Policy Review

In 1957 AD, the government of Nepal enacted the Private Nationalization Act 1957 and nationalized all the private forests, which partly to break the feudal power structures. These acts transferred most of the forestland to the state under the control of Department of Forest (DoF).

The National Forest Plan was the first government document to accept the need for people's participation in forest management. In accordance with this plan, the forest

Act 1961 was amended in 1977 to make provision to hand over part of government forests to a local political unit called "Panchyat". These acts officially initiated the implementation of the community forestry program in Nepal.

**Seventh Five-Year Plan (1985-1990):-** In the seventh plan, the national planning commission adopted the policies of the National Forestry Plan, 1976, and developed them further. Those policy objectives were to meet the people's need for forestry products, including timber, fuel wood, and fodder to maintain or restore the ecological balance through reforestation and watershed management programs, and to derive maximum economic gains from forestry products, by promoting the export of medicinal herbs. The main policies were to supply the needs of daily life, including fuel wood, timber, fodder and grass, to carry out afforestation on a large scale, and to protect afforested area all by encouraging maximum participation in afforestation programs by the people (NPC, 1985).

**Master Plan for the Forest Sector** (**MPFS**) was prepared in 1988 and approved in 1989. It provided a 25 year policy, planning and budgetary framework for the development of forestry sector. MPFS gave the highest priority to the community and private forestry program. Its main policy was to handover the entire accessible hill forests of Nepal to user groups to the extent that local people were willing and capable of managing them.

**Eight Five-Year Plans (1992-1997):** - The National Planning Commission has incorporated the Policies of the Master Plan for the Forestry Sector (1989), into the Eight Five Year Plan. The main policies were to intensified public participation through the implementation of private forestry, Leasehold Forestry and user's group based community forestry Programs; gave preference to deprived section of the society when land was allocated for leasehold forestry so that their opportunities for employment were increased, and reduction of conflicts between local residents and National Parks (NPC, 1992).

**Forest Act 1993 and Forest Rules 1995:-** After the restoration of democracy in 1990, the MPFSo conducted intensive exercises and prepared the legislation forest Act 1993. Under this Act, the government formulated the forest rules of 1995. The

Act and the Rules have given absolute rights to CFUG in managing their Community Forests.

**Ninth Five-Year Plan (1997-2002):-** Ninth Five-Year Plan followed the recommendation of the MPFS, through its emphasis on the commercialization of forest management and on the promotion of Non Timber Forest Products (NTEPs). The Ninth Plan stated the objectives of decentralization and local development for carrying out the role of developing the planning process at the local level, and of resource mobilization for local development to enhance people's participation in the balance and equitable distribution of development. As part of the community forestry strategy, the Ninth plan said that "Entrepreneurship for forest undertaking will be developed and encouragement will be given for the cultivation of NTEPs in community Forest". The plan further focused on institutional capacity, which built up to manage and monitor the supply of forest products for the fulfillment of daily needs of the communities. On the other hand, commercial farming of medicinal herbs had been extended and promoted to increase employment and income opportunities (NPC, 1997).

**Tenth Five-Year Plan (2002-2007)**:- The government's Tenth Five-Year plan and Poverty Reduction Strategy Paper (PRSP) have targeted the reduction poverty in Nepal from 38-30 percent by the year 2007. In line with the overall objective of the PRSP, the forestry sector plan focuses on reducing deforestation, soil erosion and degradation biodiversity as well as solving the problem of poverty and unemployment. The main policy of tenth plan were to increase the livelihood opportunities of the people living below poverty by expanding forest development activities and to extend community forestry program to increase participation, and the access of poor, women and disadvantaged groups to forest resources (NPC, 2002).

**Interim Plan (2007-2010):-** The main policy of the forest Sector in the Interim Plan was contribution to the national objective poverty reduction by increasing income generation opportunities through decentralized and sustainable management of forests, plants, herbs, soil and watershed, environment, bio-diversity conservation and protected areas, and development of forest entrepreneurship for the sustainable development of the forest and watershed sectors through people's partnership, establishment of forest conservation and development fund, development of

infrastructure for conservation oriented community tourism, participation of one male and one female from every household in the community forest (NPC, 2007).

**Interim Plan (2010-2013):** - The policy objectives of Interim Plan (2010-2013) were to enhance forests productivity by promoting environmental services through scientific and participatory management of forest resources and, to support poverty alleviation by generating employment opportunities through promotion of forest activities and commercialization. The main policies were to contribute in poverty alleviation of local communities by improving their livelihood through promotion of ecosystem services and mitigation and adaptation measures of negative impacts of climate change by sustainable, participatory and decentralized management of forests, plant resources, watersheds, protected area and bio-diversity resources. Other policies were to manage all types of forests by sustainable forest management, mapping of all types of forest, action-oriented forest encroachment program, one user Group: one forests enterprise and encouragement of production and processing of aromatic and medicinal plants (NPC, 2010).

#### **CHAPTER THREE**

#### **RESEARCH METHODS**

This section describes the methods used during the study especially it discusses the study and procedures followed site and key information selection. It explains the procedures of the study from beginning i.e., selection of the study area to the end i.e., analysis of the data and presentation. It includes research design, nature of data, sampling procedures, data collection technique and tools used in the present study and data analysis. It also defines some variables and terms used in the present study.

## 3.1 Rationale of the selection of the study area

The research area of this study is Jal Binayak Community Forest of Kirtipur Municipality-14 of Bagmati zone of Nepal. This site was purposively selects for the following reasons.

- ) This community forest is one of the developing and well managed community forests with high Eco-tourism potential and it is tourist influenced area.
- ) This area was found more appropriate for the research activity focusing on both sex's participation and their role in community forest management.
- ) This community forest is located in the accessible area closed to motor able road.
- ) It is considered as the best FUG in its protection system and implementation of operation plan among other forest in the Kathmandu district.

## **3.2** Research Design

Study has adopted both the descriptive and exploratory research designs. The Descriptive researcher design is concerned with the describing characteristics of a particular individual or of a group. Community Forest User Group's character and their rules and process in Community Forestry activities are descriptively discussed. Exploratory research design finds out some problems and then analyses these problems applying different research method. Participation of different level of people in Community Forest activities, factors affecting in participation and changed skill and knowledge are discussed on the basic of exploratory design.

#### 3.3 Nature and Sources of Data

By Nature, both qualitative and quantitative data were used for this research. Parameters such as age, income, literacy rate, family size, livestock number, land tenureship etc. were taken as quantitative data while information like gender, ethnicity, occupation etc. were taken as qualitative data. In the study, both Primary and Secondary sources of information were used. Primary data were collected from the field survey with the help of interview schedules, observation, and group discussion. Secondary data were collected through published and unpublished books, reports thesis, journals, papers, records website etc.

## 3.4 Universe and Sampling Procedure

There are 168 CF managing 5516.98 ha forest areas in Kathmandu district. Out of these CF, Jal Binayak Community Forest of Kirtipur Municipality-14 was selected for the study. Altogether there are 163 member households under Jal Binayak Community Forest a fair sample of 40 househods (FUGs) were selected by using Random Sampling of Probability Sampling method. Out of the Random Sampling Method, lottery method was used for sampling procedure. Thus, the sample percentage of the universe was about 24 % of the total FUG households. In addition to this, key informants from different background were also selected.

#### **3.5 Methods of Data Collection**

Both primary and secondary data collection methods were used in this study. Primary data is a major factor it fulfills the objectives of the study. The collection of Primary data had been done with the help of structured questionnaire, field observation, key informants interview as well as focus group discussion methods. The data for the study was collected from March 2015 to July 2015.

#### 3.5.1 Questionnaire

Structured questionnaire has been used to collect information regarding personal information, family background, and socio- economic status, relation to the forest, people's participation in different activities and its role in community forest

management. The respondents were requested to fill up the questionnaire. A sample of survey questionnaire is annexed to this report.

## 3.5.2 Observation

Observation is a reliable method for the primary data collection in which the researcher observes various phenomena by involving himself in a number of groups. Observation is carrying out to facilitate the data collection. From the observation methods, general information of geographical area, social structure, performance of forest user group in forest management process, decision making in user group was gathered. The observation helped very much in understanding the field reality, which was fruitful for the study that could not be captured through verbal discussions.

## 3.5.3 Key Informants Interview

In addition to this, the primary data had been collected from key informants from different backgrounds by using semi or unstructured questions. Formal and informal discussions were performed with them. The discussion was held on their contribution, history of community forestry, impact of community forestry on local activities, perception of user groups towards community forest activities, status of participation of women, lower caste & other general users. Based on the discussion, the relevant information was recorded in plain sheet. Maximum focus was given to collect qualitative rather than quantitative data from the key informants. Informants had been taken from teachers, local leaders, social workers, ward secretary and forest committed members.

#### 3.5.4 Focus Group Discussion

Focus group discussion was used to obtain basic information regarding community forest condition, management, protection, development and perception towards community forestry. During field stay, the researcher met local users, women users and local caste users. Formal and informal group discussions were done with them.

## 3.6 Data Analysis

The data were collected through various sources using various data collection techniques and tools. Qualitative and quantitative data were gathered form field visit. Since the nature of field study was more qualitative, information related to population structure, ethnic distribution, education, economic and participation status were quantified. Qualitative data has been analyzed and presented in descriptive manner. Quantitative data were tabulated and analyze descriptively. Simple statistical tools like frequency and percentage were used to present quantitative data.

## **3.7** Limitation of the study

Every research has its own limitation and the assumption. This is based on following assumption and limitation.

- ) This study was carried out only in one FUG in Kathmandu district. Thus a very small area of study cannot represent the whole country as well as district.
- ) Being dissertation, not a professional researcher, detail study is not possible due to lack of time, budget and skill.
- ) This research is dealt with people's participation in decision making at community level not at the household level and benefit sharing indicators of forest products only and forest management and it cannot generalize in other natural resource management process.
- ) Not all possible alternatives methods are considered for data collection. It is only limited to household surveys, observation and key informants.

#### **CHAPTER FOUR**

## DATA PRESENTATION AND ANALYSIS

## 4.1 General Introduction of Study Area

Kathmandu District is situated in the central development region of Nepal. It is one of the three district located in Kathmandu valley. The district is in hilly belt of the Bagmati zone, surrounded by Bhaktapur and Kavrepalanchwok district in the east, Dhading and Nuwakot District in the west, Nuwakot and Sindhupalchowk District in North & Lalitpur and Makwanpur District in the south. The district has 10 Municipalities and one Metropolitan city. It's headquarter is Kathmandu Metropolitan city, also the capital of Nepal. The total area of the district is 395 square kilometer. Geographically, the district lies in 27°27' E to 27°29'E longitude and 85°10'N to 85°32'N latitude. The altitude of the district ranges from 1,262 m (4,140 ft) to 2,732 m (8,963 ft) above sea level.

