

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Background**

Nepal is small landlocked country having abundant natural resources. Some of the natural resources available in Nepal are water, land, soil, minerals, forest etc. Forest is one of the most important natural resource for the developing country. The forest has been contributing to the social, religious, cultural, economic and environmental sector from the early human civilization, livestock rearing and forest sector have jointly contributed to the agricultural development of Nepal. As a whole the agriculture contributes two third percent of total national income in average; the forest sector has occupied one fourth percent of it. The role of forest to the development of human civilization and culture is worth remembering.

Developing countries basically depend on agriculture. Most of the people in developing country live in village. They fulfill their many basic needs from the forest. To the forest dwellers, forest are primary source of construction materials, fodder for their livestock, food in the lean season and of medicinal herbs (Fernands and Kulkarni, 1983). Forest helps to protect from the natural calamities like landslide, erosion and to conserve the soil fertility.

The conservation and development of the natural resources like forest is impossible from the government effort alone. Regarding this fact, the concept

of community forestry development programme was introduced in Nepal, since 1978/79 in the name of “Panchayati Conservation Forestry.” After the experience of about a decade there was made a contemporary change in it and was again started from the beginning of 1990 as according to the aim of “Master Plan” for the forestry in 1988. Since then the community forestry development programme is being implemented with the collaboration of the local people.

The local people have conducted various type of income generating activities with the help of community forestry programme. It has made a positive impact to uplift the life standard of the women, poor and the backward groups. The users groups have established fund by the income from the forest product, grant and penalty. They are conducting various social activities as road construction and helping the school, drinking water supply in the local level. ‘Malati Mahila Community Forestry’ in Saptari district can be taken as successful example of the impact the community forestry to strengthen the Economic status in the local level in which they have established a milk chilling center through livestock rearing with the help of community forestry. The community forestry has increased a progress in the livestock rearing which has resulted in increasement of livestock production like milk, cheese, meat etc. and compost manure. It has increased the income of the local people. Similarly, in some district like Humla, Jumla, Kalikot and so on. People have conducted the economic activities at the local level by the collection and selling of the herbs which they get from community forestry. (Hamro Kalpabricha-2003: page no 5)

Community forestry is a major forest management programme initiated by the government of Nepal. Community forestry has been implemented for

almost 30 years and spread through the nation. The principle aim of community forestry is to fulfill the basic needs of local people. The key issue today is how to support forest user groups (FUGS) in moving from protection and limited utilization to active management of their forest resource to get the dual objective of forest condition improvement and increased flow of benefit to the community (Paudel and Pandey, 2006). Community forestry was initially designed to arrest forest destruction, improve rural development and to meet the basic needs of rural people and to enhance the economic status of the rural poor and to enhance the equally participation of them in decision and benefit.

Nepal's CF Programme has proved to be a very encouraging effort in the development of a partnership in forestry between farmers and government (Mahat, 1998). In the recent year forestry legislation and policy are being refined and there is a gradual shift of CFUGs from subsistence to monetized market economy. CFUGs are getting increasingly involved in income generation, poverty reduction, local development activities and employment creation. Different projects such as CFUGs and district forest offices (DFOs) are working side by side to improve the living standard of the poor and local development. These people based activities have many positive impacts, on the one hand it has helped to conserve the forest and on the other hand it provides sources for rural development. The fund generated from the forest can be used in various activities such as watcher's salary, donation for the construction of road, school, river, dam, health centre and also the donation for solving the problem of local drinking water, irrigation, electricity, telephone service etc.

Community forestry is a kind of system in which the local people are all in all for its preservation, promotion, management and utilization. In doing so consumer committee is formed out of the total member who belongs to it. It is responsible for handling its activities like preserving, managing planning for its development and so on. In addition, its certain percentage of this income is utilized for the development and preservation of the forest and the rest for social works like provision of drinking water, irrigation facility community development and so on.

Community forestry is small scale village level forestry practice where decisions and actions are often made on the collective communal basis for establishment management, harvesting of forest crops, receiving a major proportion of the socio-economic, ecological benefit from pure forest cropping and food crops agro-forestry on the others (Kayastha 1991).

The concept of community forestry initiated from seventh five year plan. This plan makes explicit remarks in regard to forest management. The first objective set of forestry was to fulfill the people's daily needs of forest products and this was to be achieved, in part "by handing over the government forest to the community"(Government of Nepal 1995). Government has emphasized the community forestry programme since seventh plan and regularized it to eighth, ninth and tenth plans giving equally emphasis. In Tenth Five Year Plan, the main propose of this sector is to help the national goal reducing poverty. For this it can increase the opportunity of employment by adopting participatory system by its management and preserving flora, herbs Geo and watershed, bio-diversity and promoting forestry entrepreneurs. It tries to reduce poverty by increasing employment opportunities and running income generating programme for the poor, woman and backward classes

through adopting participatory system. Some of the strategies taken in tenth plan for the fulfillment of national goal are as below:

- i To preserve forest, flora and fauna including bio diversity and genetic sources.
- ii To promote local people's participation focusing on geo and watershed sector.
- iii To test scientific management of community forestry by forming the group of local people in forestry, by forming the group of local people in suitable place out of national forest. It will provide wood to the wooden industries as raw materials.
- iv To increase participation and accessibility of the people especially backward women and Dalits for extension of community leasehold and co-operative forest.

Some of the desired objectives in tenth plan can be explained as below:

(a) Contribution to poverty alleviation and human development:-

The capacity of governmental, non-governmental, local and concerned organizations will be developed through the training, seminars, and empowerment programme that are concerned with human development, source management, and skill development programme. As a result nearly 5 lakh women and backward groups of local forestry user group will be benefited from the services provided by these organizations.

(b) Contribution to employment and Income Generation:-

2, 53,000 households will get income generating opportunity through the community forestry development programmes and 25,680 households through leaseholds forest development programmes. Thus in total 2, 78,680 households will get income generating opportunities.

7250 persons will be engaged in work throughout the year by community forestry programmes and 4880 persons after the implementation of intensive forestry management work plan i.e. 12130 persons in total will be engaged in work whole year.

This research attempts to find out what are the activities and experience of the users in linking CF into community development and to identify what is the role of CF for community development and poverty reduction using the forest resource.

## **1.2 Statement of the Problem**

Jukekhadi community forest is situated in Khudunabari VDC. Khudunabari is one of the remote villages of Jhapa district. Khudunabari is surrounded by 3 rivers namely Tangting Biring and Sukhani. Being a remote village, more than 70% people depend on agriculture. Economic status of the people is not so high. People of Jukekhadi community forest user group fulfill their many basic needs from the forest such as; fodder for livestock, manure for harvesting land, timber for the construction of house, shed and other types of furniture. People also fulfill their need of herbs from the forest. People fulfill their need of firewood from Jukekhadi community forest because firewood is the only source of energy for cooking and heating. Forest is one of the most important natural resources for the people living in rural people like

Jukdkhadi community forest. It is indispensable organ of rural people that is needed from birth to death. Different kinds of ritual activities and ceremonies are performed by using the forest materials. Forest is also needed to the people for the performance of funeral rite.

Jukekhadi community forest is performing different activities to increase the economic standard of the people. Jukekhadi community forest has also helped in many developmental activities of the community. It makes different plans for the enhancement of living standard of poor people. Participation of the people in different activities of CF also has noticed gradually increasing after the adoption of CF. The Jukekhadi community forest provides different kinds of skill developmental activities and loan in low rate of interest for different objectives such as livestock farming, agriculture focusing to the poor based household to uplift their living standard and reducing the inequality of wealth.

Now our concentration is to find out contribution made by Community Forestry User Group to the income generation and poverty reduction through the CDAs and users willingness to utilize the fund. Although there is challenge to achieve the goal of sustainable CF management by maintaining forest quality while meeting the growing domestic demand for the forest product as well as the community development needs of the local people. This study attempts to find out how the CF programme has played role to reduce poverty, infrastructure building, community development and also tries to find out problem regarding the CF management with recommendation for solving the problem. This research would be the representative of some other CFUGs. This research is concentrated only in the study of Jukekhadi community forest user group situated in Khudunabari VDC of Jhapa district.





### **1.3 Objectives of the Study**

The main objectives of the study is to examine the community forestry management practices of Jukekhadi community forestry user group and to find out the contribution of forest in poverty reduction through long term and short term employment opportunities and direct assistance to the poor people by the means of poor centered development programmes. Objectives of this research are:-

- i. to examine the activities made by the user group for the betterment of poor households,
- ii. to analysis the benefits derive by the user group from the community forestry,
- iii. to evaluate the consumption pattern of forest products from the community forestry,
- iv. to give some recommendation for the further improvement of CFUG.

### **1.4 Rationale of the Study**

Forest is a common property. Forest is basis of the lives of rural people. Some of the basic needs of rural poor people are fulfilled from, forest. Forest and agriculture are closely related. Forest indirectly helps to increase the productivity of soil. It is the source of income of rural people as well as the nation. It helps to increase the economic status of the people as well as country. Many kind of development plan can be performed using forest source. Forest provides materials for construction basis for rural livelihood.

More over it has environmental and ecological importance too. Such an important natural resource is now in deteriorating process. The government and people should be serious to preserve the forest. It is possible only through the co-ordination and co-operation between people and government.

Implementation of CFP has shown positive result in the field of income generation. Poverty reduction, local development, forest preservation, environmental and ecological balancing and so on.

Much research and studies regarding the community forestry programme have been performed. But the importance of the programme is so great that there is further needs of knowing how far it is important for the programme to be implemented in every village where people are facing hand to mouth problem and the condition of Infrastructure development is bad.

The Jukekhadi community forest seems comparatively better in managing forest than other CF of Khudunabari Village Development Committee. The area and the members of forest user group are also comparatively larger. The participation of various ethnic group, Women and Dalit also can be found better than other. But it needs to be more inclusive, if forest resource is managed and utilized properly, it can generate income and many developmental activities could be performed. However, CFUGs are facing different kind of problem in regard to the management are not getting complete advantage. Therefore the study tries to find out such kind of hindrance with some recommendation for the betterment of poor. This community forest has performed many development activities such as road construction, electricity extension and other skill development activities to help poor, Dalit & women.

This research therefore, is expected to contribute a better understanding in the linkage between community forestry, local people's participation in forest management & resource mobilization. Impact of community forestry for the enhancement of economic condition of user group through the study of Jukekhadi forest user group situated in Khudunabari VDC of Jhapa District.

## **1.5 Limitations of the Study**

- i) The present study focuses only one forest user group of khudunabari VDC in Jhapa district. The research is bounded by a limited time period and cost. Therefore the conclusion and result made by the present study may not be same and equally applicable for all other community forest groups. But the recommendations given here, may help for further study.
- ii) This study has been performed through the sampling method therefore there may be some gap between the sampling study and survey study but the sampling has been adopted as much as possible to be correct for the survey study. The sampling method have been adopted due to the limited time and cost available to the researcher.
- iii) This study covers only few variables and limited items in terms of deeper analysis. Hence only selected variables (viz. Firewood, timber, livestock, and fodder) have been taken into account.
- iv) The data analysis is based on simple statistical technique. The sophisticated statistical tools and technique have not been adopted for

the generalization of the study. Hence the finding of this study may not be generally conclusive.

- v) Essential data have been collected through door to door but there arises some problem such as response error therefore researcher has attempted to correct them as much as possible to make it actual.
- vi) Simple random sampling method have been adopted and samples have been collected proportionally from every ward consisted in community forest user group.

## **1.6 Organization of the Study**

This study is divided into six chapters. The first chapter covers background, statement of problems, objective of the study, limitations of the study and organization of the study. The second chapter consists of the literature review. It covers origin and management of community forestry in Nepal and effect of community forestry on poverty reduction. The third chapter deals with methodology of the study. Fourth Chapter describes the study area. It includes the description of Jhapa district, Khudunabari VDC and the Jukekhadi community forestry and its user group. The fifth chapter concentrates on the analysis and presentation of data related to community forestry and importance of community forestry. Lastly, the sixth chapter deals with conclusion which consists of summary, findings and problem regarding the CF with some recommendations.

# **CHAPTER II**

## **LITERATURE REVIEW**

The study on community forestry is not new. Many government offices, NGOs, INGOs researchers and higher levels students have undertaken the study on community forestry in Nepal. At present many analytical studies on community forestry have been undertaken in different part of the world.

Much have been written about the formation of forest user group (FUG) and handing over of the forest. Number of studies on community forest published in various books documents, journals of forestry and community forestry programme etc. these available researches which were helpful to identify the objectives of this study, were reviewed. They are as follows and are addressed by the following sub-headings.

### **2.1 Origin and Management of Community Forestry in Nepal**

Evidence shows that Nepal was rich in forest resource in the past. Forest resource continued to decline along with the population growth. People were unaware about the importance of forest. People didn't pay attention to preserve the forest. Along with the time, the government formulated policies laws and legislations in terms of forest.

The first government attempt to conserve forest resources began in Nepal in 1889 V.S. with the establishment of Kathmandu Adda. The present forest departs of government GON (Government of Nepal) was established in

2008 V.S. The government, at different times, has been forwarding different plans and programs etc. for the conservation utilization and promotion of forest resource.

The origin of community forestry is strongly linked to different approaches to forest management in the history of Nepal. Before unification of Nepal, it was divided into many small kingdoms. The ruler of these small kingdoms had arranged several system of forest management. Although, most of the forests were state owned, People were free to collect forest product to fulfill their needs in no cost.

After the unification of Nepal in 1769 AD, the Gorkhali ruler of Nepal paid little attention to forest management practices (Mahat et.al. 1986; Gilmour and Fisher, 1994).

