

CHAPTER-I

INTRODUCTION

1.1 Overview

Nepal is an agro-based mountainous and landlocked country, but it possesses highly diverse natural resources. It holds 25th position in the world in context of bio-diversity concentration within its landmass of 1,47,181 sq. km. Though it is small and consisting of three major physiographic regions of Terai, Hill and Mountain, several floral and faunal diversities can be found. About 90% of its population depends on agricultural production. Nepal's economy is largely based on renewable natural resources. As such the economy of Nepal is dominated by subsistence farming with strong linkage to forestry. Trees and forests are integral parts of the subsistence farming system and they are vital parts of the Himalayan environment of the nation. As productive function of trees and forests provide a number of goods like timber, firewood, fodder, medicinal herbs, resins, fiber, ritual material, bedding material, etc, for animals and compost for agricultural production. As an accessory function, forest has recreational and aesthetic value. It also provides habitat for wildlife and bio-diverse products. To great extent, trees and forest help control soil erosion, flooding and other environmental catastrophe. Moreover, in some parts of Nepal, the pattern of use of forest resources has been changing and its value is increasing due to the development of a market economy and its contribution to the rural economy. Thus, in the Nepalese context, trees and forest are important natural resources for survival, well-being and development of the rural people. For conservation of the Himalayan environment contribution of forest cannot be ignored. So, people have started giving high value to conservation of forest resources and devoting their love for Green Motherland.

The recent report of Department of Forest Resource and Survey (DFRS, 1999) shows that forest covers about 4.27 million ha (29%) and shrubs 1.56 million ha. (10.6%). Both forest and shrubs together covers 5.83 million ha (39.6%) of the total land area of the country, i.e., 14.72 million ha. Comparing with Land Resource Mapping

Project (LRMP, 1978/79) results; in the whole country, from 1978/79 to 1998, forest area has decreased at an annual rate of 1.7%, whereas forest and shrubs together have decreased at an annual rate of 0.5%. Increasing population of human (growth rate 2.1%) and livestock coupled with shrinking forest resources demands an effective and sustainable management. It demands a huge amount of resources both human and economic. Being a developing country, it is difficult to invest a huge amount of money only in the forestry sector because of the long-term return from forestry sector. Therefore, involvement of local people in the planning process to manage the forests is the only way of sustainable forest management. Now more and more areas of forest are being handed over to Communities throughout the country.

Despite the considerable success in the hills (Joshi, 1990), CF in the Terai has not gained momentum till now. The reason could be different socio-economic and resource use condition (Pokharel, 1999); large-scale encroachment on government's forest lands, smuggling forest products across the border with India, treeless and landless people depending at the same areas, etc (Subedi, 1991).

The CF concept was initiated in the Makawanpur District only after 2047 B.S. As per DFO records, potential CFUG area is 119726.53 ha, in which 255 CFs have formally been handed over to Forest User Groups covering the areas of 38309.62 ha for 41755 HHs in the Makawanpur District till the fiscal year, 2061/062. In Bhainse VDC potential CF area is 3114.85 ha, in which 8 CFs have been handed over to CFUGs covering the area of 2315.24 ha. There are 799.61 ha and 81416.81 ha forest area of Bhainse VDC and Makawanpur District remained to hand over. 0.94 ha of CF area per HHs possessing FUC size 3002 and female in FUGC is 699. Kalika Chandika CF area is 801.5 ha has been handed over to 192 HHs.

1.2 Forest and Community Forest

Forest is an area set aside for the production of timber and other forest produce or maintained under woody vegetation for certain indirect benefits which it provides, e.g., climatic or protective. But in ecology, forest is defined as ' a plant community predominantly of trees and other woody vegetation, usually with a closed canopy.' In

legal terminology, forest is defined as ' an area of land proclaimed to be forest under a forestland.

"Complex ecological system where trees play a dominant form of life (Encyclopedia Britannica)" can be called forest. A forest is a community of an ecosystem of biotic and non-biotic component consisting predominantly of trees or other woody vegetation growing more or less closely together. In addition to trees, other biotic components are shrubs, grasses, other plants and animals. The non-biotic components are soil and local climate prevailing within and in the vicinity of the forest (FAO, Agricultural series No.8, 1978).

The Government's Master Plan for Forestry Sector (HMGN, 1988) recognizes CF as the major strategy by which most of the country's forest can be managed sustainably by phased handing over of all the accessible hill forests to the communities for their protection, sustainable management and proper utilization.

The Forest Act, 1993, first amendment, 1995 has promulgated " the District Forest Officer may hand over any potential part of the national forest to a User Group in form of CF in a prescribed manner entitling it to develop, conserve, use and manage such forest and sell and distribute the forest products by independently fixing their prices based on Operational Plan. While so handing over as CF, the DFO shall issue a certificate there off." Thus, the present legislative definition clearly explained that CF is a "People controlled local forestry practice," which is managed in the manner of prescribed operational plan. CF, thus handed over is given to CFUG, which is a constituted and organized institution of people who have traditional use right over that forest. Further, FUG is " Specified group of people who share mutually recognized claims to specified use right" (Gilmour and Fisher, 1991). Several CF definitions have been derived from such approach. All of them maintain that CF is a locally practiced, controlled and managed forestry practice.

CF is national forests handed over to communities with usufruct rights. In fact, the Community Forest Development carries hope for sustaining democracy, alleviating poverty and restoring the country's greenery. The main objective of CF in Nepal is to develop and manage the forest resources through active participation of the people to meet their needs of forest products.

CF is a policy innovation, which aims to provide productive assets for the poor by bringing about the social changes and establishing efficient property institutions at the local level (Sanwal, 1988). It is one of the few areas where there has been an attempt to integrate traditional social values, institutions and norms with scientific discovery and learning (Wasi, 1988). It can be seen through a combination of eight elements of society.

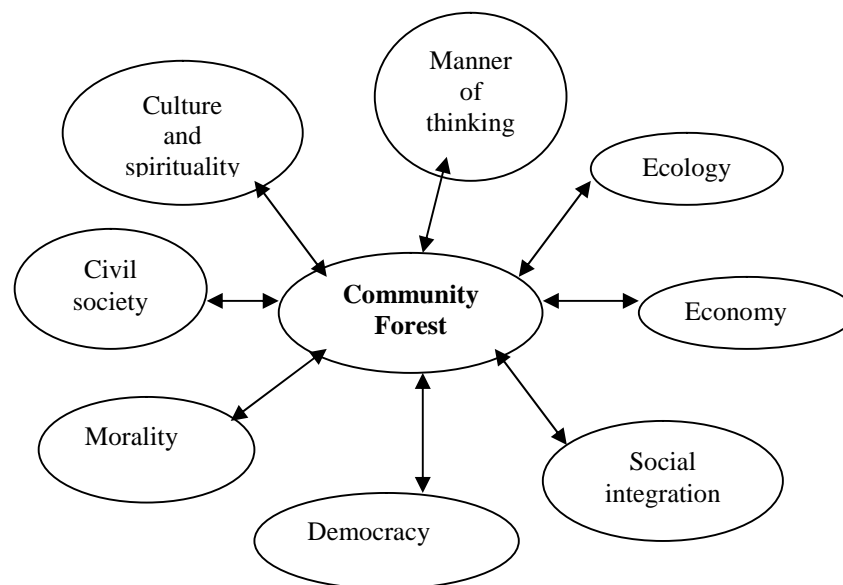


Figure-1.1: Community Forestry: An integrative force (Wasi, 1998)

The ultimate objective of CF is the welfare of local people. It is community oriented forest management system where local people control, manage and utilize forest resources for their own benefits (Baral, 1999). Thus, the concept of CF underpins the notion that the state and the local community can jointly manage forest resources to the benefit of both parties (Anderson, 1995) and involves a large number of people

from growing trees to enjoying benefits in a more participatory manner than the other forestry activities (Pokhrel, 1999).

1.2.1 Motive for Community Forestry in Nepal

Prior to 1957, all forests of Nepal (especially in the hills) were managed by Indigenous Technical Knowledge (IGTK) system prevailing in local community people considered forest as their livelihood sources. When nationalization of forest had taken in 1957, there was no provision made for people to manage surrounding forests themselves, which they had been doing since time immemorial. Major objectives of nationalization were to control over the forest by government staffs and collect more revenue, but it was not successful.

As an integral part of farming system, forest can play significant role to upgrade several socio-economic conditions of farmers, which would be a means of development of society. This motive was realized in mid 1970s, when the DoF was unable to manage large area of forest due to insufficient staffs and low resources and also because of ecological crisis and deforestation in hills. Thus government policy changed and shifted power to the people and started the local forest hand-over process to local people (Gilmour, 1992). There were various external and internal causes of shifting the power to local community. A motive under it was to develop the socio-economic condition of people as well as to maintain environmental balance. Government recognized people participation would be an effective tool in forest management after 20-year realization (Joshi, 1998) and shifted power to local people when a great motive was pronounced as "forest is for people rather than state."

Today in CF management, people have shown great and participation in Nepal. Through CF management, it is expected that the poverty alleviation could be achieved remarkably by upgrading the socio-economic condition of local people particularly women, poor and dalit.

1.2.2 Emergence of Community Forestry in Nepal

The concept of CF emerged in response partly to the failure of the forest industry development model to lead socio-economic development, and partly to the increasing rate of deforestation and forestland degradation in the third world (Pokhrel, 1999). The concept of CF also emerged during the period of fuel wood crisis in mid-hills between 1975-80. At that time, serious deforestation was running due to population growth, migration, development of road and communication, expansion of agricultural land in forest area (Gilmour, 1992 and Bajracharya, 1992).

If an overview is made on the past history of Nepalese forestry and CF related approach, we can see that there were ample, well-stocked forest resources compared to its need for forest products. It was recognized as green wealth of nation. The forest resources were amply distributed in all physiographic regions of the country. Local people who lived in surrounding managed forests under the indigenous knowledge system. These forests were managed as Birta, Talukdari, Kipet, Raniban and Manapathi systems prior to 1950. Most of the forestland under Charkose Jhadi of Terai (a forest belt in the southern Bhabar low lands) was distributed as Birta land in the form of awards during the Rana regime for conversion into agriculture land (Shrestha, 1995). During the same period, Kipet and Talukdari systems were in existence in the hills, which were replaced by indigenous forest management system developed by the local people (Bartlett et al., 1992). After the down of democracy in 1950, all private forests in the kingdom of Nepal were nationalized without compensation under the Private Forest Nationalization Act, 1957. Apparently this was done to protect the national wealth from devastation and to conserve, manage and utilize it at optimum for the benefit of the nation and its people at large (CPFD, 1995). As a result, people gradually lost all benefit and over time became apathetic toward the government because of being deprived of their rights to manage and benefit from the forests. This alienation of people from resource management led to wanton destruction of forest (Shrestha, 1995). Likely in 1961, Forest Act was brought to control over these forests, which separated the local people from the main stream of indigenous forestry management practices. This action created negative impression on local people. After it, the depletion of forest resources was more accelerated in mid-hill, ultimately there occurred a fodder, firewood and timber deficiency occurred.

Table-1.1: Evolution and development of Community Forestry legislation in Nepal

Subject	By Law 1978	1979 Amendment	1987 Amendment	New Act & Reg. (1993-1995)
Area allowed for Community Forestry	Up to 125 ha (as Panchayat Forest) to 250 ha (as Panchayat Protected Forest)	125 ha	No limit	No limit
		500 ha	No limit	No limit
Benefit sharing	40%	75%	100%	100%
CF Income to be spent on forests	50%	50%	100%	Surplus fund for CD activities
Pricing of Products	Not less than royalty	Not less than royalty	Not less than royalty	As per FUG decision
Plan preparation	By DFO	By DFO	By community	By community
Plan approved by	Conservator	Conservator	Regional Director	DFO
Boundary	Political	Political	Political	No political boundaries
Management unit	Panchayat	Panchayat	User committee	User Group(Assembly)
Chaired by	Elected leader	Elected leader	Selected by political body	Selected by users' assembly

By mid 1970s, the government of Nepal (HMG/N) had become aware of the costs of deforestation and its own inability to respond. The realization on the part of the HMG/N that protection, maintenance and development of forests scattered all over the kingdom is neither possible nor practicable through government efforts alone (MOF, 1978) brought about a significant change in 1976, in the national forest policy for involving the people in local communities in management of their forests and tree resources.

In 1975, DFO conference was convened in Kathmandu and considered deeply about the deterioration of hill forests. The conference concluded to hand over all degraded forests in hills to local people and community as PF and PPF. It was the first milestone put by the government in the history of CF development (Gilmour and Fisher, 1991). Later on 1978, the PF and PPF provision was legally supported. The Seventh Five year Plan (1985-90) also mentioned as priority to develop CF approach

and fixed the objective for forestry sector " Fulfill people's daily need of forestry products, i. e., fodder, fuel wood and timber" by handing over more forest as CF.

To support the CF program, the government of Nepal has approved the main policy document of forestry sector named Master Plan for Forestry Sector, 1988 having the period of 21 years (1989-2020) and focused on community and private forestry program as a major component and expected to absorb 47% of all investment in the sector within this period.

In 1993, more progressive forest act came, which brought the revolution in CF activities by strongly supporting the CF program. Up to now, several rules and regulations have also come and all are strongly supporting the CF activities and CF handing over has been increasing day by day while CF is managing in meaningful basis by local people and they are deriving several socio-economic benefits from Community Forests.

Currently this concept has been incorporated in the national parks and wildlife reserves as well to protect the allocated areas from outsiders and fulfill the basic needs of the local people. Buffer Zone Community Forests are being handed over to BZFUGs for the conservation of wild life, eco-tourism development, corridor protection and formation of green belt outside the park and reserve and fulfillment of basic needs of forest products of the rural people living adjacent to the parks and conservation partner to them, which directly or indirectly uplift the socio-economic condition of surrounding people.

1.2.3 Present Scenario of Community Forestry in Nepal

Out of total 5.5 million ha forest area of Nepal, Tamrakar and Nelson (1990) has stated that there is 61% (3.35 million ha) potential CF area. 13,792 CFUGs have been handed over to 15, 74,068 households covering the area of 11, 45,928 ha.

The size of CF varies from 0.5 ha to thousands of hectares. Households including in these CFs are in smaller to larger extents. Most of the CFs has been handed over in mid-hills and inner Terai Districts; whereas the handing over process is slow in high hills and Terai region. The management of CF was previously protection oriented, but now they have become in lieu with commercial management. They have produced firewood, grass and timber on a larger scale and they have also cultivated several NTFP species. Million of rupees have been collected as social fund, which have been utilized in social development work such as road construction, school construction and others.

The community and private forestry program is the largest component program of the Master Plan for Forestry Sector (MPFS) and is expected to absorb 47% of the all investment in the sector through to the year 2010. Master Plan is the policy document for the forestry development program in Nepal and for handing over of forests to the local FUGs. Nowadays, FUGs are managing the forests in effective and efficient way. On one hand, the community forestry program is fulfilling the demand of forest products such as fuel wood, fodder, litter, timber and other products of daily need to the local people and on the other, it is generating the income and employment opportunities to the rural people. Users mobilizing the fund obtained by CF activities are constructing many developmental infrastructures. Nowadays, the local people have keen interest, and are aware to manage the accessible forest as Community Forest to fulfill their basic needs, to create income and employment opportunity through CF and to develop their village through the fund generated by CF. Ultimately, CF helps to improve the socio-economic condition of rural poor. That is why the fame of the CF is significantly increasing within and outside the country.

1.2.4 Community Forest in Tenth Five-year Plan

In Tenth Five- Year Plan (2003-2008), the provision for forest and soil conservation has been mentioned in chapter-8. The plan emphasizes to contribute towards poverty alleviation in an appreciable way by improving the status of forest and environment, ensuring adequate use and promotion. Good governance surrounding forests, active participation coming from deprived section of women; conservation of forests is the

need of the day. Transferring ownership of the forest to people in the periphery of the forest can both conserve the forest and ensure a steady rise in the means of livelihood to the population.

The plan indicates sale of wood and fuel wood has not yet been evolved at fast paces, cyclical fund introduced to forest management has not yet been functioning in an effective way and forest takes some years for tangible results due to the biological processes. There has not been enough progress speak as suitable technology to cultivate herbs on vocational and industrial scale, which minimizes poverty by introducing income-generating activities.

The main objective of the forestry sector is to ensure people's participation in management of forest, vegetation, herbs, watersheds and genetic biodiversity along with business based on forest products with a view to enhance employment opportunities and alleviating poverty. To contribute towards poverty alleviation by encouraging participatory system the women and members of the poorer section of society get employment. For this ideological importance will be placed on Community Forestry and keeping continuation the same in CF development program the problems encountered will be identified and gradually solved.

Development budget allocated for community and private forest program is NRs. 644.8 billion. In coming five years 5000 CF groups will be formed, 6000 action plan will be prepared and forest will be transferred, 6500 action plans will be improved and 5000 users' groups and cooperation will be managed in all the 75 districts of Nepal. Similarly in 500 places silvicultural technology, plot identification and commencement of program will be promoted. 500 forest-based industries within the limits of Community Forestry will be established. Technical assistance, skill and awareness development concerning Community Forestry will be carried out in 750 places. To launch the Community Forestry and other related activities NRs. 18.6 billion will be spent for Human Development. The means of livelihood for the people under poverty will be increased through transfer and expansion of CF. The access of deprived section of population, such as women and dalits, to community forest will be

amplified for effective forest management. Community Forest of alpine and hill regions will be encouraged. With a view to increase opportunities concerning livelihood provision will be made to insert clauses allowing in Community Forestry so that the members of the poorer section of society get benefits in economic, social and human resources and institutional development. Suitable policy will be adopted to promote Community Forestry in the hills. Non-wood forest products will be brought under Community Forestry and implemented on priority basis. Forest products certification shall be introduced to improve the industries linked to it. Long-term strategy will be implemented for sustainable development of herbs.

Community organizations and NGOs will be mobilized in Community Forestry for formation of users' groups and their mobilization. The government towards forest research, human resources development, training and dissemination of information has envisioned a far-sighted forest management. Training conducted on human resources development for forestry sector shall ensure rising quality of the training. The task of raising the level of awareness of common people, the task of enhancing the capacity of the people by introducing income generation activities after extending assistance, the task of imparting training, organizing workshops and endowing researches shall be done by the NGOs to conduce of whatever has been mentioned in the master plan to make the forest sector self-reliant. Capacity of governmental, non-governmental, local and other concerned institution and stakeholders, resource management, skill development, gender equity and other programs like seminars with a view to empower the people and social development. Community Forestry shall benefit at least 253000 households and access to income generation for at least 25680 households.