According to censes of 2011, the total population of this district is 1,744,240, out of which 913,001 are males and 831,239 are females. It has the highest population density in the country. The main inhabitants of this district are Newar (30%), Brahmin (20%), Chettri (18%) etc followed by other ethnic groups. The major languages are Nepali and Nepal Bhasa. The major religions are Hinduism and Buddhism. The weather condition of this district is very fine. It is neither too hot nor too cold. The average summer temperature varies from 28-30°C while average winter temperature is 10.1°C. Rainfall is mostly monsoon based (about 65% of the total concentrated during the monsoon months of June to August). On average humidly is 75%. There are 168 CF with 19887 households managing 5516.98 ha forest areas in Kathmandu district. Out of these CF, Jal Binayak Community Forest of Chobhar, Kirtipur Municipality-14 was selected for the study.

## 4.1.1 Research Area

Chobhar is the study area selected for this research. The area lies in ward number 14 of Kirtipur Municipality. It is situated at southern part of capital Kathmandu which is about 7 kilometer far away from old Bus Park (center of Kathmandu). This area is

famous for Adhinath temple, Jal Binayak temple, Chobhar Gorge, Chobhar cave. It is bounded by Sainbu hill of Latitpur district in east, Hattiban and Taudaha in south, Panga and Bhajangal in west & Kathmandu Metropolitan city in north. Holy River Bagmati lies on left side of the Chobhar. It is at the altitude ranges from 1284 meter to 1512 meter above the sea level.

The population consists of different ethnic groups such Newar, Chettri, Brahmins, Magar, Sarki etc. Among these, Newar is the largest ethnic group which occupies more than 60 percent of total population. Most of the people from Newar community follow both Hinduism as well as Buddhism. They speak Newari and Nepali language. Transportation, communication, electrification and other infrastructural development are available in this area. Agriculture is the main occupation of this area and some are engaged in trade, business, government service, occupational job and foreign employment. People, who live in this area, have general living standards as other Nepalese. The living style of this area is directly influenced by urban system due to proximity to Kathmandu and Patan.

The mention of Chobhar goes back to the ancient time when all of Kathmandu valley was a lake surrounded by a hill. According to Swayambhu Puran, in Pleistocene era-Manjushree-a divine saint from China, came upon this lake and saw a huge lotus emanating bright light at the center. So, he cut a deep gorge in southern Hill with his Chandrahas Khadga (a sword of Manjushree) to let the water out of the lake and worship the lotus. The bed of the lake became Kathmandu valley and the gorge is called Chobhar gorge. As of today, Chobhar gorge is the only water outlet of the valley through which the Bagmati River flows of Kathmandu valley.

## 4.1.2 Climate

The weather condition of this study area of Chobhar varies around the year. The climate of this area has a mild, subtropical climate. In general the seasons can be divided into mainly summer, winter and raining. Summer temperatures, between May and August, range from 19°C to 30°C, and in winter, between November and February, temperature average between 2°C to 20°C. During the rainy monsoon season between June and August, there is an average rainfall of between 140 mm in this area.

#### 4.1.3 Forest and Vegetation and other Resources

The forest of this study site of Chobhar is of complex type. Different types of tree or plant species are found in those forests. This forests consists mainly of Alnusnepalensis (uttis), Pinusroxburghii (sallo), Micheliachampaca (champ), Salixsps (Baish), Cedrusdeodara (devdar), Choerospondiascamaldulensis (masala), kaiyo, asare, jacaranda, khirya,kalki, dhupi, paiyu, kapur, tanki, peepal, bar, bakaino and many other ornamental and medicinal plants. Monkey, jackle, leopard, rats, etc are the animals while birds are dhukur, parrot, titra, kalij, saroun etc.

#### 4.1.4 Description of Jal Binayak Forest User Group

#### 4.1.4.1 Location

Jal Binayak Community Forest is one of the two community forest of Chobhar. This community forest is located in the south-east part of Chobhar hill at Jal Binayak Area. This community forest encompasses an area of 22.372 hectare. This community forest was established in 2006 AD (2062/12/20) with an aim to preserve the historically, archaeologically and culturally important Jal Binayak area and promote these sites for tourism point of view. This CF has attractive sites like Manjushree Gorge, Manjushree Cave, Jal Binayak temple and Manjushree Park.

The brief descriptions of some of the attractive sites of this CF are:-

- 1. Jal Binayak Temple: Jal BInayak temple is a popular temple of lord Ganesh. Jal means water and Binayak means lord Ganesh. The temple lies near the Chobhar gorge. It is valley's most important lord Ganesh Shrine worshipped as a remover of obstacles and of good luck. This temple was built in 1603 A.D by king Shiva Singh Malla. The image within the ancient temple is an impression on a large limestock rock that resembles an elephant's head.
- 2. Chobhar Gorge: This gorge is also known as Manjushree gorge. According to Swayambhu Puran, this gorge was struck by Manjushree, who travelled to Nepal to offer prayers to the Swayambhu flame. It is said that Manjushree walked along the peaks around the lake three times and with his mighty sword struck the deep cleft in the southern hill to drain the water from the valley. A

suspension bridge built in 1903 A.D. connects the two sides of the gorge. The bridge offers the views of the Jal Binayak temple, Manjushree gorge and the nearby Manjushree Park and Manjushree cave.

3. **Manjushree Cave**: - Manjushree cave lies just right of Chobhar gorge. This cave was formally opened by the Jal Binayak forest user's Group. The total length of the cave is 1,250 meter long, one of the popular longest cave in south Asia. Only 350 meter of the cave is open to visitors. This cave is also known as Chakhunti Bakhunti or the cave of Pigeons and Sparrows. The cave was an important meditation site for Buddhist monks in the ancient time and many Tibetan monks have even mentioned the cave in their autobiography. There are five routes which have been opened for visitors at present. There are three entrance points: one is the main entrance (Barah Gufa) and others are Bagh Gufa and Naya Gufa (Gufa means cave in Nepali). There are two small ponds inside the cave.

#### 4.1.4.2 History

Before 2001 A.D there were a lot of problem in Chobhar area due to cement dust pollution produced by Himal Cement Factory which was established in 1974 A.D. Cement dust particles which were produced from cement factory caused a lot a problem in Chobhar area such as environmental pollution, sound pollution, respiratory problems in the people of this area, vegetables and other agricultural products were not grown properly due to heavy encrustation of cement particles formed on the plants, tourism sector were not grown despite the presence of the historical site such as Chobhar gorge, Manjushree cave, Adinath temple. As pollution start to soar in Chobhar area, the locals of Chobhar which were affected mostly formed Environment Protection Agitation Committee to end the pollution caused by the factory by having it shut down for good. During winters the visibility becomes so poor that driving becomes difficult, leading to many road accidents. According to chairperson, Mr. Indra Bahadur Maharjan, after the lot of revolution the campaign was finally successful resulting closure of factory on 20<sup>th</sup> December, 2001. With the closure of Himal Cement Factory, Environment Protection Agitation Committee arranged various group discussions with the villagers for the protection, development and promotion of various tourism area and forest area of this sector and thus formed Jal

Binayak Development center. But the fulfillment of the desired aim, this center has to convert into community forest user group. So they arranged various formal and informal group discussions with the users of the forest and established "Jal Binayak Community Forest User Group" in 2<sup>nd</sup> April, 2002 and registered their BIDAN with forest operational plan at DFO Kathmandu.

#### 4.1.4.3 Formation of Forest User Group and Forest User Committee

Formation of forest user group and forest user committee is the first step of community forestry program. Some leading people of Chobhar ward Number-14 of Kirtipur suggested to form forest user Group for the management of their forest as community forest. With the initiation of some leading person, they organized many informal group discussions where teachers, villagers, leaders and social workers of this area were presented. From informal group discussion, they decided to make community forest and Jal Binayak Area. After several meeting, user's Group was formally registered in DFO Kathmandu on 2<sup>nd</sup> April 2006. According to constitution, membership will be two types: General or ordinary and Executive. General membership means "Forest User Group" (FUG). There are all together 163 household member and FUG members are from Jal Binayak, Taalo Guth, Mathilo Guth, Kamitar and Ikhatole of Chobhar-14 of Kirtipur Municipality. Executive committee means board members which were to be formed on the basis of election (Democratic method) by the majority of general members. According to law, there are maximum 15 executive members in the Samuha (Group). It is done by General Assembly. Duration of executive committee is for 5 years. 50 percentages of executive committee members should be female. From remaining 50 percentages also there should be equal representative from Janajati, Adhibasi, Dalit, Bipanaa. In most of instance either chair person or secretory should be female. If 51 percentages of General Members deny to accepting executive committee members, the committee will be dissolved and new executive committee members will be elected for next 5 years. 14 members of second new executive committee were elected from 2013. Mr. Indra Bahadur Maharjan was elected for the post of chairperson whereas Mr. Deepak Maharjan was elected as Vice-chairperson. Similarly, Ms Sunita Shakya, Sujindra Maharjan, Dinesh Maharjan was elected as secretary, treasurer and sub-secretary respectively. Other executive members were Mr. Sanukaji Maharjan, Mr. Shyam

Maharjan, Ms. Anita Maharjan, Ms Sangita Mahat, Ms. Sabina Shrestha, Ms Subhadra Maharjan, Mr. Sajan Maharjan, Ms. Aamkan Karmacharya and Ms. Subarna Magranti.

# Table No.1

# Composition of People's Community Forest Executive Committee by Marital Status, Age Group, Caste/Ethnicity and Sex

Selected Characteristics	Male	Female
Age-Group		
20-30	-	-
31-40	3	6
41-50	3	1
51-60	1	-
Marital Status		
Single	-	1
Married	7	6
Caste/Ethnicity		
Brahmin	-	-
Chettri	-	1
Newar	7	5
Dalit	-	1
Education		
Literate	-	-
Illiterate	-	-
Primary (1-5)	-	-
Secondary (6-10)	1	1
S.L.C	1	2
Intermediate and above	5	4

Source: Field Survey 2016

Above table showed that the 14-members community forestry Executive committee was constituted for Jal Binyak Community Forest User Group. From the study, it is seen that all the members were above the age of 30. Among which most of the members are in the age between 31 to 40. It seemed that the post was prioritized on the basis of experience and age. Marital status of committee members showed that only one committee member is unmarried while all other are married.

Caste-wise composition of executive committee is vital in promoting participation. Equal representation being the norm of democracy, plays an important role in enhancing people in participation in community forestry. Above table showed that only one member each is from Chettri and Dalit while rests of the all members are from Newar Community. It may be due to majority of this community forest user group are from Newar community. From Table (1) it showed that 122 household out of 163 total household members of this user's group are from Newar community.

Now a day, women participation in the executive committee is a crucial issues and it plays a vital role in the decision-making. Above table showed that 7 out of 14 members are female in executive committee. So, there is equal gender balance.

Educational status of committee members shown that educational status of the executive committee is very good. None of the member is illiterate. 9 out of 14 members of executive have studied intermediate and above.