Rana rules had also preserved some of the national forest but for their own benefit. By 1950 about one-third of the total forest and cultivated land were under Birta tenure of which 75 percent were registered in the name of the Rana Families (Regmi, 1988 as cited in Gilmour and Fisher 1991)

Before establishment of democracy in 1951, forest was managed as Kipat system, where certain local elites were selected to look after and regulate the forest protection and product distribution. Kipat system is a kind of land holding system where forest resources were managed collectively (Joshi, 1990) with the close consultation and support from the owner of the forest (Arnold and Campbell, 1985). There were several large tracts of forests provided as Birta awarded to the certain land owners (Regmi, 1988), Birta, a kind of feudal system, was eradicated after the advent of democracy in 1951. Forest nationalization act was promulgated in 1957.

During the Panchayat political system, many forest acts and amendment practices were performed. Some of them were, forest law (1961), forest protection special law (1967), and Panchayat forest (PFS) and Panchayat protected forest (PPFS) (1978). Under Panchayat forest system, any government forest or part of it, which has been kept barren or contains only stumps, may be handed over by government to the village community on the prescribed term and conditions.

Nepal's forest sector policy was first declared in the sixth five year plan (1981), which emphasized community participation in the management, conservation and utilization of forest resources. The government prepared a master plan for forestry sector in 1987. Primarily basing on these concepts, new community forestry policy was derived, after the restoration of democracy in 1990.

The new act "Forest Act, 1993" classified the nationalized forest into five different categories, they are: government managed forest, community forest, religious forest, protected forest and there was also provision of private forest.

Community forestry is not concerned with protection of forest for its own sake, but with providing sustainable source of forest product of the people of Nepal (Fisher and Mall, 1994)

## **2.2 Community Forestry: Poverty Reduction and Community Development activities**

Nepal's forest are essential for the well being of rural community who depend on them for supplies of fuelwood, fodder, poles, timber and many other products. They also provide essential raw materials for national development and help to maintain a sound environment.

For the last two decades, community forestry programme has been adopted as one of the major strategy for managing country forest. Community forestry in Nepal has become the most important programme within the forestry sector with the approval of MPFs in 1989, enactment of the 1993, community forestry legislation in 1997. The local communities as forest user groups have been entrusted with the responsibilities of management, development and utilization of forest resource to their proximity. To date more than 9000 forest user group are managing about 6.5 lakes of hectares of community forestry in the country (CFDP 2000). The primary objective of these user groups are to fulfill the energy needs in terms of the fuelwood and a number of inputs to sustain farming system along with conservation of forest, to make able the local people to decide their development activities using their own fund. Before emergence of CF, there were many state interventions design to enhance the greater control over forest resources and conservation of biodiversity.

Forest act 1961 was amended in 1978 to incorporate the provision of Panchayat and Panchayat protected forest. However, the act failed to produce desired result as local political entities. Moreover the forest was handed over on the basis of political boundary without any proper identification of



traditional and real use right. Hence, it neither contributed to an efficient management nor ensured effective people's participation in forest activities. After all, these changes neither created environment for fuller participation of the villagers nor entrusted them with an authority to protect, manage and utilize the forest. Thus the status of custodial element remained the same. However changes in forest management became gradually evident after the implementation of forest sector master plan in 1988. The plan focused on achieving people's basic needs for various forestry products, increases income at village level, and conserve natural ecosystem and genetic resource by maintaining a safe and wholesome environment.

In 1991, after the restoration of multiparty democracy in the country, the government pursued a policy of handing over forest resources directly to the villagers so that they can use it for rural development. Department of forest started identifying villagers and organized them as the forest user groups. In the true spirit of community forestry and for implementing the strategy suggested by the master plan. Forest act 2049 was promulgated in 1993. the act's preambles status in general, to attain socio-economic development and promote a healthy environment for ensuring development and conservation of forest through proper utilization of the forest products, the act emphasized on greater co-operation in conservation management development of forest resources. The act paved way for the formation of forest user groups (FUGs) to protect, manage and utilize the forest products to meet local needs of fuelwood, fodder and timber. The act also encouraged collective efforts towards community development through the sale of surplus products. Forest regulation was issued in 1995 with outlines for protection, management and utilization of community forest. It prioritized the utilization

of fuelwood and timber for meeting the domestic needs of the rural people moreover, simplifying flow of wood energy to the rural people.

However in rural areas, community forest is in practice, it has some drawbacks too. Community forestry programme is facing different kinds of problems, such as lack of knowledge for the proper management, lack of purposeful planning etc. Nevertheless, community forestry programme has been implemented with the concept of people participatory approach after the restoration of democracy. People have become the owner of their natural resource and CF practice has given positive result.

Different scholars and researchers have studied and written of the forest related to management and community development are discussed below.

Roy (1999) submitted the BSC thesis entitled “Assessment of rural livelihood through community forestry” to institute of forestry Pokhara. He used questionnaire as a major tool for collecting information. He also carries out informal discussion with key informants. Information are collected through direct observation. His main objective is to record the impact of community forestry in the rural people in terms of agricultural production, animal husbandry and their day to day activities. He finds that majority of Brahmin Chhetri have used improved variety of seeds for agriculture after the introduction of community forestry. He also finds that the use of chemical fertilizer is decreasing due to the availability of leaf litter. They are hopeful of crop increment due to increasing use of leaf litter. Majority of people own more livestock after the implementation of CF. Their wealth has been increased. They can tame more cattle before than the adoption of CF which has helped to increase the annual wealth of the people. After the adoption of

CF, people can collect firewood from the nearby forest. People can use their remaining time in others income generating activities and he concludes that community forestry has played a positive role either directly or indirectly. Fertility of soil has increased. Income of the people has increased time has been saved and people are healthier than before. If the government implement any kind of skill improvement training there, it would help to be the local people self dependent.

Kanel and Niraula (2004) prepare a paper on “can rural livelihood livelihood be improved in Nepal through community forestry?” this paper attempts to quantify the contribution of community forest to the community development and livelihood of people in Nepal basing on 1788 CFUGs information of 12 district. The data for this paper have been collected from 1788 CFUGs from 12 districts of Nepal. The annual income and expenditure of CFUGs are collected from the district through district forest offices (DFOs). Among 1788 CFUG data, 247 are in Terai region and 1541 in hill region. The simple frequencies are used. Total CFUGs are broken down into two groups; hills and Terai region. He finds the increase at income of CF due to the involvement of people in forest activities and the condition of local infrastructure better than before. CFUG are spending their time and income in forest protection, management and local development. He concludes CF can provide environmental, social, institutional, and physical benefits. CF is financially viable, environmentally sound and socially acceptable option of forest management in Nepal and at last he recommends that CFUG should design programme in favour of poor people and evoke them to participate in different activities without any discrimination. He further writes “Most of the rural people in Nepal depend in traditional agriculture and livestock for their

livelihood. Forest is the major component of farming system and plays a vital role in rural livelihood by providing fuel construction materials and animal food. Having agro based economy, Nepal has to develop and manage the existing forest resource to achieve the national goal of poverty reduction as mentioned tenth five year plan (2000-2007).

Joshi Amrit L. (1997) writes about the importance of forest that in the last twenty years, community forestry programme (CFP) has not only gained impressive international reputation but also fulfilled firewood and fodder demand of local communities. The programme has also generated some revenues for local community development. Being a new concept of forest management, new problem have been faced and are get solved simultaneously. One should not forget that CF is designed to suit the Nepali local condition and may need appropriate modification to apply in other parts of the world. Other countries could learn a substantial lesson from Nepal's experience in this particular matter. The main lesson is that if the communities are empowered, the resource can be well protected managed and utilized.

Pokharel (2001) states that it is possible from community forestry to reduce poverty by securing resource for the poor, increasing the availability of resource and providing potential for income generating activities. Community forest contributes to improve people's livelihoods. It has contributed significantly in building social capital.

Community forestry approach is one of the most effective and appropriate approaches taken by the people to preserve the forest in Nepal. Community forestry in essence a participatory approach in which the local people are

involved in the planning, implementation development production and protection of forest resource (Kayastha, 1991)

Khanal (2005) submitted a master thesis of “Forestry Programme in the hill of Nepal.” to the Norwegians university of life science. He analyses quantitatively about economic dependence and inequality of forest user group in Kaski Nepal, basing on the objective of the effect of community forestry programme for reducing poverty and analyses the problem and prospect with some recommendation, he writes that the percentage share of community forest income in the total forest income tended to be higher to the literate, untouchable, female headed households the dependence of the household on community forest is mainly based on the benefit derived by fuelwood, fodder ground grass and leaf litter. The community forest income is more important for the poor and had a strong equalizing effect on local income distribution.

Neupane (2003) submitted a master's thesis on Economic effect of community forestry in Nepal" to the central department of Economics. The study was conducted in Bhumisthan community forest user group of Hattiyaha village development committee of Baglung district, Nepal. His main objectives are to find out the problem regarding the community forestry in the study area and to recommend policy measures for beneficial exploitation of CFUG of Hattiyaha village.

The study is mainly based on primary data, primary data have been collected through questionnaire design, interviews, observation, key informant, field diary. Data have been analyzed using simple descriptive method to obtain the basic purpose of the study.

His main findings are, after the inception of CF programme in the area, management practice is gradually improving. Villagers are now getting sustainable forest products, easy accessibility, co-operation among people and environmental benefits. Community forest in this area is the main source of fuel wood, fodder for livestock and timber for villagers. It is also the source to help other types of community development programme such as school support bridge constructions, electricity trail improvement etc. The whole village got a good return from the forest and they are always willing to expand and develop the forest. Community forestry has played dual role, on the hand protecting forest and on the other hand community development activities.

He recommends that a policy guideline for the use of funds should be developed for the proper mobilization of groups fund and CFUG has to be provided with the technology of NTFPs cultivation and promotion in community forest.

Khatri (2004) submitted a master thesis on "The role of Community Forestry in Community Development" to the central department of rural development. The study was conducted in community forest user groups of Dovan in Terai are landscape, Palpa district.

His main objectives are to examine the economic status of households involved in forest group, to analyze the local development activities of CFUGs for rural development in the study area and its impact on the local development.

The study is based on analysis and description. Simple random sampling method has been adopted. The information are collected through primary data and secondary data also collected if necessary. Data were

collected through interview, observation, key informants interview, households' survey. Data have been analyzed using simple statistical tool and technique. 94 households of CFUGs (25%) were selected from 379 households of six CFUGs for the study.

Conclusion of the study is that the CF in Dovan VDC is improving because of increased ownership feeling and various sound forest management strategy. Several socio economic improvements like employment generation reduction in migration, increasing level of awareness, self confidence, self reliance and community development program like linking roads, roads gravelling, school buildings, temples, resting houses, support to bio-gas plant establishment, construction of red cross building, support to goat keeping, micro hydropower production etc have been established and achieved after enactment of CF in study area. CF has positive impacts on gender equality, employment and poverty reduction that are limiting factors of socio economic change of rural people. At last he recommends central level should lead the CF to make plan and manage the forest properly. Continuous support, co-operation and monitoring from district offices are essential for the future improvement of CF. All groups, gender cost should have equal participation for the sustainable development of forest resource.

Giri (2000) submitted a master thesis on "community forestry and pattern of income distribution in Nepal" to the department of economics P.N. Campus Pokhara. His study confines in community forestry in Lekhnath Municipality he tries to find out the pattern of income distribution that implementation of community forestry has either help reduce the inequality of income or not and to find out the problem of CF. He collects information through questionnaire, key informants; both primary and secondary data have

been collected for the analysis of the study. Random sampling procedure has been adopted. Giri suggested that community forestry is a viable strategy for the department of forest to manage the forest resources of the middle hills of Nepal. The users have been found happy about product distribution practices prevalent in their group. The users make an equitable contribution towards protection, management and equitable distribution of forest product. He has also mentioned that equity in decision making and distribution of FUG funds are more complex process. However, these fund to all cases in his study have maintained relatively well in this regard.

Prasai's (2000) study on "some aspect of community forestry in Nepal" A case study conducted on Bhagawanthumki community forestry in Kabhrepalanchok district taking 50% households from study area. He collects data randomly. He also uses questionnaire, key informant etc for data collection and some related informations are also collected from executive body. Both primary and secondary data have been used for the analysis of the study. He finds that community forestry fulfill the demands of forest produces like firewood, fodder, green grass, leaf litter timber etc. community forestry has a greater impact on other income generating activities by saving time to collect fire wood, fodder and leaf liter and earn around 10000 per house in average each year. Most of the people in the study area used the saved time on poultry farming and of the people in the study area used the saved time on poultry farming and earn around 1,0000 per households in average each year. It has been amply demonstrated in Bhagawanthumki community forestry that communities are capable of organizing themselves and conserving local forest resource. Besides the monetary benefit, the people of study area are being



entertained with real benefit like co-operation among the people, environmental improvement etc. after the implementation of CF program.

Singh (1998) reported that many CFUGs, after meeting their forestry needs of fuel wood, fodder and timber have earned a significant amount of income for their group funds from the management of community forest and another viable sources. Although book keeping and financial auditing of CFUGs are at a rudimentary stage, collection of substantial amount of fund by many CFUGs signifies that CF is gradually moving towards the monetized sector of the economy. These funds are now being used for many CDAs and FDAs (Yadav 1998).

Jackson and angels (1994), mentioned that many CFUGs in Nepal, Australia community forestry project area have part of their income to hiring guards to protect forest, building schools and roads, establishing irrigation facilities and drinking water systems providing credits to CFUG members, connecting electricity and purchasing torch lights for use in literacy programmers.

