

JAMUNBOTE COMMUNITY FOREST LIVELIHOOD OF KAVREPALANCHOWK DISTRICT



**A Thesis Submitted to the
APF Command and Staff College
Faculty of Humanities and Social Science, Tribhuvan University
In Partial Fulfillment of Master Degree in
Security, Development and Peace Studies**

Submitted by

Janak Sapkota

Sixth Batch (2077-2079)

Roll No. 4003

TU Registration No.: 7-1-25-128-1997

**APF Command and Staff College
Sanogaucharan, Kathmandu, Nepal**

September 2022

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DECLARATION

I hereby declare that this research paper entitled "Jamunebote Community Forest in Livelihood of Kavrepalanchowk District" submitted to APF Command and Staff College, is entirely my original work. I have made due acknowledgements to all ideas and information cited and extracted from different sources in the course of preparing this research. The result of this research paper has not been presented or submitted anywhere else for the award of any degree or any other purpose. I assure that no part of the content of this research paper has been published in any form before. I shall be solely responsible if any evidences found against my research paper. This thesis is being submitted to APF Command and Staff College, Faculty of Humanities and Social Sciences, Tribhuvan University in Partial Fulfilment of Master Degree in Security, Development and Peace Studies.

Signature:

Name :

Date : September 5, 2022

LETTER OF RECOMMENDATION

I certify that this thesis entitled "Impact of Community Forest in Livelihood: A case Study of Jamunbote Community Forest of Kavrepalanchowk District" was prepared by Mr. Janak Sapkota under my supervision. This researcher has fulfilled the criteria prescribed by Faculty of Humanities and social Sciences, Tribhuvan University. I hereby recommend the thesis for the final evaluation and approval.

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Dr. Naresh Rimal

Thesis Supervisor

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LETTER OF APPROVAL

This thesis entitle "**Jamunbote Community Forest in Livelihood of Kavrepalanchowk District**" submitted by Janak Sapkota to APF Command and Staff College, Faculty of Humanities and Social Science, Tribhuvan University in Partial Fulfillment of Master Degree in Security, Development and Peace Studies has been approved by the undersigned members of the Evaluation Committee.

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ACRONYMS AND ABBREVIATIONS

APF	Armed Police Force
APP	Agriculture Perspective Plan
BS	Bikram Shambat
CF	Community Forestry
CFUG(s)	Community Forest User Group(s)
DAG	Disadvantage Group
DFO	District Forest Office/ Officer
DFID	Department for International Development
DoF	Department of Forest
FECOFUN	Federation of Community Forest User group, Nepal
FUG(s)	Forest User Group(s)
FUGC	Forest User Group Committee
FY	Fiscal Year
GESI	Gender Equity and Social Inclusion
GoN	Government of Nepal
HA	Hectare
HH(s)	Household(s)
INGO	International Non-Governmental Organization
KI	Key Informants
LIP	Livelihood Development Process

LPG	Liquidfied Petroleum Gas
MoFSC	Ministry of Forest and Soil Conservation
MPFS	Master Plan for Forestry Sector
NACRMLP	Nepal Australia Community Resource Management and Livelihood Project
NGO	Non-Governmental Organization
NPC	National Planning Commission
NTFP	Non Timber Forest Product
OP	Operational Plan
SLC	School Leaving Certificate
UNDP	United Nation Development Program

ABSTRACT

Community Forestry has become vital for the forest management policy and practices since 1978. This concept brought all interested local people together and gained great momentum to uplift the livelihood of the poor and disadvantaged groups through sustainable use of forest resources. This study aims to explore and assess the contribution of community forestry on the livelihood assets i.e. human, physical, social and financial aspects of the community forest user groups. This study was carried out in Jamunbote Community forest of Panchkhal municipality ward no., -2- of Kavrepalanchowk district which represents the scenario of most of the hilly community forest. Primary data were collected through questionnaire surveys (20% households were taken as a sample), key informant survey (n=7), and secondary data from related journals, articles, websites. Data were analyzed quantitatively and qualitatively using MS Excel and results were illustrated in the form of descriptive statistics. Our results show that around 64% of the respondents depended on agriculture, remaining were involved in business, private, government and foreign land jobs. This study found that the contribution of Community Forest is seen in physical, social, human and financial capital. Community Forest sometimes organizes training and workshops to build up the skills of user groups. Based on the people's perception, most of the income was spent on infrastructure development, community development, forest management and protection. This study also found that the social relationship between and with user groups has increased after the handover of community forest. For increasing its potentiality on livelihood improvement, Government and concerned community forest should carry out effective workshops and training for poor, disadvantaged and marginalized groups. Additionally, Community forest should focus on alternate income generating activities like bamboo plantation, forest product based handicraft industry, horticulture for its user's well-being.

Key words: Community forestry, Disadvantaged group, Livelihood, Marginalized group, Forest management and protection

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CHAPTER-I

INTRODUCTION

1.1 Background

Nepal's Forest Act 1993 defines the Community Forestry as the part of National Forests, which is handed over to the local community as community forest for development, protection, utilization, and management. Community forestry is most accurately and usefully understood as an umbrella term denoting a wide range of activities which link rural people with forests, trees, and the products and benefits to be derived from them stated that Rural people use forest especially for domestic purposes and as an integral part of their farming systems. Since community forestry constitutes both social and biophysical elements, the "resource" can be managed effectively with a clear understanding of forest management principles and knowledge of the natural system and "social" part can be dealt with a clear understanding of a society and their relationships with the resource and institutions related to it (Pokharel, 2004).

Community Forestry in Nepal has a well-documented history of over 25 years. In Nepal it is acknowledged as a demonstration of local democracy action where local people have successfully taken control of an important aspect of their livelihood). Community forestry came into practice in the late 1970s when development strategies of the 1950s and 1960s that focused on industrial development were being criticized for overlooking rural development and were not meeting the basic needs of rural poor .Community Forestry took full shape in the 1990s; both in policy and practices. The Forest Act 1961 was amended to introduce community based forest management in 1978 with a series of development Master Plan for Forestry Sector 1988 was introduced for strengthening the forest management system. The new Forest Act 1993 and Forest Regulation 1995 were introduced with a clear provision about community forestry and forest handover process to the local communities.

In various parts of the country, Community Forest Users Group (CFUGs) have become the vehicle for rural development. CFUGs also act as rural banks and source of revenue and income of many rural communities. Till May 2020, there were 22,266 CFUG in Nepal which manages 2.24 m hac. (About 35% of total) of the country's forest resources and directly benefitting 2.91 m households (about 33% of total) population of the country (Pandey, 1999).

For most of the community households, Community Forestry provides essential food, nutrition, medicine, fodder, fuel, thatch construction materials, mulch and non-farm income. Poor households, in particular, depend on these products for their livelihood because they usually have more access to the forest than to other resources. Most of the rural people depend upon forest for their daily needs like fuel wood, fodder, timber and leaf litter. The concept of development from below emerged in the 1960s with a new definition of development concerned with the fulfillment of basic human needs rather than material needs of financial advantage. Nearly 1.5 million people have already been involved in community forestry and the figure is increasing day by day.

The people's involvement in this program is meant for their livelihood improvement. Some common property scholars claimed that Community Forest plays a significant role in reducing poverty and improving rural livelihood. Government of Nepal (2002) also claimed that CF has potential to contribute significantly to improve people's livelihoods as a means of poverty reduction. It is assumed that the forestry sector plays a vital role in meeting the basic forestry needs of the people through the community forests and paves the way for achieving the national goal of poverty alleviation through the environmental stability and economic prosperity of the people of the country (NPC, 1998). However, the livelihood improvement through community forest has been debatable.

The word "Livelihood" can be used in many different ways. The following definition captures the broad notion of livelihoods understood here "A Livelihood comprises capabilities, assets (Natural, Social, Human, Financial and Physical) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Malla, 2000). It is a holistic approach that tries to capture, and provide means of understanding, the vital causes and the dimensions of poverty without collapsing the focus on just a few factors (e.g. economic issues, food security etc). It also tries to sketch out the relationship between the different aspects (causes, manifestations) of poverty, allowing for effective prioritization of action at an operational level as shown in Figure (DFID, 1999) (which is shown in appendix 'c')

1.2 Statement of the Problem

Pokharel (2004) concluded that, the community forestry contributes to the improvement of the livelihoods of rural people in three ways by increasing the resources, by reforming the organizations, agencies and policies, and by facilitating the social changes. Still there are some problems observed in the community forestry implementation process. CFUG are not only provided with well stocked forests but also with degraded forest and integrating CF policy and practices with democratic governance and livelihood imperatives makes it even more challenging. Other concerns are mainly related to the economic position of the women, poor and socially disadvantaged groups of the society. More prominent issues are elite domination on the decision making process, lack of transparency, vested interests of powerful people and inequity in the benefit sharing mechanism. Inclusion of women, poor and socially disadvantaged groups directly and indirectly helps in maintaining peace and social harmony within the society, all in all we can say that the core issue of CF lies in interaction of social and natural systems (Kanel & Kandel, 2004).

Community forestry research has traveled a relatively long way since its birth. Literature published in the last few years provided ample evidence for this. However in the absence of a clear picture of the status of community forestry, a substantial gap exists in Nepal. This study seeks to explore contributions of CF to improve livelihood in terms of capital formation. Community forestry has potential for contributing to poverty reduction and the improvement of rural livelihoods. However for community forestry to be genuinely successful in sustainable poverty reduction, women as well as minority groups need to be involved and empowered. The study about what are the benefits that the poorest people get to support their livelihoods from such a program is still lacking. This study would help further development to assess the contribution of the Community forestry Program in the livelihoods of the poor people which in turn contributes to the reduction of poverty in the rural areas. This study would help further development of the community forest management as a means to support poor livelihood focus programs. Before applying the concept of community forest, the forests of Nepal were under the close monitoring by the state and National forest was there where all the responsibilities were on state at that time trend of deforestation increased day by day where the Nepal's rural community were dependent upon forest for their livelihood. But now the trend of community is changed in this changing context, how can forestry of Nepal be preserved by the way of sustainability for the upcoming generation.

The Gender and Social Inclusion Strategy (MFSC,2007) and third Community Forestry Guidelines (DOF, 2009) have endorsed the leadership and voice narrative in community forestry that supports for crucial political position (e.g. 50% women leadership) for women and marginalized groups in advancing the agenda of these groups through decision-making processes. But still the impact of these changes is unknown (Ojha et al., 2014). This is also supported by Forest Act 2076 and Forest Regulation 2079.

1.3 Research Questions

The study focuses to answer the following research questions:

1.3.1 How community forest impacted livelihoods of Jamunbote Community of Kavrepalanchowk District?

1.3.2 What are the situation of Inclusiveness in the user groups in Jamunbote Community Forest in Kavrepalanchowk District?

1.3.3 How sustainability of its preservation can be achieved in Jamunbote Community Forest in Kavrepalanchowk District?

1.4 Objectives of the Study

The general objective of this study is to assess the impacts of community forest on the livelihood of Jamunbote community of Kavrepalanchowk district and the specific objectives are given below.

1.4.1 Specific objectives

1.4.1.1 To examine the level of social inclusion in Jamunbote Community Forest

1.4.1.2 To explore the sustainability of its preservation.

1.5 Significance of the Study

The significance of the study lies largely to impart the importance of community forest for environment protection and give the way forward to its sustainable preservation that is centralized only on govt. from the past experience it is seen that the responsibility of govt. only has increased deforestation and is not able to protect. And if the community does not want to preserve it, it is not possible because of various conditions such as declining trend of dependency in forest.