1.3 Social Demography of Nepal

Nepal is said to be a land of cultural diversity. Such diversity is also the foundation of the country's identity. It is a relatively small country of 1, 47,181 sq. km. in the shape of a long rectangle with a length of 885 km. East to West and with non-uniform width of 193 km. North to South. It lies between china and India at 80⁰ 4' to 88⁰ 12' longitude and 26⁰ 22' to 32⁰ 27' North latitude.

Nepal's total population has increased by 23% between 1991 and 2001. The table shows the statistics as given below:

Table-1.2: Population by religion

S.N.	Religion	1991	%	2001	%	Change 1991-2001	%
1	Hindu	15996953	86.5	18330121	8.6	2333168	14.6
2	Buddhist	1439142	7.8	2442520	10.7	1003378	69.7
3	Islamist	653218	3.5	954023	4.2	3000805	46.0
4	Kiranti	318389	1.0	818106	3.6	499717	157.0
5	Christian	31280	0.2	101976	0.5	70696	226.0
6	Jain	7561	0.0	4108	0.0	-3453	-45.7
7	Sikh	9292	0.1	5890	0.0	-3402	-36.6
8	Others	17124	0.1	86080	0.4	68956	402.7
9	Unstated	18138	0.1	-	-	-	-

Table-1.3: Population by Dalit

Caste	1991	2001	Change	%
A. Hill	1619434	616748	-2686	-0.2
1. Badi	7082	4442	-2640	-37.3
2. Gaine	4484	5887	1403	31.3
3. Kami	963655	895954	-67701	-7
4. Damai	367989	390305	22316	6.1
5. Sarki	276224	318989	42765	15.5
B. Terai	582347	954780	217125	37.3
6. Bantar	-	35839	-	-
7. Chamar	203919	269661	65742	32.2
8. Chidimar	-	12296	-	-
9. Dhobi	76594	73413	-3187	-4
10. Dom	-	8931	-	-
11. Dusadh	93242	158252	65283	70
12. Halkhor	-	3621	-	-
13. Khatwe	-	74972	-	-
14. Musahar	66612	172434	8360	12.5
15. Sonar	-	145088	-	-
16. Tatma	141980	172434	30454	21.4
17. Unidentified	-	173401	-	-
Total	2201781	2917090	715309	34.5

Table-1.4: Population by Caste/ ethnic groups

Group	1991		2001		Native Area	Social Group
	%	Rank	%	Rank		
Chhetri	16.1	1	15.8	1	Hill	Caste
Brahmin	12.9	2	12.7	2	Hill	Caste
Magar	7.2	3	7.1	3	Hill	Ethnic
Tharu	6.5	4	6.8	4	Terai	Ethnic
Tamang	5.5	5	5.6	5	Hill	Ethnic
Newar	5.6	6	5.6	6	Hill	Ethnic
Muslim	3.5	7	4.3	7	Terai	Religious
Kami	5.2	8	3.9	8	Hill	Caste
Yadav	4.1	9	3.9	9	Terai	Caste
Rai	2.8	10	2.8	10	Hill	Ethnic
% of total population	69.4%		68.5%			

1.3.1 Status of Dalit and women in Nepal

1.3.1.1 Status of Dalit

National Dalit Commission (2004) conducted a study in six (6) municipality and 24 VDCs in 11605-dalit populations in Siraha, Dhanusha, Mahottary, Banke and Dhangadi and found that 53% dalits are landless in these districts, 75% of dalit HHs are landless in Siraha; 60% dalits don't have citizenship, 65% are illiterate and only 1.45% dalits have passed S.L.C.

Human Development Report (2004) showed that 29.65% dalits are landless, average age of dalit is 50.8 years whereas country's average age is 59 yrs. Similarly, country per capita income is US\$ 1186.00 but per capita income of dalit is only US\$ 764.00 due to untouchable and marginalized groups of society.

Nepal's Human Development Index of Dalit is 0.24, but others 0.32. Report added that 15.32% hilly dalit and 43.98% terai dalit are landless. So dalit community needs special activities and programs to develop their socio-economic condition. After democracy, HMG/N has scheduled 23 castes as dalit decided at the dated 28th Chaitra, 2054, which were legally untouchable as a second-class citizen. Such groups have been deprived of utilizing common property easily such as temples, well, etc.

National Tenth Five-Year Plan (2002-2007) set apart at least NRs. 500 million from Poverty Eradication Fund and NRs.1100 million from Local Development Fund besides the programs conducted by the concerned Ministry for dalits' progress and prosperity.

Table-1.5: A Transient View of Dalit for Landholding.

S.N.	Land ownership	Landholdings (Acre)	Terai Dalit (%)	Hilly Dalit (%)
1	Landless	-	43.98	15.32
2	Partial Landless	0-0.20	9.89	15.24
3	Frontier Farmers	0.21-1.00	26.19	44.55
4	Small Farmers	1.01-2.00	11.3	17.25
5	Partial Medium Farmers	2.01-4.00	6.01	6.14
6	Medium Farmers	4.01-10	2.29	1.27
7	Rich Farmers	> 10.01	0.34	0.24
	Total Households		231880	308796

(Source: Nepal Human Development Report, 2004)

Table-1.6: Land Ownership of Some Dalit Castes.

S.N.	Castes	Landless (%)	<5 ropani (%)	6-10 ropani (%)	11-20 ropani (%)	>21 ropani (%)
1	Kami	19.2	46.5	18.8	17.1	6.5
2	Damai	28.8	55.1	11.1	3.2	1.3
3	Sarki	7.6	47.8	24.2	16.7	3.8
4	Badi	39.1	39.1	13.0	4.3	4.3
5	Dhobi	33.3	66.7	-	-	-
6	Doom	88.2	11.8	-	-	-
7	Gaine	41.2	45.1	-	-	-
8	Musahar	33.3	55.6	-	-	-

(Source: Status of Dalit Community, 2060BS)

1.3.1.2 Status of Women

Nepal is landlocked country, which composed of Physiographically Terai, Hill and Himalay, where most of the population lives in the Terai as high-density population and low density in Himal having tropical to temperate climate. With respect to population, female is more than male. According to population census (2001), female and male population is 50.03% and 49.97% respectively. Women led to 5.58% of the total lower house members. In Civil Service, women represent only 8.55% of the total civil servicers and 26% of teachers. Women Justice represents 2.04% only.

Out of the total landholdings, women owns 10.85% and their ownership on the house holdings is only 10.83%, whereas women contribute to the agricultural production of

about 60.5% of the total agriculture works. It shows that women contribution is 29% greater than that of men.

As record shows that 86% of the population lives in the rural areas, in which 20% rural areas only have electricity facility. In our country, fuel wood meets 66% of the total energy needed, collection responsibility of which is with the women mainly. 22 % (774 CFUGs) of the total CFUGs (i.e., above 14000) have been handed over to the women.

The Paragraphs shows that how much and where the women are different from the men, which help plan varieties of programs to uplift the socio-economic condition of the poor women.

1.4 Linkages of Community Forestry with Livelihood

Experience from Community Forestry program in Nepal and elsewhere has so far indicated that poorer households are still marginalized even its resources are managed under community ownership since level of the wealth of individual users affects the leadership quality in the sphere of public decision as well as the extent of resource exploitation and appropriation. Scholars on common property resource management argue that economic inequality in terms of private wealth (social and physical capital) among the members of a resource using groups might be associated with different degrees of control to and access over the local commons. The socio-economic status, gender and ethnicity of individual community members may limit the opportunity available to weaker member to participate and share benefit from community decision-making (Adhikari, 2001).

Management of multiple products and services, equity, income generation activity, local governance, subsistence as well as commercial uses; are the basic principle and objectives of the Community Forestry (Anonymous, 2001). Multiple uses of forest resources by various groups of local people should be understood in the context of local social structure and system of livelihood. Rapidly increasing population in the

Terai and hilly regions has little opportunities for employment and income besides the subsistence farming in the fast degrading soils. This is why a large mass of the rural people particularly the poor and women, poor and dalit, find little alternative and forced to rely on the forestlands in hill for their livelihoods.

Because of the ease of access and very low threshold of capital and skill needed, forest foods, forest based income and employment opportunities are particularly important to the poor and women. They also enable for high level of participation in household level income by poor women who often dominate in activities such as mat and basket making. Such works may be performed nearby their home, thus allowing them to combine these earning activities with other household tasks.

According to the motto of Community Forest development program, it should orient towards the development of natural, physical, financial, social and human capital. Carney (1998) has described following webs of the livelihood assets.

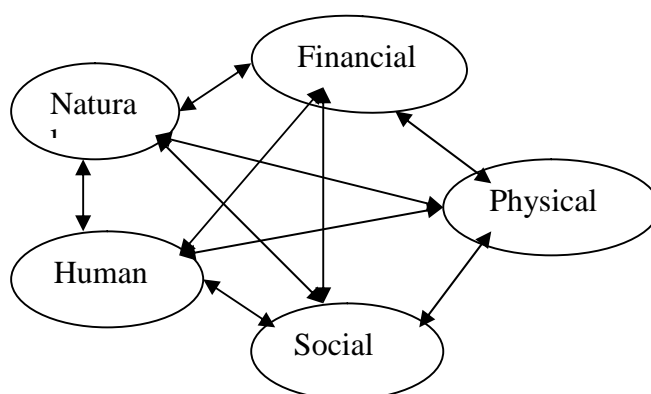


Figure-1.2: Webs of the Livelihood Assets

Natural Capitals are those that are natural resources, i.e., land, forest, water and wild life. Physical capitals are basic infrastructure and producer goods needed to support livelihoods. Producer goods are tools and equipments while infrastructure consists of changes to the physical environments. Financial Capital denotes the financial resources that CFUGs have in stocks as well as flows to the household as credit scheme. Human capital refers to the skill, knowledge, and ability labor, food and

health. Membership of CFUG, network connections, relationships, trust, power reciprocity and exchanges of their ideas develop includes the social capital.

Process and policy of CF implementation, there is high probability to empower poor, women and marginalized section of the society. FUG is the major local institution not only for forest management but also other development activities performing in the village. CFUG is a single organization where all users have the qualification of being members. The poor and dalit may have been able to participate in discussions regarding resource management. They may involve in the decision-making process. Therefore, CFUG is an ideal institution to put views related to own development of the poor and oppressed groups. At least, one member from each household meets together once or twice a year or more frequently to discuss the matters related to forest resources development and other development aspects of the village. Such kinds of activities may increase the capacity to put on their voice in common forum, ultimately develop leadership quality. Gathering of people may increase intimacy among users. Intimacy improves the relationship of ethnically elite and dalits. Forest Act, 1993 and its regulation, 1995 legitimizes the autonomy to the CFUG. Due to that, it may contact stakeholder like Rural Development Bank, different NGOs and Co-operatives, Agricultural Development Office, Cottage and Skill Development Office, etc. linked to the different organizations, smoothen the livelihoods of poor people.

One of the major issues arising on the Community Forestry is of the equity. The forest policy has clearly highlighted that priority should be given to poorer or to the poorer people in a community for the management of CF (MPFS, 1988; MFPS, 2000). Equity is about fairness, about social justice, about the acceptability of something. It refers to a fair relationship between certain people in an exchange situation, between rights and obligations, benefits and burdens, advantages and disadvantages (Boelens, 1998). There may be inequities in benefit-sharing due to the dependency of poor people for their livelihood in amount, access to resources should also be high programs related to the poor, women, poor and dalit smoothen livelihood if the concept of equity is applied in the field.

Different literatures show that most of the Dalits living below poverty line. We know that poor people dependencies for their basic needs are greater than other economic strata. Due to their relevance upon the accessible national forest, i.e., Community Forest is very high. Thus involvement of those poor, women and dalit people in the CF as well as group management should be significant. Without involving stakeholders in the CF management, success lies on the question.

1.5 Socio-economic Significance of Community Forestry

Nepal's economy is largely based on renewable natural resources. About 81% of the Nepalese people rely on agriculture for their livelihood (NRA, 1999). As such the economy of Nepal is dominated by subsistence farming with strong links to forestry. Total GDP from agriculture sector is estimated to be 60%, whereas forestry sector constitutes 9% in total GDP (Chapagain, et al., 1999). The human development index of UNDP (2001) shows poverty index of Nepal as 51.3%. Nepal has slipped one place to figure in the 143rd position out of 175 nations in the UNDP Human Development Report-2003. The World Bank report says that Nepal is the third poorest country in Asia according to its per capita GDP score. Major poverty is seen in rural areas where 93% farmers live and get subsistence from agriculture and forest resources. Further UNDP report shows there is 42% of population living below poverty line defined as absolute poverty, where rural people live having a monthly income below \$ 1.00 (one US Dollar) (HMG/Winrock, 1998; Hada, 2001). Each national plan promises to alleviate poverty. The Ninth Five-year National Plan (1997-2002) also had prioritized the poverty reduction and economic growth of the poor people (i.e., poor farmers). The plan had aimed reducing absolute poverty from 42% to 10% during coming 20 years by the multi-layer production of agriculture products, forestry products and infrastructure development. The Tenth Five-year National Plan aims reducing poverty by creating the forest based employment opportunities and making accessibility of resources to the poor.

There have been many studies to support that CF has brought many social changes with a feeling of unity, awareness, feeling of ownership and democratic system. Furthermore, CF has increased technical and social skill (human and social

resources), increased access to group fund and income from NTFPs, increased participation and reversing the trend of exclusion of women and marginalized people. A synthesis report of NUKCFP states that despite various problems, many FUGs are engaged in protection, management and utilization of Community Forests, nursery and plantation activities. Groups generally have sufficient and are willing and able to enforce regulations and punish violation to almost entirely curb "illegal" activities. There is a widespread sense of ownership of CF and general willingness by member to abide by regulation and contribute to enforcing this regulation on other user even where FUG functioning is poor.

Therefore, HMG/N has given high priority to CF and intends to use CF as a poverty reduction means from rural areas. The dependency of rural people on forest is generally profound where forestry, agricultural and livestock husbandry are intimately related in farming systems of Nepal. Rural household gets fodder, grass, firewood, timber and organic manure from forest. In eastern hill, it is estimated that 4 ton / ha organic manure return to farm from forest and 40% livestock nutrient is also obtained from forest (Chapagain et al., 1999). There has been implementation of several policy, law, act, regulation and programs to support integral development of agriculture and forestry. The CF program has also been running in order to trap poverty in rural areas.

It is considered that CF model is a new approach of poverty alleviation whereby maximum flow of forestry products (firewood, grass, timber, manure, etc.) is to be distributed in poor households. Thus it is hoped that CF may change socio-economic variables of women, poor and dalits and also helps in biodiversity conservation (e.g., protection of flora and fauna). Several impact studies carried out in different territory of nation show that there are positive socio-economic changes brought by CF. Some CFs have contributed in building road, drinking water, irrigation canal, school, health post, temple, etc., in rural area which has changed the several socio-economic condition of society. Moreover, CF has brought positive impact on agriculture production, income, and employment generation, biodiversity conservation, social equity and literacy in society. So, CF has brought a change of great socio-economic significance in rural society (Yadav, 1998; Joshi, 1997; NUKCFP, 1999; Pokhrel and Roy, 2001)

1.6 Problem Statement and Justification

Nepal's rural setting is a complex structure of social system. It consists of hierarchal social structure that includes different economic and social classes, oppressive caste system and gender discrimination, difference between poor and rich, upper caste and lower caste, women and men create situation for social conflict affects on CF management (Das and Gupta, 1993).

Community Forestry is criticized for not being able to address the needs of women and poorer segment of society who are the real users of forest. There are views that CF is likely to be a means of marginalization of more vulnerable section of the society such as women, poor and dalit (Timsina, 2001).

The dominance of elites and influencing person in the decision-making and benefit cost sharing, poor participation of women and DAG, lack of quality leadership and unawareness about some rules and regulations are some of the problems existing in Community Forests. FUGs need to be aware about fund and the production capacity of the forest whether that can supply the forest products as per their demand in the present and the future (Rawat, 2005).

Community Forestry evolved with the aim of protection, management and utilization of forest products in equity basis. Later, policy was changed to manage the forest on sustainable basis and allowed Community Forest User Groups (CFUGs) to distribute the products and sell extra forest products and earned money can be used for community development works and poverty reduction through income generation activities (IGAs), but women, poor and dalit didn't get benefit as they needed because they needed help from CF funds to conduction income generation activities for their livelihood (Regmi, 2003).

A synthesis report of NUKCFP (1999) states that there has been aroused several conflicts in benefit sharing and equity concern among FUG people. "In decision-making high castes and wealthier are dominant, voice of poor and dalits are not heard

properly. Decision-makers often intend to take decision in their own favor due to which women, poor and dalit may not be benefited.

According to Kunwar (2002), CF was found to have positive impacts on gender, equity, empowerment, etc. that are limiting factors of socio-economic change of rural people. Thapa et al (1998) has stated that members of disadvantage groups such as Kami, Damai, Sarki and Gaine were "not listened to in practices" in FUG meetings and that "user often worked in the forest to avoid paying fine rather than as an expression of responsibility."

Thus developed inequity may result in breaking the trust and unity of the rural people i.e., women, poor and dalit in CF management. Consequently, these types of conflicts affect the participation in implementation of Operational Plan (OP) leading to the failure of the programs. Targeted groups that are women, poor and dalit may not be contributed from Community Forest and ultimately the objectives of CF to alleviate poverty will not be fulfilled.

Population Census (2001) shows that population of female is more than that of male but literacy rate and access and control to the resources by female are very low. They are considered to be culturally poor and marginalized. In context of Community Forestry as well, women are dominated by men and they are deprived of participating in decision-making, committee meeting, etc, whereas their maximum daily life passes in collecting fuel wood, grass, fodder, leaf litter, etc. So, contribution of CF on socio-economic upliftment of women is felt to be assessed as a burning issue.

The rural poors' dependency upon forest resources is extremely high for the fulfillment of basic forestry needs. They cannot fulfill their requirements from their own field due to lack of in private land. Any change in their use pattern of forest resources after handing over of CF may make them vulnerable and marginalized. Hence, this study will explore the impact on the poor and oppressive people after CF

implementation and also will be helpful to find out the gaps in between the strategy of Community Forestry program and practice in field.

The research must be focused on problems that implementation of local level control and management. All categories of users must be involved in the identification of research topics and in the evaluation of research results (Gilmour and Fisher, 1991). Meanwhile the study focuses to assess the contribution of CF on socio-economic upliftment of women, poor and dalit and also explore the better measures to improve the livelihood to be carried out in future.