It is shown that community forest management is helping community development activities by injecting funds and voluntary services. For instance, in Nepal and India, CFUGs are undertaking small-scale CDAs with the funds generation from community forests (Hunts et al 1996, Gouda 1997). These small scale development activities could be move appropriate than externally sponsored activities to solve local problems. This is because local people determine their needs, seeks solution and act accordingly, such activities may be more sustainable than the activities run by the outside funding because continued sustained income from CF would provide for on going maintenance

of cost. This is particularly important when outside funded rural development programme fail to provide continuous benefits after the termination of external funding as local communities often do not have sufficient funds to maintain the infrastructure. Providing funds for rural development is not the only way that CF is supporting for rural development. It has also mobilized a growing rural labor force by providing off-farm employment such as harvesting of timber and non timber forest products, processing and transportation of forest products (Hunt et al. 1996. Maharjan, 1996 as cited by Dangol, 2000).

Aryal (2001) submitted a master thesis on "importance of community forestry in Nepal". It is a case study of Pandey Gaun community forestry user group of Tukucha VDC, Kavre District. His main objectives are to analyze the importance of community forest, to analyze the benefit derived by the user group, to asses the role of CF in income generating activities and to find out the problem regarding the community forestry in the study area. This is a survey study, which covers all areas and households of the study area. This is a survey study, which covers all areas and households of the study area. Data are collected through primary source and primary data are based on questionnaire, interview and field observation. Different techniques of data collection have been employed to obtain different types of quantitative and qualitative data. The collected data have been classified, tabulated and analyzed in items of simple statistical tools like frequency percentage and mean.

He finds that after the implementation of CF, forest deterioration is under control and forest management practices is gradually improving. Villagers now get sustainable forest products, easy accessibility, co-operation

among people and environmental benefits, CF is now the main source of fuel wood, fodder for livestock and timber. People's participation seems to be active and so is the women's participation. Community forest has been a source of support for development and social work in the village. Problem regarding the community forestry is people have different views in a single issue; people with different political ideology cannot sit under the same roof. There are other technical problems such as assistance from forest department is not sufficient, illegal cutting of trees, smuggling and fire problem etc. At last he recommends that more awareness programme should be implemented. The user group should receive training, bio-gas and improved stove should be promoted, and government and non government should implement different programme for CF.

Acharya and Oli (2004) prepare a paper on "impact of community forestry in rural livelihood". The paper endeavors to assess the impact of community forestry programme on rural livelihood and Economy. Bharkhare community forest of Parbat District of western Nepal was selected for this purpose. The study site is located in Siwlaya VDC ward no 1 in western Nepal of hilly region. The literacy rate is 90 percent where 75% literate are Brahmin and Newar. Semi structured interview, Focus group discussion, internal discussion, transect working, key informants survey, line survey and observation are used to collect the information. Secondary information are obtained through CFUG, district forest offices and published literature. The study finds that after the hand over of forest, the community people are participating actively in weeding, cleaning, protecting against fire and grazing, singling, pruning selective felling, leaf litter collection soil conservation and plantation. The impacts of community forestry are

multifaceted and complex. Their nature varies from direct and non measurable to indirect and measurable. The impact of CF are grouped into two categories: bio physical and socio-Economic. Impact of community forestry management was beneficial to the users but some negative effect were also observed. The most beneficial impact by the programme is the rehabilitation of degraded hills. Thickness of forest has increased. Implication of CF shows the positive socio-economic impact, such as capacity and infrastructure building. Rural infrastructure building and community development through the support of CFUGs and helped in developing mechanism for participatory development process in natural resources. Marginalized sector of community including women and Dalit have been empowered. It was also noticed that household level benefit from CF has increased. Each household has been receiving average amount of 1248 kg to 2359 kg of forest product for the last 10 years. Each household of CF has extracted about NRS 3200 worth of forest product annually from the forest within the period of 10 years. CFUG is able to collect the fund and spend it in various educational and development activities such as quiz competition, plantation, it has also helped to reduce the conflict. Some negative impacts were also noticed such as grazing rearing and forest protection negatively affected the livestock rearing and livelihood for the poor and issues of elite-dominance in decision making and benefit sharing are increasingly emerging.

Conclusion of the study is that after the implementation of CF, some positive impacts have been noticed such as erosion control, water source conservation bio-diversity conservation. It was also found that social cohesiveness among the forest users of different caste/ethnic groups has

developed which helps minimize the gap between higher and lower caste and income inequality.

Thapa (2004) submitted a master thesis on "An Economic analysis of community forestry" to the Central Department of Economics. The study was conducted in Saraswati community forestry user group Narayan Municipality of Dailekh District Nepal. His main objectives are to analyze the importance of community forestry in local economy, to examine the economic impact of community forestry on user group and to find out the problems regarding the community forestry in the study area.

In this study both qualitative and quantitative research methods have been applied out of 129 household of the members of Saraswati CF, eight households were selected and simple random sampling procedures were applied. Questioners were structured by two ways; One set of questions were for user group and another set of question were for FMC. Both primary and secondary data have been collected through the technique of purposive sampling survey. Questionnaire interview key informant and field survey are the technique of data collection. Data collected from field and respondent have been tabulated and compiled. Both primary and secondary data have been analyzed qualitatively as well as quantitatively.

He finds from the study that community forest has helped the user saving their time in day to day activities by making availability of fuel wood, fodder leaf litter, water etc. The user had to spend a lot of time in walking just to get a 'Bhari' of firewood and fodder. These days they don't have to spend so much time for collecting since they get it sufficiently community forest. They have been using their saved time for other purposes such as; the people in the study area are using their saved time on poultry farming and earn around as 10000 each households in average every year. These positive results have been notice after the implementation of CF; widened the forest area, increase

the awareness of belonging to the forest as their own, improvement of economic condition of CFUG.

He recommends that Government organization should encourage the CF by providing training, operational plan preparation, forestry rules and regulation and awareness building should be conducted. DFO should have regular interaction and meeting with FUG. Improved cooking stove, kerosene stove, Gobar gas programme in the mid hill can be carried out to reduce fire wood consumption, and people should be encouraged to participate in every developmental and educational programme.

# **CHAPTER III**

## **RESEARCH METHODOLOGY**

### **3.1 Research Design**

In this study both qualitative and quantitative research methods have been applied. Factors determining impact of community forestry on poverty reduction and local development are briefly described by the attitude of the respondents and data of different activities available in the study area. The basic objectives of this study are to identify the different activities performed by the user group for the betterment of poor households, to examine the local development activities to find out the problems regarding the community forestry management.

The methodology consist of source of data, data collection technique and method of data analysis.

### **3.2 Source of Data**

This study is based on both primary and secondary sources of data. Secondary data are those data which already exist and may be used for investigation. The secondary data include records and reports on different aspects of the study. The reports and records are obtained from different sources and offices i.e. local forest office, District forest office's census survey etc. Different maps, diagrams, tables are also included in this study. Similarly,

other secondary sources of information are: articles, books and dissertation on related topics.

### **3.2.1 Study Area and Sampling**

Primary data refer to the information, which has originated directly as a result of the particular under investigation. Primary data are mainly collected through structured questionnaires.

The total number of forest user households are found out to be 1,275 in Jukekhadi Community Forestry user Group. Total population of Jukekhadi community forest user group is 7,025. Out of the total households, 10 percent households has been taken as the sample size, which consist 128 households. Each sampling unit has been selected by simple random sampling without replacement. Lottery method has been adopted for the collection of household information. Necessary information and data are collected from the study area from Ashadh to Ashwin (2064).

## **3.3 Techniques of Data Collection**

Different data collection techniques have been employed to obtain different types of quantitative, qualitative data and empirical information. Some techniques, used for data collection are described below:

### **3.3.1 Questionnaire**

Questionnaire sheet have been prepared and administered to the local people in order to collect quantitative and qualitative data. Structured



questionnaire has been used to get quantitative data in the field of personal identification, population compositions, educational status, land holding patterns, forest utilization as well as poverty reduction and forest development.

### **3.3.2 Interview**

Interview method has been used to collect empirical information related to this study. Empirical information obtained from interview method includes cause of forest depletion, crisis of local people, response of the local people to the community forestry, impact of deforestation in the native subsistence system and traditional system of forestry practice.

### **3.3.3 Observation**

Participant observation is a very useful method for examining local development activities and patterns of daily resource use. It is used to verify information that is gathered by means of other methodologies. Informal interactions are carried out with local people during the study in villages.

### **3.3.4 Selection of key informants**

A few informants have been selected to obtain in depth information in the field history of settlement, stability and change in the attitude of people towards forest conservation etc. The key informants are village elderly people, local political leaders, local elites, secretary and chairman of Jukekhadi community forestry committee.

### **3.3.5 Field Diary**

The researcher used a hand diary to maintain the record of day to day necessary information observed during field survey and collect the information about the forest. It was meant to note some supporting information which not covered by the survey questionnaires. Details of important incidents, events and discussion are recorded in the hand diary.

## **3.4 Method of Data Analysis**

The collected data have been classified, tabulated and analyzed in terms of simple statistical tools like frequency, percentage and mean. Descriptive method has been taken into consideration to obtain the basic purpose of the study.

The overall weight of utilized fodder and manure has been taken in 'Bhari' then it has been given expected value for each Bhari for final analysis in terms of monetary term. Quantity of fire wood has been taken in kilogram and quantity of timber has been taken in Cft and converted it into monetary term.

Both quantitative and qualitative data analysis have been used for the analysis of the collected data. For the analysis of the quantitative data, percentage and mean are used. Similarly, for qualitative data are analyzed using descriptive mean.

## **CHAPTER IV**

### **DESCRIPTION OF THE STUDY AREA**

#### **4.1 Jhapa District**

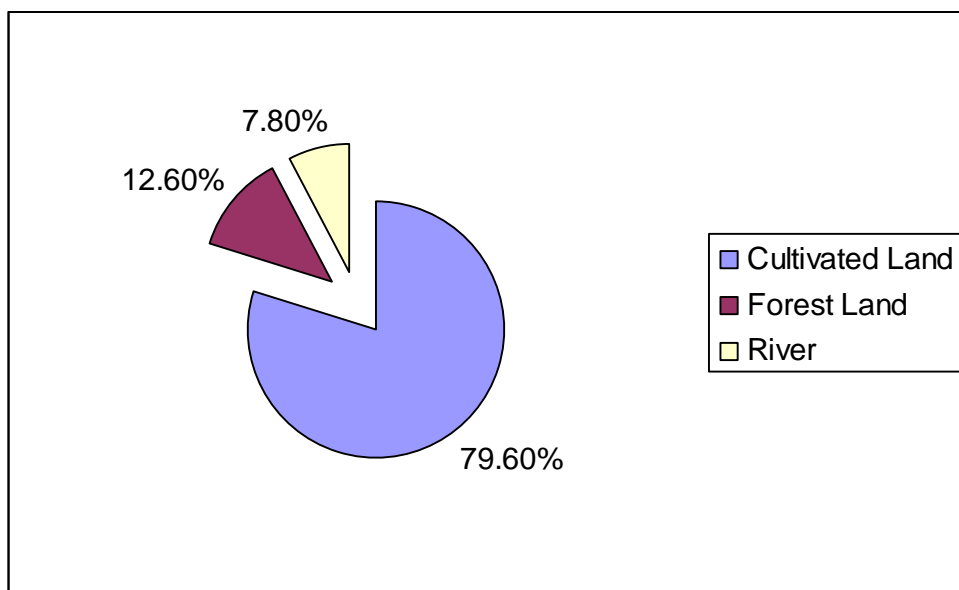
Jhapa is a Terai district situate in between 20°20' to 26°50' N latitude and 87° 39' to 88°12' east longitude in eastern development region of Nepal. The total area of this district is 1606 sq km. It is bordered by west Bangal state of India to the East, morang district to the west, Ilam district to the north and Bihar state of India to the south. The climate is subtropical temperate.

The total population of Jhapa 688,109 out of which the number of male are 341,675 (49.65%) and female are 346,437 (50.35%). Total households of Jhapa are 137,301. Average population size of the district is 5.01. Population density is 428 per sq. km. Literacy rate of Jhapa district is 66.93% in which male literacy rate is 75.35% and female literacy rate is 58.65%.

Topography of this district is almost plain. Some are slightly steeper. Land utilization of this district includes agricultural land, grazing land, forest covered land and other types. 79.6% land of Jhapa is cultivated land. Forest and river covers 12.6% and 7.8% land respectively in Jhapa. This can be shown in the following figure 1:

**Figure no 4.1**

**Land Utilization Pattern of Jhapa District**



Source : DFO, Jhapa.

There are 47 VDCs and 3 municipalities (Mechinagar, Bhadrapur & Damak) in Jhapa district.

The main religion of the people in Jhapa district is Hinduism, Buddhism and Kirant comes to the next. Nepali is major spoken language. Besides, Rai, Limbu, Hindi and other ethnic dialects are also spoken. Being a Terai and a developed district, trade is also a major occupation of the people of Jhapa. Besides, people are also engaged in livestock rearing. Types of livestock found in this district are cattle, buffaloes, goats, pigs, chickens, ducks etc. Some people are also engaged in poultry farming and hatchery too. Main cereal crops growing in this district are paddy, maize and wheat. The cash crops include potatoes mustard, tomatoes and other green seasonal and non-seasonal vegetables.