This study is expected to educate readers about impacts and importance of community forest on livelihood of surrounding people, sustainability and its preservation despite the lack of dependency in the forest.

1.6 Limitation of the Study

The study is based on impacts of community forest in the livelihood of the Anikot community residing around the Jamunbote community forest of Kavrepalanchowk district. This study does not cover all dimensions of community forest, rather it aims to focus only on livelihood..

CHAPTER-II

LITERATURE REVIEW

Community Forestry is a decentralized concept, which has been practiced in Nepal for about 25 years. Forest development is usually advocated for contemporary development for both environmental conservation and rural livelihood support. There is always a strong potential for community forests to serve as the basis for improving the quality of life and the status of livelihoods in rural Nepal while conserving forest resources on the other hand (Thoms, 2008). The word "Livelihood" has a different definition. The following definition captures the broad notion of livelihoods understood here "A Livelihood comprises capabilities, assets (Natural, Social, Human, Financial and Physical) and activities required for a means of living.

A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base." (Chamber and Conway, 1992 in Scoones, 1998) The important feature of this livelihood definition is to direct the links between assets and the option people possess in practice to pursue alternative activities that can generate the income level required for survival (Ellis, 1999). Capability refers to the ability of individuals to realize their potential as human beings, in the sense both of being and doing (to exercise choice, develop skills and experience, participate socially and so on).

Assets comprises a number of components, these are natural capital, physical capital, human capital, financial and social capital. All five assets mentioned above are disparate in nature, but they are complementary to each other. These different levels affect the livelihood option available to an individual. Livelihood is sustainable when they promote an accumulation of all forms of capital. (Johnson, 1997). It is a holistic approach that tries to capture, and provide means of understanding, the vital causes and the dimensions of poverty without collapsing the focus on just a few factors (e.g. economic issues, food security etc.).

It also tries to sketch out the relationship between the different aspects (causes, manifestations) of poverty, allowing for effective prioritization of action at an operational level. The Livelihoods framework is a tool to improve our understanding of livelihoods, particularly the livelihoods of the poor that was developed by the Sustainable Rural Livelihoods Advisory Committee, building on earlier work by the Institute of Development

Studies (among others) (DFID, 1999). This study attempts to assess the impacts of CF on livelihood of the users using DFID sustainable livelihood approach.

2.1 Resource Management and Livelihood Outcomes through Community Forestry

The frame of Resource Management and Livelihood Outcomes through Community Forestry indicates the forest users living around the forest and have primary rights to use forest products. Local governance and livelihood outcomes are inter connected to each other. (The framework is presented in appendix 'c')

2.2 Conceptual Framework for Analysis of the Livelihood Impacts of Community Forestry.

To date there has not been a direct and comprehensive study of livelihood impacts of community forestry across a large number of sites in Nepal, although several studies have been conducted in a modest way, in a small number of sites, in recent years. One helpful quantitative study was conducted by Maharjan (1998), who assessed the distribution of costs and benefits in a single FUG in Dhankuta district. His study highlighted the frequent equity problems of new forest management regimes, which can reduce the access of poorer households to essential forest products. He highlighted the importance of participation of marginalized groups in FUG. Planning, and also the opportunities for commercialization of forest product collection and processing. In order to assess the impact of community forestry on forest users' livelihoods, this study used a livelihood systems model. Carney (1998) presents a definition of livelihoods based on the work of Robert Chambers and Gordon Conway. A number of livelihood systems models have recently emerged that present household livelihood processes and functions. The model used in this paper has been developed by Soussan et al. (2001). Households build their livelihoods on the basis of their assets and available opportunities. Household 'livelihood assets' are augmented through 'entitlements' to locally available capital, such as tree and forest resources. Different households within the same locale have diverse levels of household assets. The poorest may have to rely simply on their own human capital and entitlement to common property. Households arrive at a 'livelihood strategy' on the basis of assets available, in view of opportunities arising, level of resource access, risk aversion and perceived benefits. On this basis they then engage in 'livelihood activities'. This model gives an understanding of households' livelihood processes, and allows one to 'map' the consequences of specific

changes, including changes brought about through external interventions intended to improve people's lives.

For most households in the Middle hills of Nepal the main livelihood activity is agriculture, usually augmented by cash-earning activities such as a household member going to the plains in search of work. For households with little or no agricultural land, the main opportunities open are local manual work as agricultural laborers or porters, and artisanal production (with skills and tools passed intergenerational within households). Collecting forest products can be an important supporting activity for such households, since non-agricultural livelihoods are particularly vulnerable to seasonal fluctuations in demand. Changes in the entitlements / access conditions can vitally affect their livelihoods, as can changes in the condition of resources.

A range of factors in the community forestry context of Nepal can be related to the different components of the livelihood systems model presented in appendix 'C'. A re-definition of the 'external policy and legal context', through new laws (particularly the 1993 Forest Act and associated 1995 Byelaws) changed the tenure and forest access rights of local communities and created new mandates for the Department of Forests (DoF). There were effective channels for learning from past field implementation of community forestry. There have also been substantial efforts made to reorient the DoF, which have had some success.

The 'wider social and political environment' has also been of tremendous importance. Early efforts at community forestry were frustrated by social controls imposed by the semi-feudal panchayat system. In contrast, there was a rapid growth of community forestry following the 1990 revolution that swept away the panchayat system and opened up the possibility of local institutions that were representative and regarded as legitimate by the majority of the population. These political changes also led to a new 'culture' in many government departments, which now saw their role as serving, rather than controlling the people.

The community forestry approach changed the 'local social and institutional context' by creating, as an 'output' of policy, new local institutions (FUGs), and also raising awareness and understanding amongst local people of more democratic decision-making processes and legal rights. FUGs have become pivotal in the empowerment of local communities to manage forests in ways that are seen to be representative of all forest users (in what are often extremely complex local social situations) and provide an effective interface with the DoF.

The formation of FUGs is one of the specific targets of the community forestry policy, and the effectiveness of this can be assessed in terms of both quantity (numbers formed; membership; geographical coverage; effectiveness of operations; etc.) and (with more difficulty) quality (participation in, and representativeness of, the committees; gender relations; empowerment in relation to accessing government institutions; etc). The implications of FUGs can go further than forestry management, as many of the more effective and established ones start to become involved in other activities such as schools, water supply and path maintenance. As such, the development implications of community forestry in terms of creating new 'social capital' can go far beyond forests.

Through the FUG, an 'outcome' of community forestry policy is changed 'entitlements and assesses of individual households to the forest. The effects of this will vary from household to household, according to existing dependence on the forest, but what the policy does is legitimize existing entitlements and/ or create new entitlements to the forest. This can be related to the livelihood model as the 'access to natural capital' element in the diagram. Another 'outcome', due to regulated access, can be an 'improved forest resource base'. Improvements to the forest condition are widely observable under community forestry (Yadav et al. 2003).

The 'outcomes' of community forestry policy (legitimizing entitlements, regulating forest access and improvement of forest conditions) can, in turn, lead to 'livelihood impacts': improved flows of forest products available on a sustainable basis. This is more likely to occur if the FUG is egalitarian and effective. However, it is possible that poorer households, who have traditionally relied more heavily on common property resources, will suffer disproportionately in the shorter term, since FUGs often impose heavy restrictions on forest use to allow for the recovery of degraded forest areas. Thus, there may be trade-offs between the costs of foregoing short-term forest/pasture exploitation, and long term gains in sustainable forest production.

Community forestry can open up new livelihood opportunities for FUG members, for example the cultivation of the spice cardamom or the tapping of resin in the forest. In such cases, a critical issue is the distribution of these benefits amongst different groups in the FUG. Thus, the sustainable level of 'income' can be improved, with fewer concerns about gathered forest products and/or more secure livestock production. However, where there is potential for increased cash income through the sale of forest products, the precise modalities

of sale and distribution of proceeds will determine how income improves for different social groups. Proceeds may accrue as income to individual households or to the community as a whole, allowing them to invest in local public facilities such as water schemes, nurseries or schools.

All of these factors together may reduce the household's 'vulnerability' to declining availability of forest produce, and long term dangers of land degradation due to watershed destruction. The creation of new local institutions, access to new resources and new patterns of social relations all have implications for the resilience of different households to cope with vulnerabilities (Journal of Forest and Livelihood, 2003).

2.3 Patterns of Household Livelihoods and Forest Use

In order to understand the livelihood impacts of community forestry one needs to understand the diverse patterns of social conditions, livelihood activities and forest use specific to each area. Key factors affecting the impact of community forestry on household livelihoods include: (1) the location of specific users in relation to the forest; (2) the ethnic caste background of specific users; and (3) the homogeneity or heterogeneity of the FUG. Given the complex patterns of forest use, the question of how particular changes in forest access have affected users is very challenging to answer. Furthermore, there would have been many changes in local circumstances over the period since the FUG in question was formed.

There is a widespread misconception that forest users are members of one FUG only, and depend on one forest only. Forest users, in fact, commonly depend on different forests, at different altitudes and locations, for different products and services at different times of the year, often complemented by on-farm tree products. This may be most evident in the case of livestock grazing, where settlements at different altitudes can have seasonal reciprocal grazing arrangements. Farmers and craftsmen such as blacksmiths also need fuel wood, fodder, wood for tools and construction timber, each of which may come from different forest areas.

Using the livelihood analysis approach discussed above, we may now consider the livelihoods of different households in the Middle hills, and how community forestry has impacted on them. In order to understand how different groups' positions have been affected,

it is important to disaggregate users by: (1) wealth rank, and (2) dependence on the forest resource.

To understand wealth patterns within villages, a wealth ranking exercise was conducted in each FUG. In group discussions, a number of ranks in the village were identified by the local people. Most commonly four ranks (Rich, Medium, Poor, and Landless) were identified, although in some FUGs the 'Poor' category was divided into 'Poor' and 'Very Poor' (with 'Very Poor' households having food production sufficient for only three months, and 'Poor' households closer to six months). The criteria for each of the ranks were then identified (e.g. land-holdings, self-sufficiency in food, livestock holding, etc). In each village slightly different criteria were identified, but when these were compared, surprisingly strong commonalities emerged. This has allowed comparisons to be made according to wealth-ranks across all the FUGs studied. Different wealth-rank groups show different levels of dependence on the forests due to their different livelihood activities and differential access to private resources. Medium, Poor and Landless groups are most dependent on the forest (Journal of Forest and Livelihood, 2003).

2.4 Livelihoods Improvement Process

Livelihoods Improvement Process (LIP) is an innovative mechanism to promote pro-poor and disadvantaged groups within the CFUG in a holistic way through social equity and gender inclusive process. This process has been initiated in Sindhupalchowk and Kavrepalanchowk districts with the support of Nepal Australia Community Resources Management and Livelihoods Project (NACRMLP). The objective of the LIP is to search livelihoods opportunities for the well-being of pro-poor and disadvantaged groups with CF resource mobilization and improving the governance at local level. Particularly the needs of women, poor, dalits, and ethnic groups are given priority in LIP and make consensus with the support of other stakeholders. The common minimum programs, which benefit the elites are also included in the LIP. The major outcome of LIP is to endorse the livelihood needs in CF operational plan with consensus of all the stakeholders. The following diagram makes the process more clear.