## 4.1.4.4 Preparation of Constitution and Operational Plan

Every community forest needs to make a one written constitution of user group and one operational plan for community forest. This provision is included in forest regulation 1995 and community forest guide line 1995.

Constitution of user is the guideline to go a specific direction and to participate systemically. It is the document of policies, rules and regulation. It is necessary to include the name, address, objectives and stamp for the user's group in constitution. The total household estimated population of user's group, formation, procedure of user's committee member's is also needed to include constitution. Working procedure of user's committee, the ways to control forest offence, penalties for user's member who do not obey the constitution, a system of collection of funds and auditing are also most.

Preparation of constitution was a difficult task for user member. First, they organized the user's assembly to discuss regarding the preparation of the constitution. User's had no knowledge about it. Therefore, they requested the ranges to help them. The user's assembly gave authority to user's committee to prepare the constitution. The user's committee members discussed and prepared the drafts of the constitution with the helped of the rangers. Therefore, they called user's group assembly to discuss on the draft constitution. After the ratification of the constitution, they registered in district forest office and issued a certificate registration in the prescribed from on 2006.

Operational plan is the written document with the description of the forest (example name, boundary, area, condition, and forest types), the map of the forest, objectives of the forest management, forest protection system, scientific management operation, income generation program and benefit sharing for those who do not obey the operation plan.

The user's alone cannot prepare the operation plan without the help of forest technician because it is technical tasks (Ex: - survey of the forest, preparation of map of the forest, designation of the operation plan). User's had no proper knowledge regarding how to draw an operation plan. The group meeting decided to prepare the operation plan and gave full authority to the user's committee.

After the completion of the survey of the forest by the forest technician, user's prepared the draft of the operational plan with the help of Rangers. A General Assembly of the entire user's was called and discussion was held on major provision. Then, operational plan was finalized and submitted at DFO for the approval. DFO provided the registration certificate on 2006. This operational plan was approved for 5 years. After 5 years, DFO evaluated and monitored the situation of forest and working style of forest user's group. However, due to some internal causes operational plan was revised only after 8 years in 2013.

#### 4.1.4.5 Duties and Responsibilities of Forest User Committee

Forest user group committee plays a vital role in protection and managing the forest with the help of user's group. They have to follow constitution of user group and operational plan of forest. If user committee needs to change and to add new rules, they have to call general assembly to formulate and approve the rules. They can formulate new rules with the agreement of the general user's but it is necessary to take approval from DFO. Forest user committee has set some duties and responsibilities for the effective implementation of community forestry activities with full participation as much as possible. The duties and responsibilities of the forest user committee are as follow:

- ) To call the committee meeting in every month for the discussion on forest management and other casual problems.
- ) To take the necessary step to implement the operational plan.
- ) To punish and fine the individual who is against the rules and regulation of operational plan and constitution.
- ) To consult with DFO to take necessary technical advice and other helps if needed.
- ) To keep the records of income and expenditure of the user's group and to present in general assembly in every year for the approval from group.
- ) To use and distribute the forest products equally as mentioned in operational plan for the satisfaction of users.
- ) To check whether user are performing their duty of forest protection.
- ) To notify the users about the works and decisions of forest user committee.
- ) To perform other concerned works of community forest with the help of general users.

# 4.1.4.6 Objectives of the Jal Binayak Community Forest User Group

Forest user group has set following objectives for the betterment of the forest.

- ) To conserve, promote and manage this community forest.
- ) To conserve, manage and utilize Manjushree gorge, Manjushree cave, Jal Binayak temple for the promotion of tourism sector of this area.
- ) To protect flora and fauna of this forest.
- ) To conserve medicinal plants and use them properly.
- ) To empower the economic condition of user's group by giving various types of income generation programme.
- ) To establish the forest nursery for plantation and distribution.
- ) To arrange various types of seminar, training about the forest and environment.

## 4.1.4.7 Protection Management

Protection of forest is major tasks of community forestry programme. Different rules are made in different community forest for the protection of community forest. Forest user's group has decided to protect forest on a rational basis by user's themselves. Every user has been assigned to protection duty as volunteer on a rational basis. They also supervised each other and if any one where found with stolen forest product is informed to user community for punishment. Grazing is completely prohibited to protect small seeding and sampling of tree species and medicinal plants.

## 4.1.4.8 Offences and Penalties Rules

Forest user group made some penalties rules for those users (either belonging to user group or not) who break the norms and rules of constitution and operational plan. Users who involve in destruction of forest get some penalties. He or she will get penalties in accordance with his and her nature of crime. Jal Binayak Forest user's group has made two types of penalties, penalties for minor offence and penalties for major offence. Detail of offence item and penalties are mentioned below:-

Penalties for Minor Offences			
	Offence Items	Penalties	
1.	Timber cutting	Depending upon quantity Rs. 150-500 per cubic feet	
2.	Fire wood collection	30-50 per Bhari	
3.	Grazing	Rs. 3-5 per cattle	
4.	Damaging for seedling	Rs. 10-21 per seedling	
5.	Destruction of medicinal	Rs. 50-100 per plant	
	plants		
	Penalties for Major offences		
1.	Fire Hazards	Rs. 500-1000, File the case to DFO	
2.	Land encroachment	Rs. 5000, File the case to DFO	
3.	Digging soil and stone	Rs. 1000-1500, File the case to DFO	
4.	Hunting	File the case to DFO	
5.	Destruction of paper of office	Rs. 2000-5000	
6.	Work against constitution	Dismissal from FUG.	
7.	Dumping of waste product	Rs. 500-1000	

# Table No.2

#### 4.1.4.9 Utilization Management

#### 4.1.4.9.1 Grass/Fodder Collection

Grass cutting is strictly controlled in forest area. During the period of Jhadi Safai (cleaning the forest) users can collect green leaves of trees and branches at free of cost. If any users need green leaves in off time then they have to take permission from the committee and have to pay a certain amount of money. During ceremonial function they can take these products at free of cost.

#### 4.1.4.9.2 Firewood Collection

When the forest open for firewood collection the entire users can collected dry firewood at free of cost. During the social occasion like marriage Sapta puja, funeral function etc. the entire members can easily get the required amount of firewood at free of cost. Besides ceremonial occasion, if any users need large amount of firewood they had to take permission from the committee and have to pay certain amount per load (Bhari).

# 4.1.4.9.3 Timber Collection

Because of status of forest, the amount of timber in community forest is very limited. Till date, no any timber was sold from this community forest.

#### **4.1.4.10** Promotion and Development Management

The promotion and development management includes all the techniques that are used for development of community forest status i.e. Silviculture practices, plantation, nurseries etc. It also includes awareness and training among users and also the future plans of CF development.

#### **4.1.4.10.1** Silviculture Practice

Silviculture is defined as a practice of cleaning and cutting of undesired tree species for improving the forest condition there by increasing the quantity of quality of products. Silviculture practices include Jhadi Safai (Cleaning), thinning, pruning, singling etc. The silviculture activities are generally based on operational plan but sometime they used to change the timetable and strategy on the basis of need assessment. The activities of cleaning forest (Ban Godne) run once a year. All the member households must attain in Ban Godne Programme. According to executive committee members, it was found that the silviculture activities in their CF are satisfactory.

#### 4.1.4.10.2 Plantation

This community forest user's group had performed different plantation programme in barren area of CF. According to chief, Mr. Indra Bahadur Maharjan, this user's group organized plantation program every year mostly at "world Environment Day" in collaboration with various organization. Almost 1000 trees of different varieties were planted on a stretch of 22 ropanies of barren slope at this community forest by Clean Energy Development Bank Ltd. Likewise on 2014 A.D Trekking Agencies Association of Nepal (TAAN) planted 500 sampling trees of different species on barren area of this CF on the occasion of "World Environment Day".

## 4.1.4.10.3 Training and Awareness Programs

The executive committee frequently arranged various types of training and awareness program to the members of this community forest. Training and awareness program to the members of this community forest. Training and awareness program helps to change knowledge, attitude towards the forest. It also helps to improve the skills of the members and socio-economic condition of the society. Some of the noticeable training given by this community forest user's group for its member is:-

- Local tour guide training
- Waste management training
- Drinking water purification training
- Home stay training
- Bakery training
- Agricultural training for Dalit and poor people
- Educational class for women

Besides this, DFO and other agencies also provided various types of training to executive members for better management, protection, development and utilization of the forest products.

#### **4.1.4.10.4** Future Plans for Development of Forest

The FUG has planned to develop this community forest as the model community forest of this Kathmandu District. Some of the future plans are:

- To establish 33 feet height lord Manjushree statue inside the Manjushree Park.
  The total cost of this statue will be Rs. 1 core 20 lakhs.
- To connect electricity in public places of Jal Binayak area.
- To increase the income of the women by arranging various training program.
- To increase area of the park at the steep hill near the Bagmati River.
- To collaborate with various local organization for the protection of environment and development of tourism.

## 4.2 Socio-economic Characteristics of Forest User Group

Social and economic activities of forest users were examined to discuss the socioeconomic characteristics of forest user Group using 40 sampled households. Among forty households, 26 were taken from Newar caste, 6 from Chettri, 1 from Brahmin, 3 from Magar and 4 from Sarki.

#### 4.2.1 Ethnic Composition of Forest User Group

Truly, Nepal is a garden of garden of various ethnic groups. Similarly, in the study area (Chobar, Kirtipur-14) where the forest users are consisted of various ethnic backgrounds. The caste and ethnicity play important roles for socio-economic development in Nepalese society. Jal Binayak community forest user group has 163 household members from Jal Binayak, Mathilo Guth, Taalo Guth, Kamitar, Ikha tole of Chobhar area. There are total 851 population among these households. Among this 421 are male and 430 are female. The table No.3 below showed detail information of Caste/Ethnic composition of Jal Binayak forest user Group.

#### Table no.3

Ν	Ethnic composition	No. of	Users No.	Percentage
0.		household		
1.	Newar	122	647	76.02
2.	Chettri	17	92	10.81
3.	Dalit	11	57	6.61
4.	Brahmin	6	24	2.82
5.	Magar	5	22	2.58
6.	Gurung	1	6	0.73
7.	Limbu	1	3	0.35
Total		163	851	100

Source: Village Profile, 2015

From above table it showed that Newar is largest Ethnic group with 76.02 percentage of total population followed by Brahmin with 2.82 percentage, chettri with 10.81 percentage, Gurung with 0.73 percentage, Magar with 2.58 percentage, Limbu with 0.35 percentage and Dalit with 6.61 percentage. Table also showed that there are 122 households of Newar, 6 households of Brahmin, 17 households of Chettri, 1 households of Gurung, 5 households of Magar, 1 households of Limbu and 11 households of Dalit.

#### 4.2.2 Age and Sex Composition of Sampled Households

Age and sex composition is one of the most important demographic features for the planners. Separate data for males, females and age group are important for various types for planning. It will help to know which sector is weaker and support they can do for uplifting the sex. The balance of sexes affects the social and economic relationship within a community. The table No.4 below showed detail information of Age and Sex composition of sampled household of Jal Binayak forest user Group.