### **4.1.1 The Forest Resource of Jhapa District**

Forest covers about 12.6 percent land in total area of Jhapa District. Being a Terai district, climate of Jhapa is subtropical temperate and main species of trees found in the forest of Jhapa are Sal (*Shorea robusta*), Sisoo (*Dalbergia Sisoo*), Harro (*Terminallia chebula*), Kadam (*Anthocephalus Chinesis*) etc. Among various kinds of trees found in Jhapa, the Sal tree is the main and almost all parts of the forest is covered by it. Among others, Ashare (*Lagerstriemia parreflora*) Satisal (*Dalbergia larifolia*), Jamun (*Suzygium cumini*), Tanki (*Bauhinia purpuren*) etc. Besides, Mashala (*Eucalyptus camaldulensis*), Simali (*Vitex negundo*) Bakaina (*Melia azedarach*) Lahare pipal (*popula deltoids*) are found planted by local peoples in their lands (Source: JCFUG Statute).

### **4.1.2 Status of Community Forestry in Jhapa District**

In Jhapa District, CF initiatives were started just after the restoration of democracy in 1990. Community forestry programme is further highlighted after implementation of the MPFs (1988). Community forestry activities have been implemented in Jhapa district through the district forest offices. Community forestry program in the district began with the purpose of enhancing assets of rural communities through more equitable, efficient and sustainable use of forest resources. Till the fiscal year 2063/064, most of the forest have been handed over to the community forestry user groups. Among these CFUGs, one CFUG namely Jukekhadi community forest situated in Khudunabari VDC has been chosen for the study.

## 4.2 Khudunabari Village Development Committee

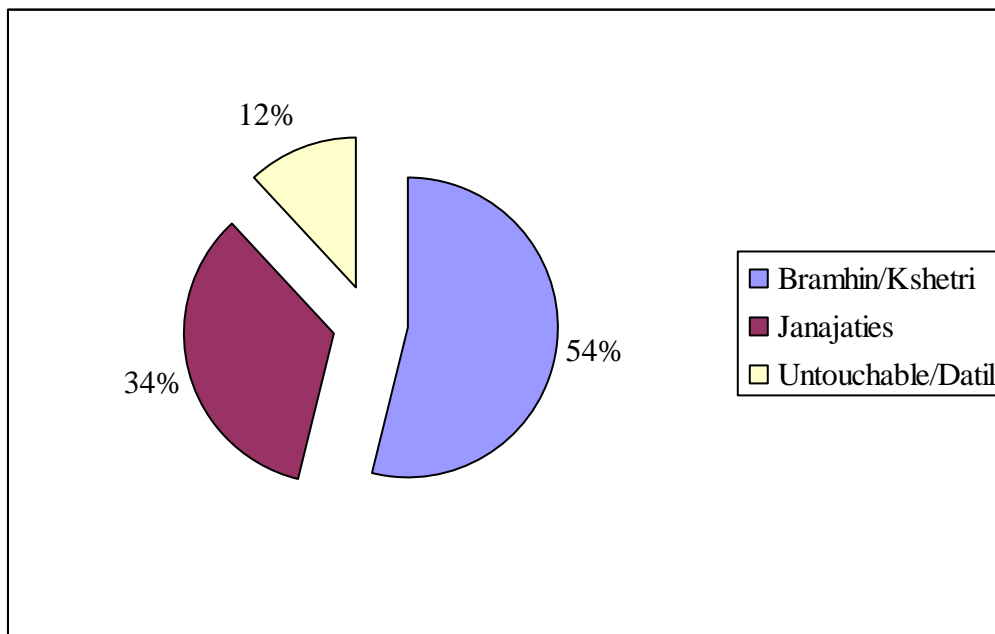
Khudunabari VDC is situated in the northern part of Jhapa district. Sukrabare is the main town of Khudunabari where the VDC office is situated. Khudubabari is bounded by two rivers; Tangting and Biring to the East and Sukhani to the West. Before some ten years ago, Khudunabari was a most remote village in Jhapa. Now it has become as a developed village because of the construction of road, drinking water, electricity facility, +2 school initiatives, village market etc. But these three rivers are the headache for Khudunabari. Many hectares of fertile lands are swept away by summer flood every year. DDC and Nepal government has not taken much interest to solve the flood problem of Khudunabari.

Khudunabari VDC has diverse caste/ethnicity such as Brahmin, Kshetri, Rai, Limbu, Gurung, Tamang and other lower castes like Kami, Damai, Sarki etc. The total population of the VDC is 14,037, where there are 7,028 males and 7,009 female. Percentage of male and female are almost equal (50%). The total number of households is 2699. There is also Bhutanese refugee camp where there are about 18,000 refugees have been staying since 1,990. So altogether there are more than 3,5000 population in this VDC.

Khudunabari VDC is a composition of diverse ethnic and caste group but the dominance is of Brahmin-Kshetries where 54 percent are Brahmin-Kshetri, Janajatis are 34 percent and so called untouchable, lower cast Dalit are 12 percent. It can be shown in the following diagram.

**Figure no 4.2**

**Ethnic Composition of Khudunabari VDC**



Sources: Field Survey, 2007

Kumal are the indigenous ethnic people of Khudunabari. But now they are in a few numbers. Their numbers of population are decreasing gradually. Kumal are called innocent and honest community of Khudunabari. About 84 percent people are found literate that is why number of illiterate people are negligible in the study area.

There are six community forestry user groups in Khudunabari VDC. There is also one range post which actively launches the program to preserve the forest and gives training to the newly formed CFUG. People are actively engaging in forestry program. People's participation in community forestry program has given positive result on local community development.

### **4.3 Jukekhadi Community Forest and its User Group**

The Jukekhadi community forest is one of the oldest community forests of Khudunabari VDC, which is located in ward no. 7 and 8 of Khudunabari. It comprises of 729 hactor of land and various kinds of trees such as Sal, Sisoo, Simal, Siris, Chilaune, Khayar, Rajbriksha, Tooni, Kadam, Aashare, Kaphal, Pipal, Champ etc can be found in this forest.

Jukekhadi community forest was established on 20<sup>th</sup> Manshir 2052 BS and handed over to the community on 3<sup>rd</sup> Phalgun 2052 BS Jukekhadi community forestry user group consists of 7,449 people where there are 3,722 males and 3,727 females where males and females are found 49.97% and 50.03% respectively. In percentage male are 49.97% and female are 50.03%. Jukekhadi community forest user group is the composition of different ethnic group like Bramhin, Kshetri, Janajati, Dalit, Madhesi and indigenous people. About 70 percent people are literate in this community. More than 70 percent people adopt Hindu religion. Others have adopted Kirant, Budhism, Christianity, Islam as their religion. The main occupation of Jukekhadi community forest user group is agriculture. According to survey performed by CFUG in 2006, 80 percent people are found to be engaging in agriculture.

According to the oldest people of village, political change of 2036 and 2046 caused the rapid decline of the forest. During the Panchayat system, forest was attempted to protect by DFO and range post. Many strict laws and legislations were employed but it could do nothing due to the lack of people's participation in protection and management. It proves that forest protection



and obtaining benefit from it is impossible without handing over forest to the local user people in management and utilization.

It has been noticed that forest areas and its density have increased after the adoption of CF. Smuggling of forest wood has decreased. People's participation in preservation and development activities has increased. People are getting different kinds of skill development training that has helped the people to be self dependent and increase the level of income.

The Jukekhadi community forestry user group comprises of the people of Khudunabari ward no 7, 8, 9 and Arjundhara ward no. 2, 3 and some parts of ward no. 4. There is an executive committee of thirteen people with the representative of women, Dalit and Janajati.

The Jukekhadi community forestry user group is performing different activities for the development of local community and income generation of local people. The forest user group has specified the following objectives for the management and protection of the forest.

- i. To fulfill the basic needs of users from forest products such as fuel wood, fodder and timber on a sustainable basis.
- ii. To manage the forest scientifically by dividing forest into different blocks.
- iii. To increase the density and greenery of the forest.
- iv. To improve the forest condition by protecting, promoting and developing appropriately.

- v. To conduct community development activities and income generating activities by the fund created by CF.
- vi. To increase the local people's participation in different activities of CF.
- vii. To increase the Economic status of the local people by the proper utilization and management of CF.
- viii. To increase the productivity of land and conserve soil fertility and water resources.

The executive body of Jukekhadi community forestry user group is selected by voting. The executive body is selected for two years. The executive body holds authority to make plan and mobilize the fund in different sectors. The meeting of executive body holding in the end of the month decides about the performance of different plans.

#### **4.3.1 Collections of Forest Products and its Distribution**

The main forest products collecting from Jukekhadi community forest are fuel wood, timber, fodder, grasses, leaf litter and poles. These products are collected for the domestic purpose. The forest user group has initiated plan and rule for the protection, collection and distribution of forest products. The collection and distribution rules for these products outlined in the forest user group's statute and forest operational plan are as follows:

### **(i) Fuel wood**

Fuel wood is collected from singling pruning and thinning operations that are carried out every year. Green fuel wood collection is strictly prohibited. The FUG has strictly prohibited taking axe, saws and other big weapons in the forest area to collect fire wood. The FUG has permitted to collect fire wood from the forest, Saturday and Tuesday twice in a week. The fuel wood collected through the CF office is distributed equally with nominal charge to the users. The CF office has fixed two types of fuel wood charge for sal and non sal tree. Sal fuel wood is sold in Rs 50 per quintile and Non-Sal fuel wood is sold in Rs 40 per quintile. People besides the community forestry user group can't purchase the fuel wood from CF. Each member of CF has to obey the rule of community forest. Member of the community should not get facilities provided by the user group if they are found violating any rules of CF. Users can collect only dry twigs and dry branches from the forest. If people are found in the forest with big weapons, they are fined as per their offence. Each household can get 6 quintile fuel wood from the forest annually with nominal charge fixed by CF. The CF provides fuel wood for cremation performance without any charge and if anybody conduct religious activities, CF provides fuel wood as per their need.

### **ii) Timber and Poles**

Jukekhadi community forestry provides timber and poles to the member in a nominal rate. Timbers are distributed indiscriminately to the users as per their needs. The community forest office collects over matured and fallen trees from the forest and carries out a need assessment of the users and provide up to 25 cubic feet of timber and poles specially to those who need

timber and poles for house, kitchen and shed construction and maintenance. For this, users are charged Rs 101 per Cft of Sal timber and Rs 61 per Cft of non-Sal timber. Community forestry office provides timber for making furniture and plough too. The prices of timber for the community are set lower than those of free market. In free market the cost of timber is Rs 301 per Cft of Sal timber and Rs 101 per Cft of non-Sal trees. The timber is sold in free market only if there is surplus of timber after distributing the community for domestic purpose. Besides the private purposes, the timber and poles can be given to those people who are suffered by natural disaster i.e. flood, fire etc. The community forest provides timber without any charge to those people who are extremely poor in the community. 10 households from the family of lowest economic status in community are selected then the community provides 10 CFT timbers for them on free of charge. If the society needs timber and poles for social infrastructure building such as electricity, schools, hospitals, road construction, bridge construction, timbers can be used without hampering the conditions of forest or as per the operational plan.

### **iii) Fodder**

Users can collect fodder all over the year from forest on free of charge. People staying the nearby forest depend on it to collect fodder for their livestock. But the people are not allowed to collect tree fodder. It has given permission to the people to collect only green ground grass. The user group has strictly prohibited the people to take big weapons in the forest to cut big branches of the tree for fodder and other purposes.

### **iv) Protection of Forest**

The forest is protected from fire setting, cattle grazing, illegal felling of trees and smuggling of timber and collection of forest product such as medicinal herbs and others raw materials through a strike system of forest watching. The community forestry has employed some sixteen person as forest watcher. They are called "Sorah Danthe". They petrol and watch the forest day and night. If the people are found in forest with illegal activities, are punished and fined as per their offence. Rupees collected from such fines and punishment is added into the fund of user group and spends it as per the need of community.

## **4.4 Other General Information of the Jukekhadi Community Forest Area**

### **(i) Sample Households**

Total sample households of the Jukekhadi community forest user group are 128 where there are 746 people out of which there are 386 male and 360 female. The population composition of Jukekhadi community forest user group is noticed almost as equal in percentage of male and female. Male population is slightly greater than female. It can be shown more precisely in the table below.

**Table No 4.1**

### **Population Composition of Jukekhadi Community Forest user group**

Total Household	Population				Total
	Male	Percentage	Female	Percentage	
128	386	51.74	360	48.26	746

Source: field survey, 2007

**(ii) Ethnic composition**

Jukekhadi community forestry user group is the composition of different ethnic group, out of which dominant ethnic group is "Bramhins/Kshetries".