2.5 Linkage of Forest Resource and Livelihoods

Hills of Nepal are abounding with Poverty exclusively enforcing degradation of forest and land resources (Poudyal 2003). Forest resources have indispensable importance in any agriculture system. The forest resources are the main source of forage for the cattle and farm manure for agriculture development in rural settings. In the rural agriculture system domestic animals are the main source of milk and meat production. Thus sustainable forest management is crucial for sustainable agriculture development. Forest resources have abundant biodiversity for the production of medicinal and aromatic plants. There are strong linkages among social inclusion, livelihoods, forest management and development. The intricate relationship of social inclusion, livelihoods and forest management is described in the following diagram.

2.6 Five Core Assets Categories or Types of Capital upon which Livelihood are Built (DFID, 1999)

2.6.1 Human Capital

Human capital represents the skills, knowledge, ability to labor and good health that enable people to purchase different livelihood strategies and achieve their objectives (DFID, 1999). Support through training, workshop and exposure, visit from a number of organizations related to CF is another dimension. This has become a useful tool to increase user's knowledge and skills related to silviculture, community development and organization management and leadership development.

2.6.2 Social Capital

Social capital is the relationship of trust and reciprocity that supports cooperative action, the membership of informal and formal groups, and the networks that increase people's ability to work together and access institutions and organizations.

2.6.3 Natural Capital

Natural capital is the term for the natural resources stock from which resources (i.e. land, forest, water and wildlife) and services that are useful for livelihood are derived. There is a wide variation in the resources that make up natural capital, from intangible public goods

such as the atmosphere and bio-diversity to divisible assets used directly for production (Trees, Land). In this research, focus is given to the community forest and services rendered from the CF.

2.6.4 Physical Capital

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. Infrastructure consists of changes to the physical environment that help people to meet their basic needs and to be more productive. Producer goods are the tools and equipment, which people use to function more productively. Physical capital has linkage both at household level and FUG level. Numerous FUGs have carried out many community development activities on their own. Construction of village trails; community buildings, school, temples, and soil conservation structure are examples of physical capital created through the CF program.

2.6.5 Finance Capital

Financial capital denotes the financial resources that people use to achieve their livelihood objectives. The definition used here is not economically robust in that it includes flows as well as stocks and it can contribute to consumption as well as production. However, it has been adopted to try to capture an important livelihood building block, namely the availability of cash or equivalent that enables people to adopt different livelihood strategies. There are two main sources of financial capital. Those are available stocks and regular inflow of money. FUGs have established low interest credit schemes as well as grants to the poorest members from the FUG fund.

2.7 Poverty and Poor

According to a human development report, poverty has two dimensions: low incomes, which is insufficient to maintain life and low level of human capabilities, which restricts a citizen's options to lead a life of his or her choosing (UNDP, 2003). Furthermore, poverty is a state of economic, social and psychological deprivation occurring among people or countries lacking sufficient ownership, controlling poor access to resources to maintain a minimal acceptable standard of living. Though community Forestry has successfully promoted sustainable resources use across Nepal there is a question whether the goal of providing resources to the

poorest of the poor has been realized or not (Nightingale, 2002). The poor are underrepresented in the decision making process and the elites play manipulative roles at various stages of community forestry. Less powerful users comply with decisions despite being unhappy in terms of the inequitable outcome due to a local sense of ownership (Baral, 1999). They also comply with the CF rules, partially because they do not question the prevailing power structure and also because they expect to gain in the long run (Chakraborty, 2001). Poverty is a multidimensional complex phenomenon. Apart from the macro economic problems, the degradation and restricted access of the poor to the available material and environmental assets also fundamentally trap the poor in their circumstances. Therefore there is an urgent need to revisit the forest poverty nexus because forest ecosystems are capable of offering interesting opportunities and security nets for poverty reduction (Sharma 2003). The poorest cannot afford to participate and take leadership responsibility because they are not compensated for their time. Within the FUGs, rich and poor, male and female and so called upper caste and lower caste with difference in power, speak and are heard differently. The poorest are the ones who suffer the most because, first of all, they cannot afford to participate, secondly, if they do, they hardly speak. If they do speak, they are rarely heard and if heard, hardly get decisions made in their favor. If heard very few decisions are implemented and if implemented only few benefits (Pokharel and Nurse, 2004).

2.7.1 Poverty in Nepal

Close to half the people in Nepal could be considered poor on the basis of income level. Official statistics for 1996 estimate that more than 40% of the population is poor, while estimates based on a poverty line of \$1/day/person puts the figure at more than 50% (UNDP, 2000). Poverty is greater in the rural areas, especially in the higher altitudes and less accessible regions and among lower castes and ethnic minorities.

The human development index of UNDP, 2001 showed that the poverty index of Nepal is 51.3% and Nepal lies in the 125th position among the 174 countries of the world (Hada, 2001 cited in Paudel, 2002) recorded in the poorest country list. Poverty is the daunting development challenge confronting the world today.

2.8 Disadvantaged Group (DAGs)

Constitutionally, there is no discrimination among citizens on grounds of religion, race, sex, caste, tribe or ideological conviction in Nepal (HMGN, 1990). But in practice exclusion is a highly prominent feature of culture in relation to women, the “low caste” the ethnic groups and the poor, and such groups face severe barriers against the use and enhancement of capabilities (UNDP, 1998). DAG includes “socially disadvantaged and minority communities” (Chhetri et al., 1998). More specifically, DAG has been defined as “those groups of people who are identified to be historically, socially and economically discriminated against and/or who have been denied opportunities and access to resources thereby leading them to further poverty and exploitation” (CARE NEPAL 1996). According to this criterion, DAG for the mid hill region of Nepal includes ethnic groups like Kami, Damai, Sunar, sarki and gaine. All these castes are recognized as low castes or untouchable castes by tradition. The untouchable castes constitute about 15% of the total population of Nepal. (Care Nepal 1996). Disadvantaged people in rural areas are more dependent on public or community forest for their basic forest products than wealthier people of the same area. (Hobley 1987). The participation of poor and DAG in CF is very low and the local elites (High social status, wealthier and educated) are influential in the local decision making process of CFUGs (Gilmour and Fisher, 1991). As a result, an unequal distribution of CF benefits in favor of local elites is common in many CFUGs (Pokharel et al., 1999).

A disadvantaged group is defined by the particular pattern of denied resources and barriers it faces (rather than the fact of race, or poverty or sex). A disadvantaged group may face more than others. Each group presents its own pattern of disadvantage and barriers to self – sufficiency; the implied solution would vary from group to group as well. (Steven. E. Meyer, 2003).

Community Forestry of Nepal has been contributing to the rural livelihoods mainly in two ways: (1) flow of forest products in an easy and an accessible way, and in a sustainable manner, (2) contributing in the development of livelihoods assets. The livelihood assets include natural capital (forests, water, land, fish, minerals); social capital (relationships of trust and reciprocity, groups, networks, customary law); human capital (skills, knowledge, beliefs, attitudes, labor ability, and good health); physical capital (basic infrastructure); and financial capital (monetary resources). With improved access to and control over different types of assets, the poor are better able to meet basic needs and to create different livelihood

options (Singh and Gilman 2000). These assets are the building blocks of livelihoods of the people. A range of assets is needed to achieve positive livelihood outcomes (Warner, 2002).

The Master Plan for Forestry Sector, 1988 (MPFS), the Agriculture Perspective Plan (APP) and the Tenth Plan are the main policy instruments for poverty reduction and sustainable forest management. In the hills, CF is of prime importance for the restoration of forest resources and poverty reduction to improve the livelihoods of the rural poor (Poudel and Thapa, 2004). The present form of Nepal's community forestry is guided by the Forest Act of 1993, Forest Regulations of 1995, and the Operational Guidelines of 1995. These legal instruments have legitimized the concept of CFUG as an independent, autonomous and self-governing institution responsible to protect, manage and use any patch of national forest with a defined forest boundary and user group members. CFUGs are to be formed democratically and registered at the DFO, with CFUG Constitution, which defines the rights of the users to a particular forest. Community forestry is based on the operational cooperation of Forest Department officers and forest user groups. Moreover, the devolution of the power and authority to manage forest areas between these actors is linked to the idea of sharing the responsibility of forest protection. Therefore, in order to ensure the feasibility of resource management, it is necessary to emphasize cooperation between the forester and those who use the forest, especially for domestic purposes and as an integral part of their farming systems (Pokharel, 2003). Improving the living standard of the people is achieved if people become aware of the benefit that they can obtain from the forest because it has been an integral part of human society. CF can be considered as the backbone for upliftment of living standard of the Community Forest User Group (CFUG). The overall aim of community forestry is to decrease the socio-economic hardships of the people living in hilly areas. The bio-physical status of the forests and socio-economic status of people are being improved after the implementation of the CF program. (Dahal, 1996).

CF contributes to users' livelihood by meeting the basic needs for forest products, easy availability of forest products by reducing the time for collecting the forest products, encouraging to adopt productive livestock and stall feeding, and this all lead to improved living conditions for users. It has been observed poor users were not as much benefited as rich and middle users in terms of social and human capital generation. The CF lagged behind to generate financial capital of the users although a high financial transition has existed during recent years in the FUG fund. (Neupane, 2003)

Impacts are diverse both within and between FUGs, but have been generally positive in terms of improved levels and security of forest product and benefit flows, various household income generating opportunities, support for community infrastructure and development activities, and improved ‘social capital’ for collective planning and action. Nevertheless, impacts to date are below their potential, and the needs of rural households require more investigation to determine what further opportunities exist and how police and extension agencies may offer specific needs oriented support (Pandey, 1999).

2.9 Political Systems, Forest Policies and Degree of Citizen Participation over the Past Decades in Nepal

Forest are directly related to the nation’s development. Forest were exploited after the implementation of private forest nationalization act 1957 because local people who had been using the forest resources as well as protecting the forest were deprived of their rights. As a results, this led to deterioration of forests particularly in the hills. The need for a community forestry program in Nepal was first emphasized by government policies as early as 1976 (By the National Forest Plan, 1976). This resulted in amendment of the traditional forest act (amendment 1977) by making provision for handing over of part of government forests to the small local government unit which was known as ‘Panchyat’. Forest rules 1978 was produced for the implementation of the program. Local Panchyat had ownership over plantation forest (Panchyat Forest) and existing natural forest (Panchyat Protected Forests). Later, forest administration started handing over the forests directly to the local groups involved in protecting forests which brought ownership feeling to the local people. A master plan of forestry sector (1989) placed the community forestry program as one of its six primary program. Forest act 2049 recognized the community forestry as one of the forestry programs for Nepal and Forest regulation 2051 elaborated operational modalities for CF.

Forest policy of Nepal provides an environment to practice and learn from community forestry and many more have been achieved in terms of capital formation and its flow, governance reforms and community empowerment. However there are many challenges related to gender and equity, livelihoods and forest sustainability. Nepal’s community forestry has proved that communities are able to protect, manage and utilize forest resource sustainability. Thus, community forestry is needed according to local context to address the social issues such as gender and equity.

CHAPTER- III

RESEARCH METHODOLOGY

3.1 Research Design

The design of this research is mixed method which is conducted in descriptive and analytical form. It is based on a review and examination of information gathered from primary sources of Consumers and key informants by sampling method and also a variety of secondary sources information review mainly district profile.