## Table no.4

Age	Male		Fe	male	Grand Total		
Group	No.	Percentage	No.	Percentage	No.	Percentage	
0-5	12	5.6	9	4.2	21	9.7	
6-14	9	4.2	8	3.7	17	7.87	
15-39	51	23.61	59	27.31	110	50.92	
40-59	22	10.18	21	9.72	43	19.9	
Above 60	11	5.09	14	6.48	25	11.5	
Total	105	48.62	111	51.38	216	100	

## Age and Sex composition of Sampled household

Source: Field Survey 2016

From the table 4, it can be seen that the population of female is higher than male. The age group 15-39 has domination in the user Group, which have covered 50.92 percent of the total users.

## 4.2.3 Educational Status of Sampled Household

Education is considered as human capital and important infrastructure of the development as well. It plays a crucial role in all sector of the society. Educational structure of the community people has played important role for the participation in different CF activities.

## Table no.5

Educational status	Male			Female	Grand Total		
	No.	Percentage	No.	Percentage	No.	Percentage	
Illiterate	15	6.94	32	14.81	47	21.75	
Literate	4	1.85	9	4.16	13	6.01	
Primary (1-5) class	15	6.94	13	6.01	28	12.96	
Secondary (6-10) class	23	10.64	16	7.4	39	18.05	
S.L.C	13	6.01	5	2.3	18	8.33	
Intermediate and above	35	16.20	36	16.66	71	32.87	
Total	105	48.57	111	51.43	216	100	

## Literacy Rate of the FUG of Sampled Household

Source: Field Survey 2016

The above table reviled that in total number of sampled household there are 21.75 percent illiterate people, 6.01 percent literate people, 12.96 percent primary class, 18.05 percent secondary class, 8.33 percent S.L.C & 32.87 percent intermediate and above class.

#### 4.2.4 Family Size and Structure

The family size and structure affects the economy, health, social and educational conditions of the family. In the study area two kinds of families according to their nature, can be categorized. Both nuclear and joint family is found. A nuclear family consists of father, mother and unmarried son and daughter. Similarly, joint families are consisting of grandmother, grandfather, father, mother, married son and their children.

The following tables showed the family structure and size of the sampled household in CFUGs.

	-	-	
Caste/Ethnicity	No. of Household	Nuclear Family	Joint Family
Newar	26	6	20
Chettri	6	3	3
Sarki	4	4	0
Magar	3	2	1
Brahmin	1	1	0
Total	40	16	24

#### Table No. 6

## Caste/Ethnic wise Family Structure of the Sampled Household

Source: Field Survey 2016

The table showed that in the study area among the 40 sampled household; 24 family are joint family while 16 family are nuclear family. Most of the Newar continue Joint family whereas the entire sampled household from Sarki and Brahmin continue Nuclear family.

## Table No. 7

Caste/Ethnicity	Household No.	Population No.	Average Family Size
Newar	26	141	5.42
Chettri	6	39	6.5
Sarki	4	15	3.75
Magar	3	17	5.6
Brahmin	1	4	4
Total	40	216	5.05

## Average Family size by Caste /Ethnic Group

Field Survey: 2016

In the present study, it was found that the Chettri has largest family size 6.5 person per household and the Sarki has small size 3.75 people per household. The average family size of selected household of the study area is 5.05.

## 4.2.5 Occupation

Agriculture is the main occupation in Nepal. This trend has also seen in the study area. Some household are also engaging non agricultural occupation.

## Table No.8

Distribution of Respo	ndents on the basis of U	
Occupation	No. of Respondent	Percentage
Agriculture only	8	20
Business only	8	20
Agriculture + Service	6	15
Agriculture + Carpenter	6	15
Service only	4	10
No service	3	7.5
Agriculture + Buisness	2	5
Agriculture + Wage labor	1	2.5
Wage labor only	1	2.5

## Distribution of Respondents on the basis of Occupation

Source: Field Survey 2016

Teacher

Total

1

40

2.5

100

From above table it showed that majority of people has taken up Agriculture as their main occupation and major source of their income. Around 15 percent of them are engaged as government as well as private service besides Agriculture. Similarly 15 percent are working as carpenter along with Agriculture as their source of income. During the survey it has found that most of household sold cauliflower, vegetables, potatoes, carrot, maize, turnip etc. as agricultural product. From the survey it showed that about 7.5 percentage of respondent has no any service.

#### 4.2.6 Livestock Type

Livestock is also a part of agriculture. It plays an important role for the upliftment of their economic condition. The prosperity of a family can be also judged by the number of animals.

Livestock is one of the important occupations of Nepalese people for getting milk, meat, eggs, ghee etc. Livestock is also a means of liquid assets which can be easily be converted into cash during crisis.

During the interview of respondents, it was found that only 32.5 percentages of sample households are involved in livestock holding. Only three families are involved in cow husbandry each with one cow only, eight families are involved in hen keeping in the range of two to five for their own use and four families are involve in goat keeping for production of manure essential for Agriculture. During the interview it was found that many live stocks like cow, oxen, goat, hen, pig were dead during the earthquake that hits the Kathmandu district on 25<sup>th</sup> April 2015.

#### 4.2.7 Land Tenureship

Land Tenureship determines the income and food sufficiency of the people. The more land more income, less land less income.

The table No.9 below showed the distribution of sampled household by the size of land holding of CFUGs.

## Table No.9

No. of Household	Percentage
6	15
15	37.5
15	37.5
2	5
2	5
40	100
	6 15 15 2 2

#### Distribution of Sampled Household by the size of Land Holding

Source: Field Survey 2016

Above table showed that there are 30 household holding (0-6) ropani of Agriculture land. Only two household holding more than 11 ropani of agricultural land. Few household has rented out their land to others for the cultivation. Only 6 household are landless.

## 4.2.8 Crops Production of Sampled Household

In this study area, most of the people depend upon agriculture production. Various types of crops are the main sources of food for the people in this area. Rice, wheat and maize are the main crops production of the study area. Potatoes, cauliflower, green vegetables, turnip, carrot are produced as cash crop of the study area. The table below showed the distribution of sampled household based on agricultural production.

## Table No. 10

Crops	Unit	Agricultural Production (in Muri)					
		0	1-3	4-6	7-9	>9	
Rice	Household	17	10	9	1	3	
Wheat	Household	18	20	2	0	0	
Maize	Household	9	22	8	0	1	

## Distribution of Sampled Household based on Agricultural Production

Field Survey: 2016

Above table showed that 23 household produces rice among which 10 household produce rice in the range of (1-3) muri. Only 3 household produce rice more than 9 muri per year. Similarly, 22 household produces wheat among which 20 household produce wheat in the range of (1-3) muri. Likewise, 22 household produce Maize at the range of (1-3) muri.

#### 4.2.9 Use of Forest Products

From the survey, it was found that the entire respondents do not need folder, timber, leaf litter and medicinal plants from the forest. Only during especial occasion such as marriage ceremony, very few families used fuel wood from forest. In most of the time if they needed they collected fuel wood from their own land for cooking purposes.

#### 4.3 People's Participation in Community Forest Management

This chapter discusses participation of people in community forest management and community development activities.

People's participation is the main important part in community forest management program. Without people participation CF cannot be success properly and sustainable way. The principle aim of CF is to involve beneficiary in all stages beginning from planning, decision making to benefit sharing. People are essential factor for the sustainable management, and development of the community forest. The community forest program itself defines the participation of people in management, utilization and development of their local forest. Thus participation of people in community forest indicates the involvement of the entire member of FUG in all levels namely from planning, formation process, benefit sharing to evaluation and monitoring.

Here in this study, levels of the participation of the local people in the community forest resource management are:-

- 1. Participation in decision-making
- 2. Participation in implementation
- 3. Participation in sharing of benefits and
- 4. Evaluation and monitoring

#### 4.3.1 Participation in Decision Making

Decision making is a crucial element for the success of any project. The research has found that participation is affected not only by those who make and implement decisions but also by how decisions are made.

In Jal Binayak Community Forestry, Forest user Group makes decision through group assembly or committee meeting. Meeting of group or committee relied on the issue to be decided. Committee members decide minor issue whereas group decides major issues.

The chairperson and secretary call every group meeting & committee meeting. It is mandatory that, all members of the committee should be present in the committee meeting while one member from one household should represent in the group meeting. Both meeting need more than half representative to decide any decisions.

Every decision is carried out by consensus. Every member has right to keep his/her opinion regarding each case. People's participation in decision-making is known by asking their representation in meeting and asking some questions to access their active participations. For institutional development, the process of decision-making makes great difference whether this institution really could run or not. Group meeting and committee meetings are means of decision making, which are discussed below.

#### **Committee Meeting**

Generally committee meeting is held regularly once in a month. If members feel necessary, a meeting is held more than regular meeting. When meeting is called, it is usually the secretary on the order of chairperson informs other members. Generally decision to implement forest operational plan is being made by the forest user committee.

It is necessary to analyze the representation of women user and lower cast user of community in forest user committee. Forest user committee has enough authority to make decisions with regard to community forest user group processes such as plantation process, which members would participate in different trainings, tour and workshops. Therefore there should be representation from all interest group.

Jal Binayak forest user committee is highly dominated by Newar community as they are the largest members of this user group. There is one representation of Chettri and Dalit community each. Hence, while making decision the Brahmin, Maga, Gurung and Limbu plays no dominant role. In this forest user's group there is equal representation from male and female each with seven members. So, in decision making in committee there is equal representation from both male and female. Key informants reported that executive committee had always consulted user's group members taking any decision and implementing its decision. The committee aimed priority to mobilize women participation in committee work.

The following major tasks have been assigned by General Assembly to Executive committee are:-

- > Operate day to day office and forestry activities.
- Monitor illegal activities in the community forests.
- ➤ Harvest the forest products and arrange the distribution of products.
- ➤ Implement/execute the development activities as of yearly plan.
- Reward or punish to users and outsiders based on contribution to forest and illegal/harming activities in forest.
- Keep records and send yearly report including audit report to concerned offices like DFO within one month of the completion of fiscal year.
- Submit annual report during General Assembly.

#### **Group Meeting/Group Assembly**

Group meeting and group assembly is called when the user committee feels its necessity. General assembly of group is held once a year. At least majority assemblies (more than 50 percent) must be present tom pass a decision. In group meeting, the users express the view and decisions are carried out by a majority vote of user group. Every member has the right to keep his/her opinion in each agenda during group meeting.

The following tasks and associated decisions are to be approved by the General assembly meetings: -

- > Revision of the operational plan and the constitution.
- > Approval of an annual development plan.
- Constitution and selection of executive committee.
- > Approval of fund for operating system.