**Table no 4.2**

**Ethnic Composition of the Jukekhadi Community Forest User Group  
(household survey)**

<b>Ethnic group</b>	<b>No. of Households</b>	<b>Percentage</b>
Bramhin/Kshetri	70	54.69
Hill Janajati	27	21.09
Hill Dalit	15	11.72
Terai Janajati	8	6.25
Terai Dalit	6	4.69
Muslim	2	1.56

Source: field survey, 2007

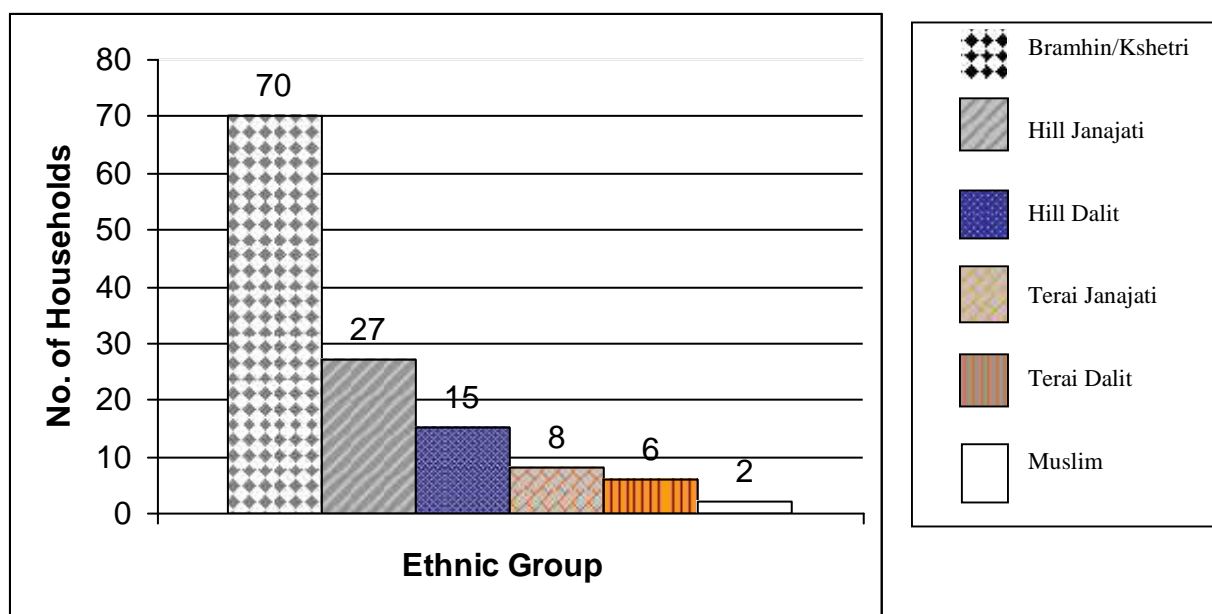
From the above table it is noticed that in total households 128, there are 70 households belonging to Bramhin/Kshetri, which occupies 70% households. 27 households are occupied by Hill Janjati it is 21.09%. Hill Dalit falls 3<sup>rd</sup>. Number of households belonging to Hill Dalit are 15, it is 11.72% in total. Terai Janajati comes in 4<sup>th</sup>. Terai Janajati belong 8 households, it covers 6% share in total and Muslim community in community seems lowest ethnic

group. Muslim households in community are 2 and it is 1.56% share in total households.

Ethnic composition of the Jukekhadi, community forest user group has been shown in the following diagram.

**Figure no 4.3**

**Ethnic Composition of Sampled Households**



**(iii) Occupational Composition**

Agriculture is the main occupation of the people living in Khudunabari so as well as in Jukekhadi community forestry user group. Bramhin and Kshetri are comparatively richer than other ethnic group. Bramhin and Kshetri occupy comparatively more land than other ethnic group. Landholding pattern of the people of Jukekhadi community forestry user group is noticed unequal where most of the fertile land area are in the grip of "Bramhin/Kshetri". Hill Janajati comes second. So called Dalit can be noticed poorest ethnic group in the community.



Although agriculture is the main occupation of the people of Jukekhadi community forestry user group, they adopt different occupations. Most of the so called Dalit adopt their traditional occupation such as Kami-iron making, Damai-tailoring. Besides most of poor people are engaged in wage labor, loader, carpenter etc. Specially, the people consisting in so called Dalit can be noticed adopting lower class work.

Only the people who belong to the age group of 15-16 are considered as occupational person. In fact less than 14 years and elders more than 60 years are not taken into account for the occupational distribution.

The total population of 128 households are 746 where there are 423 people consisting 15-16 years. Occupational distribution of economically active people is shown in the table below.

**Table no 4.3**  
**Occupational Composition**

<b>Occupation</b>	<b>Frequency</b>	<b>Percentage</b>
Agriculture	296	69.98
Service	68	16.08
Business	21	4.96
Wage labor	26	6.15
Traditional profession	12	2.83
Total	423	100.00

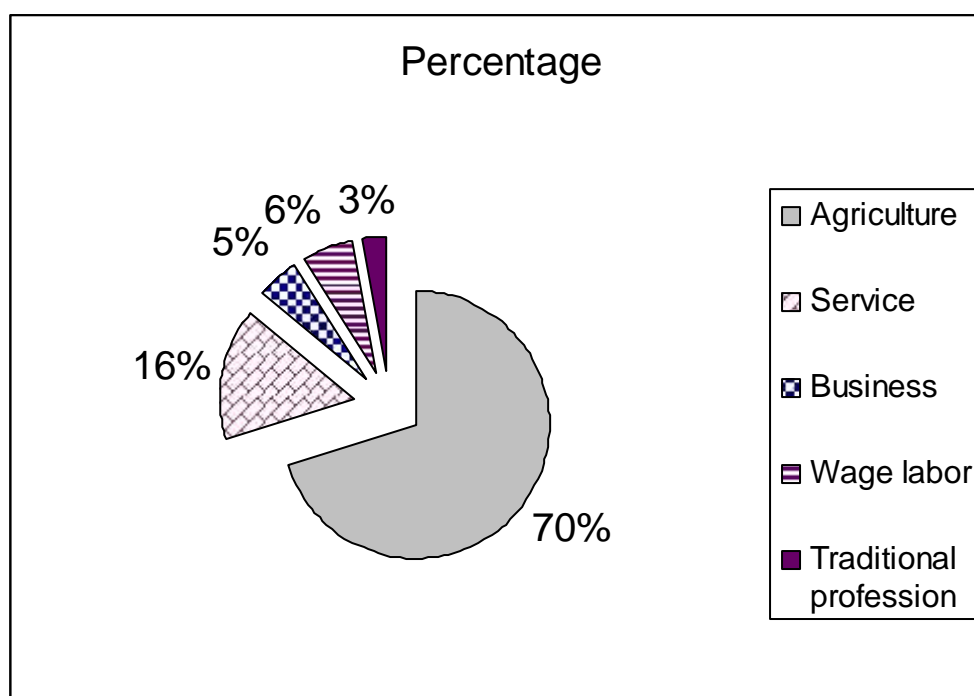
Source: field survey, 2007

From the above table it is known that out of 423 population, number of people adopting agriculture as a major occupation are 296. It covers 69.98%

share in total. Then people engaging in service are 68 it is 16.08% share. Business, wage labor traditional profession falls in 3rd, 4th and fifth category respectively. Where people engaging in business wage labor and traditional profession are 21, 26, and 12 respectively. It can be shown in the following diagram.

**Figure no 4.4**

**Occupational Composition of Sampled People**



**iv) Animal Husbandry**

Animal husbandry is also a part of agriculture. The prosperity of family can also be judged by the number of animals they own. They depend on forest to feed their animals.

**Table no 4.4**

**Ethnic Group Owning Different Animals**

Ethnic Group	House-holds	Cow /Ox	Buffalo (He/she)	Sheep/goat (He/she)	Pig (He/she)	Chicken /Ducks
Bramhin/Kshetri	70	154	140	368	×	161
Hill Janajati	27	48	33	68	31	60
Hill Dalit	15	23	4	8	8	20
Terai Janajati	8	2	×	6	×	10
Terai Dalit	6	4	5	15	5	20
Muslim	2	×	×	4	×	10
Total	128	231	182	469	44	281

Source: field survey, 2007

From the above table it is known that 70 households of Bramhin/Kshetri rear 154 cows/oxen, 140 buffalo, 368 sheep goat and 461 chicken/ducks respectively. Brahmain/Kshetri are not found to be rearing pig. Pig is untouchable animal for Bramhin/Kshetri. Hill Janajati, Hill Dalit, Terai Janajati, Terai Dalit and Muslim are found to be rearing 48, 23, 2, 4 and cows/oxen, 33, 4, 0, 5, 0 buffaloes, 68, 8, 6, 15, 4 sheep/goat, 31, 8, 0, 5, 0 pig and 60, 20, 10, 20, 10 chickens/ducks respectively. Each households in the community are found to be rearing 9.43 animals in average. Each of the ethnic groups is found to be rearing one or two kinds of animal in the community.

**v) Education Status**

Educational status also represents the economic status partially because it is a human resource. Here educational status has been classified into four groups they are:

- i. Illiterate
- ii. Literate
- iii. Secondary
- iv. Higher secondary

Illiterate people are those who are up to 6 years and have not taken any formal or informal education and unable to read and write even the Nepali language. Literate are those who are up to 6 years old and generally able to read and write Nepali language by any means of formal or informal education. Secondary education means the people who have passed the SLC examination. Higher secondary means the people who have studied more than intermediate level.

**Table no 4.5**

**Educational Status**

Level	Male		Female		Total	
	No	%	No	%	No	%
Illiterate	51	8.32	67	10.95	118	19.25
Literate	138	22.51	159	25.94	297	48.45
Secondary	46	7.56	43	7.01	89	14.52
Higher secondary	69	11.26	40	6.52	109	17.78
Total	304	49.65	309	50.35	613	100

Source: Field survey 2007

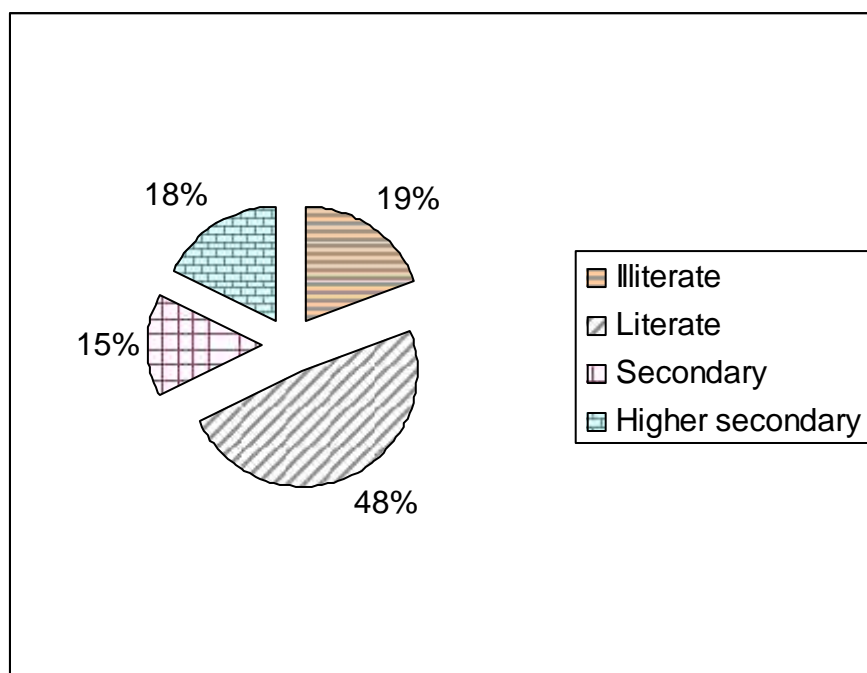
From the above table it is noticed that 118 (19.25%) people are illiterate where 51 (8.32%) are male and 67 (10.93%) are female.

Literate people in the community seems 297 (48.45%) where 158 (22.51%) are male literate and 159 (25.94%) are female literate.

Similarly the people belonging to the secondary level seems 89 (14.52%), where 46 (7.50%) male and 43 (7.01%) female and the people belonging to Higher Secondary level education seems 109 (17.78) where 69 (11.26%) and 40 (12.94%) are female in total number of population. Here only 613 people from the total number of population (746) has been taken into account. The other remaining people ( $746-613=133$ ) belong to the age group below 6 years. It can be shown in the following Figure.

**Figure no 4.5**

### **Educational Status of Sampled People**



### **vi) Land Holding Patterns**

Land holding determines the food sufficiency of the people. It also indicates the income of the people. The more land the more income and the less land the less income. The highest ethnic group of land holders of Jukekhadi community forest user group is Bramhin and Kshetri, then there comes Hill Janajati as a second higher land holders ethnic group. They own 28 Kattha and 23 Kattha land respectively. The least land holders at the community are Terai Dalit and Muslim who hold 2 Kattha and 1 Katha land respectively per household in average.

**Table no 4.6**

**Average Land Holding Pattern of Households by Ethnicity (in Kattha)**

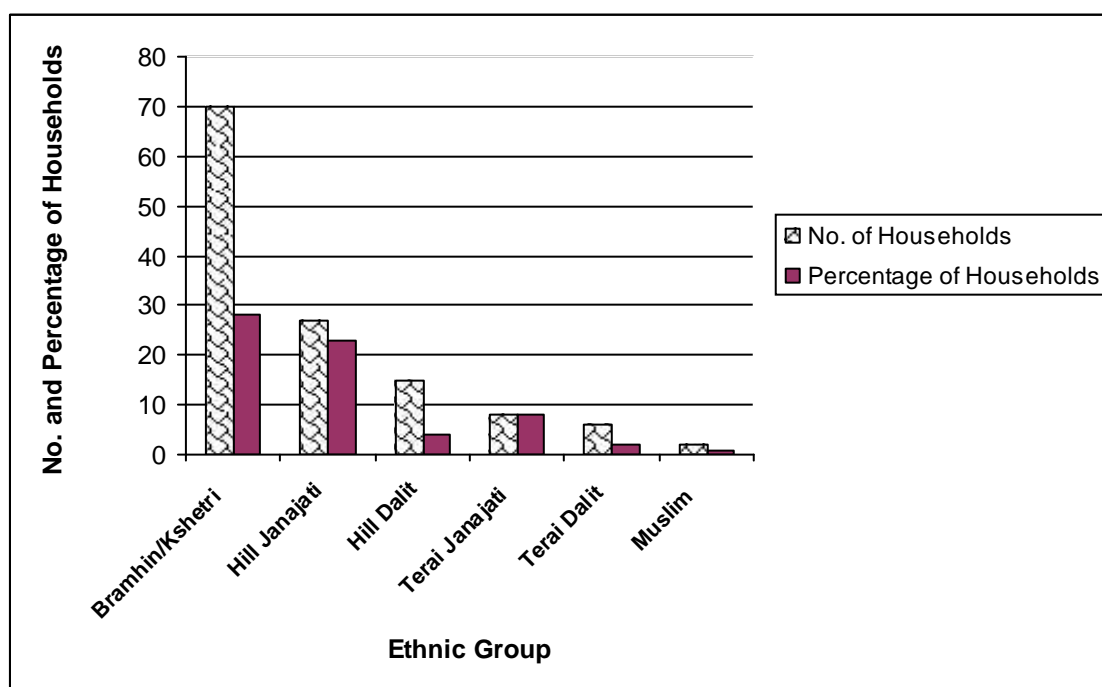
Ethnic group	Households	Average land holdings (in 'Kattha')
Bramhin/Kshetri	70	28
Hill Janajati	27	23
Hill Dalit	15	4
Terai Janajati	8	8
Terai Dalit	6	2
Muslim	2	1

Source: field survey, 2007

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

**Figure no 4.6**

### **Land Holding Pattern of the Respondents**



### **vii) Food Sufficiency of Households**

The table given below show that out of 128 household survey 22 households are food saver. 42 households have sufficient food for their family consumption for the whole year. 13 households have food only for 9 month. 19 households have food only for 6 month. 5 house holds have food only for 3 month and 27 households have food less than 3 month. Those people who are food saver sells the food in market. And those people who can not fulfill their

food requirement from their own land should purchase either from the market or from local food saver. Those people who are unable to solve their daily hand to mouth problem are compelled for hard working wage labor. Specially Dalit are in this category.