3.2 Study Area

Kavrepalanchowk District

Kavrepalanchowk is one of the districts in Bagmati Province, which is full of flora, fauna, and natural beauty. It is quite rich in culture, education, civilization, and lifestyle. It is famous for its biodiversity, various cultures, cast, ethnic groups live here, they are the next identity of Kavrepalanchowk district. Dhulikhel, the tourism city, which is just 30 km faraway east of Kathmandu is headquarter of this district.

In terms of world geography, it lies from 27 degree 20minutes to 27 degree 85 minutes northern hemisphere and 85 degree 24 minutes to 85 degree 49 minutes eastern hemisphere. It is linked with Ramechap and Dolakha district in the East, Kathmandu, Bhaktapur and Lalitpur in the west, Sindhupalchowk district in the north and Sindhuli and Makwanpur districts in the south. It is a landlocked hilly district. It spreads from 280m high (Sikkre Dovan) to 3018m (Bethanchowk Dada) from the sea level. The total area of the district is 140486 hectares with rectangular shape. East West length is about 42.05 km and North-South length is about 35.42km.

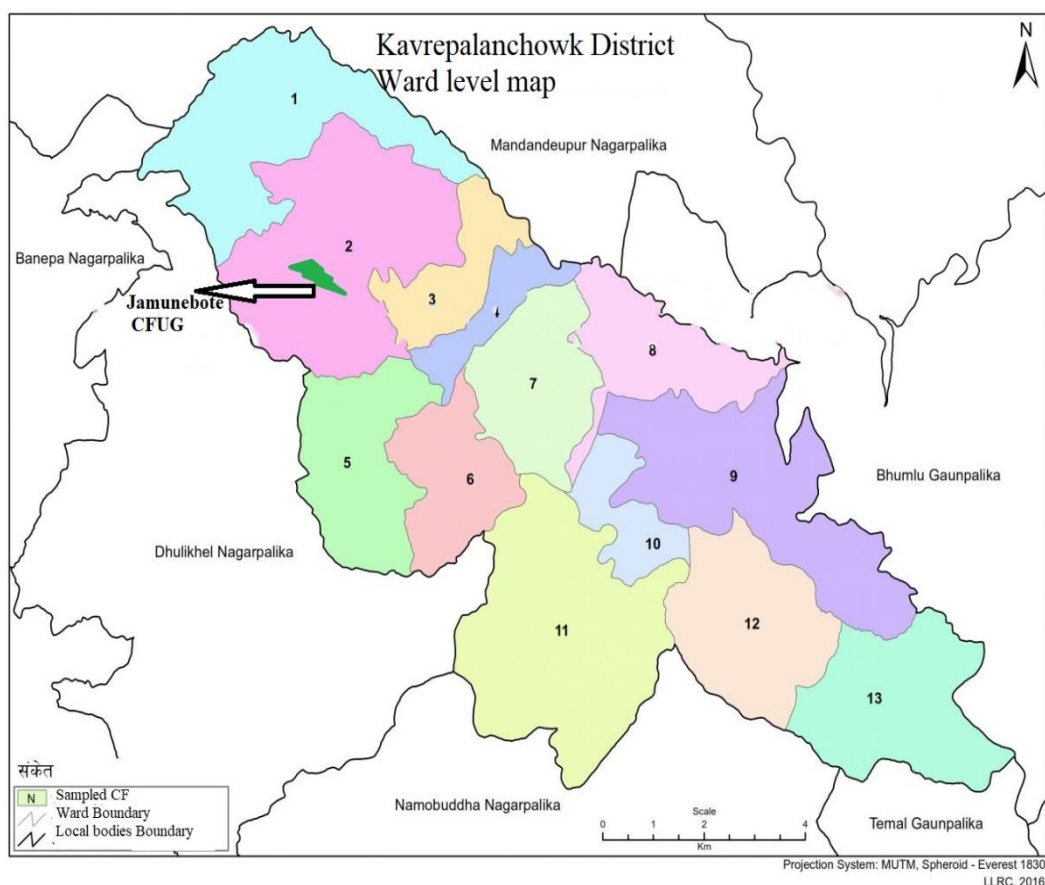
Out of the total area of the district 52% of the land is covered by forest. There are 578 community forests handed to the users covering 29600.09 ha area of forest. (Annual report, 2077 DFO Kavre)

Overview of Jamunbote Community Forest:

Jamunbote community forest located in Kavrepalanchowk district is the area of this study. This community forest was handed over to the community in 2052 B.S. It lies in Panchkhal Municipality, ward number 2 and covers an area of 75.97 hectares. Jamunbote community forest user group consists of 128 households comprising 205 females and 220 males. Total four blocks shape this community forest, whereas the major species of plants found here are Salla, Chilaune, Saal etc. (Operational plan (OP) of Jamunbote CF)

Figure 1

Study area showing sampled forest, ward and local bodies boundaries



Source: District Profile Kavrepalanchowk District Published by Division Forest Office

3.3 Nature and Source of Data

Primary was collected from the household interviews where 20% of the total users' households were taken as sample and key informant survey (n=7). Simple random sampling was done for the selection of the household for the survey.

Questionnaire survey was conducted in person individual interview method including poor, marginalized, women and other users of the consumer's community. Some closed ended and some open ended questions were used in questionnaires for the data collection.

Secondary data were collected from the related books, journals, reports, published and unpublished articles and websites.

3.4 Data Processing, Analysis and Presentation

Date entry has been done for the arrangement and analysis of collected data using MS excel. Quantitative data has been presented in graphs, bar diagrams and pie charts and interpreted in terms of text percentage and numbers .Qualitative data has been analyzed in the descriptive manner.

3.5 Ethical Consideration

Ethical Considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between right and wrong. They help to determine the difference between acceptable and unacceptable behaviors. Norms like honesty and integrity, objectivity, carefulness, openness, respect for intellectual property, confidentiality, responsible publication and legality has been taken in consideration. There is no hurt to the government policies and procedures.

The APA 7th edition has been adopted for citation and references. Due respect is given to the writer of source from where data has been collected. Policy of non-plagiarism is strictly followed .Citation and reference are coded for each and every source. The research is conducted adopting the general principle of ethical standard like responsibility, integrity and justice. Primary data were collected through questionnaire surveys (20% households were taken as a sample), key informant survey (n=7), and secondary data from related journals,

articles, websites. Data were analyzed quantitatively and qualitatively using MS Excel and results were illustrated in the form of descriptive statistics.

CHAPTER- IV

RESULTS AND DISCUSSIONS

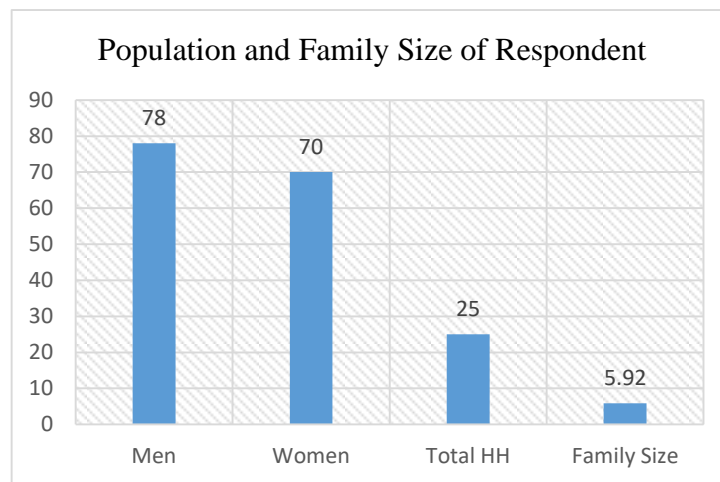
4.1 Results

4.1.1 Population and Family Size of the Respondents.

Total respondents of the CFUG are 25 with a population of 148. Figure below represents the average family size and number of men and women of the CFUG.

Figure 2

Population and family size of the respondent



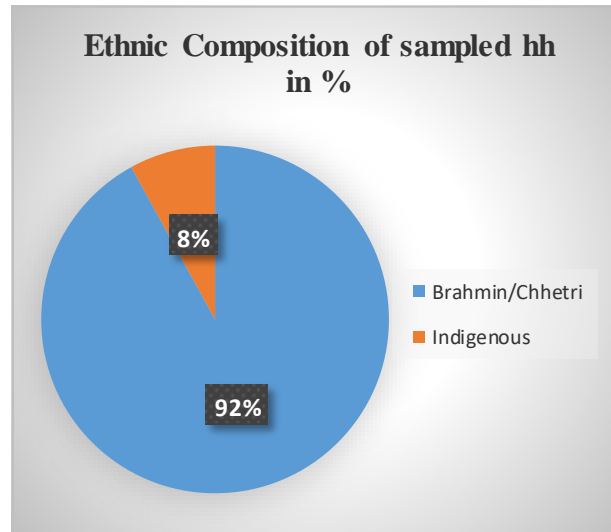
Source: Field Survey 2022

4.1.2 Ethnic Composition of the Sampled Households

This study area is homogeneous in terms of ethnic composition. Out of the total 20% households were selected for the research purpose randomly. Majority of them were Brahmin/Chhetri (92%) and Indigenous (8%). The figure below shows the ethnic composition of respondents.

Figure 3

Ethnic Composition of sampled households



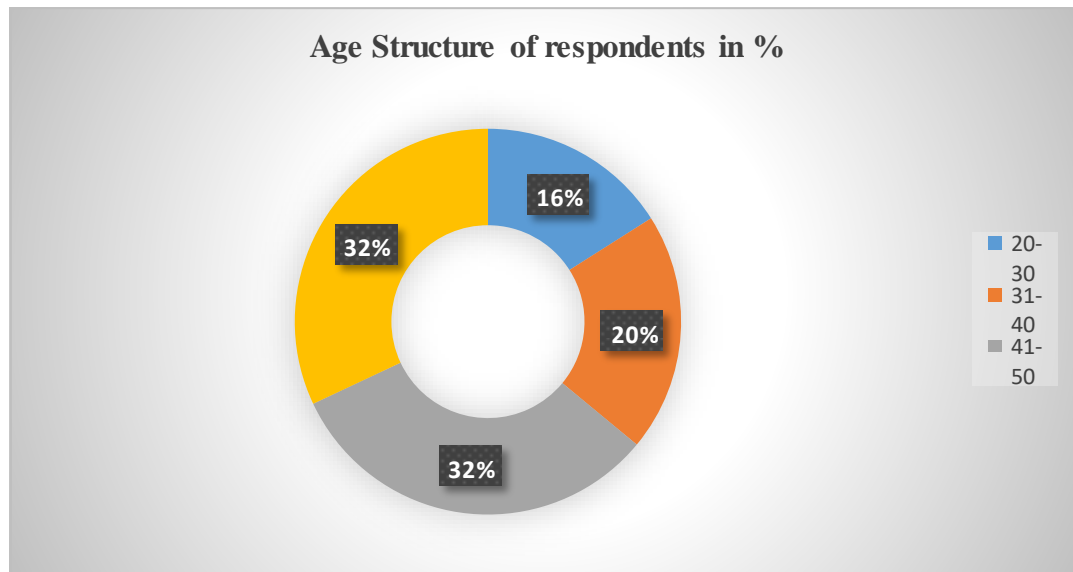
Source: Field Survey 2022

4.1.3 Age Structure of the Respondents

Majority of the respondent's family members were from the age group of 41-50 (32%) and >50 occupying 32% whereas the least portion of them were from age group 20-30 (16%) and 31-40 (20%) respectively.