Experience of Community Forestry so far has shown that it is possible from CF to reduce poverty by secure resources for poor, increasing the availability of a range of resources and providing potential for IGAs. CF has attributed significantly in a number of ways. The major areas include: building social and human capital through trainings and networking, intensive management of physical capital such as community infrastructures- roads, drinking water, rural electrification, telecommunications, health, etc. A research motive has been made to study whether the benefits and activities of CF are addressing to women, poor and dalit or not. Hence the study motive is asking a question "Are women, poor and dalit of Kalika Chandika CF getting benefits from CF? If they are benefiting from CF, how far CF has provided such benefit?" "Are women, poor and dalits involved in decision-making process, benefit-sharing system and leadership role of CFUGC?" These are not completely answered questions.

If there is a gap between opportunities given to women, poor and dalit and strategies of government to them, my research will help to explore it. It is a study of benefited exploration about above concerning problems related to poor and contribution of CF to socio-economic changes of women and dalits. It is expected that findings and recommendations of the study will help foresters, researchers, CFUGs, non-forestry professionals, NGOs and INGOs to reform and replan the CFUG ideas in designing and implementing the programs. It will also be fruitful towards the contribution of CF and strengthening them for users' livelihood, which will ultimately help to all levels of

planners and institutions to make right decision towards women, poor and dalit focused programs in CFUGs.

1.7 Objectives of the Study

This study is designed broadly to assess the contribution of Community Forest on socio-economic upliftment of women, poor and dalit.

Specifically, this study aims to

-) explore the socio-economic condition of beneficiaries of the concerned Community Forest.
-) assess the contribution of Community Forest on socio-economic upliftment of women, poor and dalit.

1.8 Research Hypothesis

H₀: There is no significant difference in the socio-economic upliftment of women, poor and dalit.

H₁: There is significant difference in the socio-economic upliftment of women, poor and dalit.

1.9 Assumption

The study was carried out under such assumptions, which are as follows:

1. Socio-economic condition of respondents doesn't fluctuate during study period.
2. No influences of outsiders in the community.
3. Livelihood resources and outcomes remain constant during research works.
4. Consumption pattern and quantities of forest products are dependent on economic status of ethnic groups.
5. Infrastructures developed by organization other than CFUG has not been considered after CF.

1.10 Limitations of the Study

1. Educational level of users was the main limitation of this study since most of the respondents were illiterate. It took much time to explain most of the question.
2. As most of the poor and dalits' livelihood depend on wage labor, their busy time was next limiting factor.
3. Respondents provided the tentative estimation of their income, expenditure and consumption of the forest products, as they don't keep records of their income and expenditure of their daily activities.
4. Political instability was also felt to be obstructed the respondents to talk freely.
5. Women didn't intend to put their words forward to us as they are socially dominated.
6. This study has been carried out for the partial fulfillment of the requirement for Bachelor Degree in forestry. Therefore, detailed research was not possible due to the lack of sufficient resources within such a short period.
7. Inadequate relevant literatures are available regarding the subject matter

CHAPTER-II

REVIEW OF LITERATURE

Chitamber (1977) reported that there might be rich, medium and poor people within the CFUGs. He added that widespread heterogeneity in socio-economic status and generally rich people have high access to resources, which shows that rich people are dominant in society. He concluded from the action of elite people, poor and disadvantaged groups couldn't get the equal share in the sense of benefit from community forestry.

Pant and Jai (1980); Chamber (1987) recommended that the transformation of poor to upper economic class will be possible if we upgrade poor income, health status and educational status access to resources, etc.

Chamber (1983) has stated that the people have been trapped on following deprivation web, is poor. The complex networks of deprivation web is

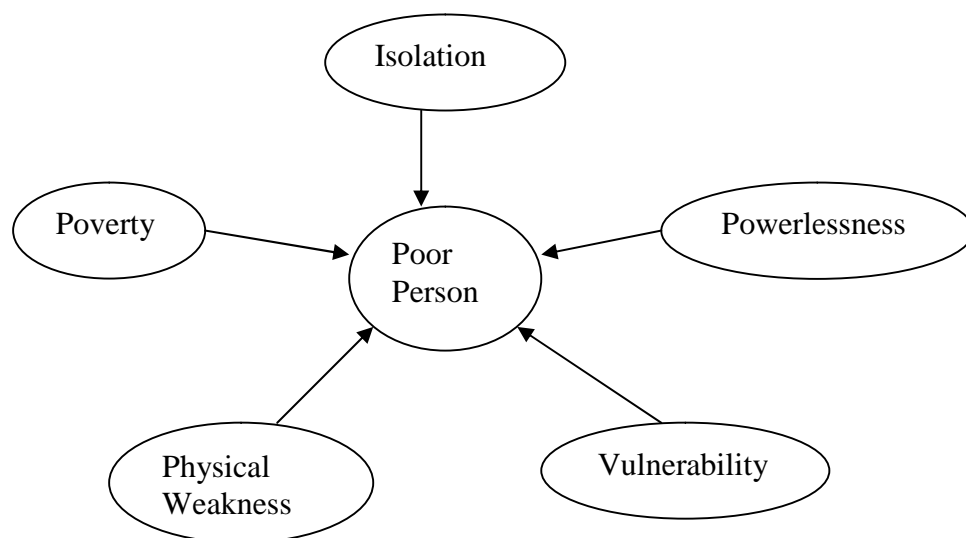


Figure-2.1: Chamber's Deprivation Web of Poverty

Maharjan (1988) put forward in his paper that CF in Nepal has had unlimited success in achieving its intended objectives including empowerment of the women, poor, marginalized and Dalit groups and improvement of their control over, and access to CF products and services on an equitable and sustainable basis. Consequently, the women, poor, marginalized and Dalit groups are benefiting less from CF than the wealthier and influential households.

Gilmour and Fisher (1991) concluded that Participation of poor and DAG in CF is very low and the local elites (high social status, wealthier and educated) are influential in local decision-making processes of CFUGs. As a result, an unequal distribution of CF benefits in favor local elites is common in many CFUGs.

Ghimire (1992) stated that landholdings are so unequally distributed that 9% richest landowners own 47% of the farmland, in contrast 67% of the poor households who own only 17% of the farmland.

Sharma (1993) recommended that it is important to make special provision for the landless and marginal farmers as they often rely more on the forest than others to meet their subsistence needs, if the Community Forestry program is to succeed in its equity goals.

Laughhead *et al.* (1994) stated that the people belonging to higher socio-economic status are always influential of poor and DAGs.

Bajracharya (1994) concluded that, depending on the geographic and socio-economic conditions; women contribute 50% to 80% of total agricultural labor.

Malla (1994) stated that community forestry is concerned with improving the economic status of rural poor and it is one of the main components of rural development.

Laughhead *et al* (1994) stated that the people belonging to higher socio-economic status are always influential in local decision-making and their decision may not necessarily reflect the problem of poor and DAG.

Dahal (1996) recommended that socio-economic condition of people is increasing as well as contribution of Community Forestry Program is appreciable to uplift the socio-economic status of people.

Gautam (1997) found that CFUG funds were utilized in developing infrastructure like bridges, schools, irrigation canals, water supply schemes and temples.

NUKCFP (1998) has also published a perspective model of poverty list which give a clear idea where CF activities have to be focused whenever socio-economic activities initiate to break poverty trap in rural area, are listed below.

S.N.	Who is poor?	Causes of poverty
1	<u>Natural Capital</u> J Those who have low land and food	J Low land, low productivity
2	<u>Human Capital</u> J Lack of skill J Physically diseased J Parasitic life	J Lack of education J Lack of nutrition J Lack of nutrition
3	Social Capital J Deprived of opportunities J Lower castes	J Exploited by rich and able J Caste system
4	Financial Capital J No regular income (low income) J No surplus money	J High rate of interest/ unemployment J Indebtedness
5	Physical Capital J Lack of livestock	J No feeding support

NPC (1998) recorded that the poor are those who cannot acquire level of basic needs and are unable to escape from such situation by transferring poverty from one generation to next. Illiteracy, limited access to safe water, hunger, food insecurity, etc is some of those equally important issues that need to be addressed to cover the broader dimension of poverty.

UNDP (1998) stated in its report that the user groups control over the CF is quite theoretical, while in practice disadvantaged social segments, i. e., women and low caste groups are still unaware for their right and responsibilities.

Yadav (1998) revealed that the formation of FUG, which was initially targeted to forest management and utilization, has also made men and women more aware of common needs of the society and helped each other immensely to increase their self-reliance towards improving the socio-economic status.

Shrestha and Shrestha (1998) found that disadvantaged users play a negligible role in decision-making and that like women, "their opinion was not normally asked for even if they were a committee member."

UNDP (1998) has mentioned that in practice, exclusion and discrimination is a highly prominent feature of culture in relation to women, the low caste, ethnic groups and the poor and such groups face severe barrier against the use and enhancement of capabilities. It has also mentioned that the extent of caste and ethnicity-based exclusion is very deep in the control and management of forest resources by user groups.

Paudel (1999) argues that poor, lower castes and women have been negatively affected and their standards of living have decreased since the formation of Community Forests. Pandey (1999) that the dependency of poor on CF for their subsistence needs is higher than that of other groups.

Bhattia and Karki (1999) reported that many poor people depend on forest resources for their livelihood like fuel wood sellers, charcoal makers and sellers of medicinal plants.

Sharma (1999) revealed that CF income has gone more to the poor than rich households have because fund mobilization mechanism is developed by the voices of all the users.

Pokharel *et al* (1999) reported that the Sankar Nagar CFUG of Rupandehi district has invested NRs. 0.78 million (24.4% of total expenditure) in community development works like road construction and support for local schools as community welfare activities done from CF.

NUKCFP (1999) reported that in context of community forestry and its role to reduce poverty from rural area, which is basic premise of government where they described about the poor and disadvantage people's role, participation, benefit- sharing and equity concern. NUKCFP also explained that in decision-making process, high castes and wealthier are dominant, while voice of poor and DAG have not been heard properly.

Bhatia (1999) reported that many poor people depend on forest resources for their livelihood like fuel wood, sellers, charcoal makers and sellers of medicinal plant.

Ellis and Jone (1999) reported that poor has possessed the following indicators of scarcity.

Dimensions	Indicators
Economic - Income Social - Nutrition - Water/ Sanitation - Health - Education	- below poverty line - low calories intake - not access to potable water - not access to primary health care - not access to primary Education

Gentle (2000); Ghimire (2000) and Bhatta (2002) concluded that in most cases, a large amount of CFUG funds are either being deposited in the bank account or invested in non-productive sectors and in some activities which directly support the wealthier people.

Gentle (2000) conducted research in Pyuthan District and reported that the actual benefits from the CF are not reaching to the poor and disadvantaged people involved in the management of Community Forest and it is widening the gap between the poor and rich people in the community.

Pokharel (2000) reported that inter-cropping of turmeric has been introduced as an income generating activities and the poorest households of the CFUG are receiving quick cash returns as the contribution of CF on poor and DAG.

Agrawal (2001) stated that the concept of participation and empowerment in a development intervention means involvement of poor and marginalized people in a decision-making and thus results into the empowerment of those people.

Subedi *et al* (2001) concluded that CFUGs have emerged as a very strong local institution for facilitating economic activities in the group as well as nearby

communities. They also added that some of them had undertaken planned enterprises while others had carried out discrete services such as health, communities' infrastructure and education.

Malla (2001) found that decision regarding forest management such as why and how to manage the forests who should manage how and when to distribute the forest products, etc are controlled by the village elite and alliance of forestry staffs.

Bhatta (2002); Chhetri *et al* (2001); Tiwari (2002) and Warner (2002) have given joint statement that the decision-making process in most of the CFUGs was captured by wealthier and upper caste male and the interests and concerns of poor, women and dalits, who depend more on common property resources for their livelihood, were not adequately considered in decision-making process.

Winrock (2002) reported that women's involvement in many aspects of CF is lacking far behind. It is obvious that decision-making within CF through equity will ensure an equal distribution of benefits which will help in supporting people's livelihood. But large proportions of CFUG members, i.e., women are still not being actively involved. This has attributed to distrust and disinterest in the process.

Tenth Five-year National Plan (2002-2007) also have been prioritized the poverty reduction and economic growth of poor people. The plan aims reducing absolute poverty from 42% to 10% level during coming 20 years by the way of multi-layer production of agriculture products, forestry products and infrastructure development to support them. The plan also premises on more income generation opportunities creation and making accessibility of resources to poor.

Kanel *et al.* (2002) have indicated that the poor users do not get as much benefit from Community Forest as others. The study showed that rich and middle groups get more benefits than poorer.

Kunwar (2002) has reported in his study in Makawanpur District that "Despite CF having numerous benefits, there is some practical and social anomalies because of the limited accessible opportunities and fulfills most of the daily needs of the poor and ultra poor, which has needs and priorities different from the better off. There have little efforts to reflect on livelihood of rural people.

Tondon (2002) argued that access to forests and NTFPs collection is dominated by high castes, as in confessionnal timber collection. And lower castes are the first to be dispossessed during eviction drives.

Maharjan (2003) recommended that participation in CF for women, poor and marginalized groups can be done through a separate forestry sector. Revolving fund particularly for IGAs, it can return immediate benefits to these women, poor and marginalized and Dalit groups and compensate their opportunity costs.

Maharjan (2003) stated that Nepalese countryside wasn't scourged by absolute poverty and the rural communities as well as legislation seems to have ignored the approaches to address socio-economic realities of the poor, women and marginalized groups and hence the present social turmoil.

Kanel and Niraula (2004) stated that forest products are the major source of CFUG income, which constitutes about 82% of the total income. CF is properly contributing around NRs. 2 billion to Nepal's GDP through forest products alone. Community development comprises the highest proportion of CFUG expenses (36%) that includes school support, road construction and other community infrastructure development.

Community Forestry Division (2004) reported using the Sustainable Livelihood Approach (SLA) can help us to make sense of the complexity that surrounds us all, encourage us to think beyond just the forest and can assist us in identifying opportunities for change and to address constraints. It is also useful for understanding

the particular situation of poor individuals or groups, who are frequently more dependent on forest resources than the better off.

Singh (2004) recommended that the social equity is one of the burning issues in community forestry in terms of access and control over resources of poor, women and dalits and disadvantaged groups. Leasehold and community forestry can work together in this issue.

Ojha and Subedi (2004) found in Baglung District that a small health initiative on life saving health messages on safer motherhood through the CFUG structure has increased women participation in community forestry.

Kanel and Subedi (2004) concluded that CF can contribute to reduce poverty but it alone cannot improve the livelihoods of the poor, CF activities have to be linked with the pro-poor programs of other sectors.

Banjade *et al* (2004) addressed the issue of inclusion adequately that CF processes need to reach beyond the elites within CFUGs and give due consideration to different sections of community particularly poor, women and marginalized.

Shrestha (2004) argued that women are responsible in farming, livestock rearing, water, fuelwood, collection, thinning of small wood, etc. This means women are the real managers for the rationale use of the forest. Thus, CF has contributed to capacity building of women and under-privileged people of the community.

CHAPTER-III

STUDY AREA

3.1. A Short Glimpse of Nepal

Situated in the lap of Himalayas, Nepal is located in between 26 22' N to 30 27' North latitude and 80 04' to 88 12' East longitude and elevation ranges from 70 to 8848m. The average length being 885 km. east to west and average breadth is about 193 km. North to South. The country is bordering between the two most populous countries of the world, India in the east, south, west and China in the north. Nepal is landlocked country and home place of beauty with traces of artifacts. The temperature and rainfall differ from place to place. In the geographic diversity and varied climatic condition census 2001 enumerated more than 100 caste/ethnic groups. Population projected for the year 2005 is 25342638, among them 1268375 (50.05%) male and 12657263 (49.95%) female. As current population growth rate is 2.25% per annum and 4253220 households. The average household's size is 5.44 and literate population is 54.01% (Population Census, 2001).

The Human Development Index of UNDP (2001) showed that poverty index of Nepal is 51.3% and Nepal lies in the 125th position among the 174 countries of the world recorded in the poorest country list. Poverty is the daunting development challenge confronting the world today. Of the current world population of 5.6 billion, about 1.3 billion people in developing countries live on a meager income of less than US \$ 1.00 per day (NPC, 1998).

3.2. Status of Forest in Nepal

At the recent time, forest area coverage of Nepal is in increasing trend. The region wise status of forest of Nepal is given in the table 3.1.

Table-3.1: Region-wise forest condition of Nepal

S.N.	Development Region	Total land (ha)	Forest Area (ha)	% Of Forest Area	Shrub land (ha)	% Of Shrub Land	Total Forest and Shrub Land (%)
1.	Far-Western Development Region	1953900	687400	35.20	263900	13.50	48.70
2.	Mid-Western Development Region	4237800	1192400	28.20	442000	10.40	38.60
3.	Western Development Region	2939800	734300	25.00	256900	8.70	33.70
4.	Central Development Region	2741000	918600	33.5	233800	8.50	42.00
5.	Eastern Development Region	2845600	736100	25.90	362600	12.70	38.60
	Total	14718100	4268800	29.00	1559200	10.60	39.60

(Source: Forest Resources of Nepal (1987- 1998), HMG/N.

Map of Makwanpur District



Study Area



3.3 A Brief Description of Makawanpur District

Makawanpur District is recognized as an industrial district lies in Narayani Zone, the Central Development Region of Nepal with an area of 2426 sq. km. and its headquarter is at Hetauda. Makawanpur District consists of two major types of Physiography, viz., a Mahabharat hill that is in the Northern side with steep slopes and Churia hills, which is rugged in all aspects. The Siwaliks are dissected by many shallow rivers and streams, which change course from time to time. Main rivers are Rapti and Bagmati and others are Lothar, Manhari, Chauda, Karrera, Bakaiya, etc. It has a artificial lake or pond i.e., Indrasarobar.

3.3.1 Geographical Condition

Makawanpur District is located between 27° 21' to 27° 40' North Latitude and 84° 41' to 84° 31' East Longitude. Its altitude ranges from 166 m. to 2588 m. The political boundary of the district is:

East = Kathmandu, Lalitpur, Kabhre planchowk and Sindhuli

West = Chitwan District

North = Dhading and Kathmandu District

South = Bara, Parsa and Rauthat District

3.3.2 Climate

Climate varies from tropical, sub-tropical to temperate. Average annual rainfall of the district is 2535 mm and maximum and minimum temperature is 30.3° and 16.6° respectively.

3.3.3 Geology and Soil

Its geology is tertiary Siwalik to the south and Mahabharat Range to the north. And its soil consists of red soil around chure area and sandy and gravel to western area.