**Table no 4.7**

**Food Sufficiency of the Households**

<b>Particulars</b>	<b>No. of Households</b>	<b>Percentage %</b>
Saver	22	17.19
Sufficient for the home consumption (whole year)	42	32.81
Food sufficient for 9 months	13	10.15
Food for 6 months	19	14.85
Food for 3 months	5	3.91
Food less than 3 months	27	21.09
Total	128	100.00

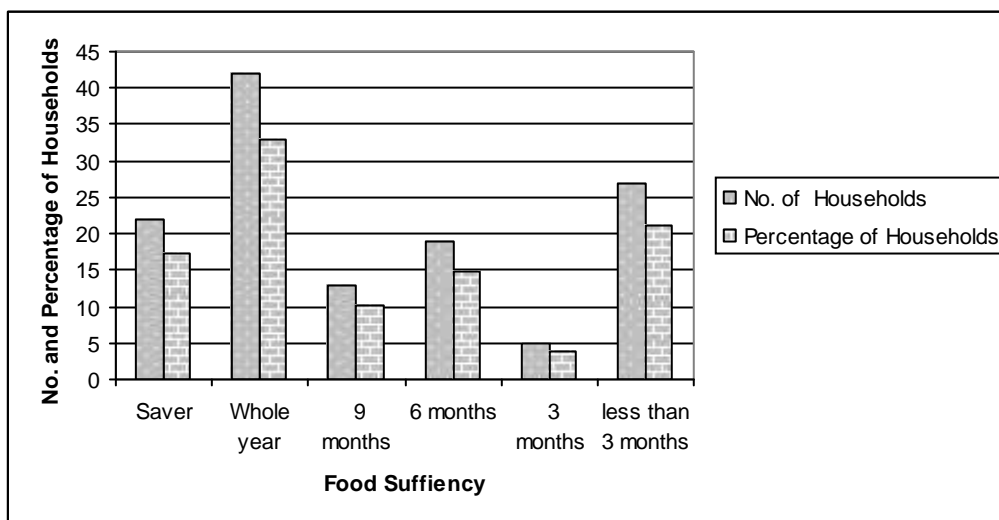
Source: field survey, 2007

It is shown in figure in the following way:

**Figure no 4.7**

**Food Sufficiency of the Households**





## CHAPTER - V

# COMMUNITY FORESTRY USER GROUP'S ACTIVITIES

## 5.1 Activities of Jukekhadi Community Forest User Group

Nepal is a country of villages. Most of the villages of Nepal are underdeveloped. Main features of Nepalese villages are lack of infrastructure, lack of proper education, poverty, traditional agriculture, lack of modern agricultural equipment, lack of improved seed, lack of technical knowledge etc. The main occupation of underdeveloped or developing countries is agriculture. Most of the people in underdeveloped country live in village and adopt agriculture as the main occupation.

People living in village fulfill their many basic needs from the forest. Forest helps agriculture in many ways. Forest and agriculture have a close interlink. Forest provides fodder for livestock, manure for agriculture, different kinds of medicinal herbs fuel wood for cooking and heating, timber and poles for the construction of house, shed and other kinds of Furniture, tall grass (Khar) for making the roof of house and shed. Forest also helps to rain in time and also prevents from the natural disaster like erosion, flood, downpour etc.

The Jukekhadi community forest user group has played a very crucial role for the betterment of rural poor. The user group collects funds by selling different kinds of forest materials like timber, tall grass bamboo, fire wood, plough, different kinds of medicinal herbs and invests the collected fund in local infrastructure development and income generating activities for poverty reduction. Some of the income generation activities undertaken by jukekhadi community forest user group for poverty reduction has been described below.

### **i) Facility of Loan**

Jukekhadi Community Forest user group is the combination of the people of different income group and different classes. The user group provides loan to those people who do not have sufficient productive land for producing the crops for their sustainability and no alternative source of income. The user group selects some 40 households from the lowest income level of people and provides loan without interest in installment. The loan should be paid within 3 years. The loan is provided for livestock farming.

## **ii) Timber for Poor**

The user group selects some 10 households every year from the community within those people who are poorest and who don't have alternative income source. and provides them 10 CFT timbers on free of charge. Poor are those people who earn less than Rs. 50 per day and have to depend on wage labor for survival. This program has been initiated by the user group with the objective of reducing the level of inequality and providing the facility of CFUG to each and every households of user group.

### **iii) Timber for Natural Disaster Effectuated**

The Jukekhadi community forest user group provides necessary timber and poles for the people effected by natural disaster like fire, landslide, flood without any charge.

### **iv) Job for Poor**

The Jukekhadi community forest user group has provision of enhancing the economic and social status of the people so that inequality could be reduced. For this purpose, user group collects the list of poor and deprived group from the community and provides employment in forest watcher, forest guard and other required post. Now there are 16 watcher man selected from the lowest income class for daily duty. The local name of 16 watcher man is "sorhadanthe" It has helped to reduce the poverty in community.

### **v) Investment in Agriculture**

The Jukekhadi community forest user group distributes its twenty percent fund in agricultural sector every year. Agriculture is the main occupation of the people of JCFUG and it is also the source of income of the people. JCFUG is directing different kinds of technical training to the people and provoke the people for using improved seed, fertilizer, and modern agricultural equipment so that the productivity of land could be improved. The Jukekhadi community forest user group has invested its fund in irrigation and dam construction too. The user group has invested Rs. 300,000 fund for the catchments construction in ward no.2 and 4 of Arjundhara, and some small catchments situated in community territory.

## **vi) Bio-gas Program**

The Jukekhadi community forest user group is directing bio-gas programme with the objective of provoking the people for livestock farming to enhance the economic condition and conserving the environmental condition at the territory so that health of the people could be better. Bio-gas program has also reduced the pressure on forest. People are compelled to domestic some one two or more cattle. People earn money by selling milk. The CFUG provides Rs. 12000 loan in installment without interest. People should pay the loan within 3 years. 230 households of the community has constructed bio gas till now.

## **vii) Plough in Nominal Rate**

The Jukekhadi community forest user group provides plough to the user households in discount rate of Rs. 50. The CFUG sales the plough at the rate of Rs. 200 per pieces to the people out of community.

## **viii) Knitting Cutting Training**

The CFUG is providing knitting, cutting and sewing training to the poor deprived, uneducated and not having alternative sources of income and disabled girls. The CFUG selects some 26 girls from the poor family and provides 6 month training with the objective of making them self dependent and self employed. The CFUG is directing the program regularly since 2059 B.S. The CFUG is also providing other kinds of technical training to the unemployed youths of community.

### **ix) Timber and Firewood on Discount Rate**

The CFUG provides timber as per their need to the member of CFUG on discount rate. The CFUG charges Rs. 101 for per cft of sal timber and Rs. 61 for per cft of non-sal timber. where as the CFUG charges Rs. 301 for sal timber and 101 for non-sal timber to the people out of CFUG.

### **x) Dam Construction and Plantation**

The CFUG is spending its fund every year for dam construction and plantation to conserve the land from erosion, landslide and flood. Agriculture is the only option of the people of JCFUG. Therefore high priority should be given on agricultural sector for the betterment of the poor. Quality, fertility and productivity of land should be improved. The Jukekhadi community forest user group has invested more than Rs. 1800000 for dam construction and soil conservation till now.

## **5.2 Benefits Derived by User Group from Community Forestry**

Forest is the only option of source of energy for the rural people. Rural people are not able to sustain their lives purchasing kerosene and gas because of their limited income. Firewood is collected from the forest for cooking and heating. Because of the increasing population, demand of forest products are increasing day by day on the other hand, forest is destroying rapidly. Therefore, it is high time to conserve the forest for fulfilling the rural demand of energy as a compensation of petroleum product.

Community forestry is like an investment to restore the degraded forest. It provides the local people a proper management system which Offers suitable, and efficient forest protection and utilization patterns. It does not provide immediate benefits but its influence is felt a few years after operation.

Community forestry programme is implemented mainly with the concept of social service. Therefore, it is not possible to assess its project purely on the basis of commercial benefit-cost analysis. Its benefits and costs must take into account the various relevant factors which affect national welfare, environment, resource and security. Man's welfare, nay his very existence depends upon air, soil and water management in which forest play vital role. Their diverse contributions include several abstruse beneficial influences viz; pollution control, temperature control, retardation of the flow of heat into the ground during the day and its exudation during the night, interception of rain water and its infiltration, water and soil conservation, role of trees shelterbelts and wind breaks, capability, role of trees to fix atmospheric nitrogen leading to the production of nitrogen fertilizers, recreational and amenity values, scientific and educational value, military defenses, tribal and village welfare and so forth. Forestry projects are motivated to provide environmental and ecological stability, improved social condition, ameliorate the local economy as well as lead to more equitable distribution of income.

Micro theory of consumer's behavior and the theory of utility help us to appreciate the need and necessity of measuring the environmental impacts of the flora and Fauna. Forest economics helps to evolve new criteria for the assessment of various aspects of forest's role to provide factors at present beyond the scope of traditional benefit cost analysis. Community Forestry

provides various benefits in different sectors. Some of the benefits derived by the users groups are categorized in the following topics.

## **I) Socio-Economic Benefits**

Community Forestry Programme is launched in the society for the welfare of rural people. Many development activities and poverty reduction programme are performed through the community forest by using the fund created by itself. Community forestry program for rural people has become one at the most essential and beneficial since it has made the rural people self dependent.

Most of the expected economic benefits of community forestry to the rural communities were expected to be non-monetary and strongly related to subsistence use. The creation of increased forest resource and proper management of this resource in the community forest has provided significant economic benefits have provided significant economic benefits to the users. Some of the socio economic benefits derived by Jukekhadi community forestry are as follows.

### **a) Strengthening Organization**

After the establishment of the Jukekhadi community forestry, people are able to tackle every types of social problems through strong organization some of the minor development activities are performed collectively through their own labor. Collective force has resulted to save time and money. People are much interested for social work. Now, Jukekhadi community forest is like a family and members of it are member of family rather than member of society.



### **b) Employment Generation**

Specially, poorest family of Jukekhadi community forest are employed in different work: "Sorhadanthe"(for the security of forest), peon, carpenters, labors, forest monitoring committee have been selected from poor family. Jukekhadi community forest has given much priority to the local people for fulfilling the different vacant posts. Now there are 52 people, who are employed by Jukekhadi community forest. It has also helped the people to be self employed by providing training and skill developmental programmes.

### **c) Increase the People's Participation**

After the implementation of community forest people of different cost, Dalits and women are equally participating in each activity of community forest.

### **d) Co-operation among People**

Density of forest has increased and forest materials are easily available. There is no quarrel among the people for forest materials because people are getting forest materials equally by the legal process. People's thought about the forest has been changed. They think forest as their own property and contribute equally for the conservation of forest.

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

### **e) Easily Availability of Forest Products**

Jukekhadi community forestry has highly contributed to increase the forest products such as grass, leaf litter, firewood, fodder, poles etc. The user group has accumulated the significant amount in its community fund from its indigenous forest management and this fund is used for the community welfare.

## **II) Environmental Benefits**

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

### **a) Increase in Forest Cover**

Cover and density of Jukekhadi community forest has increased significantly due to the implementation of community forest and changed thought of people.

### **b) Increased Soil Fertility**

Jukekhadi community forest user group has given more emphasis in agriculture to increase the income of people. Due to the easily availability of fodder and leaf-litter, people are encouraged for livestock farming. People use manure in their farm which helps to increase the fertility of soil. On the other hand user group spends its fund for the construction of small catchments too.

### **c) Increased Aesthetic Value/Increase in Bio-diversity**

Community forest has banned to cut small trees. People are not allowed to take heavy weapons like axe, saw etc in forest. It has also ban for grazing in the forest. Different kinds of valuable plants are being growing in the forest. Forest has converted into green now Forest is seen very beautiful and full of bio-diversity.

#### **d) Sustainable Collection**

The people now in Jukkhadi community get sustainable firewood and fodder for their daily needs. Before the implementation of community forest, the degraded forest couldn't provide sustainable supply. A forestation by community forestry program became helpful to increase the livestock farming which is very important in increase the income of the local people.