Figure 4

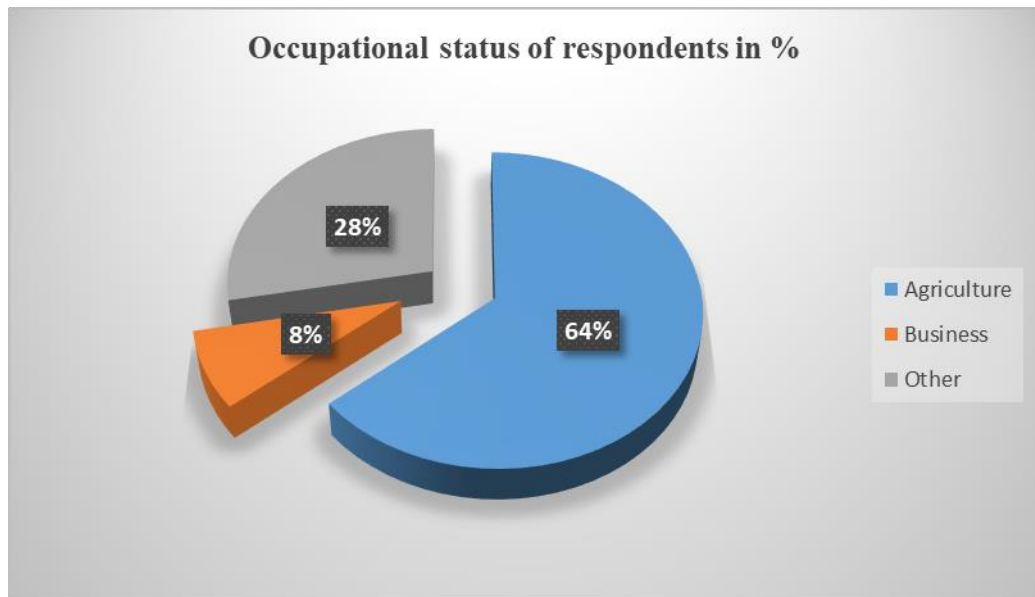
Age structure of the respondents



Sources: Field Survey 2022

4.1.4 Occupational Status of the Respondents

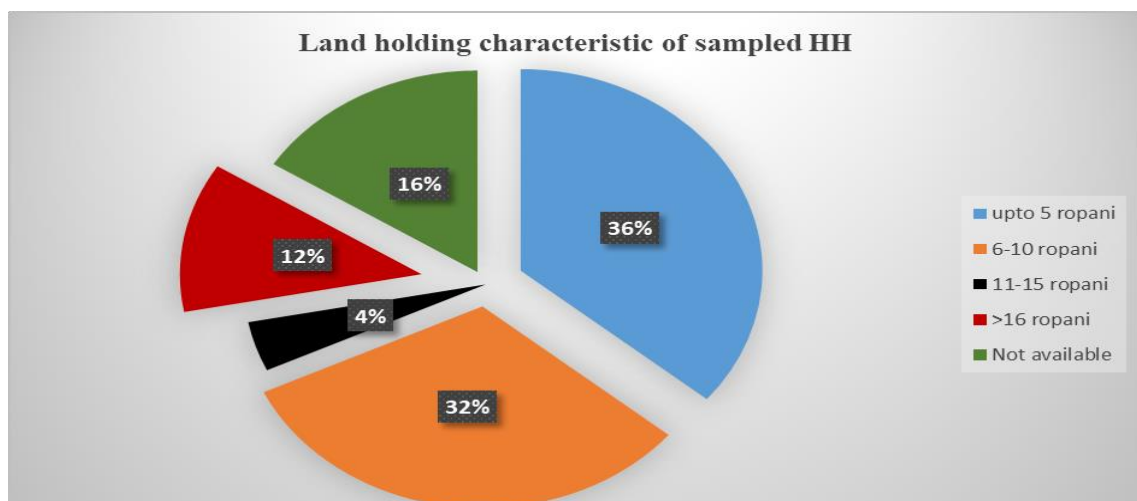
Different types of occupation have been adopted in a community. Majority of the respondents were engaged in agriculture (64%), Business (8%) and others (28%) respectively. Other occupations include service (private and government), remittance, etc

Figure 5*Occupational status of the respondents*

Sources: Field Survey 2022

4.1.5 Landholding Characteristics of the Sampled Households

The landholding status of the sampled household in percentage is as shown in figure below.

Figure 6*Landholding characteristics of sampled household*

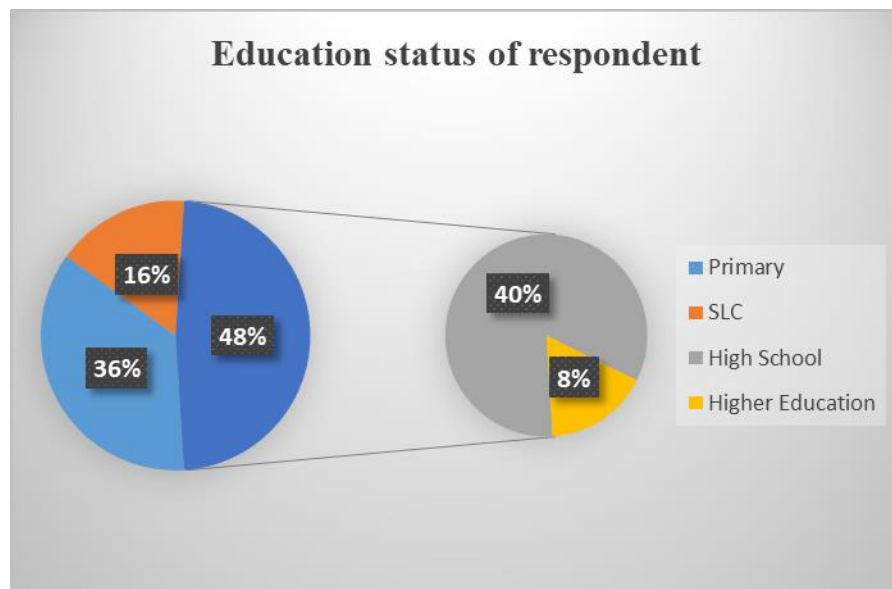
Source: Field survey 2022

4.1.6 Educational Status of the Respondents

Literate people are also included in the primary category. Study shows the educational status of the respondent. Majority of the respondents have a high school degree (48%) followed by primary education (36%), SLC (16%) and higher education (8%) respectively

Figure 7

Educational status of the respondents



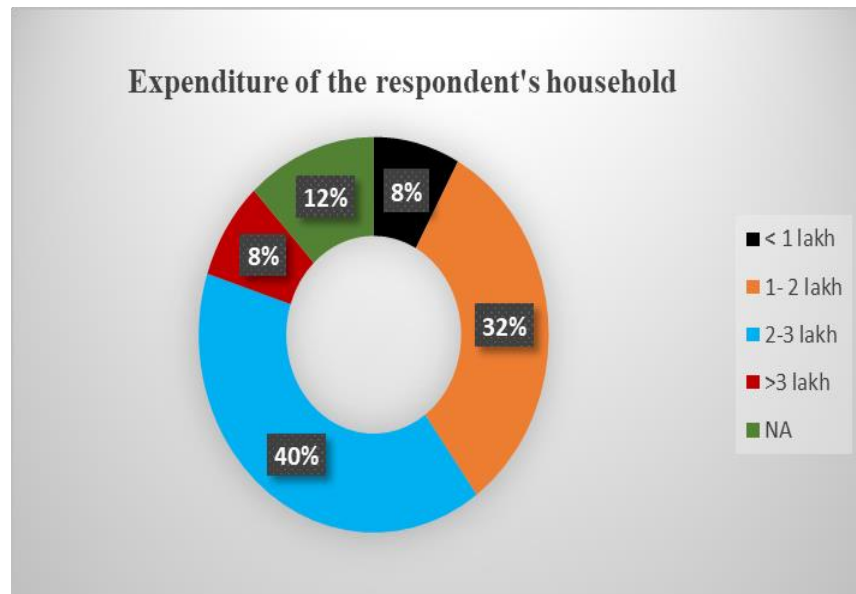
Source: Field Survey 2022

4.1.7 Livestock Holding of the Respondent Households

As a dependency on forest decreases there is relaxation on restrictions to enter CF as a result of which people can collect firewood, fodders, leaf-litters etc, more frequently which has encouraged the remaining people to keep more livestock than before though the no. of households having livestock has decreased.

4.1.8 Expenditure of the Respondent Households

The highest expenditure of the respondent's household is around 2-3 lakhs (40%) and they spent money on food, medicine, education, clothes and miscellaneous things followed by 1-2 lakhs (32%), more than 3 lakhs (8%) and less than 1 lakh (8%) respectively.

Figure 8*Expenditure of the respondent's household*

Source: Field survey 2022

4.2 Livelihood Assets i.e. Human, Physical, Social, and Financial

4.2.1 Human Capital

Human capital is the combination of the skills, knowledge, ability to labor and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. Human capital is a factor of the amount and quality of labor available which varies based on household size, skill levels, leadership potential, health status, etc at a household level.

Table 1*Access of respondent on education*

Educational Status	Percentage
Primary	36
SLC	16
High school (10+2)	40
Higher Education	8

Source: Field survey 2022

Overall educational status was found satisfactory. Only 8% of the respondent were joined for higher education i.e. Masters and Bachelors after high school. The general trend of leaving study after 10+2 because they were concentrated to earn money through involving different earning activities rather than continuing further study.

Key Informants (KI) 1 illustrated that community forest enhanced employment opportunities in tree harvesting and livestock farming in local areas.

4.2.1.2 Contribution of community human capital on the livelihood of the user

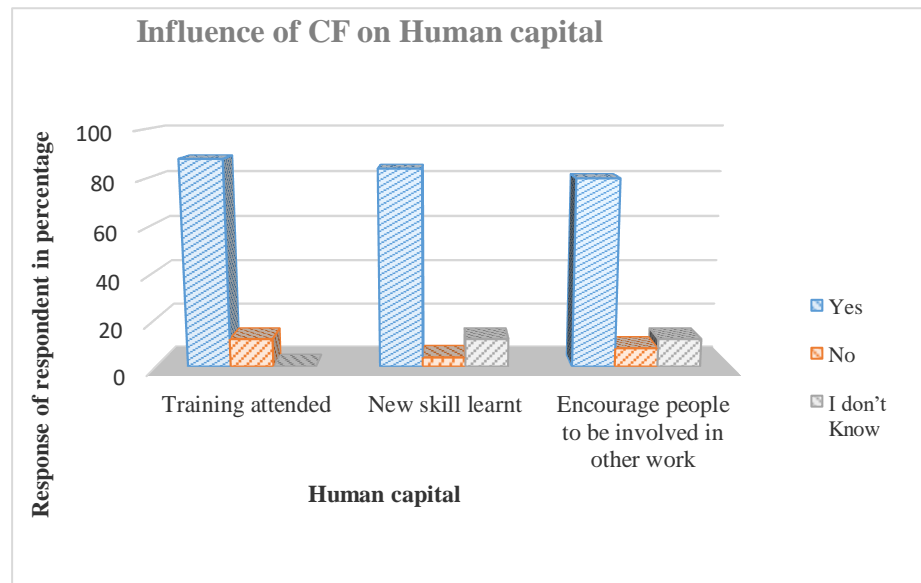
The primary aim of community forestry training workshops is to capacitate communities so that they can take over the management responsibility of the forests they have traditionally been using since time. By giving extra knowledge, the users can become technical and managerial experts.