3.3.4 Land Use Category of Makawanpur District

Table-3.2: Land use categories in Makawanpur District

S.N.	Land Category	Area (ha)	Percentage (%)
1.	Forest	144588	59.1
2.	Water bodies	16583	6.7
3.	Agriculture	61489	25.2
4.	National Parks	15125	6.2
5.	Industrial Areas	1607	0.7
6.	Shrubs and grasses	4972	2.0
7.	Sand and desert	127	0.1
	Total		100.00

3.3.5 Social Description

Total population	:	392604
Male	:	199144
Female	:	193460
Sex ratio	:	1:03
Annual growth rate	:	2.13%
Total household No.	:	71112
Average household size	:	5.52
Population density/sq.km:		162

3.3.5.1 Population

Table-3.3: Population by language

S.N.	Language	Percentage (%)
1	Tamang	45.24
2	Magar	0.89
3	Nepali	42.42
4	Chepang	3.45
5	Newari	5.18
6	Wantwa Rai	0.57
7	Maithili	0.50
8	Bhojpuri	0.40

Table-3.4: population by region

S.N.	Religion	Percentage (%)
1	Hinduism	49.36
2	Bhuddhist	47.63
3	Islamese	0.32
4	Kiranti	0.02
5	Chritian	2.07
6	Jain	0.004
7	Sikh	0.01
8	Others	0.59

Table-3.5: population by castes

S.N.	Castes/ Ethnicity	Percentage (%)
1	Tamang	47.34
2	Magar	4.57
3	Chepang	3.91
4	Chhetri	10.56
5	Brahmin	14.92
6	Newar	6.82
9	Kami	2.68
13	Others	9.2

3.3.5.2 Education

Literacy percentage : 63.2%

Male : 53.7%

Female: 72.4%

Table-3.6: Educational Institutions

S.N.	Name of Institution	Number
1	Primary School	295
2	Lower Secondary School	41
3	Secondary School	45
4	Campus/ Colleges	3

3.3.5.3 Health Facility

Table-3.7: Health service facilities

S.N.	Name	Number
1.	Health Post	10
2	Sub-health Post	30
3	Primary Health Center	4
4	Hospital	1
5	Ayurvedya Hospital	2

3.3.5.4 Occupation

53% of the population of the district is involved in Agricultural activities and next 47% is employed in non-agriculture activities.

3.4 Information on Forests of Makawanpur District

Makawanpur District is considered as rich in bio-diversity. Since this district holds wide variety of elevation ranges from 166 m. to 2584 m, it consists of different 9 dominant types of forests. They are

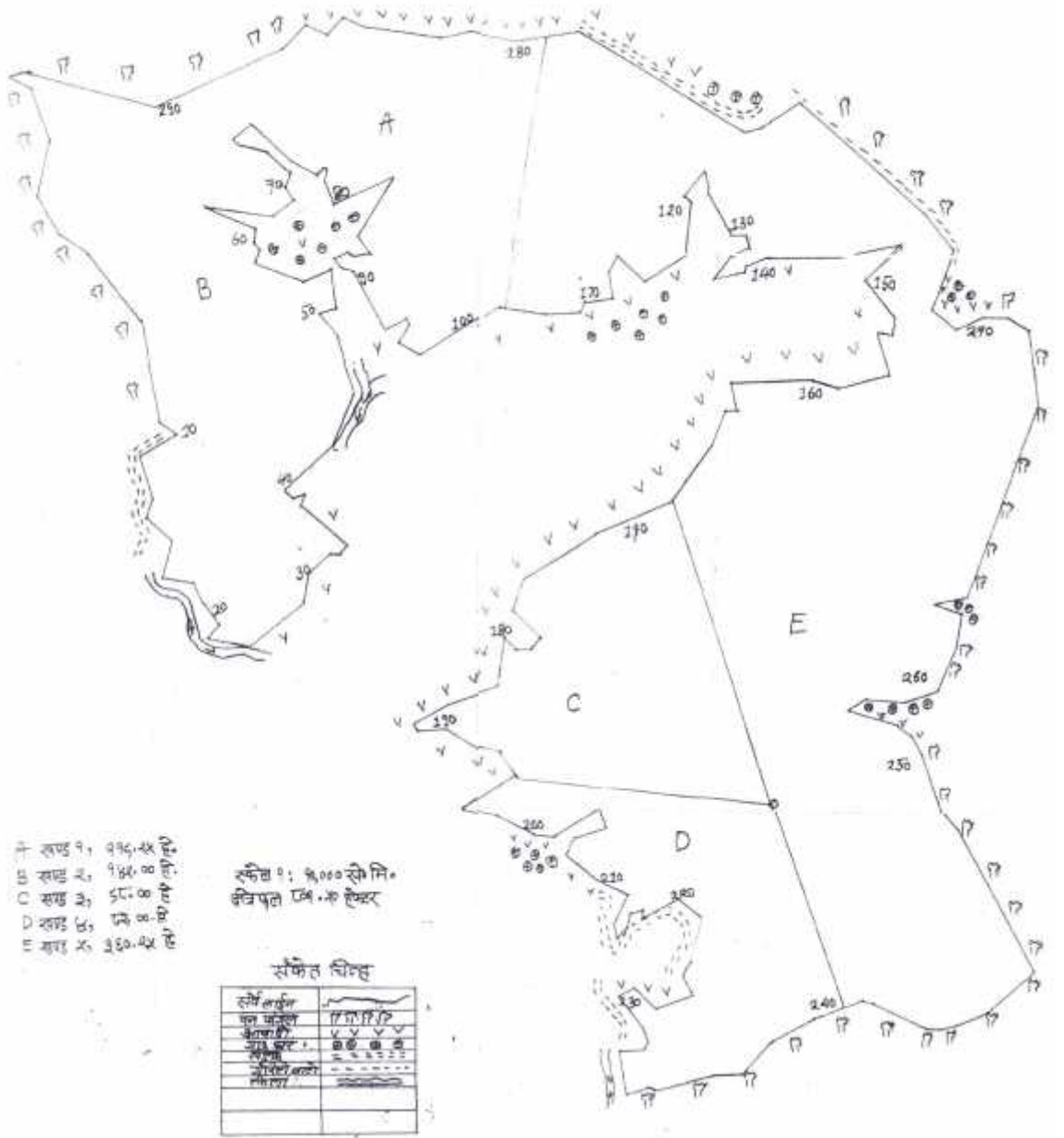
1. Shorea robusta Forest
2. Sub- tropical deciduous Forest
3. Upper slope mixed hardwood Forest
4. Pinus roxburghii Forest
5. Pinus wallichiana Forest
6. Mixed evergreen Forest
7. Oak- rhododendron Forest
8. Schima-Castanopsis Forest
9. Alnus nepalensis Forest

In this district, BISEP-ST recorded that national forest covers 92511.35 ha, out of which 38222.60 ha of national forests have been handed over to 255 CFUGs for 40588 households. There are 7 women CFUGs and women represented in CFUGCs are 25%. Number of committee members of the district comprise of 9 to 22 members and 15 members per CFUGC on an average.

According to fiscal year, 2060/ 061-progress reports, 99173.93cft timber was sold. As such, 158544.72 kg Khair timber, 25485 kg khoto and 196 chatta of fuelwood were distributed outside their own CFUG. About 250 species of medicinal plants are found in Makawanpur District, where only one medicinal plant based industry has been conducted. As statistics shows 60% (59882.33 ha) of Sal, 20% (19294.11 ha) of Sal

Terai hardwood, 5% (4823.53 ha) of pinus, 4 % (3855.82 ha) of Chilaune- Katus and 11% (10611.76 ha) of Lower Mountain Hardwood Forests are found as an existing productive forest. Annual progress report of fiscal year, 2061/ 062 shows that potential leasehold forest area is 12617.21 ha, in which 1150.73 ha of forest area has been handed over to 276 groups for 1709 HHs possessing 10986 populations. Private Forest covers 95.85 ha and religious forest 10.59 ha.

Study Area : Kalika Chandika CFUG



3.5 The study area: Kalika Chandika CFUG

Previously, this forest area was covered by dense forest of Sal (*Shorea robusta*), Asna (*Terminalia tomentosa*), Khote salla (*Pinus roxburghii*), Chilaune (*Schima wallichii*), etc in the lower altitude and Katus (*Castanopsis indica*), Phlant (*Quercus semicarpifolia*), Angeri (*Lionia ovalifolia*), etc to the upper altitude. Also abundant wild life was found in the forest area such as Tiger, Bear, Deer, Chituwa, Jungle cat, monkey, etc. Water sources abounded in water. In course of time, rapid growing population demanded varieties of forest products, e.g., timber, fuelwood, fodder, leaf litter, etc and consequently forest degradation was started to meet the people's demand. Also people of the other parts of the country used to fell trees illegally for selling or meeting their requirement because this forest area became very degraded; water sources were decreased; many types of mammals and birds threatened and gradually disappeared; and some landslide also occurred.

Ultimately the necessity of forest protection was taken as the most important issue. So, conscious local people, leaders and educated persons forwarded the application letter to District Forest Office for the protection of forest. Local forest users prepared constitution with the help of Ranger, DFO staffs as CF was a new concept and registered it and thereafter Operational Plan for forest management was prepared with the help of technicians. Thus, Kalika Chandika CF was officially handed over to the local users in 2054 BS for protection, management and utilization.

Users of the forest are living scattered in different toles, i.e., Ghante Khola, Ampchaur, Kalikatar and Bhainsetar. Ethnically, this area has much diversity as Magar, Tamang, Chhetri, Brahmin, Newar, Bishwakarma, etc are the community forest users.

Kalika Chandika CFUG was handed over in the dated 27th Falgun, 2054 BS and renewed in the 5th Asadh, 2060 BS. 801.5 ha of national forest were handed over to 192 HHs having total population 1112 (Male: 570; Female: 542). This study showed that they rear 482 livestock possessing on an average 2.51 livestock per HHs.

Income and Expenditure of CF from fiscal year, 2054/ 055 to 2058/ 059 BS.

Income : NRs. 212021.75

Expenditure : NRs. 177209.59

Saving (Bank Balance) : NRs. 34812.16

Topic of Income

Timber sale : NRs. 124539.95

Others : NRs. 8748.80 (i.e., punishment, membership, etc.)

Topic of Expenditure

Forest Development : NRs. 88125.00

Institutional : NRs. 39720.45

Social work : NRs. 42630.59

Others : NRs. 6733.55

Some Decisions done in General Assembly, 2062/ 07/05.

- CFUG will earn total amount NRs. 150979.96 from different sources and expend for differnt sources in the fiscal year, 2062/063 on the following topics:

Table-3.8: Expected income and expenditure in the fiscal year, 2062/063

S.N.	Items	Expenditure (NRs)
1	Forest protection and Management	20500.00
2	Social development	31000.00
3	Office Management	20500.00
4	Income Generation Activities	9500.00
5	Trainings and Workshop	25000.00
6	Male buffalo purchase and Prizes	13000.00
7	IEE and Amendment of OP	30000.00
8	Miscellaneous	1479.95
	Total	150979.95

- CFUG decided to collect rosin as per technician recommendation and OP approved and sells on not less than government rate.
- Financial support will be provided for accidental natural calamities and prized Tiltar Women Groups for their active role in forest protection.
- District Forest Office will be requested for IGAs to uplift the socio-economic condition of women, poor and dalit.
- Furniture Industry will be established to make varieties of commodities from felled and dried trees required for forest users.
- Forest Watcher will be managed to prevent illegal felling from CF areas.
- Timber will be distributed on the priority basis for the construction of houses.
- Varieties of trainings will be provided such as Rosin Collection Training, IGA and skill development training (i.e., Advanced Women Tailoring Training) etc.

- New membership of adjacent users will be provided only on the agreement of applicants and Kalika Chandika CFUG representative.
- Extension Programs will be conducted through posters, pamphlets, etc for discouraging corrupts and forest fire
- One male buffalo will be purchased for CF users.
- Forest Product Distribution Sub-committee will be formulated.
- Legal procedures will be forwarded for one who have not renewed membership.
- Concerned group and CFUG respectively paid can conduct social development activities only on the provision of 30% and 70% expenditure.
- 30 set desks, bench will be provided to the high school as per CFUG royalty.

Women participation:

Section- 6.3 (chh) of Operational Plan (2060) has managed for women, poor and Dalit to uplift their socio-economic condition. IGAs and other special activities will be conducted by CFUG mobilizing CF fund. CFUG has formulated 7 (seven) women sub- groups for actively participate in the forest activities such as weeding, forest protection, etc. Each group has been provided some amount of money to utilize in various works to promote their economic condition as a saving program so that women may be encouraged and empowered to carry out activities, i.e., goat keeping, poultry- farming, vegetable farming, etc. At the present, those groups have been working satisfactorily.

3.5.1 Reasons for Selection of CF for Study

To meet the objectives of the research study, " Kalika Chandika Community Forest", Bhainse- 2,3, Makawanpur, has been selected as a study area among 255 handed over community forests. It has been selected for the research due to the following reasons:

-) It should be at least 5 (five) years old representing majority of CFs of the mid-hills.
-) Heterogeneity in economic composition

-) Accessible site and hence easy to conduct research work
-) Level of forest resources relative to population
-) Apparent degree of success of user group
-) The FUG having fund mobilization
-) Outside the urban area where there is highly discrimination of women, poor and Dalit may be found. Also dependency of those people on forest is high.

3.5.2 Location, Boundary and Physiography

It is located at Bhainse VDC ward No. - 2, 3 of Makawanpur District. It lies about 35 km. from headquarter, Hetauda Bazaar and occupies 801.5 ha. A stream flows across the forest facing eastern and western aspect. Some parts of the CF lie in the southern aspect as well. The boundary of CF is:

East : Bhainse-1, Pani Dhalo and Thansing Bhanjyang

West : Bhorthan Panidhalo

North : Nigale Straight Path (Tersobato) and 66 bends

South : Cultivated private lands and village

Physiographically, the area lies in the foothills of Mahabharat range.

3.5.3 Socio-economic Condition of the Study Area

According to CFUG Operational Plan and Constitution, the Kalika Chandika CF has been managing and utilizing by users of different five (5) toles, i.e., Kalika tar, Simal tar, Ampchaur, Bhainse tar- Ghante khola and Lamidanda. The forest users are of different castes and ethnic groups, out of which 70% users are under poverty level.

Total involved households are 192 and total population is 1112, in which numbers of male and female are 570 and 542 respectively.

CFUG has categorized the users into "K", "KH", "G" and "landless" for the management and utilization of CFUG so that benefits may be distributed on the equitable basis.

The major income source of these ethnic groups is largely varied from agriculture, business, government service, private service and driver to wage labor. This CFUG possesses Rich-"K"(11.51%), Medium-"KH"(22.93%), Poor-"G"(57.55%) and Landless (8%) recorded in the OP and Constitution of CFUG, 2060 BS.

Main Sources of Income

-) Selling timber inside the FUG
-) Selling fuelwood inside the FUG
-) Bank interest
-) Users' membership fees
-) Punishment
-) Support from other organizations

Contribution of CF on Social Development

-) Making foot trails, temple
-) Women awareness trainings
-) Women saving activities
-) Forest management activities
-) Volunteer teachers for Primary School
-) Providing timber for school furniture
-) Maintenance of drinking water sources

3.5.4 Flora

Kalika Chandika Community Forest Operational Plan shows that it consists of the pure stands of *Pinus roxburghii*, i.e., 50% and *Shorea robusta*, i.e., 40% species. However, few associated species, i.e., 10% are also found. *Pinus roxburghii* and *Shorea robusta* are predominant species in the forest and few mixed species like Harro (*Terminallia chebula*), Barro (*Terminallia bellerica*), Champ (*Michellia*

champaca), Sandan (*Ougenia ougenensis*), Bot dhangero (*Lagerstromia parviflora*), Amla (*Emblica officinalis*), Jamun (*Syzizium cumini*), Bhalayo, Kyamun, Asna (*Terminallia tomentosa*), Karma (*Adina cardifolia*), etc. In this CF, medicinal plants like Kurilo (*Asparagus recimosus*), Gittha , Bhyakur, Gurjo , etc are found.

Agroforestry can be successfully carried out to implement Income Generation Activities (IGAs). For this, the following varieties of species can be grown with forestry trees.

Fruit Farming :

Tall varieties	: Mango, Banana, Guava, Katahar, etc.
Middle varieties	: Litchi, Pears, etc
Dwarf varieties	: Pineapple, Ginger, Besar, etc
Medicinal plants	: Kurilo, Gurjo, Bojho, etc
Other NTFPs	: Bet bans, Amliso, etc

3.5.5 Fauna

Many species of large and small mammals and birds are found in this forest. According to the Operational Plan, Deer, Jungle cat, Jackal, Fox, Squirrel, Rabbit, Bear, etc, are found. Similarly, many species of birds are seen such as Kaliz, Koel, Cuckoo, Jungle fowl, etc.