## Table no. 11

## Participation of People during Community Forestry User's Group Formation and Operation Plan Preparation

S.N	Particulars	Yes		No	
		Male	Female	Male	Female
1.	Participation in deciding about community forestry formation	16	7	12	5
2.	Participation during preparation of constitution & Operational Plan	12	3	16	9

Source: Field Survey 2016

From above table no.11, it showed that out of 40 sample house hold; 23 (57.5 percent) house hold participated while deciding about community forestry formation while 17 (42.5 percent) household were not participated while deciding about community forestry formation. During survey, it was found that those who did not participated while deciding community forestry was either due to nature of job or due to late membership of this user's group. Likewise, table 9 also showed that only 15 (37.5 %) out of total 40 total household were participated during the preparation of constitution and operational plan. It showed that most of the household 62.5% were absent during preparation of constitution and operational plan.

#### Table No.12

#### Participation of Respondent in Group Meeting/ Assembly

Participation level	Brahmin		Chettri		Ne	war	Ma	gar	Sa	rki	Total
	М	Fe	Μ	Fe	М	Fe	М	Fe	М	Fe	
Always	-	-	1	1	7	1	1	2	-	-	13
Sometime	1	-	2	1	13	3	-	-	1	3	24
Never	-	-	1	-	1	1	-	-	-	-	3

Source: Field Survey 2016

Above table showed that there are only 13 respondents among the total 40 respondents who are regular participants of Group Meeting/Assembly. Among 13, nine are male and four are female. None of the Sarki & Brahmin are present regularly. Out of total 40 respondent 24 (60 percent) are present only sometime in meeting. Only 3 respondent never attained in Group meeting/Assembly. From this data it was found that participation of women is less in comparison to male participation. So, it can be said there is less participation of women in decision-making.

#### Table No.13

## Gender wise Participation of People from Sampled Household in Group Meeting/Assembly

Particulars	Mostly Male	Mostly Female	Both	Total
Brahmin	0	1	0	1
Chettri	3	2	1	6
Newar	18	6	2	26
Magar	1	2	0	3
Sarki	1	2	1	4
Total	23	13	4	40

Source: Field Survey 2016

From above table it signified that out of total 40 sample household; from 23 house hold mostly male are participated during Group Meeting/Assembly. From only 4 household there are equal participation of male and female. From this data it was found that participation of women are less in comparison to male participation during Group Meeting /Assembly.

## Table No.14

## **People's Participation in Different Level of CF Activities**

S	Level of Participation	Alw	vays	Som	etime	Ne	ever
Ν		М	Fe	М	Fe	М	Fe
1.	Meeting Attendance	9	4	17	7	2	1
2.	Discussion & Giving	2	1	9	2	17	9
	Suggestion						
3.	Decision Making	-	-	1	1	27	11

Source: Field Survey 2016

From the household survey, three different level of participation were identified. The first level of participation is attendance in general and monthly meeting, which is found to be 92.5 percent where women's participation constitutes 32.5 percent. Among this 32.5 percentage of respondent always attain in meeting. The second level of participation is discussion & giving suggestion relating to the development of the community forest. The participation of people in discussion & giving suggestion is found to be 35 percent where women's participation constitutes 7.5 percent. 7.5 percent of respondent always participated in discussion & giving suggestion while 27.5 percent participate only sometime in discussion & giving suggestion.

The third level is in decision making for the implementation of rules and regulation for the forest user's group. The participation in decision making is found to be 5 percent where women's participation constitutes 2.5 percent.

The table showed that most of the respondent attends the general and monthly meeting only for attendance, participation decreases as the responsibilities of the task increases. Therefore, at the level of decision making only a few members who are influential individual in the community are participating. It was found that the women's participation is lower than the men in all the levels and also the number of women's not attending the meeting is higher than the male. This is because of different factors i.e. educational roles, social values & norms which hinders the participation of women in decision making & other activities of the CF.

#### 4.3.2 Participation in Implementation

Implementation is the real practice of operation plan, constitution and other decisions made by user group. It is the main responsibility of user committee to implement all decisions and operational plan with the full participation of users. It is the responsibility of forest user to be involved in implementation of rules and plan for effective implementation. Community forestry by program, protection, management & benefits sharing are major implementation activities of community forest. Implementation of these activities cannot be successful in the absence of people participation.

There are great influences of decision making in implementation of community forest activities. Implementation decision includes which area of the forest is considered for the application of management operation, what period of the year is allocated for the harvesting of forest products, planting & distribution of forest products, how & what practices are to be applied in the planting, harvesting and protection. There is no meaning of decision-making unless it has not to be reflected in positive & supportive action by all users.

The development and protection of the forest condition depends on the activities likes' plantation, nursery establishment, Silviculture practices and guarding system performed by the FUG.

Respondents of the Jal Binayak Community Forest user Group were asked their participation in community forest development activities.

Table	No.	15
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Particulars	Always		Sometime		Never	
	М	Fe	М	Fe	М	Fe
Participation in Silviculture & C.F	13	6	14	6	1	-
development Activities						

Source: Field Survey 2016

Table showed that 97.5 percent people participate in Silviculture (Ban Godne) practices and community forest development activities where women participation constitution is 30 percent. Table also showed that 47.5 percent respondents always attain in CF development activities while 50 percent respondents only attain sometimes in CF development activities.

Silviculture practices and C.F development activities needs physical exercise, so there is high participation of male compared to women. Women are participating in cleaning and thinning whereas male is participating in pruning and transportation of extracted materials from forest to own land. According to community member, they used to provide some seedling to the participants during plantation, which has caused increased in participation.

#### Table No. 16

SN	Particulars	Mostly Male	Mostly Female	Both
1	Brahmin	15	10	1
2	Chettri	3	1	2
3	Newar	-	1	-
4	Magar	1	1	1
5	Sarki	1	2	1
	Total	20	15	5

#### Genderwise Participation of People in Silviculture and CF Activities.

Source: Field Survey 2016

From above table it showed that from 20 (50%) household out of total 40 sampled household mostly male are participated during Silviculture and Community forest development activities. From only 5 household (12.5 percent) there are equal participation of both male and female.

Chairperson of Jal Binayak Community Forest user Group said that the cleaning and cutting of grass inside the Manjushree Park is done regularly every day by the office staff. Waste product produced from picnic spot is also cleaned regularly by office staff.

## 4.3.3 Participation in Benefit Sharing

Benefit sharing is an important element for enhancing user's participation in common property resource management. In the absence of such mechanism total participation of user's cannot be plausible. This leads neither success of participation nor community forestry program. In participatory resource management process, if there is no equal sharing of benefits, users can be easily frustrated with the CFUG ultimately leading to the disparities between advantageous groups and the underprivileged group. People can realize the CFUG to be their own if they get the equal sharing of benefits. Benefit sharing includes distribution of forest products like firewood, fodder, timber, grass and leaf litter. Firewood and fodder are important forest products needed for users. The members of the Jal Binayak community forest user's group were asked whether they share the benefits from the present conditions of distribution system or not. It was found that benefit is shared equally based on households. Grass cutting is strictly prohibited in forest area. During the period of Jhade Safai (cleaning the forest) users can collect dry/green leaves of trees, firewood at free of cost. If any users need firewood/fodder in off time then they have to pay certain amount of money for user's group. During ceremonial function with the permission of committee member they can take these products at free of cost.

#### Table No.17

Caste/Ethnicity		Part	Total			
	-	High	Moderate	Less	Never	-
Newar	М	2	4	3	12	21
	Fe	3	1	-	1	5
Brahmin	М	-	-	-	1	1
	Fe	-	-	-	-	0
Chettri	М	-	2	-	2	4
	Fe	-	2	-	-	2
Magar	М	-	-	-	1	1
	Fe	1	1	-	-	2
Sarki	М	-	-	-	1	1
	Fe	2	-	-	1	3

#### Participation Level of Respondents in Benefit Sharing

Field Survey: 2016

Above table indicated that the participation of respondents during benefit sharing is low. The table showed that out of 40 respondents 19 (47.5 %) have never participated in benefit sharing. Only 8 (20%) respondents showed high participation during benefit sharing.

From the Survey, it was found that most of the member of this community forest user's group does not require any fodder and firewood from the community forest. If they need fodder/firewood they usually collect these products from their own land. They only collected firewood/fodder during especial ceremony such as marriage ceremony, Guthi, Saptaha etc. According to secretary of this community forest user's group Sunita Shakya, till date no any timber was sold/distributed due to limited number of timber in this community forest.

#### 4.3.4 Evaluation and Monitoring

Evaluation and monitoring are the essential factors for providing feedback regarding any corrective actions to be taken of adjustment in the policies to be made during the implementation phase of the project. Participation in evaluation includes people's perception of the implementation and management expressed either in a formal gathering or on private. Evaluation is finding out the values of something. This means to assess, estimate & to appraise the achievements. The general methods of evaluation are measurement, comparison, judgment and feedback. To know the perception of the members towards the community forestry, respondents of Jal Binayak community forest user Group were asked about the satisfaction with the activity of user's group committee of community forest. From the survey it was found that 75 percent respondents satisfy with the activity of the user's group committee while 25 percent respondents are neutral with the activity of the user's group committee of community forestry. They said that the Jal Binayak community forest user's group had done well for the protection and management of community forestry along with efforts made by them to conserve heritage site of this area such as Manjushree cave and Manjushree gorge which helps in development of Jal Binayak area as the tourist area.

Monitoring means observing and collecting information, and reflecting on what has been observed. In the case of CF, whether users are still on course of achieves their aims and if necessary to change the course in monitoring. Monitoring is like navigating a ship between reefs (rocks in sea) and through shallow water towards an attainable goal on parts of users. The general methods of monitoring are watching, listening or examining the process, the events, incidents that are happening. In the study of this community forest user group it was found that the forest committee members has regular duties to monitor works of forests & the growth of seedling planted in the community forest area along with monitoring of infrastructure development and community forest management. According to Mr. Deepak Maharjan, vice chair-person of this user's group, all the committee members visit the community forest area at least once a week to monitor the community forest plan effects & impacts.

The main objective of monitoring and evaluation on the community forest of Jal Binayak community forestry are:-

- 1. Improving performance through providing timely information to management and implementing units on project performance (input and output) and implications for support requirements.
- 2. Identifying and analyzing problems incurred during implementation and suggesting possible solution of the problem for taking the problem of community forestry.
- 3. Evaluating committee's activities to improving future planning processes through:-
  - ) Measuring community forest plan effects & impacts.
  - ) Evaluating plans concepts assumptions and models in the light of actual performance.

## Table No.18

## Participation Level of Respondents during Monitoring/Evaluation

Particulars	Level of Participation		
	Active	Inactive	Poor
	(Regular)	(Occassional)	(Never)
Participation in Monitoring	8	13	19
/Evaluation			

Field Survey: 2016

While investigating the participation in monitoring, it was found that among the total of 40 respondents of Jal Binayak Community Forest user's group 8 (20 percent) respondents said that they are regularly participated in monitoring and further decision making related activities. About 13 (32.5 percent) respondents said that they are occasionally participated in monitoring while 19 (47.5 percent) said that they are

never participated in monitoring and further decision making related activities. The field study also paved the way in comprehending that user's participation in monitoring/evaluation is full of complexities. The causes of complexities are identified as the ordinary user group member's role was limited.