### **III) Improvement in Agriculture**

Forest is an integrated part of the farming system. Forest provides manure for farming. Manure increases the soil fertility. After the implementation of community forest, people are encouraged for livestock farming. It is because on the one hand, people can get leaf litter and fodder easily and on the other hand community forest has directed bio-gas programme to the people that has compelled the people for livestock farming. Community Forest is also spending its significant portion of fund in irrigation facility. The community forest is providing different kinds of training related to the agriculture to use improved variety of seeds, fertilizer and agricultural instruments. Along with forestry activities, discussion regarding improved seeds of the forest trees and agricultural crops and their relation to crop production has been usually discussed in the community forest forum. This

interactions program has increased their perception and awareness among the villagers. The remaining households have the knowledge of the improved variety of seeds but still use the traditional belief. In compaction of soil, this requires hard ploughing work. It has also deteriorated the soil quality. The farmers feel that if the trends continue for long, the soil may convert into unproductive for cultivation. The use of compost manure has become popular in the area.

The farmers consider compost as replacement of chemical fertilizer but are required in greater quantities. They believe that the use of compost reduces soil fertility. Such perception of the villagers has increased the use of leaf litter from the forest. This obviously has made the positive impact in agriculture. After the introduction of community forestry, people spend less time for collection of forest materials, specially women are benefited by it less time consumption in performing in different activities by women has made them to use the leisure time in taking care of children, cleaning house and involving in social functions. Such activities can help them to keep their environment healthy. It is also a good opportunity for the government to enhance their livelihood by providing skill oriented training program in the area.

### **5.2.1 Income Generating Activities through Community Forestry**

The income generating activities may be described as direct or indirect source. The more are the sources of income, the more the community forest can spend its fund for the betterment of poor people and developmental activities. The direct income generating activities such as Bamboo planting,

tall-grass planting, income through tractor fair are being initiated in Jukekhadi community forest user group, though all of the income sources has not started to give outcome.

People are mainly dependent on agriculture directly or indirectly due to agrarian base economy in our country and so are in the study area.

There are 69.98% at people engaged on agriculture in this community area which has been shown in table 4.4.3. The other remaining households are engaged in services are 16.08%, business 4.96%, wage labor 6.15% and traditional profession 2.83% and others being children, students and old people of the total population in the study area.

Majority of the people in the community have limited income source therefore it is necessary to uplift the condition of agriculture, use of modern technology and fertilizers to raise the level of income. This C.F. has helped to prevent the source of watershed to irrigate land and to yield more production in the village. Some of the activities which help to generate income indirectly are analyzed as follows.

### **I) Indirect Income from the Source of Fuel Wood**

The villagers mainly depend on firewood as the main source of energy. To fulfill the demand of fuelwood, Jukekhadi community forestry has played the vital role in this area. Before the establishment of community forestry, people had to face difficulty for collecting the fire wood, but now people can collect fire wood easily from the forest in short time. People can use their surplus time in other income generating activities.

Before the implementation of C.F., people could collect firewood from the forest without any restriction but now the C.F. has made plan with long run vision for the conservation of forest. People are strictly restricted to take big weapons in the forest. People are allowed to collect firewood from the forest only two days Saturday and Tuesday in a week. If they are found violating the rule of C.F., they are fined.

Each family of the community uses firewood as a source of energy. Those people who want to collect firewood from the forest staying under the rule of C.F. can collect without any change and the people who have no time to collect firewood from the forest can purchased from C.F. office in fix price changed by C.F.

From the field survey, it was found that each household consume 40 Bhries of firewood in averaged in a year. One Bhar, firewood costs 40 rupees in market. Those people who collect themselves from the forest should not pay cost. Therefore it can be considered as the indirect income of people. Indirect income generation of households from fuel wood has been shown in the following table.

**Table no 5.1**

**Indirect Income Generation from Fuel Wood**

Source	Fuel wood (in Bhari)	Market price/Bhari	Total price
CF	3327 (65.5%)	Rs. 50/30kg	166350 (65.49%)
Market	874 (17.2%)	Rs. 50/30kg	43700 (17.2%)
Agriculture and	879 (17.3%)	Rs. 50/30kg	43950 (17.30%)

private forest			
Total	5080 (100%)	Rs. 50/30kg	254000 (100%)

Source: Field Survey, 2007

(1 Bhari = 30kg)

Total fuel wood consumed were 5080 Bharries last year, among which CF contributed 3327 Bhari i.e. 65.5% of total consumption. The market price of fuel wood per Bharri being Rs. 50, and per Bhari fuel wood consists of 30kg have been calculated the market price of fuel wood which accounts for Rs. 166350. People bought 874 Bhari from market in which they spend Rs. 43700 (17.2%) and from agriculture and private forest 879 (17.3%) Bharies of fuel wood were consumed which account for Rs. 43950. Thus people save Rs. 166350 from CF, which has otherwise been spent to fulfill their need of fuel wood. Fuel wood is distributed from community forest equally with a nominal price rate of Rs. 0.50 per kg. of saal and Rs. 0.35 per kg. of non-saal tree. This result has been noticed from the sample research work examined in 127 households.

## **II) Indirect Income from the Source of Fodder**

Forest is the main source of fodder for livestock. The people staying nearby forest go to the forest to collect fodder. People are not restricted to collect green grass from the forest in any seasons. Especially the people go to forest to collect fodder in winter season because fodder are rare in their agricultural land in this season. But CF only can not provide the total demand of Fodder. People fulfill their total demand of fodder for their livestock from the market also and their own agricultural land. People should pay heavy change to purchase fodder from the market. Here the contribution of forest to

fulfill the demand of fodder for their livestock can be illustrated in the following table.



**Table no. 5.2**

**Indirect Income Generation from the Green Grass and Fodder**

source	Green grass consumption (in Bhari)	Average consumption per H.H. (in Bhari)	Market price in Rs.	Fodder and straw consumption in Bhari/kg	Average consumption in Bhari/kg	Market price in Rs.	Total Market price in Rs.
CF	7747	61 (19.55%)	193675 (19.55%)	3810 Bhari	30 Bhari	95250 (15.18%)	288925 (17.86%)
Market	-	-	-	17014kg	133.97kg	17041 (27.12%)	170141 (10.51%)
Agriculture	31877	251 (80.45%)	796925 (80.45%)	14478 Bhari	114 Bhari	361950 (57.70%)	1158875 (71.63%)
Total	39624	312 (100%)	990600 (100%)	-	-	627341 (100%)	1617941 (100%)

Source: Field Survey, 2007

Expected price for 1 bhari gross = Rs. 25/-

Expected price for 1kg fodder = Rs. 10/-

Both the prices of green grass and straw have been calculated taking into consideration of nominal rate of 25 per Bhari and the fodder purchased from the market has been calculated at the rate of 10 per kg. We can see from the above table that community forestry contributes 17.86% which saves Rs. 288925 of the villagers in total. It is an indirect income of the community because people had to spend for purchasing from market. If they couldn't collect green grass from the forest. In this way, community forestry helps indirect income generating activities.

**C) Indirect Income Generation from the Source of Timber**

Timber is the main source of construction material in village not only for making of houses but also for making of agricultural tools, furniture and

shed for livestock etc. community forest distributes 20 cubic feet of timber to the people at the nominal rate of Rs. 101 per cubic feet of saal tree and Rs. 61 per cubic feet of non saal tree. If the people need more than 20 CFT of timber the monitoring team of CF evaluates and provides the timber as per their need. The C.F. provides the timber without any charge to those who are the poorest in community and the people effected by natural disaster like flood, fire, erosion etc. The market price for saal tree is Rs. 301 per cft but CF charges only Rs. 101 for the people of community. It is indirect income of the people. Indirect income from timber can be shown in the following table.

**Table no. 5.3**

**Indirect income generation from the source of timber**

<b>Source</b>	<b>Timber cubic ft.</b>	<b>Price users per cft.</b>	<b>Market price per cft.</b>
CF	2540 (90.03%)	101	301
Private land	281 (9.97%)	101	301
Total	2821 (100%)		

Source: Field Survey, 2007

The above table clarifies that the research work performed in 128 household, people were found using timber provided by the community forestry in a nominal charges of 101. People were found using 20 CFT of timber in average. Community forest fulfills 90% demand of timber and private land fulfills 10% demand of timber. People should pay Rs. 301 for per cft of timber if they purchase from the market.

From the above table it is noticed that each household saves Rs. 4000 from timber in average. It is indirect income of the households of Jukekhadi community forest user group.

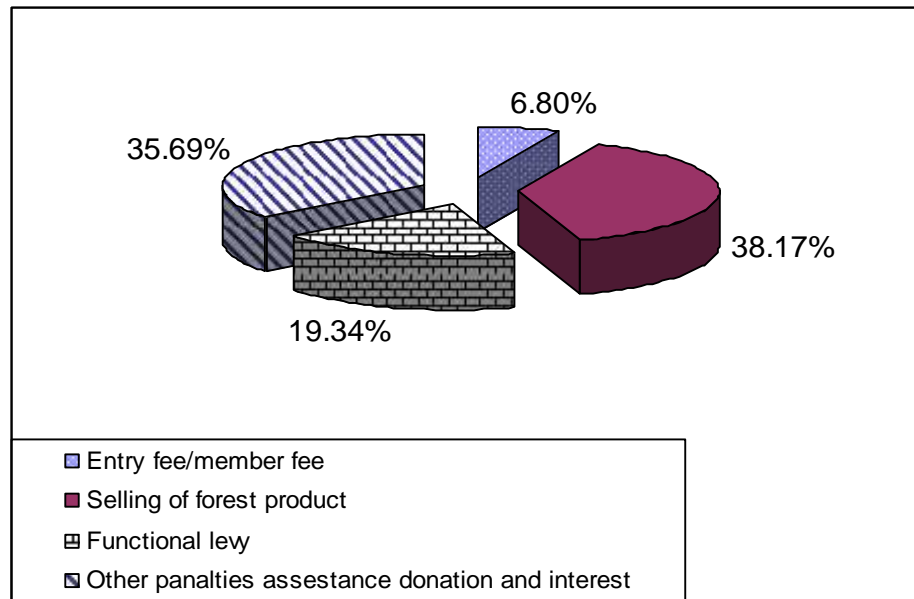
### **5.2.2 Income and Expenditure of the Jukekhadi Community Forest User Group**

#### **Source of income**

The CFUG has been generating income from various activities such as selling of forest products, penalties, entry fees or membership fees and functional levy. In this CFUG, donation from out side has also become a source of income Jukekhadi community forest user group is a reputed user group therefore different NGOS heartily ready to help it financially and others way. The income collected for the last five years from different activities is shown in the following diagram.

**Figure no. 5.1**

**Income sources of Jukekhadi Community Forest User Group**



The total income of Jukekhadi community forest user group was Rs. 2577364. In which income from entry fees / member fees was Rs. 175261. It is 6.8% of total income. Income from selling of forest product was Rs. 983780. It is 38.17% of the total income. Similarly, income from functional levy was found Rs. 498462. It is 19.34% of total income and income from other panalties assistance, donation and interest was found 35.69% of total income. The amount collected through other panalties assistance donation and interest was Rs. 91986/-

From the above figure, it can be seen that forest plays a significant role for income generation. The large portion of income source from forest is used for different developmental activities and poverty reduction program. This shows that forest is most important for the rural livelihood. Different basic

needs are fulfilled from the forest. Many forest products are also needed for urban people.

### **Areas of Expenditure**

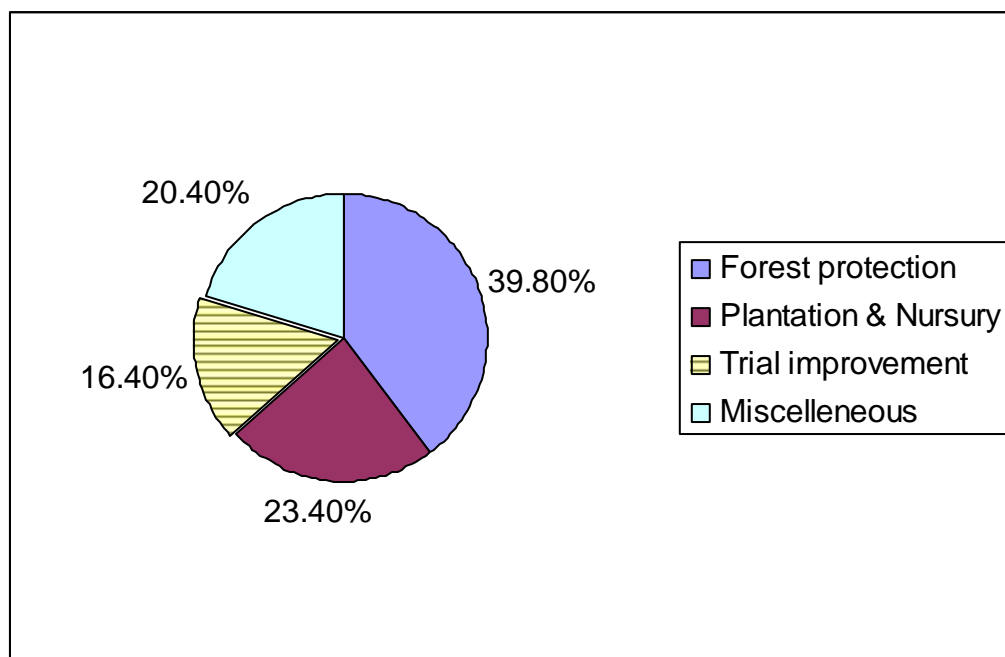
Before the initiation of Jukekhadi community forest user group, it was in dilapidated condition. People were not interested for the protection because people have no use right, and income from the forest was not of local people. The government had to spend a big amount of budget for the protection of forest. "Banjache" were deployed for the protection of Forest. People thought "Banjache" as government and people as civilian Banjache and local people had contradictory relationship.