CHAPTER-IV

METHODOLOGY

This Chapter explains how the research was conducted by using several tools, techniques and methods during collecting the data in the field or study site as well as during analysis of data in office work. An outline methodology is presented in the following flow chart:

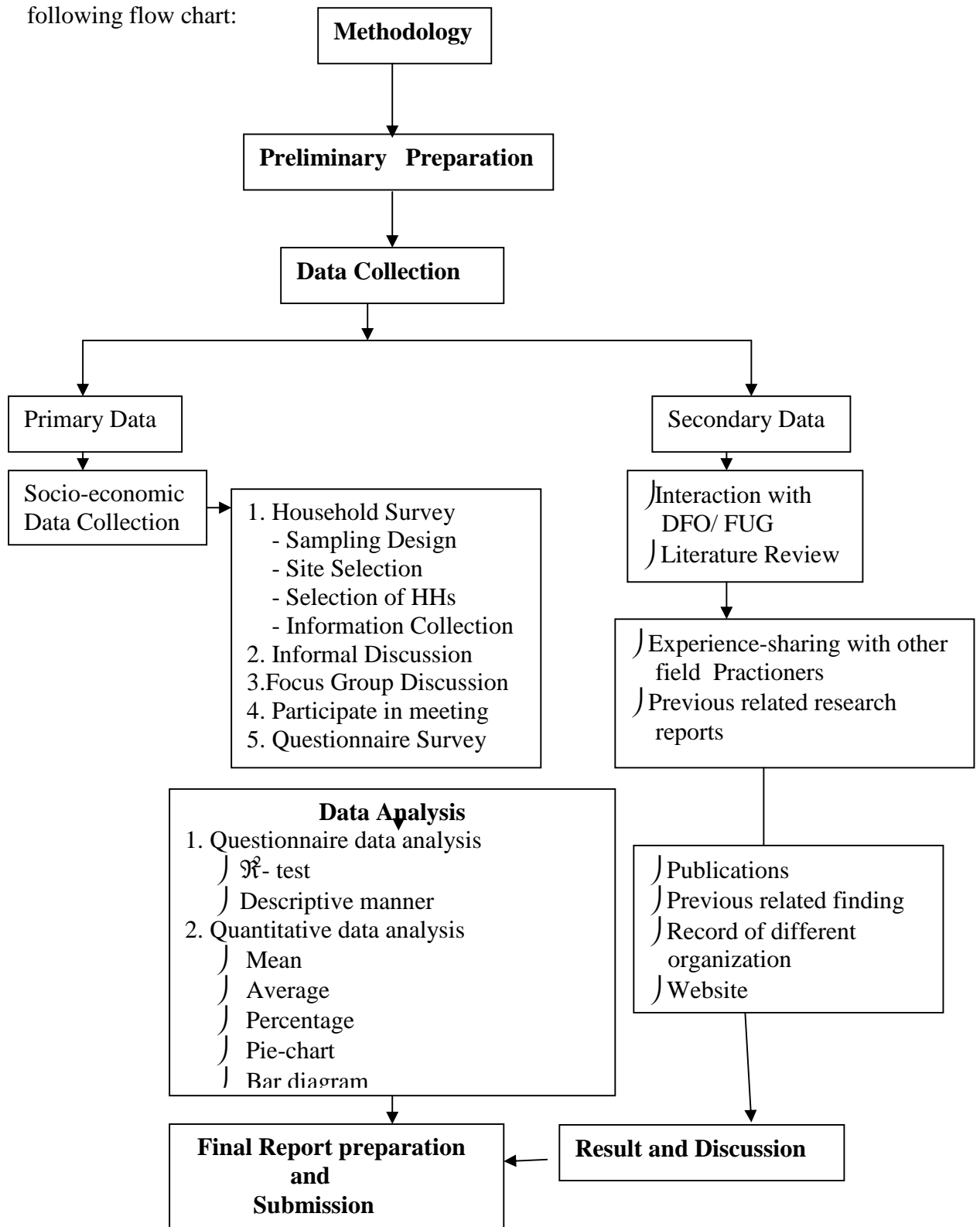


Fig.-4.1: Conceptual Framework of Research

4.1 Preliminary Preparation

The field was observed and general information was collected together with key persons/ users. Preliminary planning, literature review and questionnaire preparation were done. The questionnaire was intensively studied and tested with key persons and users.

4.1.1 Socio-economic Stratification

To separate FUG members among 3 (three) socio-economic strata, the wealth ranking exercise was performed. The "wealth ranking" depends upon the criteria developed by the FUG members themselves for assessing wealth rather than referring to external standards of wealth or income (Chadwick et al., 1995).

In PRA, CFUG members, key informants, teachers, DFO staffs, etc were involved and discussed. Though private land holdings, food security, off- farm income such as remittance from service and cattle wealth in particular were the main criteria for the wealth ranking. The main purpose of wealth ranking was to assess socio-economic strata in terms of poor, medium and rich households. According to the criteria,

Ñ "Rich HH" was defined as the one, which had more than 10 ropani of the cultivable private land per HH and some permanent off- farm employment such as business, who sell surplus grain every year.

) "Medium HH" income group was defined as one who had 6 to 10 ropani of the cultivable private land in their settlement per HH and some off-farm employment who is self sufficient in food production and sells some food grain for their household expenditures.

) "Poor HH" was defined as one who had less than 6 ropani of the private plus hared land per HH, but in some cases upto 10 ropani of bari/ pakho land only which may be Bari as uncultivated land and poor in food security to cover 12 months who relied on farm employment as wage labor for part of the year. "Poor HH" is further categorized into poor, very poor and extremely poor (landless) owning

3-6, 0-3 and zero ropani khet-bari (i.e., Khet- Cultivated, Bari- Uncultivated) respectively.

4.1.2 Sampling Design

For the collection of data, interview with selected respondents was carried out. These sample-households were selected by random sampling without replacement. The required socio-economic stratification was done categorized as per their constitution and OP. All the households of CF were categorized into three major socio-economic strata as poor, medium and rich.

For sampling at 15%, the respondents HHs were selected from the whole users, in which efforts were made to represent equal numbers of men (50%) and women (50%) respondents' HHs, out of which 4 dalits from the total dalits HHs and 3 women from rich HHs were selected randomly. Especially, women from rich HHs were selected to know their socio-economic status of women in rich households. All the respondents' households were selected randomly by lottery method to eliminate biasness for this investigation purpose.

4.2 Data Collection

Both primary and secondary data were used in this study. They are as follows:

4.2.1 Primary Data Collection

Both qualitative and quantitative data were collected to verify the research. For this, different PRA tools, pair-wise ranking, questionnaires, observation, discussion, interviews, etc were conducted, which are described below.

4.2.1.1 Household Survey and Interview

For primary data collection, household survey was done; interview was conducted in those households, which were previously selected as sample households. The

interview was taken by questionnaires, which were structured as well as semi-structured type. For details, household level questionnaire is shown in Appendix-I.

4.2.1.2 Key Informant Interview

Key Informant Interview (KII) was conducted to get additional details from CFUG committee members, local school teachers, local leaders, elites, NGO staff, DFO staff, women and different knowledge persons with a separate interview guidelines to gather information about CFUGs contribution towards women, poor and dalits, existing socio-economic condition of women, poor and dalits. A checklist of KII/FGD is included in Appendix-III

4.2.1.3 Focus Group Discussion

Focus Group Discussion (FGD) was conducted with the different groups (of different socio-economic strata and castes) of the CFUGs to collect varieties of information. The discussion was concentrated on the CFUG composition, representation of the women, poor and dalit in it, and effects of CF programs on their livelihood. The focus group discussion provided opportunities for the interaction among multiple respondents of similar background.

4.2.1.4 Discussion with Committee Members

The key questions related to the research and issues identified during data collection were the main issues. The committee members were asked about the strategy and approach of the committee on forest products availability and distribution system, fund management systems, decision-making process and information dissemination system. A checklist of committee meeting is included in Appendix-II.

4.2.1.5 Direct Field Observation

Direct Field Observation was carried out in the respondents' home, farms and forests. Women, poor and dalits participation in decision-making process was observed extensively. It helped to know the biophysical attributes of the forest and

developmental activities conducted in the village by CFUG and moreover, to triangulate the information gathered during focus group discussion, interview and questionnaire survey. A Checklist for observation is included in Appendix-IV.

4.2.1.6 Semi Structured Interview

Semi Structured Interview (SSI) is one of the main tools used in Community Forestry, where a great deal of valuable information can be obtained by talking people about their situation and the things, i.e., forest. SSI was conducted to engage local people before the questionnaire survey.

4.2.1.7 Wealth Ranking

Wealth Ranking was performed depending on the criteria developed by the FUG members themselves for assessing the wealth rather than referring to external standards of wealth or income.

4.2.1.8 Pair-wise Ranking

Pair-wise ranking was done to assess the expectation and to prioritize the needs of women, poor and dalit for forest products and social development activities. It was carried out individual interviewing of respondents as shown in Appendix-VI.

4.2.1.9 Preference Ranking

Preference ranking is a tool for inquiring into the nature of local preferences and for helping local people to set priorities for forest management or other activities. It can be done by placing series of marks of objects in each square indicating where is the necessity of investing fund on the intended and necessary programs on studied CFUG. For further, see Appendix-V.

4.2.2 Secondary Data Collection

Secondary data were collected from Operational Plan and Constitution of CFUGs, relevant literatures, reports, brochures, published and unpublished books, journals, web sites and different offices such as District Forest Office, District Development Committee Office, District Statistics Office, etc.

4.3 Data Analysis

Both qualitative and quantitative collected data were separated as required by the study objectives. Software programs simplified data analysis processes. The simple statistical tools like mean, percentage and simple test (at 95% confidence level) were done. Homogeneity test of Chi-square support the analysis of quantitative as well as qualitative data using the formula,

$$\chi^2 = \sum (O-E)^2 / E$$

Where,

\sum = Summation

O = Observed value

E = Expected value

χ^2 = Chi-square value

T- test of dependent variable analyzes the quantitative data obtained using the formula,

$$T_{cal} = \frac{\bar{d}}{s} \sqrt{n}$$

Where,

\bar{d} = mean of difference

S = standard deviation

n = number of variable

T_{cal} = Calculated value of T

CHAPTER-V

RESULT AND DISCUSSION

The results of the present investigation entitled "An Assessment of the Contribution of Community Forestry on Socio-economic Upliftment of women, poor and dalit" are presented in this chapter. Although either table or figure shows information needed, I have designed both tables and figures in some of the data obtained to clarify findings and discussions. The results and discussions basically depend on respondent households considered as a prime information center.

5.1 Results

5.1.1 Socio-economic condition of the Respondents

To meet the objective-1, the following data were collected for findings and discussions.

5.1.1.1 Occupation

Table-5.1: Occupational Status of the Respondents

RHH Occupation	Male		Female		Total	
	NOs.	% of male	NOs.	% of female	NOs.	% of total
Wage labor	10	66.66	7	46.67	17	56.67
Agriculture	-	-	2	13.33	2	6.67
Business	20	20	2	13.33	5	16.67
Bus services	-	-	3	20	3	10
Tailor	1	6.67	-	-	1	3.33
Outside country	1	6.67	-	-	1	3.33
Household works	-	-	1	6.67	1	3.33

(Source: Field Source, 2062 BS).

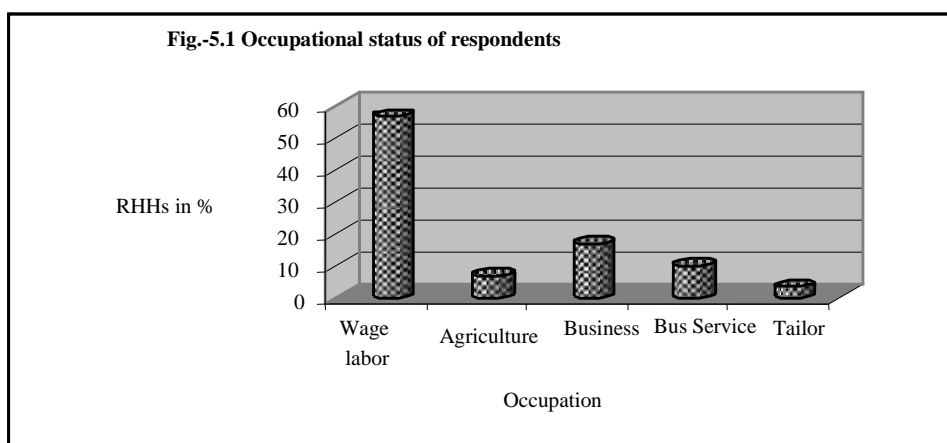


Table-5.1 shows that majority of respondents (56.67%) depended on wage labor for their livelihood followed by business (16.67%) in their local furnace and bus service (10%). Fig.5.1 also clarified it.

5.1.1.2 Literacy

Table-5.2: Literacy of Respondents' and their household members

Class	RHH members' education				Total	% of total	Respondents'			
	Male	% of male	Female	% of female			Male	Female	Total	% of total
Illiterate	12	19.67	27	40.9	39	30.70	4	7	11	36.67
Primary level (1-5)	34	55.74	26	39.39	60	47.24	8	6	14	46.67
Secondary level (6-10)	13	21.3	9	13.34	22	17.32	3	1	4	13.33
College level (> 10)	2	3.28	4	6.05	6	4.72	-	1	1	3.33
Total	61		66		127					

(Source: Field Source, 2062 BS).

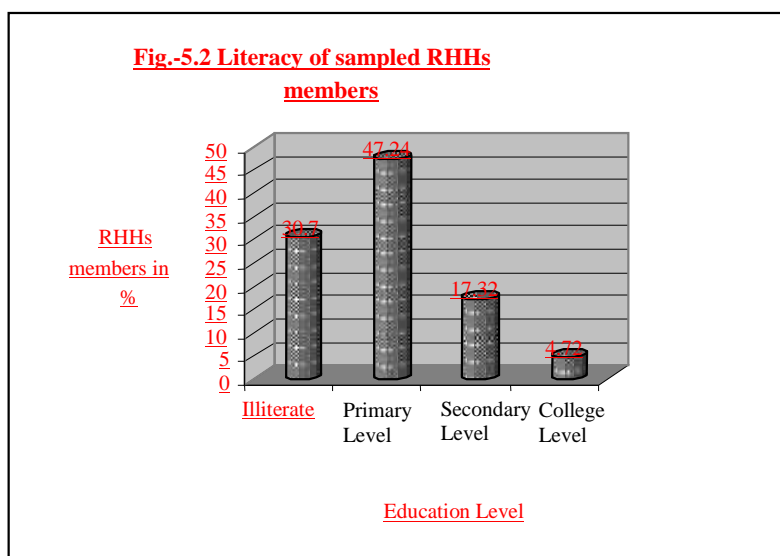
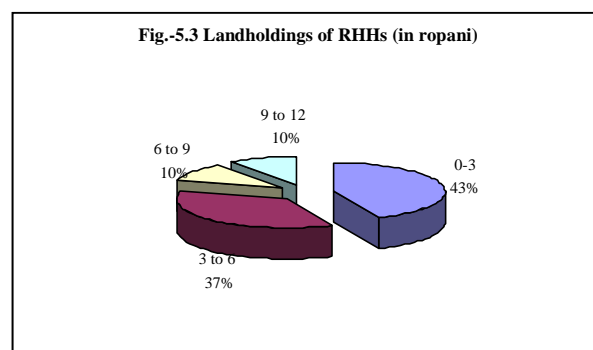


Table-5.2: shows that almost half of the sampled RHHs members (47.24%) having only primary level education. Few sampled HHs hold college degree. Similarly, respondents' primary level education seems to be high (46.67%) and college degree is minimum (3.33%). 36.67% of the respondents belongs to be an illiterate.

5.1.1.3 Landholdings (Khet/ Bari)

Table-5.3: Landholding size of RHHs.

Area (in ropani)	No. of RHHs	%	Mean
0-3	13	43.33	4.1
3-6	11	36.67	
6-9	3	10	
9-12	3	10	



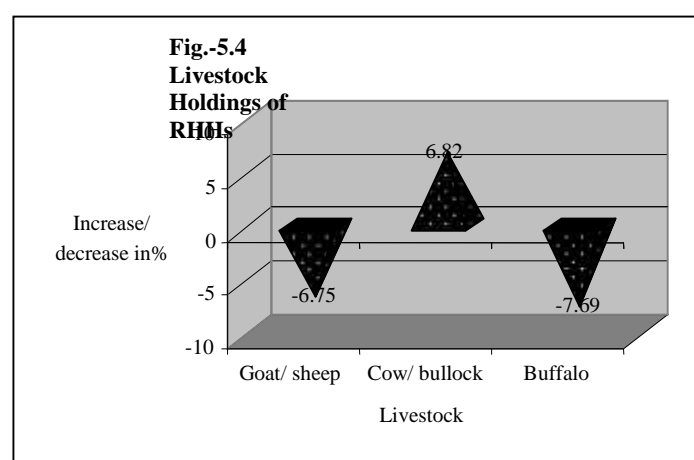
(Source: Field Source, 2062 BS).

Table-5.3 shows that the majority of respondents HHs owning up to 6 ropani, i.e., 43.33% respondents have 0-3 ropani and 36.67% respondents having 3-6 ropani of khet-bari land. They have to go for work or take land on rent to grow agriculture crops for their livelihood. They have to go to the cities or India for work to solve hand to mouth problems. Some have only Bari of very low production.

5.1.1.4 Livestock Holding

Table-5.4: Livestock Holdings of RHHs.

Livestock	Before CF (NOs.)	After CF (NOs.)	Increased/decreased (%)
Goat/sheep	74	69	- 6.75
Cow/bullock	44	47	+ 6.82
Buffalo	13	12	-7.69
Total	131	133	



(Source: Field Source, 2062 BS).

Table-5.5: Livestock Health

	No. of Respondents	%
Improving	19	66.33
Stable	11	36.67

(Source: Field Source, 2062 BS).

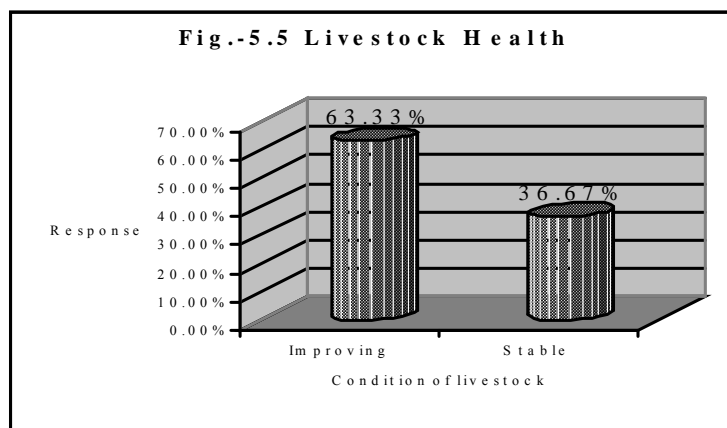


Table-5.5 shows that only the numbers of cows/ bullocks have increased (+6.82%), whereas the numbers of goats and buffaloes found to be decreased and Fig 5.5 also shows. Table-5.5 shows that the health of livestock is improving (66.33%). Some of RHHs have been supported by INGO (i.e., Plan) or hired from rich. Grazing cum stall-feeding was applied. They graze their livestock on the CF as well as public land. Respondents said children education, rules and regulation for CF protection, food scarcity, scarcity of fodder and grass on the private land and community land, etc. are the causes of not increasing the livestock significantly.

5.1.1.5 Family Size and their age structure

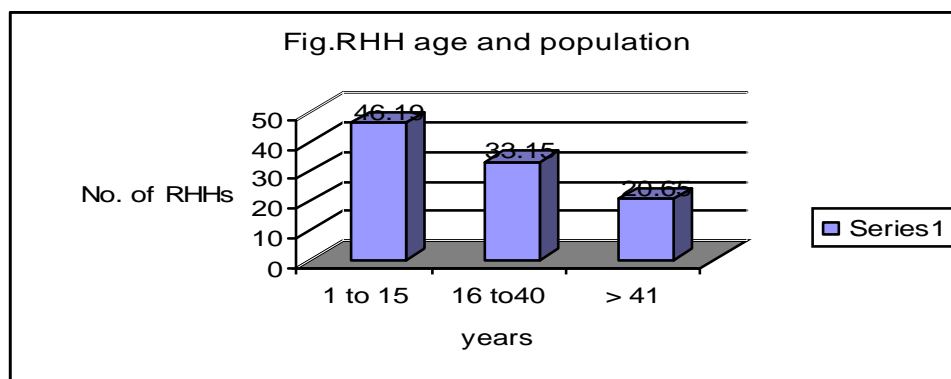


Fig-5.6 shows that almost half of the RHHs members (46.19%) possessing under 15 years old, whereas only 20.65% of sampled population found to be above 41 yrs. old, who could earn money for their livelihood.