## 4.4 Factors Affecting Peoples Participation

There are some factors which are responsible for the active participation of people in Community Forestry Program. These factors are classified as:

1) Social cultural factor,

2) Economic factor and

3) Other related factors.

#### 4.4.1 Social Cultural Factor

Social factors include age group, family size and structure, cultural practices, gender and social value and norms. How these social factors effecting in people participation of Jal Binayak Community Forest is briefly described in the following section.

#### 4.4.1.1 Age

From field study, it is revealed that the respondents below the age of 25 years are young generation users who are mostly busy in their study. They have limited time to contribute in Community Forestry activities. They contribute their free time for Community Forestry activities. Most of the respondents with the age between 25 to 40 years are busy in their professional job and also contribute their free time in Community forest activities. The respondents between ages 40 to 60 years are the one whose participation and contribution in community forestry is found higher than other age group users. Users above 60 years age are unable to contribute due to their physical weakness. However, Forest user Committee has tried to integrate all age group people above 16 years. The elderly users are placed in the position of advisor.

#### 4.4.1.2 Family Size

Family size is another responsible factor in participation. It was revealed from field study that respondents with larger family size are participation in most of the activities. Such households have managed to send one representative from their house. Sometime small family sizes have faced problem in sending their representative from their household during Community Forestry activities as they are occupied in their won jobs.

Especially, there is high influence of family size in women's participation. Women of large family size household have to devote her time in preparing food and other inside housework. However, in the large family size where number of women is higher, well participation of women was found.

#### 4.4.1.3 Gender

In Jal Binayak Community Forest, no gender discrimination was found in Community Forestry activities. Women are equally participating as they get free time from their housework. Although there is no restriction for women to participate actively in decision-making process, their participation was found not equal to male users in decision making but participation in implementation is good. Women users of Jal Binayak Community Forestry participated in training as well as study tour to other districts even tough, as per Nepali culture there is hesitation to allow women to travel without their family member far from their house.

#### 4.4.1.4 Caste and Ethnic Group

Culturally and religiously, user group of Jal Binayak Community forest is a homogeneous group. Even though, it is illegal in practicing caste discrimination based on the constitution of Nepal, still there is social/cultural practice of caste discrimination in the study area. Such social norms are inhibiting in Dalit users to participate equally without any discrimination. According to the respondents, they set the criteria like education, free time, leading capacity and gender of the users during the selection of members of user committee. But they did not consider criteria for caste, ethnic group and disadvantaged group.

#### 4.4.2 Economic Factor

Economic factor includes size of agriculture land, livestock and nature of occupation. Economic level of the respondents of this community is more or less similar in Jal Binayak Community forest. They have no great difference in farm size. Only few respondents own more land.

Nature of occupation is also affecting on participation of users. Service holder respondent said that they have no time to involve in guarding of forest. However, they are participating on group meetings and assemblies, if activities are organized during leave days or holidays. They again argued that they are unable in participation as free respondents because of their job in government and non-government organizations.

Some of the respondents are working as wage labor. They have no holiday and leave like others who work in government and non-government organizations. Therefore, they cannot contribute their time even like service holder man; they have not managed to attend meeting and other activities of same day avoiding their work.

To avoid such difficulties, the Forest User Group Committee is making maximum effort for the high participation of user group in the meeting by calling it either in evening period or during holidays.

#### 4.4.3 Self-consciousness

Attitude, education, awareness and interest play important role in developing selfconsciousness in a person. Most of the respondents are very much aware and have interest and positive attitude in community forestry work. Education factor is highly affecting in active participation in decision-making. Illiterate users who are participation in meeting do not raise their voice. Researcher asked them why they don't speak in the meeting and their response was that they are uneducated and don't know as educated. They think that decisions made by educated users are always good and thus support their decisions. Thus, in committee member selection the priority is given in selecting educated persons. All committee members are literate. Illiterate users participate during implementation as equally as literate users and is not affecting in implementation of any decision made. In general, wealthy users are literate but poor and landless users are illiterate. For the illiterate users, it is difficult to hold the leadership position in Forest user Committee as the leaders should perform daily administrative activities of the committee (letter writing, minute keeping and reporting to higher officials). Literacy plays a vital role as source of powers and privilege in rural context. The researcher asked questions to the illiterate, poor and users with less land on "why don't they hold the position of the leader of User Committee?" Their reply was "We are poor, and illiterate, we have no knowledge and thus how to perform leader's responsibility. Due to this reason we select literate person in the position of the leader".

User who is self-conscious understands the importance of forest. Such user devotes his or her time in protection and management of forest although they do not need forest products from the forest. Lack of self-consciousness was found in the five households because they have large farm size and are fulfilling their need of forest products from their own land. So, they are not participating actively in Community Forestry activities.

They should understand that they are getting indirect benefit from the community forest and it is not wise for them not to participate actively in the user group.

## 4.5 Socio-economic Benefits Derived by User Group from Jal Binayak Community Forestry

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

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

## 4.5.1 Community Development Activities Undertaken by Jal Binayak Community Forest User's Group

**4.5.1.1 Drinking Water System Construction**: - In the collaboration with Kirtipur municipality this CFUG has constructed deep boring water supply system at the total cost of Rs. 31, 81,048 which supply drinking water to all it's member of this user's group at the minimum cost. It supplies water 24 hour a day.

**4.5.1.2 Community Forest Office Building**: - This CFUG had their own two stayed cemented building. In this building there are two office room, one seminar hall, one rented catering & one rented shop.

**4.5.1.3 Construction of Public Toilet:** - With the collaboration of Kirtipur Municipality & UDAL, this CFUG had constructed one public toilet near the Jal Binayak Parking area. This public toilet mostly helps the devotees of Jal Binayak temple and for other people who come to visit in this Jal Binayak Area. Visitors have to pay Rs. 2 for urination while Rs. 5 for defecation which is used in renovation & cleaning of toilet.

**4.5.1.4 Establishment of Manjushree Park:** - This CFUG has established Manjushree Park over the Manjushree Cave & constructed following things:-

- >With the collaboration with Kirtipur Municipality, this CFUG had constructed Pavement inside the park in the way to cave at the total cost of Rs.5 lakh.
- Constructed two ticket counter & one public toilet inside the park.
- Constructed well design entry and exit point of cave.
- Constructed eight picnic spot inside and outside the park.
- Constructed railing bar in the view point of Manjushree gorge.
- Constructed wall around the park along with two decorative gates.

#### 4.5.2 Benefits Derived by User Group from Community Forestry

## 4.5.2.1 Social Benefits

Community forestry is launched in the society. It provides the benefits to the people living in the society. Some of the social benefits of Jal Binayak community forestry are as follows:

#### 4.5.2.1.1 Strengthening Organization

After the establishment of this CF, people are united to tackle every types of social problem through strong organization.

#### **4.5.2.1.2 Increase the Peoples Participation**

Effective implementation of CF has increased the women participation and other ethnic group participation in community which helps in empowerment of women especially of lower cast and ethnic group.

#### 4.5.2.1.3 Co-operation among the People

People in this area have united to increase the economic status, preservation, proper utilization of resources and efficient co-ordination among the user's group members.

#### 4.5.2.1.4 Social Relation

None of the respondent said that is any conflict among the FUG members. It was also observed that series of meeting, assemblies etc. of FUG have created opportunities for the users to discuss about the mobilization of fund for their local development. During the meeting, they also discussed and resolved the conflicts and issue of benefit-sharing. Working together for their village development and resolution of their conflicts by themselves in the meeting has built the social unity. From the field study, it was observed that due to community forestry, the people of this area has maintained good environment in their community by attaining social unity and protecting their natural environment. This indicates that there is good team spirit and forest user's committee members have good leadership to manage the community forest.

#### 4.5.2.1.5 Women and Lower Cast Participation in FUG Committee

There are 14 members in the committee in which 7 are female. It is positive sign towards women's participation to leadership development. The Disadvantage Group (DAG) women and other lower cast are also involved in this committee. It helps to empower to the DAG and women in society.

## 4.5.2.1.6 Social Funds

Some of the social funds provided by this CFUG are listed below: -

- Provided Rs. 3700 for the Lakhe dance.
- > Provided Rs. 10,000 to Sukumaya Maharjan for the treatment of Cancer.
- > Provided Rs. 1200 to Mina Niraula for the treatment of Paralysis.
- Provided Rs. 28000 each to this Forest User Group Member whose family members were died during the Earthquake that hits the Kathmandu District on 25<sup>th</sup> April 2015.
- Donated Rs. 4,111 for Krishna Jatra.

## 4.5.2.2 Economic Benefits

Some of the economic benefits derived by Jal Binayak community forest user group are as follows.

#### 4.5.2.2.1 Available of Forest Product

The Jal Binayak community forest was highly contributed to increase the forest product such as grass, leaf litter, fire wood, fodder and medical herbs. The user group has accumulated the significant amount in its community fund from its indigenous forest management and this fond is used for the community welfare.

#### 4.5.2.2.2 Employment and Income Generating Activities

Jal Binayak community forest user's group has lunched various income generation activities. It has given unseasonable vegetable production, local tour guide training, home stay training, bakery training and other skill training to its member.

For the proper management of office and Manjushree park, this community forest user group had provided direct job for 10 local people among which one is office manager, two office helper, four are counter accountant and four are forest observer (Ban Heralu).

Establishment of Manjushree park and picnic spot inside this Jal Binayak Community forest has increased the visitors on this Jal Binayak Area which helped in the promotion of business run by local people. Moreover this Manjushree park and picnic spot are full of visitors during Saturday and holiday.

## 4.5.2.3 Environmental Benefits

Some of the major environmental benefits of community forestry are as follows.

- Availability of fresh air
- Environmental balancing
- ➢ Natural beauty
- Conservation/increasing water resources
- Increase aesthetic/increase in bio-diversity
- Increase in quality of life
- ➢ Soil erosion control

## 4.5.3 The Fund Generation of the Jal Binayak CFUG

The entry fees for visitors inside the Manjushree park, picnic spot and Manjushree cave is the major sources of fund generation of the Jal Binayak CFUG. Bank interest membership fee, subsidies, fines and penalties, forest products are also other sources of CF fund. The entry fee for Household member who joined during the establishment of community forest was Rs. 150. Migrants may apply for membership with Rs. 5000. All are charged Rs. 100 for renew their membership. Some of the entry fees to visit various places of this community forest for visitors are:-

- Booking of picnic spot per shed is Rs.(2500 to 3000)
- Entry fees for Nepali, South Asian and other foreigner inside the Manjushree Park are Rs. 20, Rs. 50 and Rs. 100 per person respectively.
- Visiting fees inside the Cave ranges from Rs. (100-1500) per person.
  The fee varies from according to route and nationality of visitors.
- Parking fees for motorcycle, car, minibus and truck is Rs. 10, Rs. 20, Rs. 25 and Rs. 40 respectively.
- Entry fees for film shooting inside the park ranges is Rs. 1500 for Nepali film while entry fees for music video is only Rs. 750 per day.