This study found 88% of the people got involved in the training and workshop related to the community forest from where most (84%) of the people learnt new ideas and skills which

encouraged (80%) of the people to do other work. Only 4% of the people did not learn new skills and 8% of them were discouraged from doing other work.

Figure 9

Influence of CF on human capital



Source: Field Survey 2022

Forest conservation along with the improvement of human and financial capital of communities living around the community forest is necessary for the sustainable management of forest (Shahbaz et al., 2016).

Key Informants (KI) 2 illustrated that community forest enhanced livelihood of forest users through employment generations in forest works and livestock farming.

4.2.2 Physical Capital

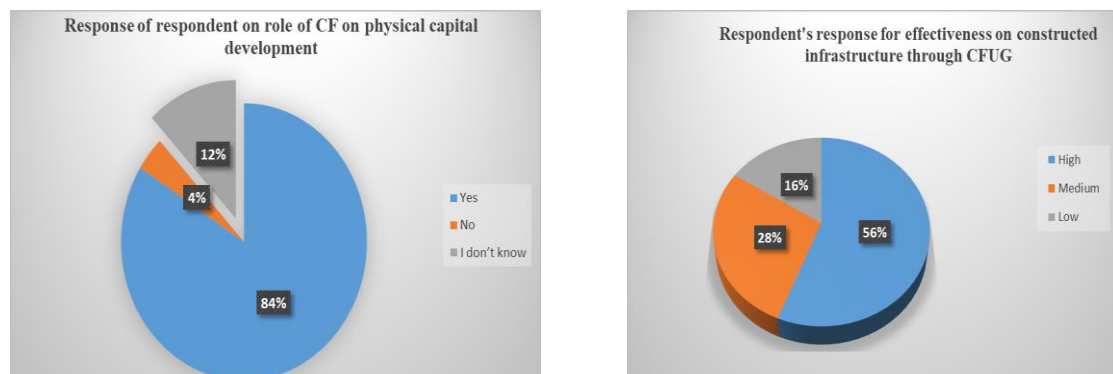
Physical capital includes the basic infrastructure and producer goods needed to support livelihoods. Infrastructure consists of changes to the physical environment that help people to meet their basic needs and to be more productive. Producer goods are the tools and equipment that people use to function more productively. The following components of infrastructure are usually essential for sustainable livelihoods; affordable transport; secure shelter and buildings; adequate water supply and sanitation; clean affordable energy; and access to information.

4.2.2.1 Respondent's perception on CF can contribute of CF on the community constructed infrastructure

This study shows that 84% of the people agreed that CF contributes to the development of physical capital. Whereas only 4% of people disagreed and 12% had no idea about it. Respondents were asked about the effectiveness of constructed infrastructures through CFUGs. Around 56% of the respondents said that effectiveness of constructed infrastructures were high followed by medium (28%) and low (16%). Temple, Chautara, forest office building was the constructed infrastructures of that community forest.

Figure 10

Response of respondent on role of CF on physical capital development and constructed infrastructure through CFUG



Source: Field Survey 2022

Key Informants (KI) 3 explained even though Jamunbote CFUG has comparatively low income than others but also it has supported some portion of expenses in drinking water and road construction activities.

4.2.3 Social Capital

Social capital refers to the internal social and cultural coherence of society. In the context of the sustainable livelihoods framework it is taken to mean the social resources upon which people draw in pursuit of their livelihood objectives. These are developed through: networks and connectedness, membership of more formalized groups, rules, norms and sanctions and

relationships of trust, reciprocity and exchanges. Social relationship of the respondents in the study area was compared with the relationship found before and after the formation of CF.

Table 2

Respondent's perception on the contribution of social capital before and after formation of CF.

S.N.	Statements	Attributes	Response after formation of CF (%)
1	Relationship among and between user groups	good	76
		Satisfactory	24
		Bad	0
2	Free in decision making process related to resource management	Good	76
		Satisfactory	20
		Bad	4

Source: Field survey 2022

Above table shows that the majority of the respondents have good relationships among and between group members and are free in the decision making process related to the resource management after the formation of CF which indicates that the CFUGs had contributed to social capital.

Key Informants (KI) 4 illustrated that the Jamunbote CFUG used to celebrate a special ritual named "Bandeji Puja" annually which leads to encouragement and enhances social harming within.

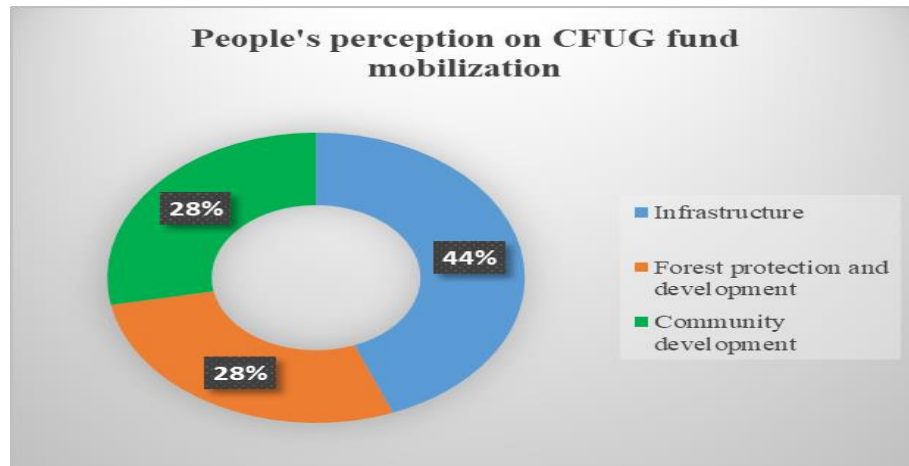
4.2.4 Financial Capital

Financial capital denotes the financial resources that people use to achieve their livelihood objectives. The definition used here is not economically robust in that it includes flows as

well as stocks and it can contribute to consumption as well as production. However, it has been adopted to try to capture an important livelihood building block, namely the availability of cash or equivalent that enables people to adopt different livelihood strategies. There are two sources of financial capital i.e., available stocks and regular inflows of money.

Figure 11

Perception of respondent on CFUG fund mobilization



Source: Field survey 2022

Above figure shows that most of the fund of CF, based on people's perception, is mobilized on infrastructure (44%) and 28% is on both community development, and forest protection and development.

Key Informants (KI) 5 illustrated that the major source of income in Jamunbote CFUG was by selling timber followed by CFUG new membership and annual renewal fees. Whereas, Forest guard salary, fire line construction and snacks for users during many volunteer forest related activities like thinning, pruning and so on.

Also, (KI) 3 informed that income can be generated by promoting recreational activities including picnic spots in hillside areas of Community forest.

Taking all these in consideration, selling forest products with existing Forest Act 2076 and Forest regulation 2079. It's quite a time consuming and lengthy process with a tender system. So, (KI) 3 also suggested to make amendment for such policies and make it simpler with less time consuming mechanism,

4.2.4.1 Income and expenditure of CFUG

Income source of Jamunbote CF is membership fee, timber sale, punishment from forest offenders, donations by other GoN and non-government agencies. In Jamunbote community forest, people pay Nrs. 125 for Samida (wood used for religious purposes while doing hom puja). Similarly, expenditure of CF mainly on fire-line construction, wages for labor forest protection, management, plantation and silvicultural activities like thinning, pruning.

4.3 Gender Equity and Social Inclusion (GESI)

Participatory forest management and participation in CF were second- generation issues, and Gender Equity and Social Inclusion in forestry was identified as the third generation issues in the forestry. Forest policy 2015 focused on access and rights of women and marginalized communities to the forest and equitable benefit sharing deriving from forest products and its management. Forest Act 2076 and Forest Regulation 2079 has emphasized 50% women leadership and voice narrative in CF. According to the operational plan of Jamunbote CF there is equal participation of men and women (around 56% women) for resource management though this is unable to incorporate social inclusion because people around this CF are mainly Brahmin and Chhetri.

4.4 Situation of forest before and after applying of community forest

Community forestry in Nepal was launched with an innovative idea of empowering local communities to manage the degrading forest in 1970, until then because of its importance in the livelihood of rural people and state revenue, forest of Nepal had a foremost place in local livelihood practices (Ojha, H., Persha, L., & Chhatre, A. (2009)). Analysts have usually described three phases of forestry in Nepal: privatization (until 1957), nationalization (from 1957 to 1970), and decentralization (from late 1970 onwards) (Hobley, M. (1996)). Private Forest nationalization act 1970 was one of the most controversial in the history of forest mgmt. Official formation of CFUG and handing over of CF started after the implementation of forest act 2049 and forest regulation 2051. The recent criteria for CFUG is based on amended forest act 2076 and forest regulation 2079, CFUGs guideline 2071.

Key Informants (KI) 6 explained that Forest and its management scenario is changing with time. Especially, we can see dramatic change in community forest management and

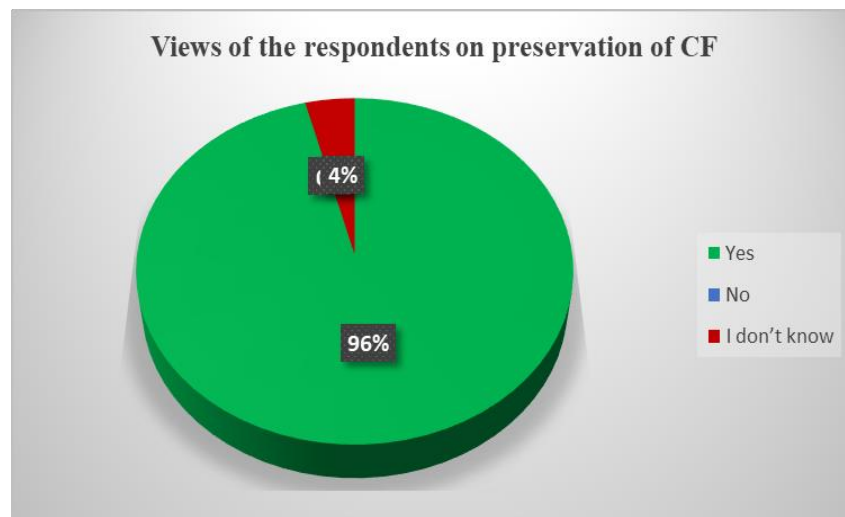
operation trends before and after 2060 B.S. He also explained that before 2060, it was more production oriented and daily household uses of forest products. Instead these days, it is being managed with conservation focus.

4.5 Sustainability and Preservation of Jamunbote Community forest

As a result of the community forestry, the forest management system shifted from protection oriented to production oriented. Active participation of the local people in the form of user groups focused more on sustainable management of the forest rather than only preservation. Which helped them to address their day to day problems. Social inclusion, transparency, equity, predictability and participation acted as a cherry on the top, by providing the user groups with the feeling of ownership and responsibility.

Figure 12

Views of respondents on preservation of CF



Source: Field survey 2022

Above figure shows that around 96% of the people said that it is necessary to preserve the community forest and 4% of the people had no ideas about it. According to the local people, promotion of NTFPs, bamboo plantation, promotion of horticulture, establishment of forest product based small scale industries like handicraft, wood carving etc. can be the sustainable earning from community forest. Local people emphasized on fire-line construction, appointment of forest guard, water resource management for the conservation of Jamunbote community forest.