5.1.1.6 Social Status of Respondents

Table-5.6: Respondents households Population of CFUG by castes/ ethnicity

S.N.	Castes/ ethnicity	No of households	Percentage (%)	Male	Female	Total Population	Percentage (%)
1	Magar	100	52.08	285	287	572	51.44
2	Tamang	43	?	127	131	258	23.20
3	Brahmin/chhetri	25	22.40	61	48	109	9.81
4	Others	24	13.02	97	76	173	15.55
		192		570	542	1112	

(Source: OP and Constitution of CFUG, 2060)

Fig-5.7: RHHs Population of CFUG by castes/ ethnicity

Table-5.6 shows that percentage of Magar is high (52.08%) followed by Tamang (23.20%) and Brahmin/ Chhetri.

Table-5.7: Respondents by castes/ ethnicity

Respondents	Male	Female	Total	% of total
Brahmin/ Chhetri	1	4	5	16.67
Tamang	2	2	4	13.33
Magar	7	7	14	46.66
Pariyar	1	-	1	3.33
Bishwakarma	1	2	3	10
Lama	2	-	2	6.66
Newar (Shakya)	1	-	1	3.33

(Source: Field Source, 2062 BS).

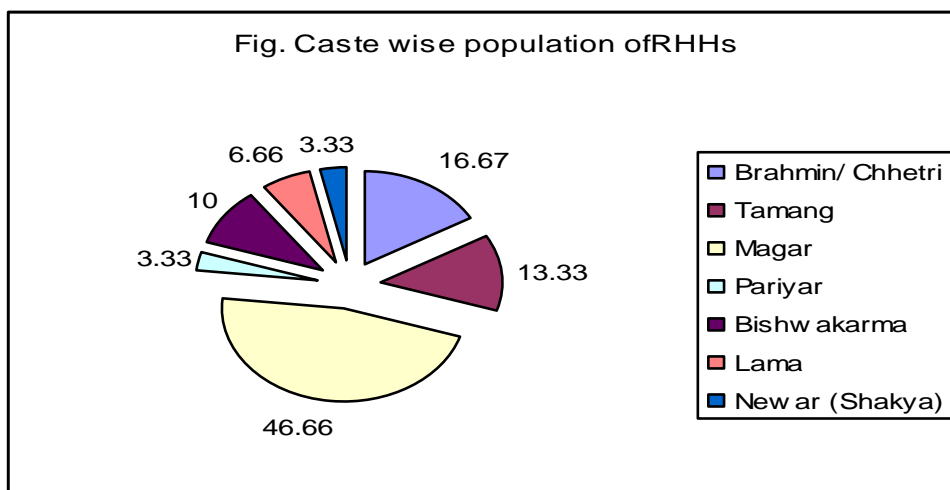


Fig-5.8: Caste wise numbers of respondents

Table-5.7 shows that the percentage of Magar is high followed by Brahmin/ Chhetri and then Tamang, B.K. and others respectively. Brahmin/ Chhetri respondents were selected more due to randomly selection from the poor respondents.

5.1.2 Livelihood Assets

To meet objective-2, natural, financial, human and social assets of livelihood assets were taken into consideration for findings and discussions, which are as follows:

5.1.2.1 Natural Assets

Table-5.8: Demand and Supply Situation of Forest Products

Items	Unit	Demand	Dependency of users for different PFs supply (in % of total)			
			Own CF	Other CF	NF	Private
Timber per 2/3 yrs	cft	720	98.61	1.39		
Fuel wood per month	bhari	562	97.86			2.14
Tree fodder per day	bhari	18	77.78			22.22
Ground grass	bhari	17	76.47			23.53
Leaf litter per day	bhari	19	100			
Thatch grass	bhari	385	87.01		7.8	5.2
Small poles per 2/3 yrs.	Nos.	505	100			

(Source: Field Source, 2062 BS).

(Note: - NF- National Forest; FPs: - Forest Products. 1 bhari fuel wood = 30 kg; 1 bhari grass = 15 kg.).

The table-5.8 shows that CF has fulfilled the users' demand for poles and leaf litters by cent percent followed by 98.6% as timber, 97.86% as fuelwood, 87.01% as thatch grass and almost 77% fodder- grass. FPs are to be purchased as per assembly decision and allocated in OP. No concession was given for poor and dalit. As Community Forest needs technical management, awareness and trainings of different kinds suggested by the key persons.

Table-5.9: Time taken to collect forest products before and after CF formation

Items	Average time (hr / day)	
	Before CF	After CF
Fuel wood collection	3.7	3.23
Fodder collection	3.6	3.03
Leaf litter	2.323	2.067

(Source: Field Source, 2062 BS).

Table-5.9 shows that there is no significant difference in time spent for collecting FPs after CF formation. Only a small unit of time has reduced after CF formation may be due to the protection of CF.

Table-5.10: Supply situation of FPs and inclusion of NTFPs.

S. N.	Statement	Attributes	RHHs		Total	% of total
			Male	Female		
1	increase in Supply situation of FPs	Yes	12	13	25	83.33
		No	3	2	5	16.67
2	Inclusion of NTFPs in CF	Yes	2	2	4	13.33
		No	10	9	19	63.33
		Don't know	3	4	7	23.33

(Source: Field survey, 2062)

Table-5.10 shows that supply situation of PFs have increased as 83.33% of respondents are in positive attitude in this regard, but 63.33% respondents said there is no inclusion of NTFPs in CF management to uplift the economic condition of rural poor people.

Table-5.11: CF Products Distribution System

Attributes	RHHs		Total	% of total
	Male	Female		
Equity basis	1	-	1	3.33
As per requirement	12	14	26	86.67
Equal basis	2	1	3	10

(Source: Field Source, 2062 BS).

Table-5.11 shows that local people fulfill their more or less all the forest products requirement from Community Forest, but they have to follow the rules and regulations of their own CFUG and no technical management systems were applied.

Table-5.12: Fertility and sources of water increase or decrease after CF formation

Attributes	RHHs		Total	%
Yes	11	8	19	63.33
No change	4	7	11	36.67

(Source: Field Source, 2062 BS).

Table-5.12 shows that fertility / production and sources of water have increased because 63.33% respondents are in its favor.

Table-5.13: Natural Calamities (flood, landslides, etc) Information

RHHs.	Response in %			t ² -test calculated	d.f.	t ² -tabulated
	Increasing	Decreasing	No change			
Male	6.67	60	33.33	11.25	2	5.991
Female	20	40	40			

(Source: Field Source, 2062 BS).

Here, table-5.13 shows that natural calamities like flood, landslides, etc are different from before handing over CF as calculated value of chi-square rejected at 2 degree of freedom and 5% significance level. Percentage of male and female respondents for decreasing the calamities seems high (60%).

5.1.2.2 Financial Assets

Table-5.14: Economic strata of FUG

	No. of HHs	Percentage
Poor	138	71.875
Medium	39	20.31
Rich	15	7.81
Total HHs	192	100

(Source: OP and Constitution of FUG, 2060)

Fig.-5.9: Economic strata of FUG

Table-5.14: shows that majority of users were poor (71.87%) followed by medium and then rich.

Table-5.15: Sources of Income for the fiscal year, 2061/ 062

S.N.	Items	Amount (NRs.)	% of total
1	Balance from last year	32436.46	41.66
2	Recommendation Fee	2520.00	3.24
3	Fine and Penalties	120.00	0.15
4	Application Fee	265.00	0.34
5	Renewal Fee	4235.00	5.44
6	Resin Royalty	5655.00	7.26
7	Advance for Risk	10000.00	12.84
8	Timber distribution Royalty	22200.00	28.51
9	Bank Interest	421.00	0.54
	Total	77852.46	

(Source: Minutes of FUG Assembly, 2062/07/05)

Table-5.15 shows that percentage of bank balance seems to be high followed by refundable money (12.84%).

Table-5.16: General Expenditure of the fiscal year, 2061/062

S.N.	Particulars	% of total
1	Administration	30.17
2	Social development	13.67
3	CF management	9.45
4	Bank balance and pocket money	46.71

(Source: FUG Assembly, 2062/07/05)

Fig.-5.10: General Expenditure of the fiscal year, 2061/062

Table-5.16 shows that CF contribution is seen high in its administration expenditures (30.17%) followed by users' welfare or social development activities and then CF management, whereas almost half of CF fund remains unutilized.

Table-5.17: Sources of expenditure

Years	CF management (%)	Administration (%)	Social development(%)	Saving money (%)
2055/ 059	42.92	19.35	20.76	16.95
2061/ 062	9.46	30.17	13.67	46.71
2062/ 063	33.44	13.57	51.99	0.98

Fig.-5.11: Sources of expenditure (Curve)

Table-5.18: Food Sufficiency of Respondents

Months covered	Respondents in%		Increased/decreased percentage	t²-test calculated	d.f.	t²_{tab}
	Before CF	After CF				
0 - 6	43.33	53.33	+23	3.72	3	7.815
6-9	23.33	16.67	-28.55			
9-12	26.67	20	-25			
+12	6.67	10	+49.9			

(Source: Field Source, 2062 BS).

Here table-5.18 shows that tabulated value of chi-square at 3 d.f. and 5% significance level is greater than the calculated value (3.72) and so food sufficiency condition is similar to the CFUG before handed over. Increased/ decreased percentage shows that there is increasing food sufficiency condition of poor people. Such kinds of food sufficiency not only fulfilled from the land production but also from their occupation adopted such as hotel, bus and truck service, tea soap, etc.

Table-5.19: Response about the way of Fund Mobilization

Respondents	Response in %			Mean	t ² calculated	d.f.	t ² tab.
	Agree	Disagree	Neutral				
Male	53.33	26.67	20		4.7	2	5.991
Female	46.67	20	33.33				

(Source: Field Source, 2062 BS).

Table-19 shows that the way of fund mobilization for male and female is homogenous as calculated value of chi-square at 2 d.f. and 5% level of significance was found less than tabulated value. But one respondent informed in discussion that fund mobilization is not satisfactory for special programs of Dalits to uplift their economic condition.

Table-5.20: Loan from CF for IGAs by respondents

Attributes	Respondents		Total	%
	Male	Female		
Yes	3	4	7	23.33
No	12	11	23	76.67

(Source: Field Source, 2062 BS).

Table-5.20 shows that the majority of respondents were deprived of mobilizing the fund as a loan for their economic upliftment. Minimum numbers of respondents have begged loan from CF for the initiation of IGAs.

5.1.2.3 Human and Social Assets

Table-5.21: Attributes of human and social assets

S.N.	Statement	Attributes	No. of Respondents		Total	%
			Male	Female		
1	Social/ community development works carried out by using fund	Yes	8	7	15	50
		No	8	7	15	50
2	Infrastructures constructed by CF	Yes	7	9	16	53.33
		No	8	6	14	46.67
3	Discrimination in getting benefits from CF	Yes	6	7	13	43.33
		No	9	8	17	56.67
4	Help from CF for IGAs	Yes	1	4	5	16.67
		No	14	11	25	83.33
5	Trainings/ workshops conducted by CF	Yes	9	8	17	56.67
		No	6	7	13	43.33
6	NGOs & INGOs in your area after CF	Yes	11	9	20	66.67
		No	4	6	10	33.33

(Source: Field Source, 2062 BS).

Table-5.21 shows that respondents, in favor of infrastructures construction are high (53.33%). 83.33% respondents have not got any help from CF for their Income Generation Activities. 43.33% respondents are being discriminated in getting benefits from CF and 43.33% are not in favor for trainings/ workshop because CF couldn't have planned trainings and workshops for poor people said respondents in discussion, whereas some NGOs and INGOs have been actively working for the poor and women.

Table-5.22: Encouragement, conflict and contribution in society

S.N.	Statement	Respondents	Response in %			t^2_{cal}	d.f.	t^2_{tab} at 5%
			Yes	No	Don't know			
1	Encouragement from CF in other activities	Male	33.33	60	6.67	14.39	2	5.991
		Female	26.67	46.67	26.66			
2	Conflicts situation		Increasing	Decreasing	No change	4.45		
		Male	13.33	33.33	53.33			
		Female	6.67	26.67	66.66			
3	CF contribution in the social development		Agree	Neutral	Disagree	5.6		
		Male	53.33	33.33	13.33			
		Female	46.67	26.67	26.66			

(Source: Field Source, 2062 BS).

Here, table-5.22 shows that encouragement from CF in other social activities for male and female are different as calculated value of chi-square is less than tabulated value at 2 degree of freedom and 5% level of significance and also percentages of male and female are 60% and 46.67% with negative attitude respectively. However, calculated value of chi-square for conflicts situation and CF contribution are 4.45 and 5.6

respectively, which are less than tabulated values at 2 d.f. and 5% significance level and so accepted the sub-hypothesis as there are no significant difference in conflict situation and CF contribution after CF formation, which means conflict situation hasn't changed overtime. CF has contributed in the social development positively.

Table-5.23: Improvement of Housing Pattern after CF formation

Attributes	Numbers of Respondents	%
Yes	13	43.33
No/ No change	17	56.67

(Source: Field Source, 2062 BS).

Table-5.23 shows that housing pattern of most of poor people have not improved after CF formation because 56.7% respondents are in this favor. "We are unable to purchase timber even from CF" said one respondent. There should be provision of house making for extremely poor people identified at purchasable cost, the same respondent suggested.

Table-5.24: Relationship among users is good or bad

Attributes	Response in %		Increased / decreased (%)	χ^2_{-cal}	d.f.	χ^2_{-tab}
	Before CF	After CF				
Yes	53.33	70	+31.26	5.86	1	3.841
No	46.67	30	-35.72			

(Source: Field Source, 2062 BS).

Table-5.24 shows the relationship among users differs from before being CF. It means relationship among users is becoming good after CF formation as positive response

found to be high (+31.26%) and calculated value of chi-square also rejected at 1 d.f. and 5% level of significance because calculated value is greater than tabulated value.

5.1.3. Participation and Decision-making for CF

Table-5.25: Participation in Assembly by CFUG

	Total No. of Participants	%
Men	87	67.97
Women	41	32.03

(Source: General Assembly, 2062/07/05)

Table-5.25 shows that men participation was higher (67.97%) than that of women in assembly.

Table-5.26: Participation in CFUG Assembly participation by women, poor and dalit

Attributes	Respondents		Total	%
	Male	Female		
Presence	13	12	25	83.33
Absence	2	3	5	16.67

(Source: Field Source, 2062 BS).

Table-5.27: Necessity for

Attributes	Respondents		Total	%
	Male	Female		
Presence	12	12	24	80
Absence	3	3	6	20

Table-5.26 shows that 83.33% respondents participated in FUG Assembly. Table-5.27 shows that 80% respondents felt necessity for participation especially by women, poor and dalit. The data shows that poor people have expected to get benefits from CF. One constraint to participate in the assembly is to be punishment. "One who doesn't go will be punished," said one respondent.

Table-528: Participation in Important Meetings

Statement	Attributes	Response in % according to social status		χ^2 -cal	d.f.	χ^2 -tab
		Male	Female			
Attended meeting when constitution was finalized	Yes	26.67	20	1.22	1	3.841
	NO	73.33	80			
Attended meeting when committee	Yes	20	26.67	1.22	1	3.841
	NO	80	73.33			
Attended meeting when OP was finalized	Yes	26.67	33.33	1.06	1	3.841
	NO	73.33	66.67			
Attended meeting when FPs distribution was decided	Yes	60	46.67	3.56	1	3.841
	NO	40	53.33			

(Source: Field Source, 2062 BS).

Table-5.28 shows that the values of Chi-square calculated (1.22, 1.22, 1.06 and 3.56) for the constitution finalizing, gathering for election, OP finalizing and meetings for forest products distribution, all the values are less than tabulated value of Chi-square taken at the same 1 d.f. and 5% level of significance (3.841). They all accepted the sub-hypothesis. It means both male and female are homogenous in participation. Above test of statistics shows that participation is significantly homogenous in constitution finalizing meeting, committee election meetings, OP finalizing meetings

and forest products distribution meetings. All the poor male and female may participate to get benefits and opportunity/ help from CF, which are needed.

Table-5.29: Women and dalit in committee

	No. of member	Percentage (%)
Women	3	27.27
Dalit	1	9.09
Others	7	63.63
Total	11	

Table-5.30: Present Status of Leadership in committee

	CFUGC	Poor	Medium	Rich
Total No	11	3	4	4
Percentage	100	27.27	36.36	36.36

(Source- OP and Constitution, 2060 BS)

Table-5.29 & 5.30 show that representation of women and dalit in executive was fewer than that of other users, i.e., medium and rich.

Table-5.31: Role of RHHs in decision making for CF

Respondents	Response in %			χ^2_{cal}	d.f.	χ^2_{tab}
	Active	Medium	Passive			
				4.7	2	5.991
Male	26.67	53.33	20			
Female	20	46.67	33.33			

Table-5.31 shows that calculated Chi-square value (4.7) is less than tabulated value (5.991) at 2 d.f. and 5% significance level. It means that role in decision making for CF by male and female are homogenous.

Table-5.32: Freedom of RHHs in decision making

Respondents	Response in %		χ^2 -cal	d.f.	χ^2 -tab
	Yes	No			
Male	53.33	46.67	2.93	1	3.841
Female	40	60			

(Source: Field Source, 2062 BS).

Table-5.32 shows that freedom in decision making by male and female are homogenous at 1 d. f. and 5% level of significance. Although a little bit active role performed was seen by male than female, there was no any significant difference in their role acted in decision- making process.

Table-5.33: Involvement of RHHs in CF products collection

	Respondents		Total	%
	Male	Female		
Men	5	2	7	23.33
Women	9	13	22	73.33
Children	1	0	1	3.33

Table-5.34: Leadership in CFUG for various activities

Leader	Respondents		Total	%
	Male	Female		
CFUG members	4	3	7	23.33
Elite members	11	12	23	76.67

(Source: Field Source, 2062 BS).

Table -5.33 shows that women involvement was seen high(73.33%) in CF products' collection. It indicates that women can manage the forests for sustained yield. Women can plan the activities and programs as per their requirement and the aim of the CF may be met.

But unfortunately table-5.34 shows that 76.67% elite member leads in CFUG, which may affect sustainable forest management and ultimately the objectives of Community Forest.

5.2 Discussion

The results obtained from the present studies have been discussed in this sub- chapter establishing the cause and effect relationship, wherever necessary or feasible in light of the literatures under the following headings.

1. Decision-making

Mainly in decision-making process, there is elite dominance as elite members lead to 76.67% (Table-5.34) in CFUG for various activities supported by Gilmour and Fisher (1991). Although the poor and dalits are benefiting from CF, there voice is not heard properly. So, their voice has not been raised satisfactorily. They are benefited by the mercy of elites not by their right. A synthesis report of NUKCFP (1999) also supported to this view.