S.N	Particulars	Income rupees in FY	Percentage
		(2013 to 2014)	
1.	Bank Balance (Previous Year)	3,686,027.00	28.99
2.	Bank Interest	75,787.00	0.596
3.	Parking Fee	212,995.00	1.675
4.	Driving training Fee	75,100.00	0.59
5.	Shooting spot Fee	191,700.00	1.50
6.	Park Entry Fee	1,580,480.00	12.432
7.	Picnic spot Fee	1,019,800.00	8.02
8.	Membership Fee	37,135.00	0.292
9.	Cave Entry Fee	156,160.00	1.228
10.	Stall Rent	36,910.00	0.29
11.	Electricity bill from stall	26,481.00	0.20
12.	Funds	19,760.00	0.155
13.	Grants (Previous+this year)	2,541,776.00	19.99
14	Miscellaneous income	23,752.00	0.186
15.	Deep boring water supply	3,027,747.00	23.81
	system (this year+previous		
	year)		
16.	Total	12,712,010.00	100

## Table No.19

## Income Source of Jal Binayak CFUG FY (2013 July 15-2014 July 15)

Source: Jal Binayak CFUG Report 2013/2014

The table 15 shows that till now FUG have generated Rs. 12,712,010. The main source of income of this CFUG are Park entry fee, Picnic spot fee, Grants and Deep boring water supply system.

## 4.5.4 The Fund Utilization of the Jal Binayak CFUG

The Jal Binayak CFUG has spent their collected income in different sectors. The expenditure has been made for improvement such as forest protection, management, poverty reduction, infrastructural development, plantation and nursery. The detail of fund utilization is given in following table.

Particulars	Expenditure (in Rs)
Administrative expenses	61,553
Salary	794,345
Meeting/General Assembly	305,686
Electricity and telephone	226,929
Auditing	16,950
Membership renew	2,200
Parking area expenses	95,151
Cave guide commission	25,622
Study tour	87,245
Publicity expenses	10,000
Miscellaneous expenses	93,009
Plantation and rolling	39,065
Welcome to guest	38,671
Other expenses	59,599
Communication and energy	41,170
Participation (sahabhagita) expense	62,000
Book expenses (Smarika)	118,890
Generator expenses	30,340
Manjushree Park Renovation	128,450
Picnic Spot Renovation	52,227
Manjushree statue maintenance	1,080,355
Road construction in Taalo Guth	1,012,792
Deep boring material expenses	28,385
Total	4,420,719

## Table No. 20: Fund Utilization of Jal Binayak CFUG (2013 July 15-2014 July 15)

Above table showed that the Jal Binayak CFUG has spent highest amount in infrastructural development and salary of staff. The net income of this CFUG is Rs. 8,291,291. Above table showed that Jal Binayak CFUG of Chobhar is highly benefited from CF programme.

#### **CHAPTER FIVE**

## SUMMARY, MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

#### 5.1 Summary

Forest of Nepal has great importance in fostering the agricultural system and in protecting the hilly and fragile land of Nepal. Community forest is a people participatory approach in which the local users of the forest are involved in planning, development, implementation, protection, production and use of forest resources. The concept of community forestry came into practice in Nepal in the late seventies (1978). At present, the community forestry program is launched in most of the area of Nepal.

Jal binayak community forest of Chobhar, Kirtipur-14 of Kathmandu district was selected as research area. Altogether there are 163 household members under Jal Binayak Community forest. The study was based on a sample of 40 household as selected by using random sampling method. Both primary and secondary data were used for the research. The data for the study was collected from March 2015 to July 2015.

The study has shown that Newar was the dominant caste in the study area. The age group 15-39 has domination in the study area. Education was very good. Majority of respondents had agriculture as their main occupation. The average family size of sampled household was 5.05 and most of them continue joint family. Most of the respondent attends the general and monthly meeting of this community forest only for attendance. People's participation during implementation was very good however; participation of respondents during benefits sharing and evaluation/monitoring was very low.

## 5.2 Major Finding

- Newar was the largest ethnic group with 76.02 percentage of total percentage of total population.
- Educational status was very good. The study showed that only 21.75 percent of the sampled household was illiterate.
- ) The majority of respondents had agriculture as their main occupation.
- ) The average family size of the sampled household was 5.05.
- People's participation during community forest formation was very good. The study showed that about 57.5 percent respondents were participated during community forest formation.
- Most of the respondent attends the general and monthly meeting only for attendance, participation decreases as the responsibilities of the task increases.
   At the level of decision making only few members were participatory.
- Participation of women were less in comparison to male during different level of CF activities (Meeting attendance, Discussion & suggestion giving, Decision making).
- People's participation during implementation process was very good.
- Mostly male were participated during Silviculture and community forest development activities.
- People's participation during benefit sharing was very low. Only 8 (20%) respondents showed high participation of benefit sharing.
- People's participation during Evaluation/Monitoring was very low. Only 8 (20%) respondents were actively participated in Evaluation/Monitoring.
- ) Monitoring of the forest activity was mainly done by forest user's committee members.
- Occupational nature and Education were the major effecting factors in people's participation during community forestry activities
- The FUG has been playing role for the development of local human resource and also enhance the rural livelihood.
- ) The direct and indirect benefits from the community forestry have played the greater role in the social life of the people in the study area.

#### 5.3 Conclusion

The community forestry plays a vital role in conservation, protection and regeneration of forest resources of the country. This study has found that there is good participation of the community users in various community forest resource management processes (Decision Making, Implementation, Sharing of Benefits & Evaluation and Monitoring). Moreover participatory approach in community forest not only satisfies the basic need of the rural people but also enhances the rural livelihood. It also empowers people towards team buildings, group dynamism as well as self- motivation in community development.

The direct and indirect benefits from the community forestry have played the great role in the social life of the people in the study area. The funds generated from this community forest is used in different community development activities like, road construction, deep boring water system construction etc., which makes the livelihood of members of user group become easier. This CFUG not only utilizes the traditional direct benefits such as firewood, timber, grass etc. from their community forest but also used the community forest for the promotion of eco-tourism which helps in the socio-economic development of local people.

Based on the fact of the present study, it can be said the Jal Binayak community forest users group is one of the model user groups, which is utilizing its own local resources for betterment.

#### 5.4 Recommendation

Base on the fact observed and mentioned in the present study, some point were identified which should be improved for the betterment of the Jal Binayak Community Forest User Group in coming days. Thus the present study has following recommendation:

- Participation of women, poor and disadvantageous groups in decision making should be encouraged through adequate representative in users committee.
- More extensive awareness and communication training should be conducted by DFO to the passive users.

- Woman participation in decision-making should be increased through awareness.
- Measures should be taken to the illiteracy through formal and non formal education such as adult literacy classes.
- FUG should consult technicians to select the plantation site according to the plant species to fit with the local climate so as to check failure in the plantation.
- The fund should be mobilized in skill training on income generating programme like poultry farming, bee farming, unseasonable vegetable, cash crops plantation and animal husbandry etc.
- There are good potential medicinal plants. Users are aware of the value of these products but lack technical knowledge on how to grow. Therefore, technical knowledge should be provided to tem and linked them to appropriate.

#### REFERENCES

- Acharya, H. Acharya, R. and Joshi, A.L. (1993). Participation of women in the Management of Community Forest in Gorkha. A Report Submitted to the Nepal Field Office of the Save the Children Federation, USA.
- Bajracharya, D. (1975). *Brief Sketch of Forestry Economics*. Kathmandu: The Nepal Journal of Forestry.
- Bartlett, A.G. (1992). A Review of Community Forestry Advances in Nepal. Common Wealth Forestry Review 71(2): 95-100.
- Chhetri, R.B. (1994). Indigenous and Community Forest Management System: Reviewing their Strength and Weakness. An unpublished thesis submitted to the Central Department of Anthropology, T.U, Kathmandu, Nepal.
- Chhetri, R.B. and Baral, S.P. (1992). *Implementation of Operational Plan in Community Forestry*. Some Useful Approaches Presented in Seminar Series at IOE Pokhara, Nepal.
- Chhetri, R.B. and Pandey, T.R. (1992). User Group Forestry in the Far-Western Region of Nepal: Case Studies from Baidadi and Achham. Kathmandu: ICIMOD.
- Collect, G.R. Chhetri, W.J. Jackson and Shephered, K.R. (1996). Socio- Economic Impact Study: Nepal Australia Community Forestry Project. Technical Note. 1/96, Canberro, Australia, Anutech, Pvt. Ltd.
- Desmond, D.F. (1996). *Current Concepts in Community Forest*. Kathmandu: Bhutan-German Integrated Forest Management Project.
- Devkota, B. and Joshi, A.L. (1991). Popular Management of Forest Resources: Selected Case Studies of Rapti Area Agriculture and Rural Development Office. Kathmandu: USAID/Nepal.

- Chapagain, D.P. Kanel, K.R. and Regmi, D.C. (1999). Current Policy and Legal Contest of the Forestry Sector with Reference to Community Forestry Program in Nepal. Kathmandu: Nepal-U.K Community Forestry Project.
- Dahal, D.R. (1994). A Review of Forest User Groups: Case Studies from Eastern Nepal. Kathmandu: ICIMOD.
- DoF. (2011). Achievements, <u>http://www</u>. dof. gov.np/achievements. htm.
- Dutta, I.C. (2007). Non Timber Forest Products of Nepal: Identification, Classification, Ethnic Users and Cultivation. Kathmandu: Hill Side Press.
- FAO. (1992). Asia's Women in Agriculture, Environment and Rural Production.Bangkok: Sustainable Development Department, FAO, UN.
- FAO. (1998). Asia's Women in Agriculture, Environment and Rural Production.Bangkok: Sustainable Development Department, FAO, UN.
- Fisher, R.J. (1988). *Directions for Community Forest Management in Nepal*. Pokhara: Institude of Forestry.
- Fisher, R.J. (1991). *Studying Indigenous Forest Management System in Nepal towards a more Systemic Approach.* Working paper Environment and policy institute, East-West Center, Honululu, USA.
- Gilmour, D.A. and Fisher, R.J. (1989). The Management of Forest Resources in Rural Development: A Case Study in Sindhupalchok and Kavreplanchok District. Kathmandu: ICIMOD.
- Gilmour, D.A. and Fisher, R.J. (1991). Villagers Forest and Foresters: The Philosophy, Process and Practice in Community Forest in Nepal. Kathmandu: Sahayogi Press.
- HMG/N. (1956). Private Forest Nationalization Act 1956. Kathmandu: Ministry of Law and Justice, His Majesty's Government of Nepal.