Key Informants (KI) 7 and most of the respondents along with key informants agreed for its conservation and preservation for future generation. They also illustrated that additional income generation activities such as NTFPs and horticulture promotion, bamboo plantation, establishment of forest product based small scale industries like handicraft, wood carving can be promoted for motivation and enhancement of livelihood of local people.

4.6 Discussions

Dependency on the forest has been in declining order than in the past. People's lives have been influenced by the advancement of science and technology. Everyday things are easily available at affordable prices due to development of roadways and means of commuting. Younger generations have started migrating to the urban areas in search of either employment or good education, only older generations are left behind and still depend on the forest. Use of LP gas instead of firewood, use of medicines instead of NTFP's etc. has reduced the dependency in the forest even more, as a result of which forest cover has increased from 29% to 44% according to DFRS 2015.

It is clearly visible that people's perception towards CF has changed than in the past days, young people from poor families, ethnic groups and disadvantaged groups that were dependent on the forest have either migrated to the urban areas for better opportunities or have fled the country in search of employment, on one hand this has reduced the pressure in the forest and people but at the same time on the other hand people have started keeping more livestock due to relaxation of the restriction to enter the CF as the dependency on natural resources decreases, decreases the restriction of using them.

Community forestry programs cannot resolve all the social problems. Social disparity and inequitable benefit sharing is one of the challenges where most of the CF are led by the elite groups and DAGs are excluded from the community forestry due to their economic conditions and social structure (Gurung et al., 2013). This community forest is also unable to include all the ethnic communities as most of the people living around this CF are Brahmin and Chhetri.

Community forest user groups contribute to addressing the basic needs of villagers on priority basis where there is lack of required physical features (Paudel, 2011). This study also supports this statement as according to the people's perception some of the physical features

like temple, trail, CF office building, support timber to the CFUGs as per their need (for religious purpose) after the formation of CF.

Even though many respondents focus on the positive impacts of community forestry in the livelihood of local people. Key Informants (KI) 8 also identified negative impacts including human wildlife conflict, trees of forest covers nearby cultivated land and convert into unfertile land with its shade and so on

Key Informants (KI) 3 explained that Jamunbote CFUG is rich in biodiversity of wild flora and fauna including, wild boar, peacock, deer, Gurjo, Resin, and many more which needs research for its sustainable use and management. Also many water recharge ponds help to keep larger land wet and cultivable. Similarly it can act as a best assets for ecotourism.

Additionally, for financial purposes, this CFUG has planted more than 1300 fruit trees in the last 3 years. It needs proper management and ultimately a good market of its productions. If we can promote such income generating forest and its market then such community forest can last long for many generations which is our main goal. Also, this CFUG established nursery for plant production in collaboration with Division Forest Office Kavrepalanchowk, It helps for knowledge transfer and regular plantation for betterment of community forest.

Our results show that around 64% of the respondents depended on agriculture, remaining were involved in business, private, government and foreign land jobs. This study found that the contribution of Community Forest is seen in physical, social, human and financial capital. Community Forest sometimes organizes training and workshops to build up the skills of user groups. Based on the people's perception, most of the income was spent on infrastructure development, community development, forest management and protection.

CHAPTER- V

SUMMARY AND CONCLUSION

5.1 Summary

5.1.1 Socio-Economic Characteristics of the Poor People and Disadvantaged Group of the CFUG

Majority of the respondents, 64%, depend on Agriculture as the main profession for livelihood, followed by 28% of the respondents with other professions like carpentry and daily wage work, whereas respondents who have adopted business as a main profession is only 8% . Around 36% of the respondent had upto five ropani land, whereas the respondent with more than five ropani land was 48%. Majority of the respondents spent a large portion of their income for food and clothes, while remaining for health and other miscellaneous expenses.

5.1.2 Human capital

About 88% of the respondents seemed to have actively participated in training and workshops related to the CF. Out of all the active participants 84% learnt new income generating skills and ideas. The education status of the respondent is satisfactory, with only 8% attending higher education.

5.1.3 Physical capital

Around 84% of the respondents agreed with the CF contribution to the development of the physical capital. In case of effectiveness of the constructed infrastructure 56% of them responded with highly effective, followed by 28% with medium and 16% with low. Construction of different infrastructures like Temples, Chautara, forest office, forest paths etc.

5.1.4 Social Capital

Respondents' participation in different events of community forest was observed to be good. Majority of respondents agreed that active participation in different events has improved their relation with other members in a better way. Around 50% men and 50% women in CFUG

committee member formation. Women should be included in one vital post either president or secretary. Combined signature of male and female in vital post for fund mobilization. Two-third ($\frac{2}{3}$) of total UG members must be present for decision making and implementation. They have started to feel more comfortable and confident towards government officials after the CFUG hand over. Likewise, 76% of the respondents were happy with their freedom in decision making whereas the remaining 24% found it satisfactory. Majority felt that their voice was heard and their suggestions were taken into account in the decision making process.

5.1.5 Financial Capital

Respondents believed that 44% of the total income of the CF is mobilized in infrastructure followed by 28% in both, community development and forest protection and development. According to key informants 25% of total income is mobilized in forest management (income: sale of NTFP and timber, renew CFUG). Similarly, 37.5% in women empowerment and poverty alleviation and 37.5% in development work, collaboration with local government.

5.2 Conclusion

Community forestry has become a proof that local communities can protect, manage and utilize the forest resources properly. Therefore, community forestry approaches act as inspiring factors to work for forest management and user's right (Pokharel and Nurse, 2004). Jamunbote community forest is doing a good job for the forest management and biodiversity conservation though here are some recommendations for the effective management of forest

There should be coordination between concerned authorities (DFO, CFUGs, and FECOFUN) to continue the forest activities. Role of each and every stakeholder regarding CF management should be clearly defined. More poor users need to be encouraged to play an active role in the decision making process. Community forest needs include users based on Gender and Social Inclusion Strategy (MFSC, 2007). The participation level of the poor, women and DAGs should be increased in general assembly, meetings, and workshops of CF. Alternate sources of income generating activities need to be explored and implemented for the sustainability of the community forest as the dependency for the subsistence needs on CF has decreased with migration of people from rural to urban areas and abroad. Similarly, the

use of fuel wood is also decreased as the demand and supply of LPG is increased. Incoming generating activities like horticulture, bamboo plantation, agroforestry, bee keeping, amriso plantation, etc need to be implemented for the development of the financial capital. It is very important to initiate forestry related employment in the local area on a regular basis. Fire line construction needs to be carried out for forest protection.

This study found that the social relationship between and within the user groups has increased after the handover of community forest. For increasing its potentiality on livelihood improvement, Government and concerned authority (CF) should carry out effective workshops and training for poor, disadvantaged and marginalized groups. Additionally, Community forest should focus on alternate income generating activities like bamboo plantation, forest product based handicraft industry, horticulture for its user's well-being.

REFERENCES

- Baral, J. C., & Subedi, B. R. (1999). Is community forestry of Nepal's Terai in right direction?. *Banko Janakari*, 9(2), 20-24.
- Bijaya, G. C., Cheng, S., Xu, Z., Bhandari, J., Wang, L., & Liu, X. (2016). Community Forestry and livelihood in Nepal: A review. *JAPS: Journal of Animal & Plant Sciences*, 26(1).
- Carney, D. (Ed.). (1998). *Sustainable rural livelihoods: What contribution can we make?* (p. 122). London: Department for International Development.
- Dahal, S. 1996. Changes in forest condition and its relation to rural livelihood. M.Sc.Thesis, Tribhuvan University.
- Dev, O. P., Yadav, N. P., Springate-Baginski, O., & Soussan, J. (2003). Impacts of community forestry on livelihoods in the middle hills of Nepal. *Journal of forest and Livelihood*, 3(1), 64-77.
- DOF (2009). Community forestry development guidelines. The Community Forestry Division, Department of Forests, Kathmandu, Nepal
- Dougill, A. J., Soussan, J. G., Kiff, E., Springate-Baginski, O., Yadav, N. P., Dev, O. P., & Hurford, A. P. (2001). Impacts of community forestry on farming system sustainability in the Middle Hills of Nepal. *Land Degradation & Development*, 12(3), 261-276.
- Ellis-Jones, J., & Mason, T. (1999). Livelihood strategies and assets of small farmers in the evaluation of soil and water management practices in the temperate inter-Andean valleys of Bolivia. *Mountain Research and Development*, 221-234.
- Gurung, A., R. Bista, R. Karki, S. Shrestha, D. Uprety and S.E. Oh (2013). Community-based forest management and its role in improving forest conditions in Nepal. *Small-scale For.* 12:377– 388
- Hobley, M. (1996). Participatory forestry: the process of change in India and Nepal. Overseas Development Institute (ODI).

- Johnson, C. A. (1997). Rules, norms and the pursuit of sustainable livelihoods.
- Kanel, K. R., & Kandel, B. R. (2004). Community forestry in Nepal: Achievements and challenges. *Journal of forest and Livelihood*, 4(1), 55-63.
- Maharjan, M. R. (1998). *The flow and distribution of costs and benefits in the Chuliban Community Forest, Dhankuta District, Nepal*. ODI.
- Malla, Y.B. 2000. Impact of Community Forestry Policy on Rural Livelihoods and Food Security in Nepal. *Unasyuva: Vol 51 (202)*, 37-45 pp.
- MFSC (2007). Forestry Sector Gender and Social Inclusion Strategy. Ministry of Forest and Soil Conservation, Kathmandu, Nepal.
- Naupane, M.R. 2003. Flow and Distribution of Costs and Benefits in the Chuliaban community forest, Dhankuta District, Nepal. Rural Development Forestry Network Paper 23e. ODI, London.
- National Planning Commission, 1998. A plunge into Poverty: Is there an escape way. An analysis of the key issues on poverty, poverty alleviation initiatives, and the challenges that lie ahead.
- Nightingale, A. J. (2002). Participating or just sitting in? The dynamics of gender and caste in community forestry. *Journal of forest and livelihood vol, 2(1)*.
- Ojha, H., Persha, L., & Chhatre, A. (2009). Community forestry in Nepal: a policy innovation for local livelihoods. International Food Policy Research Institute, 913.
- Ojha, H.R., M.R. Banjade, R.K.Sunam, B. Bhattarai, S. Jana, K.R. Goutam and S. Dhungana (2014). Can authority change through deliberative politics? Lessons from the four decades of participatory forest policy reform in Nepal. *For.PolicyEcon.* 46: 1–9
- Paudel, D.B. (2011). Community forests ensuring local governance and livelihood: A case study in Sunwal VDC, Nawalparasi, Nepal. *Geogr. J. Nepal* 8:33-42.
- Paudel,N and Thapa,K (2004). Forest Land Use Dynamics and Community-Based Institutions in a Mountain Watershed in Nepal: Implication of forest Governance and Management, Ph. D dissertation, Asian Institute of Technology, Bangkok, Thailand.