2. Leadership

In study area, only 27.27% dalit and 9.09% poor are included in CFUGC shown in Table-5.29. So, the poor and dalit are sharply excluded in leadership of CFUGC. Medium and rich households have captured 36.36% and 36.36% respectively in CFUGC positions (Table-5.30). Leadership is such single role, which governs the decision-making process and benefit-sharing system of FUG. As there is 27.27% representation from poor plus dalit in CFUG (Table-5.30) and poor landless people are 71.87% community forest users, it is clear that there is biasness and discrimination to poor and dalit people in CF activities supported by Shrestha (1998).

As mentioned in literature review chapter, various similar studies have been conducted in different parts of the country. Among them, most of the researches have shown that there is positive contribution of CF in social infrastructure development and community development. They have shown that poor people are getting benefit, income and employment opportunities from these social development works. However, about their participation in decision-making and leadership context, almost all the researches have concluded similar to this research's result. They have found that there are still elite and wealthier people dominant in leadership and decision-making process. The main reasons of suppressing the poor are poverty, illiteracy, less empowerment and awareness, lack of empowerment in gender and equity sensitization programme, social caste system, feudal and traditional thought of people, gender and equity biased society and their cumulative effect in study area.

3. Community Welfare Activities

3.1 Social Development Activities

The result shows that CF has made positive contribution to infrastructure development activities. CF has invested few amount of its funds in social infrastructure development as shown in results, 53.33% of RHHs are in this favor (Table-5.21), which has provided opportunities for poor to uplift their socio-economic condition. Seven women groups have formed to empower and activate to the other social activities. From the study, it is found that CFUG has developed trails, temples, support to school building and drinking water, volunteer teacher in local school, etc. Poor people are working as wage labor in social development activities. Such kind of

activities shows that women, poor and dalit people became aware to develop their own village.

3.2 Social Relationship

Most of the researches have shown that male and rich are dominating women and poor. High caste people from time immemorial suppress Dalits. So, women's relationship with other members of their family differs from men. Similarly, relationship of poor and dalits is significantly different from rich elites and high caste people in society. From the study, it is found that their relationship to other members is increasing day by day because 70% respondents had positive attitude in this case.

CFUG is working in well-established way conducting various trainings and awareness programme. Such as tailoring trainings, sweater-weaving training, forest management training, etc. But beneficiaries were mostly from medium and rich family.

4. Participation

From this study, it is found that 83.33% RHHs attended the general assembly (Table-5.26) and 80% RHHs felt necessity to participate in CFUG activities (Table-5.27). The data showed that they were encouraged to participate in CFUG activities. But participation of women, poor and dalit is nominal and so their voices seemed to not being heard properly. In the last 8 yrs., the local elites and rich people occupied most of the key positions. Only general positions were distributed to women, poor and dalit.

It is well known that general assembly of the CFUG is the common platform for the discussion on burning issues and to make decision. Assembly prepares constitution and OP, defines and recognizes use-rights of users, decides all kinds of rules for forest management including protection, harvesting, benefit sharing and mobilization of fund for rural development works.

5. Ecological Awareness and Ownership Feelings

Due to increasing ecological awareness and ownership feelings of the user group towards the forest resources, both plants and animals are increased. Consciousness to forest resources was only developed after the community forestry programme. Operational Plan and Constitution prepared themselves to manage group and forest helps feel own responsibility to conserve forest. Prohibition of hunting, forest fire

control, protection, protection for encroachment, etc is helping to create favorable microclimate for the diverse types of flora and fauna.

6. Access to Resources/ Benefit-Sharing

General Assembly decision, 2062 and Operational Plan show that each and every user has equal rights for protection, management and utilization of forest products. Even activities done for poor and women groups are appreciable since seven groups acting for forest protection, weeding, cleaning and such activities earned total amount NRs.68831.80 through saving program given previously only NRs. 21000.00 to them by CFUG fund. Nevertheless, study showed that women and dalit have access to the resources, but control done by medium and rich HHs as only 27.27% women and 9.09% dalit of total members of user committee lead in the CFUGC supported by Kanel et al (2002).

There is no women and dalit found in resin collection sub-committee. Resin may be the major income resource for CFUG as technician has suggested that 50-60 thousands kg rosin can be collected from pinus species found in CF (Minutes of general Assembly, 2062/07/05).

7. Empowerment

Minimum involvement of women and dalit in leadership and decision-making process showed that there is need of empowerment for women and marginalized sections of society. 60% female and 46.67% male poor have negative attitude for encouragement from CF in other social activities depicts that empowerment is required to improve the socio-economic condition of women, poor and dalit. There is great potentiality for empowering the women through women groups' sub-committee of different toles. Many more groups can be formed not only for women, but also for dalit and extremely poor to implement programs with the objectives of uplifting socio-economic condition of women, poor and dalit.

8. Poverty Reduction

CFUG is the grass root or rural level unit of Community Forestry program (CFP). CFP can be seen as the vehicle of poverty reduction. CFUG has no doubt managed the accessible forest resources from where they could get fodder, fuel wood, leaf-litter, NTFPs and timber. They could earn more money to the CFUG by selling forest products after fulfilling subsistence needs.

In the studied CFUG, major source of fund is the sale of timber and fuel wood followed by resin royalty, membership renewal fees and penalty. One volunteer teacher has been employed. Income from different sources sums to NRs. 77852.46 and current and bank balance sums to NRs.45229.96 has been left remained expending on different activities done in the fiscal year, 2061/062. The CF provides the temporary wages at the time of timber extraction, lumbering and sowing timber. Such kinds of activities provide the opportunity to poor people.

Though there is enough community area (801.50 ha) for 192 HHs and so many more opportunities to conduct IGAs, but no any such kinds of programs have been conducted. Most of the poor people are agreed with the statement " CF can uplift the socio-economic condition of rural poor." But nothing has been run for poor and dalit yet. Women have got little bit support to saving program, which may not contribute enough to poverty reduction.

CHAPTER- SIX

CONCLUSION AND RECOMMENDATION

6.1 conclusions

From this study conducted in Kalika Chandika CFUG, the majority of users were found to be working as wage labor. Percentage of Magar is high in CFUG. Similarly, majority of users having just primary level education that is not satisfactory for attempting any higher level decision- making process such as rights, responsibility and policy as well. Women involvement is higher in forest products' collection than men. Cow/ bullock rearing practices are increasing after CF formation in the study area, whereas goats and buffaloes rearing are decreasing. Food sufficiency of the poor has increased to some extent due to their involvement in driving, local business in their furnace, city labor, etc.

Contribution of CFUG is seen high in its administration expenditures followed by social welfare (users' welfare) and then community forest development and almost half of the CF fund remained unutilized. The poor and dalit fulfill their subsistence needs of forest products, which show that the users dependency on forest is high and they have no more such alternatives. CF couldn't have contributed to uplift their economic condition as existed before CF because there are no NTFPs inclusion in CF and no loan (said 76.67% respondents) and no support (said 83.33% respondents) for IGAs provided by CFUG. It reveals that the contribution of CFUG is seen not much satisfactory to fulfill the basic needs (i.e., food, settlement and clothes) which shows extra activities should be needed for further broadening in this arena.

As CFUG has allocated some portion of its budget for women skill development trainings and supported previously for saving program, CFUG is seen to be in sprouting stage for economic upliftment for mainly women.

Socially, women, poor and dalit were found to have been encouraging and somewhat empowered overtime, which is in lieu of various programs conducted by government and different agencies for local development after democracy. As 76.67% respondents had positive attitude for decision-making by elite members, it can be concluded that women, poor and dalit have lagged behind with respect to equity, leadership and decision-making process and automatically discrimination of benefit sharing accrues.

In Short, from this study, CF couldn't have contributed to uplift the socio-economic condition of women, poor and dalit, but it seemed to be in sprouting stage for the socio-economic upliftment viewpoint.

6.2 Recommendation

Some major findings and observations made during the study and research lead to the following recommendations and possible actions for the sustainable betterment of CF addressing targeted groups. So, some recommendations for CFUG and concerned agencies are outlined below to consider, which will contribute to them in future.

1. CFUG Level

) It is required to represent the leadership of women, poor and dalit in CFUGC on the equity basis.

Ñ Community Welfare Activities should be conducted without marginalizing women, poor and dalit.

Ñ Human Resource Development Program such as skill development trainings (tailoring, bet-bans, painting, bee-keeping, etc), study tour, etc should be launched to increase the skill and knowledge, which helps earn money involving them in various activities.

Ñ Infrastructure Development suited to the needs of poor and dalit people should be encouraged related to the sanitation, drinking water, health care, trail improvement, etc.

Ñ It is required to focus on the principle of multiple products management system in CF changing the present traditional system of management.

Ñ The equity in the benefit sharing, product distribution and participation should be encouraged.

Ñ Informal Adult Literacy and awareness programs should be conducted to aware about their rights and responsibilities.

Ñ Integrated Approach and Multiple protections are crucial needs to the CF management. So, emphasis should be given to the cultivation of NTFPs to be done in

CF and private land, integration with other sectors, i.e., agriculture, livestock husbandry, irrigation, etc.

Ñ Loan from CF fund should be prioritized to the poor and dalit at low and no interest for IGAs such as bicycle repairing, sewing machine distribution, bee-keeping and other programs at micro-level.

Ñ Agro-forestry in private and leasehold forestry in public land should be encouraged.

Ñ To build trust, ownership, confidence and empower the users mainly women, poor and dalit groups in fund utilization and benefit-sharing process, the CFUG should be encouraged in participatory and self monitoring and evaluation of their fund allocation, cost and benefit-sharing through public auditing.

Ñ Income from Rosin collection and forest product sale should be utilized optimally for poor and dalit.

As rural women hesitate to participate in community development activities, gender sensitization program should be conducted.

As the study shows that women are major collectors of forest products, they can identify, manage and utilize the FPs and so women should be empowered and participated from planning to implementation stage providing varieties of trainings and literacy program.

CFUG should mobilize the trained women to motivate other rural poor women.

Linkage and co-ordination with other CFUGs and concerned offices should be established properly.

District Level

Ñ Regular monitoring and evaluation should be conducted.

Technical advice from time to time regarding women, poor and dalit along with sustainable forest management should be provided.

As CFUG has not sufficient budget, DFO and other concerned organizations should conduct varieties of trainings to uplift the living standards of CFUG and to empower the women, poor and dalit.

Current rules and regulations should be communicated to the CFUGs timely.

Women should be prioritized and involved in various programs launched by District Level Offices.

Policy Level

The current forest policy document MPFS, 1988 should be reviewed

Clear-cut progressive forest policy should be formulated to secure social equity, economic efficiency and ecologically sustainability in CF and to empower women, poor and dalit groups for the participation in decision-making, leadership role and benefit-sharing system.

Appendix-V

Ranking of Benefits from CF

S.N.	Statement	1	2	3	4	5	Mean	Rank
1	Supply to forest products in daily needs	16	12	1	1	0	1.566	
2	Supply to family income	2	2	6	5	15	3.966	
3	Agricultural crop production	6	4	4	6	10	3.33	
4	Social development	4	8	10	7	1	2.766	
5	Environment development	2	4	9	11	4	3.36	

REFERENCE

- Agrawal, B.** (2001). Participatory Exclusions, Community Forestry and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development*-29 (1).pp 1623-1648.
- Agrawal, D.** (1994). *A Field of One's own: Gender and Land Rights in South Asia*, Cambridge University Press.
- Bajracharya, B.** (1994). Gender Issues in Nepali Agriculture: A Review. *HMG, Ministry of Agriculture/ Winrock International, Research Series No. 25*, Kathmandu, Nepal.
- Banjade, M. R., H. Luitel and H. R. Neupane** (2004). An Action and Learning Process for Social Inclusion in Community Forestry. *25 Years of Community Forestry*, Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August 2004, Kathmandu, Nepal.
- Bhatia, A.** (1999). *Participatory Forest Management Implications for Policy and Human Resources Development in the Hindu-Kush Himalayas. Vol-V*, International Center for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal.
- Bhatta, B.** (2002). *Access and Equity Issues in Terai Community Forestry Program*. Winrock International, Nepal.
- Bhattia, A. and S. Karki** (1999). *Participatory Forest Management: Implication for Policy and Human Resource Development in the Hind-Kush Himalayas*. Workshop Proceedings Vol.-1, ICIMOD, Nepal.
- BISEP-ST** (2005). Aadharbhut Tthyank Pratibedan, 2062 (Basic Statistics Report, 2062 BS). *BISEP-ST/ Technical Paper-07*, Regional Support Unit, Hetauda, Nepal.
- Bista, D. B.** (1980). *People of Nepal*. 4th ed, Ratna Pustak Bhandar, Kathmandu.
- Campbell, J. G., R. J. Shrestha and F. Euphart** (1987). Socio-economic Factors in Traditional Forest Use and Management: Management Results from a study of Community Forest Management in Nepal. *Banko Jankari-1(4)*, pp 45-54.
- CARE Nepal** (1996). *DAG Strategy Paper*, CARE Nepal, Kathmandu, Nepal.
- Carney, D.** (1998). Implementing the Sustainable Rural Livelihoods Approach. *In Sustainable Rural Livelihood What Contribution can we make?* (ed). Paper presented

at Department for International Development's Natural Resources Advisors' Conference.

Chadwick, M. T., J. A. Seeley and R. S. Serchan (1995). Preliminary Comment on Wealth Ranking Exercise Performed with FUG from three Geographical Area. *Banko Jankari- Vol. 5(1)*.

Chamber, R. (1983). *Rural Development Putting the last first*, Longman Publication, UK.

Chapagain, D. P., K. Kanel and D. C. Regmi (1999). *Current Policy and Legal Context of Forestry with reference to Community Forestry Programme in Nepal*. SEEP/PORT/ Pro-public Publication.

Chhetri, R. B., H. Sigdel and Y. B. Malla (2001). Nepal: *Country Profile prepared for the Forum on "The Role of Forestry in Poverty Alleviation."* FAO, Rome.

Chitambar, J.B. (1977). *Textbook of Introductory of Rural Sociology, 2nd ed.*, Weily Easter Ltd., New Delhi, India.

Dahal, Y.N. (2005). Digo Ban Byabsthanpanko Sandarbhma Laingik Moolprabahikaran (Gender Streamlization for Sustainable Forest Management). *Kalpabriksha, Kartik 2062 BS.No.173*, pp 6.

DDC, Makawanpur(2005). Jillako Sankshipta Parichaya.

DFO, Makawanpur (2005). Jilla Ban Karyalayako Ek Parichaya.

Ellis- Jone, J. (1999). Poverty Land Care and Sustainable Livelihood in Hillside and Mountain Region, *IUCN Publication of MRAD- Vol. 19(3)*.

FAO (1978). *Forestry for Local Community Development (Forestry Paper)*. FAO, Rome.

Gautam, K. H. (1997). Forestry for the Sustainable Rural Development in Nepal: Community Forestry beyond the Subsistence horizon towards the twenty first century. *Paper presented at Eleventh World Forestry Congress, 13-22 October 1997, Atlanta, Turkey*.

Gautam, S. (2003). *Assessment of User's Socio-Economic Upliftment through Community Forestry: A case study of Ashok CFUG, Hatiya-2, Rajdevi, Makawanpur District*. B. Sc. Forestry thesis, TU, IOF, Hetauda Campus, Hetauda.

- Gentle, P.** (2001). *The Flow and Distribution of Community Forestry Benefits: A case study from Pyuthan District, Nepal*. M. Sc. Forestry thesis submitted to University of Canterbury, Christchurch, New Zealand.
- Ghimire, K. B.** (1992). *Form or Farm ? The Politics and Poverty and Land Hunger in Nepal*. Oxford University, Delhi, India.
- Gilmour, D. A. and Fisher, R.J.** (1996). *Villagers, Forests and Foresters. The Philosophy, Process and Practice of Community Forestry in Nepal*. Sahayogi Press Pvt.Ltd. Kathmandu, Nepal.
- Gimire, K.** (2000). *Financial Management System of Community Forestry User Groups: A case study from Banke, Bardia and Dang Districts, Nepal*. Thesis submitted to Indian Institute of Forest Management, Bhopal.
- Graner, F.** (1997). *The Political Ecology of Community Forestry in Nepal*, Saarbrukhen, Verlagfur.
- Gurung, H.** (2005). *Social Demography of Nepal, Census 2001*. Himal Books, Patan Dhoka, Lalitpur, Nepal.
- HMGN** (1988). *Master Plan for Forestry Sector Nepal*. Ministry of Forest and Soil Conservation, Kathmandu, Nepal.
- HMGN** (1993). *Forest Act, 1993*. Kathmandu, Nepal. Ministry of Law and Justice. His Majesty's Government of Nepal.
- HMGN** (1995). *Forest Regulation, 1995*. Kathmandu, Nepal, Ministry of Law and Justice. His Majesty's Government of Nepal.
- HMGN** (2003). *Ninth Five- Year Plan (1997-2002)*. An unofficial Translation, National Planning Commission, Kathmandu, Nepal.
- HMGN** (2003). *Tenth Five- Year Plan (2002-2007)* An unofficial Translation, National Planning Commission, Kathmandu, Nepal
- Hobley, M.** (1996). *Participatory Forestry: The Process of Change in India and Nepal*. Rural Development Forestry Guide-3 Overseas Development Institute, London.

Hood, S., L. Rasaily and R. J. Fisher (1998). Community Forestry: A Programme or Process ? The interface between users and government. *RECOFTC Report no. 16*, Bangkok, pp 165-174.

IBRD (1991). *Poverty and Incomes*. The World Bank, Washington D.C.

Jackson, B. and A. Ingels (1995). Participatory Techniques for CF: *A Field Manual*. *Technical Note 5/95*.

Kalika Chandika CFUG (2003). *Community Forestry Constitution and Operational Plan*, Bhainse-2 & 3, Makawanpur District, Nepal.

Kandel, B. R. and R. Subedi (2004). Pro-poor Community Forestry: Some Initiatives from the Field. *25 Years of Community Forestry*. Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August, 2004, Kathmandu, Nepal.

Kandel, R. C. (2003). *Impact Evaluation of Community Forestry on Rural Poor People: A case study of Baghmara CFUG, Chitwan, District, Nepal*. B.Sc. Forestry thesis, TU, IOF, Hetauda Campus, Hetauda.

Kanel, K. R. and D. R. Niraula (2004). Can Rural Livelihood be Improved in Nepal through Community Forestry? *Banko Jankari- 14(1)*

Kanel, K. R., J. Starz and A. R. Sharma (2004). Income Distribution and Social Well-being in Community Forestry: Issue, Experience and Strategy. *25 Years of Community Forestry*. Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August, 2004, Kathmandu, Nepal.