- HMG/N. (1961). Forest Act 1961. Kathmandu: Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMG/N. (1978). Panchayat Forest and Panchayat Protected Rules 1978. Kathmandu: Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMG/N. MPFS. (1988). Main Report "Master Plan for Forestry Sector, Nepal". Kathmandu: MFSC, HMG/N.
- HMG/N, 1993. Forest Act 2049. Kathmandu: Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMG/N, 1995. Forest Rules 2051. Kathmandu: Ministry of Law and Justice, His Majesty's Government of Nepal.
- HMG. (2004). National Database of Community Forestry User Group. Kathmandu: Department of Community Forestry Division.
- Hobley, M. (1996). Participatory Forestry: The Process of Change in India and Nepal. Rural Development Forestry Study Guide 3, ODI Publication, London.
- Joshi, A.L. (1993). Effects on Administration of Changed Forest Policies in Nepal. In Proceedings of a Workshop on Policy and Legislation in Community Forestry. Bankok: RECOFTC.
- Joshi, N.N. (1995). Factors Influencing Participation of Members of Forestry User Groups in Community Forest in the Hills of Nepal. Unpublished PH.D. dissertation in Rural Sociology in the Faculty of Human Ecology, University of Pertanian, Malaysia.
- Kanel, K.P. (1993). Community Forestry and the 1993 Forestry Legislation: Implication for Policy and Implementation. Banko Jankari, 4(1): 2-5.
- Kanel, K.R. and Kanel, R.B. (2003). Community Forestry in Nepal: Second Generation Issues. Kathmandu: DOF.

- Karki, M.V. Jay, B.S. and Karki, N. (1994). Sustainable Management of Community Forest Resources: An Evaluation of Selected Forest User Groups in Western Nepal. Kathmandu: ICIMOD.
- Karmacharya, S.C. (1987). Community Forestry Management Experience of the Community Forestry Development Project. Ban Ko Jankari, Vol. 4, Page 30.
- Kayastha, B.P. (1991). *Element Concepts in Community Forest in Nepal*. Kathmandu: Mandala Book House.
- Khadka, K.B. (1991). *Community Forest Management by User Group*. Problems and Prospective Solution, Kathmandu: Pairavi Prakashan.
- Koirala, R. Giri, K. and Pokharel, B. (2008). "Development and Status of Community Forestry Governance in Nepal". Kathmandu: Nepal Swiss Community Forest Project, Swiss Agency for Development and Co-operation (SDC).
- Lamichhane, S. (2000). Role of Non Government Organization in Community Forestry Development: A Case Study of Ramechhap District. An unpublished M.A dissertation in Sociology/Anthropology, T.U. Kathmandu.
- Maharjan, M.R. (1997). Self Monitoring and Assessment of Community Forestry Using Pictures and Symbols. Discussion Paper. Kathmandu: Nepal-UK Community Forestry Project.
- MFSC. (2004). 'Vision' Gender and Social Equity. Kathmandu: MFSC, HMG/N.
- MFSC. 2008. 'Asia Forestry Outlook Study 2020. Country Report Nepal, Kathmandu.
- Nadkarni, M.V. (2000). *The Political Economy of Forest Use and Management*. The Asia Foundation.
- Neupane, H.C. (2005). People's Participation in Community Forest Management. A Case Study of Maulukali Community Forest User Group in Nawalparasi District. Un Published M.A Thesis Central Department of Sociology/ Anthropolgy, T.U, Kirtipur, Kathmandu, Nepal.

- NPC. (1992). *The Eight Plan (1992-1997)*. Kathmandu: HMG/N National Planning Commission.
- NPC. (1998). *The Ninth Plan (1998-2002)*. Kathmandu: HMG/N National Planning Commission.
- NPC. (2002). *The Tenth Plan (2002-2007)*.Kathmandu: HMG/N National Planning Commission.
- NPC. (2007). *The Three Year Interim Plan (2007-2010)*. Kathmandu: National Planning Commission, Government of Nepal.
- NPC. (2010). *The Three Year Interim Plan (2010-2013)*. Kathmandu: National Planning Commission, Government of Nepal.
- Poffenbereger, M. (2000). Community Forest Management in South Asia. Delhi: IUCN.
- Regmi, M.C. (1978). *Land Tenure and Taxation in Nepal*. Biblitheca Himalayaica Seris, Vol. 26. Kathmandu: Ratna Pustak Bhandar.
- Shrestha, K.B. (1994). *Community Forest in Nepal and Overview of Conflict*. A Journal of Forestry Information for Nepal, Banko Jankari. Vol. 4(1): 101-107.
- Shrestha, B. (1999). Policy and Institutional Dimensions of Community Forestry in Nepal. Discourse student Journal of Sociology/Anthropology, Department of Sociology/Anthropolgy, Patan Multiple Campus, Lalitpur.
- Shrestha, N.K. (2001). The Blasklash: Recent Policies Change Undermined User Control of Community Forests of Nepal.
- Singh, B.K. (1998). Community forest in Nepal, Gradual Move from Subsistence to Benefits Sector of Economy. Banko Jankari, Kathmandu.
- Sponsel, E.L. (2000). *Tropical Deforestation. The Human Dimension*. New York: Columbia University Press.

- Timilsina, N. (2001). Empowerment of Marginalization: A Debate in Community Forestry in Nepal. Kathmandu: Nepal-Australia Community Resource Management Project.
- Upreti, L.P. (2000). Situation Analysis of Community Forestry User Groups: Case Studies from Dang District. Samaj Journal of Sociology/Anthropology, Trichandra Multiple Campus, T.U, Kathmandu.
- Yadav, N.P. Dev, O.P. Springate-Baginski, O. and Soussan, J. (2003). "Forest Management and Utilization under Community Forestry". Forest and Livelihood, Vol 3, N.1, pp 37,New Delhi.

## Department of Sociology Tribhuvan Univercity,Central Campus Questionnaire for the Survey on People's Participation in Jal Binayak Community Forestry of Chobhar, Kirtipur-14, Kathmandu

## **APPENDIX-A**

- 1. Household No:
- 2. The Respondent:

Name:

Age:

Education:

- 3 Number of Family Member:
- 4 Detail about the Family of the Respondents:-

S.N	Name	Age	Sex	Relation to Head	Education	Occupation

- 5. Economic Information:
  - 5.1 Land Tenureship

Have you holding land for used? If yes:

Land holding and kinds of land used by the users:

Sex:

Occupation:

Land Type	Area in	Cultivation ownership			Remarks
	(Ropani)	Own	Rented in land	Rented out	
				land	

## 5.2 Production of Agricultural crops (Muri)

SN	Major types of crops	Production (Muri)	Remarks

# 5.3 Food sufficiency in months:-

5.4

5.5

5.6

a. 3 r	nonths	b. 6 months	c. 9 months				
d. 12	d. 12 months						
If yes	If yes, do you sell the surplus?						
a. Ye	s ()		b. No ()				
Lives	stock ownership						
а.	Buffalo						
b.	Cow						
C.	Goat						
d.	Hen						
e.	Pig						
f.	Other						
What	What are the other sources of income of your family?						

- 6. What do you used for cooking food?
  - a. Firewood
  - b. Lp gas
  - c. Kerosene
  - d. Bio gas

# 7. Need of forest products

S.N	Particulars	Amount	From C.F	From own farm	Remarks
				land	
1.	Fuel wood				
2.	Fodder				
3.	Timber				
4.	Leaf Litter				
5.	Medicinal plants				
6.	others				

# Appendix-B

Questionnaire related to Community Forest Programme					
1.	Do you know about Jal Binayak Community Forest user's Group?				
	a. Yes	b. No			
2.	If yes, you are a member of community forest user group or not?				
	a. Yes	b. No			
3.	Have you participate in the group meeting during the formation of forest user's				
	group & Forest user's committee?				
	a. Yes	b. No			
4.	Have you participate in the group meeting during the preparation of constitution				
	and Operational plan?				
	a. Yes	b. No			
5.	How many times have you participated in group meeting?				
	a. Always	b. Sometime	c. Never		
6.	Who participate mostly in group meeting?				
	a. Male	b. Female	c. Both		
7.	Have you involve in community forest management plan?				
	a. Always	b. Sometime	c. Never		
8.	Have you participate during C.F development activities?				
	a. Always	b. Sometime	c. Never		
9.	Who participate mostly generally in such activities?				
	a. Male	b. Female	c. Both		
10.	Have you participate in the gr	oun meeting during the shar	ing of benefits?		

10. Have you participate in the group meeting during the sharing of benefits?a. Regularb. Occasionalc. Never

11.	What are the main obstacles to you to participate in every activities of community					
	forest?					
	a. Gender	b. Age	c. Far away	d. Education	d. Occupation	
	nature					
12.	What factors enc	courage you t	o participate in s	uch activities?		
	a. Self motivatio	n b. DFO	staff c. Re	quest of committee	e member	
	d. Family memb	er e. Othe	r			
13.	Do you regularly	monitor the	community fore	st programme?		
	a. Yes		b	o. No		
14.	Have you benefited from the community forest programme?					
	a. Yes		b.	No		
	If yes, what are t	hey?				
	a. Provides fodd	er b. pr	ovides fuel wood	c. Wild beaut	ies	
	d. Economic bene	efit e. otl	ners			
15.	5. Do you learn any knowledge/skills from C.F programme?					
	a. Yes	b. N	0	c. don't know		
	If yes, what kinds of skills/knowledge did you learn from C.F Programme?					
16.	Have CFUG mad	de any effort	s to conserve her	itage site?		
	a. Yes	b. No	)	c. don't know		
	If yes, what type	of efforts an	d activities has C	C.F made? Mention		

17. C.F has improved livelihood of poor people. What is your view?

a. Agree b. Disagree c. Neutral

18. Are you satisfied with the activity of user's group committee of community forest?

a. Yes b. No c. Neutral

19. Do you have any suggestion for the future improvement of your C.F regarding it's Management, conservation and development?

.....

.....

**Thank You** 

## **APPENDIX-C**

Composition of Community Forestry Executives Community (Samudayik Ban Upabhokta Karyakarini Samittee) of Jal Binayak Community Forestry Committee.

Chairman	-	Mr.	Indra	Bahadur	
Maharjan					
Vice-Chairman	- Mr. Deepak Maharjan				
Secretary	- Ms. Sunita Shakya				
Vice-secretary	- Mr. Dinesh Maharjan				
Treasurer	- M	r. Sujir	ndra Maha	ırjan	
Member	- M	r. Sanu	kaji Maha	arjan	
Member	- M	r. Shya	m Maharj	an	
Member	ber - Mr. Sajan Maharjan			n	
Member	- M	s. Anit	a Maharja	n	
Member	- M	s. Sang	jita Mahai	jan	
Member	- M	s. Sabi	na Shrestł	na	
Member	- M	s. Subł	nadra Mah	arjan	
Member	- M	s. Aam	kan Karm	nacharya	
Member	- M	s. Suba	ırna Magr	anti	