- Pokharel, B.K. and M. Nurse (2004). Forest and People's Livelihood: Benefiting the Poor from Community Forestry. *J. For. Liveli.* 4: 19-29.
- Pandey, R.K. 1999. Contribution and Impacts of Community forestry On Rural Poverty Alleviation. A thesis submitted to Institute of forestry for the partial fulfillment of B.Sc degree in Forestry.
- Pokharel, B. K., 2004. Contribution of Community Forestry to People's Livelihoods and Forest Sustainability: Experience from Nepal. World Rain forest Movement, Montevideo, Uruguay.
- Poudel, M., & Smyth, I. (2002). Reducing poverty and upholding human rights: A pragmatic approach. *Gender & Development*, 10(1), 80-86.
- Scoones, I. (1998). Sustainable rural livelihoods: a framework for analysis.
- Shahbaz, B., Ali, T., & Awais, M. (2012). Perceived impact of participation in forest management on natural and social capitals in Mansehra district of Pakistan. *J. Anim. Plant Sci*, 22, 1167-1172.
- Shrestha, K.B. and Shrestha, R. B. 2002. Experiences of over 25 years in community forestry. In *Human-institutional Natural Resources Interactions* Kanel, K.R., K.R., Karmacharya, M. B. and Karna, B.K. Institute of forestry, Pokhara, Nepal.
- Thoms, C. (2008). Community control of resources and the challenge of improving local livelihoods: A critical examination of community forestry in Nepal. *Geoforum* , 39: 1452-1465.
- Warner.2002.sustainable rural livelihoods: Practical concepts for the 21st century. IDS Discussion Paper 296. Brighton: IDS.

APPENDICES

Appendix 'A'

(Refers to page 22-35)

Questions to Consumers Committee Members and locals

TO meet the above objective following Model Questionnaire For Locals by Random Sampling

A. Demographic features

Name of CFUG.....

1 Information about the respondent

Name..... Gender..... age..... Address.....
Caste.....occupation..... Education..... Name of house
hold head..... Living there since..... Migration
from.....

B. Household information

2. **Family size**

Male : Female : Total :.....

3. **Education status :**

4. **Occupation :**

5. **How much land do you own? :**

6. **How many of the livestock do you own? :**

7. The livestock number after the formation of CF is increased or decreased or neutral :.....

8. The agriculture production after the handover has increased or decreased or neutral :

9. What is the annual expenditure of your family :

C. Human Capital

11. Do CF activities encourage you to involve in other works? a. Yes b. No c. I don't know

12. Did you learn new skill? Knowledge that other have acquired after CF handover? a. Yes b. No c. I don't know

13. Have you or your household members attended any training, workshop , study tour related CF? a. Yes b. No If yes, What:

14. Perception of respondents towards human development through CF.

Statement	Status of the respondents	Response in percentage			Means response
		Agree (1)	Neutral (2)	Disagree(3)	
CF may contribute in human development					
	dalit				
	Non dalit				

D. Physical Capital

16. Do you think CF can help in the development of physical capital?

a. Yes b. No c. I don't know

17. Are there Physical works done by your CFUG? How effective do you find those works to be?

Infrastructure constructed	Effectiveness in percentage		
	High	medium	Low

18. Are there any community development activities conducted in your CFUG?

a. Yes b. No c. I don't know

If yes, what are they?

E. Social Capital

19. Respondents perception on the contribution on social capital before and after formation of CF

S.N	Statement	Attributes	Response in %	
			Before	after
1	Relationships among user group members are very good.	Yes		
2	Capability of decision making with respects to resources management is very good	Yes		
3	Relationship between forest office and user group is very good	Yes		
4	Free in decision making process related to resources management	yes		

21. How much do you participate in meetings and assemblies, decision making, CF management and benefit sharing?

a. Always b. Usually c. Sometimes d. Never

22. How are the decisions made in the meetings?

- a. Majority b. Elite dominant decisions c. unanimous d. all three

23. Do all of the users participate in the decision making process?

- a. All users b. Only the elites c. Rare users d. Unknown

24. Is your voice heard during decision making process, benefit sharing system in CF?

- a. Always b. Usually c. Sometimes d. Never e. I don't speak

25. Have you or any members of your household been selected in user committee?

- a. yes b. no c. If yes, how long and in which position?

F. Financial Capital

28 Do you know about the 3 main income sources of your CFUG?

- A Yes b. No c. I don't know d. If yes, then what

29. How much income do your CFUG earn annually? a. How much.....? B. I don't know

30 What is rate of expenditure of your CFUG annually? a. how much.....? B. I don't know

32. Where CFUG fund utilized?

- A Infrastructure b. Community development c. forest development d. forest protection e. IGAs

33. Are there any income generating activities being conducted in your community for the poor and DAG people?

- A. Yes b. No c. I don't know d. If yes what are they?

34. CF can improve the livelihood of Poor people?

- A. agree b. disagree c. neutral

G. Forest product distribution System

35. What is basis of benefit sharing?

A HH b. Family size c.Elite person d.cost shared e. User committee decision.

36. Are you being discriminated during benefit sharing? A yes b. No c.

Unknown **d.** If yes, why?.....

37. Has the CF included the poor people and DAGs in benefit sharing system?

A yes b. No c. Unknown If yes, why?.....

38. Are you satisfied with the existing resources distribution system of your CF?

A, agree b.Disagree c. Neutral If disagree why?

39. What do you suggest for equitable forest production distribution system in this CFUG?

40. Do you obtain sufficient amount of product from your CF?

a. yes b. No

41. Who fixes the price of the forest products?

a. General assembly b. FUGC c. Elite person d. others

42. Are you satisfied with the present price of the forest product?

A Yes b. No c. I don't know

43. Are there any changes in the supply of forest products after the formation of CF?

A Yes b. No c. I don't

G. Preservation and sustainability

44. Do you want to preserve CF ? : Yes or No

If yes, How:

.....

Appendix 'B'

(Refers to page 22-35)

Key Informants Interview (KII) Questions**Key Informants**

- ✓ **Division Forest Office staff**
- ✓ **Sub Division office staff**
- ✓ **Ranger**
- ✓ **Assistant Forest officer**

Name:

Designation:.....

Office :

Address :

Check list for key informants**A) General**

Forest management practices

- Past and present condition of the forest
- Past and present forest management system
- History of the community Forestry
- Formation process of FUG and FUC
- Criteria for the formation of the FUG and FUC

B) Participation

- Decision making process
- Participation of DAGs and poor people in participation process
- Participation of users in community forestry activities
- Participation of users(especially DAGs and poor)

in other community development activities

- Participation in meeting/assembly

C) Equity

- Information dissemination system
- What type of forest products found in the forest area
- How much domestic needs fulfillment through forest
- Product distribution system

D) Transparency

- Income sources of CF
- Expenditure of CF for what
- Community development activities through CF
- Fund used and collection system
- Problem and conflict with In the forest user groups
- Changes knowledge and skill of users
- Trainee selection criteria
- How is the relation to DFO officials
- Solving pattern for forest offences
- Activeness of users

E) Sustainability of preservation

- Dependency
- Settlement in Remote area
- Practices for sustainability
- Preservation mechanism
- Recent policy and Guidelines on this regards

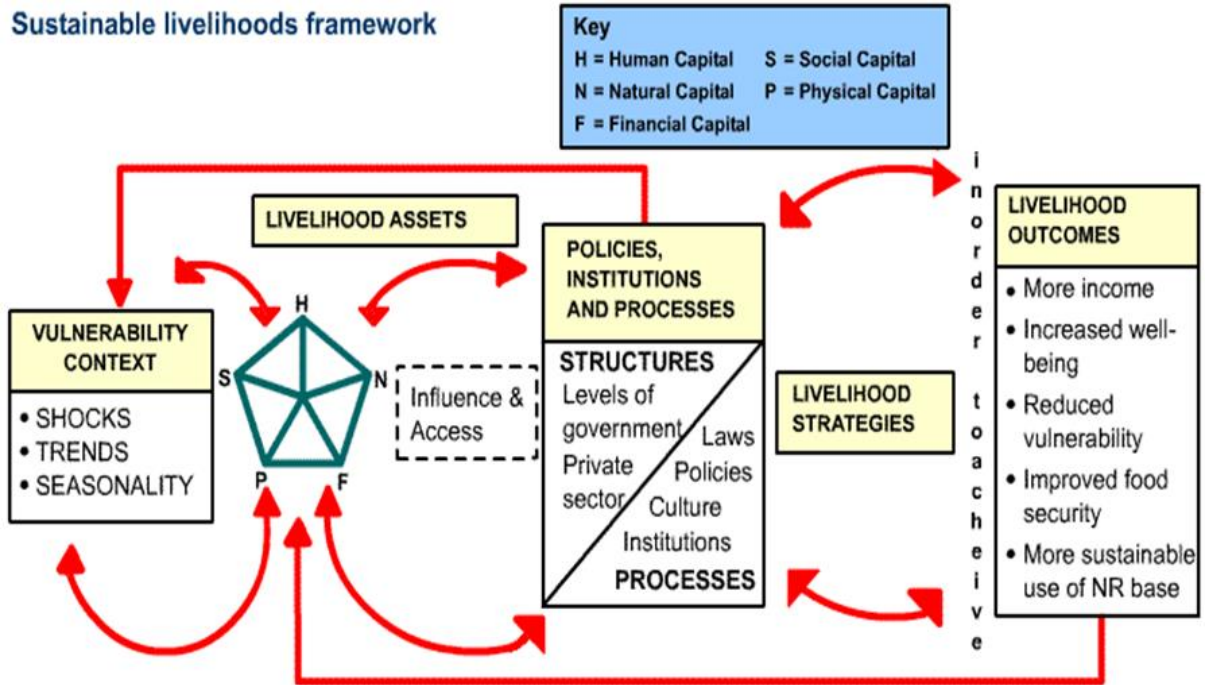
F) Predictability

- Op revised
- Guidelines implementation
- Networking with different organization
- Any suggestion or comments

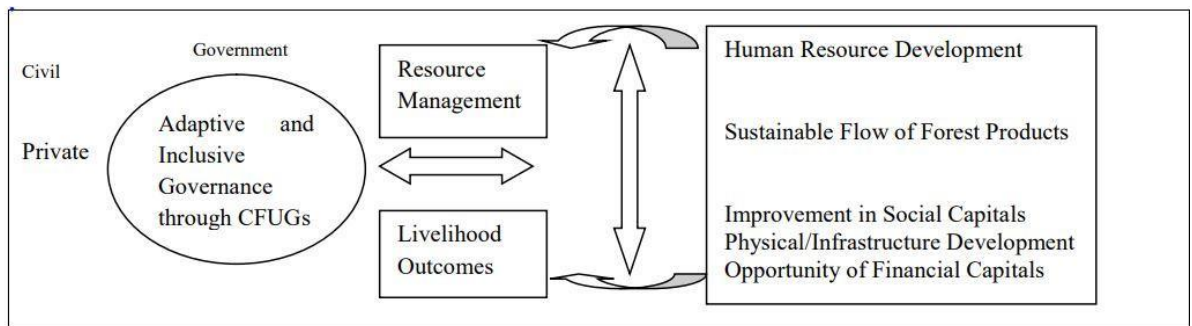
Appendix ‘C’

(Refers to Page no 2)

1. Adapted from DFID’s Sustainable Livelihoods Guidance Sheets



2. Conceptual framework on resource management and livelihood outcomes through community forestry (Refers to Page no 7)



Source: Paudel (2011) which is cited from Dhurba Bijay et al., (2016).

Appendix 'D'

Some Pictures

Some Pictures of Key Informants and Focused Group Interviews