Kanel, K. R., M. B. Karmacharya and B. K. Karna (2002). Who Benefits from Institutional Reform: Case studies from four Community Forest ? *In Human-institutional Natural Resources Interactions(ed)*. Institute of Forestry, Pokhara, Nepal.

Kothari, C. R. (1990). *Research Methodology, Methods and Materials*, New Delhi, Wiswa Prakashan.

Kunwar, R. M.(2002). *Participation and Benefits to People in CF: A case study from Makawanpur District, Central Nepal*.

Laughhead, S., R. Shrestha and K. D. (1994). *Social Development Consideration in CF*, Project Working Paper No.2, NUKCFP, Kathmandu, Nepal.

- Maharjan, M. R.** (1998). *The Flow and Distribution of Costs and Benefits in the Chuliban CF, Dhankuta District, Nepal*. Rural Development Forestry Network Paper 23rd ed. ODI, London.
- Maharjan, M.R.** (2003). Policy Implications for Equitable Costs and Benefit-Sharing in Forestry in Nepal. *Banko Jankari- vol. 13(1)*, pp15-20.
- Malla, Y. B.** (2001). Changing Policies and the Persistence of Patron-client Relation in Nepal: *Stakeholders' response to changes in Forest Policies and Environmental History, Vol.6 (2)*, pp 287-309.
- Mehta, J.N. and S. R. Kellert** (1998). Local Attitudes towards Community Based Conservation Policy and Programmes in Nepal: A case study in the Makalu Barun Conservation Area. *Environmental Conservation-25 (4)*.
- Nepali, P. B.** (2005). Poverty and Dalit (Nepali Translation). *Jan Utthan*, September 2005, No.3, pp 32-33.
- NUKCFP** (1999). A Synopsis Report and Publication of G/NUKCFP/52, Nepal-UK Community Forestry Project.
- Ojha, P. R. and H. N. Subedi** (2004). Community Forestry and Safer Motherhoods: An Example of Inter-sectoral Linkages in LFP Dhaulagiri Hills. *25 Years of Community Forestry*. Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August, 2004, Kathmandu, Nepal.
- 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.
- Pant, Y. P. and S. C. Jain** (1980). *Rural Problem and Rural Development in Nepal*. Development publication, New Delhi, India.
- Paudel, D.** (1999). *Distributional Impacts of Community Forestry Programs on Different Social Groups of People in the Mid-hills of Nepal*. A dissertation paper submitted to the Department of Geography, University of Cambridge for the partial fulfillment of M. Phil. in Environment and Development course.
- Paudel, M. R.** (2002). *An Assessment of Community Forestry on Sustainable Rural Livelihood*. A thesis submitted to Institute of Forestry for the partial fulfillment of B. Sc. Degree in Forestry.

- Pokharel, B. K. and Tambahamphe, N.** (1999). *Community Development Action*. A Synopsis Report and Publication of G/NUCFP/52, Nepal-UK Community Forestry Project.
- Pokharel, R. K.** (2000). Farm Practice to Policy Squatters from Forest Protection in Nepal: An Experience from Srijana CFUG, *Forest Trees and People No.42*, pp 31-35.
- Rai, B. and M. Buchy** (2004). Institutional Exclusion of Women in Community Forestry: Is Women-only Strategy a Right Answer? *25 Years of Community Forestry*. Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August 2004, Kathmandu, Nepal.
- Regmi, N. P.** (2003). *Assessment of the Contribution of Community Forestry on Poor and Disadvantage Group: A case study of Jyamire Kalika CFUG, Manhari-7, Makawanpur District*, B.Sc. Forestry thesis, TU, IOF, Hetauda Campus, Hetauda.
- Sah, B. P.** (2003). *Role of Community Forestry for the Improvement of Socio-economic Condition of User Group: A case study of Aaitabare Rani CFUG, Dhankuta Dhankuta Municipality-1, Hille*. B. Sc.Forestry thesis, TU, IOF, Hetauda Campus, Hetauda.
- Sharma, A.** (1999). *Glamour and Grips of Community Forestry*, a case study: Impact of Income Distribution in Badikhel, Lalitpur, M.Sc. Forestry Thesis, Wageningen Agriculture University, Netherland.
- Sharma, U.R.** (1993). Community Forestry: Some Conceptual Issues. *Banko Jankari-Vol.4(1)*.
- Shrestha, K.B. and R. B. Shrestha** (2002). Experiences of over 25 years in Community Forestry. *In Human-institutional Natural Resources Interactions (ed)*. Kanel, K. R., M. B. Karmacharya and B. K. Karna, Institute of Forestry, Pokhara, Nepal.
- Shrestha, R.** (2004). Women's Involvement in Community Forestry Programme. *25 Years of Community Forestry*, Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August, 2004, Kathmandu, Nepal.
- Shrestha, R. K.** (1995). Conflict in Chandane Jorkuwa, Gniwi and Bhankunda Community Forest. *Banko Jankari, Vol-5(3)*. PP 120-122. Kathmandu, Nepal, Forest Research and Survey Center.

- Singh, B. K.** (2004). Complementary Pro-poor Programme in Community and Leasehold Forestry. *25 Years of Community Forestry*. Proceedings of the Fourth National Workshop on Community Forestry, 4-6 August, 2004, Kathmandu, Nepal.
- Subedi, B. P., H. Ojha, K. Nicholson and S. Banargee** (2001). *Review of Community Forestry Based Forest Enterprises in Nepal: Causes, Consequences and Lessons on Summary*, June 2001, ANSAP and SNV, Kathmandu, Nepal.
- Tamrakar, S. M. and D. Nelson.** (1990). *Potential Community Forestry Land in Nepal (Part-2)*. Field Document No. 16, NEP/85/017. HMG/UNDP/FAO Community Forestry Development Project, Kathmandu, Nepal.
- Thapa, S., R. N. Shrestha and K. P. Yadav** (1998). *Socio-economic Aspects of the Follow up Forest Resource Assessment Study*, NUKCFP, Kathmandu, Nepal.
- Timsina, N. P.** (2001). Empowerment or Marginalization: A debate in Community Forestry in Nepal. *Journal of Forest and Livelihood-2* (1). Pp 27-33.
- Tiwari, S.** (2002). *Access, Exclusion and Equity in Community Forestry Management of Forests: An Analysis of the Status of Community Forestry in the Mid-hills of Nepal*. Winrock International, Kathmandu, Nepal.
- Tondon, V.** (2002). *Getting Women to Choose*. Internet: <http://www.mtnform.org/resources/library/tand02a.html>
- UNDP** (1998). *The Nepal Human Development Report*, 1998, UNDP, Nepal.
- Upadhyaya, A. (2003). *An Assessment of Social Equity in Community Forestry: A case study Diyale Danda CFUG, Godawari-5, Lalitpur District*. B. Sc. Forestry thesis, TU, IOF, Hetauda Campus, Hetauda.
- Wagle, T. C.** (2005). Not the Same Departure Point for Poverty and Dalit. *Jan Uthhan*, September 2005, No.3, pp16-18.
- Warner, K.** (2001). Decision-making within Community Forestry User Groups Emerging Issues in Community Forestry in Nepal.
- Winrock International** (2002). *Emerging Issues in Community Forestry in Nepal*. Forestry and Natural Resource Management, Kathmandu, Nepal.
- Yadav, B. D.** (1998). Impact of Community Forestry at Sabla of Tehrathum. *Banko Jankari-Vol. 8(1)*.

Appendix-1

Household Level Questionnaire

A] Basic Data

1] Name of Respondent: -

Date:-

a) Address:-Ward No.:.....Tole:-

.....

Male	Female
------	--------

b) sex:- c) Age:-

d) Education: -

e) Occupation: -

2] Family size/ Status: -

Total No.		1-15 yrs		16-40 yrs		41 & above	
M	F	M	F	M	F	M	F

3] Education: -

Illiterate No.		Primary (1-5 class)		Secondary (6-10 class)		Higher secondary (10-12)		Graduate	
M	F	M	F	M	F	F	M	F	M

4] Occupation: -

S.N.	Occupation	No	M	F	Cash earned	Remarks
1	Agriculture					
2	Business					
3	wage Labor					
4	Service					
5	Animal husbandry					
6	Outside Country					
7	Horticulture					
8	Others					
9						

5] Livestock Number: -

	Cow/bullock	Buffalo	Goat/sheep	Pig	Others
Before CF					
After CF					

6] Land holdings: - (in katha/Ropani)

Component	Khet	Bari	Private Forest	Phakho	Home garden (A/F)
Irrigated					
Non-irrigated					

7 Forest products' demand and supply

Items	Unit	Demand	Supply in Percentage				
			CF ₁	other CFs	NF	Private	Purchase
Timber/yr							
Fuel wood/day							
Tree fodder/day							
Ground gross/day							
Leaf litter/day							
Small poles/yr							
Thatch/yr							
Medicinal plant							
Others (specify)							

8] Food Sufficiency

	Before CF	After CF
Below 3 months.		
3-6 months		
6-9 months		
9-12 months		

9] Participation in committee meetings & assembly during last year

Types of meeting	No of members				Allocated days	Participated days		Remarks
	Male	Female	DAG	Total		Male	Female	
Committee meeting								

B] Information on Socio-economic Condition

1] Livestock quality is

- a) Improving b) Diminishing c) Stable

2] What is the main pattern for Livestock rearing?

- a) Grazing to stall feeding c) Grazing to Grazing
 b) Stall feeding to grazing d) Stall feeding to stall feeding

3] How much time is spent in collecting fodder, fuel wood and leaf litter?

In hr./day	Before CF	After CF
Fuel wood		
Fodder		
Leaf litter		

4] What are the main source of livestock management? Please, fill in the blank from given

below from (a) to (d).

Before CF..... After CF.....

- a) Community Forestry b) National Forest
 c) Private Forest d) Community Land

5] What do you do the milk produced by livestock ?

- a) Sale b) Drink c) None of a & b

6] How much money do you save contributed by CF formation?

	Before CF(Rs.)	After CF(Rs.)	Saved (Rs.)
Milking buffaloes/day			
Sheep & Goat keeping /year			
Fuel wood			
Fodder			
Leaf litter			
Timber			

7] Is your CF able to provide employment opportunity?

- a} Yes b} No c} Don't know

If yes, then for what activities ?

.....

8] Has the health of the poor improved?

- a} Yes b} No c} No change

9] Do you think CF can contribute in this regard (health)?

- a} Yes b} No c} Don't know

If yes, how ?

.....

10] Is housing pattern improving after CF formation?

- a} Yes b} No c} Stable

11] Are there any social/ community developmental works carried out by using fund from

forestry activities?

a} Yes b} No c} Don't know

If yes, what are these?

a) b) c) d)

.....

12] Are there any infrastructure developments in your community for social betterment ?

a} Yes b} No c} Don't know

If yes, what are they

?.....

13] Are you being discriminated in getting benefit from CF ?

a} yes b} No c} Don't know

If yes, why ?

.....

14] Are there any increase in supply situation of forest products after CF formation?

a} Yes b} No c} Don't know

15] Are there any changes in selling forest products after CF formation ?

a} Yes b} No c} Don't know

Products'

More	Less
------	------

 Supply

16] Do you go to FUG Assembly ?

a} Yes b}No c} Don't know

17] Did you have freedom in decision making before CF ?

a} Yes b} No c} Don't know

18] Do you have freedom in decision making after CF formation ?

a} Yes b} No c} Don't know

19] What is your role in decision making for CF management after CF formation ?

a} Active b}Passive c} Medium

20] Do CF activities encourage you to involve in other social works ?

a} Yes b} No c} Don't know

If yes, what are they?

.....

21] In your opinion, is it necessary to participate all member including women, poor and

dalit in CF activities?

Yes	
No	

22] If yes, why?

Women	
Poor	
Dalit	

23] Did you learn any new skill/ knowledge that other have acquired after CF?

a} Yes b}No c} Don't know

If yes, what are they?

.....

24] Is the relationship among user group members very good?

	Before CF	After CF
Yes		
No		

25] Is relationship with the forest office, users' group and other offices very good?

	Before CF	After CF
Yes		
No		

26] Are conflicts among users after CF formation are

- a) Increasing b) Decreasing c) No change

27] May CF contribute in the social development?

- a) Agree b) Disagree c) Neutral

28] In which areas, do you think CF has supported (contributed)?

	1	2	3	4	5
Supply of FPs in daily need					
Support to family income					
Agricultural crop production					
Social development					
Environment development					

29] Can CF improve the socio-economic condition of women, poor and DAGs?

a} Agree b} Disagree c} Neutral

30] Have you started any income generating activities (IGA) regarding the CF development program?

a} Yes b} No c} Don't know

If yes, what are they?

.....

31] Have you included the NTFPs in CF?

a} Yes b} No c} Don't know

If yes, which NTFPs (Non-timber Forest Products) are suitable for your CF ?

a}.....b}.....c}.....
d}.....e}f}

32] What types of programs have been conducted by your FUG for women, poor and DAGs?

	Programs / Activities
Women	
Poor	
Dalit	

33] What is the CF products distribution system ?

a}Equal basis b}Equity basis c} As per requirement
 d} Auction e} Only for social custom f} for disaster as subsidy

34] Who is generally involved in CF product collection?

- a} Women b} Men c} Children

35] Do forest products brought from your CF meet your requirement? If yes, which and if no

Which?

.....

36] Who takes the leadership for the above mentioned development activities ?

- a} CFUG member b} Elite users c } Others

37] Have you borrowed money from CF for IGAs ?

- a} Yes b} No

At what interest rate and how much ? a)..... b)

.....

38] Do you feel production/fertility increase due to protection of CF

- a} Yes b} No c} No change

39] Are any trainings / workshop conducted by your CFUG for women, Poor and DAGs?

- a} Yes b} No c}Don't know

If yes, what types of trainings and workshop?

	Trainings / workshop
Women	
Poor	
Dalit	

40] After CF formation, the natural calamities like landslides, flood, heavy rain, etc are

- a) Increasing b) Decreasing c) No change

41] Have you constructed furniture after CF formation ?

- a) Yes b) No

42] Did you or your HH members attend any of the following events ?

S.N.	Events	Participation	
		Yes	No
1	Meeting when constitution was finalized		
2	Meeting when committee was formed		
3	Meeting when OP was finalized		
4	Last meeting when distribution of forest product was decided		

43] Do you think CF can help in the development of physical capital?

- a) Yes b) No c) Don't know

44] Where is the fund utilized?

- a) Community development b) Forest protection
 c) Forest development d) IGAs

45] Do you agree with the way of fund utilization ?

- a) Yes b) No c) Don't know

If yes, why?

.....

46] Do you have anything to say ? If yes, please explain.

.....

(Thank you for your genuine information.....)

Appendix-II

Checklist for Discussion with Executive Members

Participants: Users Committee Members

Group:

Time:

Method: Group Discussion

Materials:

1. Identify progress on:

- a. Distribution, Sale of forest products
- b. Income and employment generation
- c. Collection and utilization of CF fund
- d. Trainings and employment
- e. Others

2. Identify progress on:
 - a. Forest protection
 - b. Harvesting and distribution of products
 - c. Fund collection and utilization
 - d. Developing physical capital
 - e. Decision making (i.e., role of committee, assembling etc.)
3. Identify problems perceived by committee members.

Appendix-III

Checklist for Key Informant Survey/ Focus Group Discussion

1. Are you involved in CF management Committee? What benefits do you feel?
2. Are you satisfied with the way of CF management?
3. What types of benefits have you perceived from CF before and after handed over CF?
4. How CF is beneficial to you than the past system of management?
5. Have any activities conducted by CF for poor and dalits?
6. As you know, what activities conducted by CF for particularly women to improve their socio-economic discrimination?
7. What are the main cause of decreasing / increasing livestock numbers?
8. Mention your opinion in poverty reduction through CF management?
9. Do you think forest is improving or not? Give reason.
10. What are the sources of income in CFUG fund? Is this income posted in the Bank Account?
11. What are NGOs/ INGOs working in your village? Please, note name only.
12. What are the programs mainly launched by NGO/ INGOs?
13. What are the roles of Women, Poor and Dalit in decision-making process for lowering conflicts?
14. Has CF helped to eliminate social bias like castes, gender, etc.?
- 15] To what extent CF has contributed to enhance social democratization and empowers in leadership of women, poor and DAGs in CFUGC ?
- 16] Has CF helped to eliminate social and bias like caste and gender ?

Appendix-IV

Checklist for Observation

Observation on Meetings

Decision on participation of dalit and poor.

Participation of women

Discussion and information sharing process

Decision-making process

Minuting / recording process

Observation on Home or homestead

Energy sources, i.e, type, quality, quantity, etc.

Numbers/ types of livestock farming pattern, i.e, stall-feeding, grazing.

Observation on Forest

Existing forest situation

Forest development works, i.e., nursery establishment, plantation, etc.

Distribution of forest products (How?)

Participation of Women, Poor and Dalit for forest management.

Observation on other places

Sources of fuel wood and timber (National Forest, CF, Private Forest)

General opinion about CF.

What suggestion do you want to give for better works ?

Appendix-V

Preference Ranking of Benefits from CF

S.N.	Statement	1	2	3	4	5	Mean	Rank
1	Supply to forest products for daily needs	16	12	1	1	0	1.566	I
2	Supply to family income	2	2	6	5	15	3.966	V
3	Agricultural Crop production	6	4	4	6	10	3.33	III
4	Social development	4	8	10	7	1	2.766	II
5	Environmental development	2	4	9	11	4	3.36	IV

Appendix-VI

Pair-wise Ranking

Table-1: Activities to utilize the Fund

	CF	FP	IGAs	SD	FSP	Average total (Total / 30)	Rank
CF						5	III
FP						2	IV
IGAs						7	I
SD						5.5	II
FSP						1.5	V

Note-

CF: Community Forestry Development

FP: Forest Protection

IGAs: Income Generation Activities

SD: Social Development (Social Welfare)

FSP: Fund Saving Programs

Table-2: Basic Needs for Respondents

	LL	FW	STP	SSC	LM	NTFPs	GR	GR	Average total (Total / 30)	Rank
LL									5.5	V
FW									14	I
STP									6	IV
SSC									9.5	III
LM									4	VI
NTFPs									11.5	II
GR									2	VIII
SB									3	VII

Note-

LL: Leaf Litter

FW: Fuel wood

STP: Small Timber at low price

SSC: Students' Scholarships for Children

LM: Loan at minimum or no interest

NTFP: Non-Timber Forest Products cultivation

GR: Goat Rearing

SB: Support to Biogas