A big amount of fund created by CFUG is spent for the development of forest in Jukekhadi community forest user group. Jukekhadi community forest user group spend about 40 percent of its fund for protection, plantation and nursery building.

The financial record of CFUG has revealed that they audit their financial records by the authorized auditor. But all of the user have no knowledge about the management of the financial record of the CFUG.

**Figure 5.2**

**Areas at expenditure of Jukekhadi community forest user group**



The use group committee has invested 63.2% of the total expenses in forest development activities (FDAS) such as forest protection & harvesting. They hired the local labour (from within the CFUG) to carry out harvesting effectively and systematically. It is shown that the involvement of hired labour for carrying out silvi-cultural operations involved a large amount of expenditure of funds. They are not well trained and not efficient to conduct the forest management operations.

The expenditure of CFUG for trail improvement is a major expenses. Being a poor and developing village, lack of concrete road is a great difficulty of the people. People should carry heavy loads on their heads to take their products in market. Instead of it, the committee also spends its fund for different social activities such as irrigation, school building, hospital building, dam construction and other important sector. These different expenses has been taken in miscellaneous expenditure.

# **CHAPTER VI**

## **CONCLUSION**

### **6.1 Summary**

Jukekhadi community forestry area being near from its VDC office has high literacy rate. More than 85% people are literate. They are very much aware to conserve the forest. The main occupation here is agriculture cash crops and trade has helped to raise the income level of people. Livestock rearing is also the other main occupation of the people of Khudunabari VDC. People are being benefited by the adoption of different occupation.

Khudunabari VDC is the composition of different ethnic group such as Bramhin/Kshetri, Rai, Limbu, Gurung and other untouchable group like Kami, Damai, Sarki etc.

Jukekhadi Community Forest user group consists of 7449 people where 49.97% are male and 50.03% are female. Jukekhadi Community Forest User Group is the composition of different ethnic group, among them Bramhin and Kshetri seems to be more elite, educated and superior than other ethnic group. Untouchable groups found least educated, poorest and deprived in the community. Their participation in different social and development activities seems to be higher than others. Hindu is the main religion adopted by people in Jukekhadi Community. 70% people are engaged in agriculture.

From the research conducted in Jukekhadi Community Forestry User Group taking 128 households as sample from the community with the simple random sampling procedure with the simple random sampling procedure

without replacement, there found 746 people, where 51.74% are male and 48.26% are female, 70% people of the community are found Bramhin/Kshetri then there comes Hill Janjati 27%, Hill Dalit 15% Terai Janajati 8%, Terai Dalit 6% and Muslim 2% respectively. 69.98% people are found adopting agriculture as the main occupation. Then the other occupation adopting by the Jukekhadi community are found service 16.08%, business 4.96%, wage labour 6.15% and traditional profession 2.83%. All of the households are found rearing at least one or two livestock. In average, each households are found to be rearing 9.43 livestock from among the different animals such as; cow, ox, buffalo, sheep, goat, pig, duck, chicken. 87.75% people are found literate in which 51.11% male and 48.89% female literate. Highest land holders of the community is found Brahmin/Kshetri. "Bramhin and Kshetri" hold 28 'Kattha' land in average. The lowest land holder ethnic groups are Dalit and Muslim who hold 2 Kattha and 1 Kattha respectively. It is also found that most of the people belonging to Dalit can not sustain their lives harvesting crops in their own land. They should purchase food from the market for 3-9 month for consumption in a year.

## **6.2 Major Findings**

The Jukekhadi community forest was found to be playing a very crucial role for the betterment of poor and deprived group of people by implementing different kinds of poverty reduction programme such as; facility of loan, Timber without charge, Timber for natural disaster effected population, job for the poorest family etc. The user group is also doing different activities in terms of improving fertility of land, conservation of forest for healthy environment, bio gas programme for the conservation of forest and improving women's health as well as generating the income of the people through livestock rearing. The CFUG is also doing for the whole community. Every household of the community are getting different kinds of facilities and are being benefited. The FUG is providing Timber, Plough, firewood, furniture to the community people in discount rate. Community is providing knitting,



cutting and sewing training to the girls belonging to the FUG that has helped the disabled, uneducated, poor and deprived girls to be self dependant.

The CFUG is also found to be plying a very crucial role for local development. The community is spending its fund in road linking, water supply, electricity extension, health post assistance, school building etc. Now every wards of the community have been linked by roads with the assistance of FUG. People can sale their products in the market and income of the people seems to be increasing.

The CFUG is also spending its fund for soil conservation, Dam construction, bridge construction, plantation etc.

The people are being benefited by the CFUG in two ways; on the one hand, they are receiving different facilities such as sustainable collection of forest products, different forest products in nominal and discount rate, and on the other hand, less time consumption in forest products collection, healthy environment, social integrity, people's consciousness etc.

## **6.3 Problems**

From the research there were found some problems too. The main problem of Jukekhadi Community Forestry is conflict and Lack of Coordination among the people because of the different political ideology rather than personal or socio-economic between users. People with different ideology can not come into an agreement. There seem disputes in making plan, budget allocation and developmental activities. Executive body is selected from voting system people choose executive body not as capacity of the person but their political ideology. The view of elected body to their opposition groups seems some how partial. Therefore it is must to forget their

political ideology for the common benefit of the village. Similarly self consciousness for conservation and development of the forest is also the must.

a) Technical Knowledge

Different NGOS, INGO, Range post and District Forest Depart gives training and forest related education to the users. Different programs are performed under the consultation of DFO. Similarly user itself has experience of different activities. The user group usually gives technical classes to the users. Therefore technical knowledge is not a big problem for Jukekhadi community forest user group.

b) Sapling

Although sapling is provided to the community forest user group, its proper management and protection is causing some problems. But forest itself is mature to regenerate only the problem is protection of new plant growing in the forest. Now the CFUG is directing sapling program for the thick density of trees. Sapling problem seems not so big problem in the forest.

c) Illegal Felling of Trees

After the initiation of Jukekhadi community forest user group, illegal felling of trees has been controlled but not completely stopped. Timber smugglers illegally fell trees and sale them in market outside. Lack of strict punishment for the illegal activities is causing such kinds of problem. The researcher tried to collect the response of the people whether there are illegal activities. Nearly 10% people respond that it is a big problem of community.

An interaction programme organized by the researcher concluded that there should be strict rule and hard punishment to those who commits illegal activities.

#### d) Fire Problem

Before introducing the community forestry program in this area, fire caught the forest due to carelessness and negligency. Now a days community itself is actively involving to solve the problem. The forest has been divided into 6 blocks and several small trails have been constructed. Fire path have been constructed. Water source have been protected and repaired strict rule have been implemented, if sometimes fire caught the forest, all the people staying nearby forest gather to go off the fire.

## **6.4 Recommendation**

Success of community forestry depends on the participation, co-operation, satisfaction, benefit and motivation of the people as a whole. The most important thing for community based forestry program is to be the people conscious about the importance of forest. Forest is re-productive natural resource. Forest is needed from birth to death for rural people. Government and different NGOS and INGOS should give the proper education for the conservation of forest. Proper laws and legislatures should be implemented effectively. Only the government cannot conserve the forest. Both the government and civil society should do co-operatively.

Community people should have full authority of use right and they are to be completely benefited by it. Different activities of CF and its account should be transparent.

Community forestry programme has played a vital role for rural development and income generation. Community based forestry program has controlled the forest to be rapidly degraded. However, people are not capable for managing it to get complete benefit. They are not able to make proper plan to get specific objective because of the lack of knowledge in management. They are not to be left alone for management of forest. Different NGOS, INGOs and government should act together to get complete benefit from the forest. Some of the recommendations on the basis of findings have been given below:

- a) The fund distribution of CFUG for poverty reduction was found insufficient. Therefore The Community should increase the size of fund in poverty reduction programme.
- b) The CFUG is found to be giving less priority for the conservation of forest. The CFUG is spending its big portion of fund for local infrastructure building. The CFUG has to pay equal attention to the conservation of forest as well as the development.
- c) Forest management practice is not matured. The DFO, NGOs and INGOs should give training to the user people to increase the management skill on forest.
- d) Conflict among the different political ideology is the most crucial problem. All of the political ideology should be forgotten for the common benefit of the society.

- e) The DFO is not visiting CFUG for the inspection of their activities. The DFO and range post should frequently visit the CF and have to take regular information about the forest condition, progress should give different suggestions and directions. Interaction between CFUG and DFO helps understand the obstacle/hindrances and problems of CFUG.
- f) The executive body of the CFUG is built not by the proportional basis. The CFUG is the combination of different ethnic groups. The CFUG should pay attention to form the executive body by proportional basis. It helps to reduce the conflict in the society.
- g) Poor people are found to be selling firewood illegally in market due to the lack of alternative income source. The FUG should pay high attention for the creation of alternative income source for the poor so that they wouldn't be depended on firewood selling for their subsistence.
- h) Interaction programme between executing body and the user people should be held regularly.

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# Questionnaire for Household Survey 2007

## 1. General information

1.1 Name of the Households head:-

1.2 Sex:-

1.3 Ethnic group:-

1.4 Languages:-

1.5 Religion:-

1.6 Occupation:-

1.7 Education:-

## 2. Family Description

S.N.	Name	Age	Sex	Education	Marital Status	Remarks
1						
2						
3						
4						
5						
6						
7						
8						

## 3. Economic Information

### *3.1 Population owning land*

S.N.	Land type	Area in Kattha	Cultivation ownership			Remarks
			Self	Rented out	Rented in	
1	Khet (Irrigated Land)					
2	Bari (Non- Irrigated Land)					
3	Private Forestry /Garden					
Total						

### *3.2 Production of agricultural crops (40kg)*

- (a) Rice
- (b) Maize
- (c) Wheat
- (d) Cash crops
- (e) Others

### *3.3 Food Sufficiency in Month*

- (a) Less than 3 Month (     )
- (b) 3 Month (     )
- (c) 6 Month (     )
- (d) 9 Month (     )
- (e) 12 Month (     )

### *3.3 Live Stock Ownership*

Live stocks	Number
Cow/ox	
Buffalo (He/she)	
Goat (He/she)	
Hens/Ducks	
Others	

### *3.5 Income Source of People*

Occupation	Income (IN Rs)
a) Agriculture	
b) Business	
c) Services	
d) Wage labor	
e) Others	

#### 4. Need of Forest Products

S. N.	Particulars	Amount	From CF	From NF	From own land	Others
1	Fuel wood					
2	Fodder					
3	Timber					
4	Leaf Litter					
5	Medicinal Plants					

#### 5. What do you use for cooking food?

- (a) Fire wood ( )  
(b) Kerosene ( )  
(c) Bio gas ( )  
(d) Gas ( )  
(e) Others ( )

5.1 How many Bharies of firewood you need annually?

5.2 Has community forestry helped in supply of fire wood?

5.3 How many Bharies of fodder/grass do you need to feed you livestock for a week?

#### 6. From where do you get the fodder?

- (a) Private land (b) Community forest  
(c) Both (d) Others

#### 7. Have you used timber recently?

- (a) Yes (b) No

*If yes, for why?*

- (a) House construction (b) Furniture  
(c) Animal shed construction (d) Tools

#### 8. From where do you get timbers?

- (a) Government (b) Community Forest  
(c) Market (d) Others

**9. How far has CF helped in providing forest products?**

- (a) Very much                      (b) Not significantly  
(c) Not good                      (d) No idea

**10. What are the changes you have witnessed after the introduction of community forestry program?**

- (a) Increase in forest area                      (                      )  
(b) Proper use of resource                      (                      )  
(c) Effective preservation of forest (                      )  
(d) Promotion of rural people                      (                      )  
(e) All                      (                      )

**11. Has CF helped to reduce the Poverty?**

- (a) Yes                      (b) No (c) No idea

*If yes, How?*

- (a) Provide loan to the poor people                      (                      )  
(b) Provide skill oriented training                      (                      )  
(c) Provide educational opportunity                      (                      )  
(d) Provide subsidies in the forest goods (                      )  
(e) All                      (                      )

**12. Is there any development program supported by CF?**

- (a) Yes                      (b) No                      (c) No idea

*If yes, What are these?*

- (a) Road/School construction                      (                      )  
(b) Electricity extension                      (                      )  
(c) Dam construction                      (                      )  
(d) Drinking water supply                      (                      )  
(e) All                      (                      )

**13. How are the development activities supported by CF?**

- (a) Free supply of forest products                      (                      )  
(b) Free labor supply from user group                      (                      )  
(c) Financial Assistance from CF                      (                      )  
(d) Others                      (                      )

**14. Has CF program helped in income generating activities besides forest products?**

(a) yes (b) No (c) No idea

*If yes, How?*

- |  |     |
|--|-----|
| (a) Providing skill development training                     | ( ) |
| (b) Providing Improvement training                           | ( ) |
| (c) Providing training about unseasonable vegetable products | ( ) |
| (d) Providing loan for business/agriculture                  | ( ) |
| (e) Others   | ( ) |

**15. Have you realized any problem in CF?**

(a) Yes (b) No (c) No idea

*If yes, How?*

- (a) Conflict
- (b) Political prejudice
- (c) Illegal Cutting of trees
- (d) Problem in equal distribution of forest products
- (e) Fire and grazing
- (f) Others

**16. What do you think about the activities of user group and executive body?**

(a) Very good (b) Not so good  
(c) Bad (d) No idea

**17. In your opinion, Community Forestry is**

- |                        |     |
|------------------------|-----|
| (a) Very beneficial    | ( ) |
| (b) Good               | ( ) |
| (c) Not very important | ( ) |
| (d) Not good           | ( ) |

*If not good, Why?*

.....  
.....