

**COMMUNITY FORESTRY MANAGEMENT AND PARTICIPATION
OF RURAL WOMEN IN NEPAL: A CASE STUDY OF
BHUMIRAJMANDAU VDC OF DOTI DISTRICT
A Thesis**

**Submitted to
Central Department of Rural Development
Faculty of Humanities and Social Sciences
Tribhuvan University**

**In the partial fulfillment of the requirement of Master's Degrees in
Arts in Rural Development**

Submitted by

Nabin Prasad Bhatta

**Regd. No. 5-1-33-782-97
Exam Roll No. 3879
Central Department of Rural Development
Tribhuvan University
Kirtipur, Katmandu
Nepal
January, 2007**

LETTER OF RECOMMENDATION

It is to certify that **Nabin Prasad Bhatta** has completed the thesis entitled **Community Forestry Management and Participation of Rural Women in Nepal: A Case Study of Bhumirajmandau VDC of Doti District** under my supervision for partial fulfillment of the requirements of Master's Degree of Arts in Rural Development. This thesis is recommended for its final evaluation and approval.

Tulasi Sharan Sigdal

(Supervisor)

Central Department of Rural Development

Tribhuvan University

Kirtipur, Kathmandu

Date:

LETTER OF APPROVAL

This is to certify that the thesis submitted by **Nabin Prasad Bhatta** entitled **Community Forestry Management and Participation of Rural Women in Nepal: A Case Study of Bhumirajmandau VDC of Doti District** has been approved in the prescribed format of this Department Faculty of Humanities and Social Sciences. This thesis has been approved by the undersigned members of the committee.

Thesis Evaluation Committee:

Prof. Dr. Pradeep Kumar Khadka
Head of the Department

External

Mr. Tulasi Sharan Sigdel
Supervisor

Date:

ACKNOWLEDGEMENT

The problem of deforestation is increasing day by day in Nepal. So, to overcome this problem and to save the forest, people should organize by themselves and manage so as to stop the deforestation. In such a situation community forestry is regarded as the most successful forestry practice in Nepal. In the rural area of Nepal, most of the forests are being destroyed due to the unknown importance of the forest for the inhabitants.

It is worthy to mention here that the inspiration to carry out this research came to me when I visited the rural areas of Nepal. In fact, during that time, I have personally realized that the life of the rural people is totally based on the forestry sector and most of the forestry related activities are performed by the rural poor women. And It is realized that women, therefore, should be participated in community forestry also. So, the topic has been chosen so as to show and analyze the community forestry practices by the participation of rural women in Nepal.

It is my great privilege to complete this project work under the supervision of Mr. Tulasi Sharan Sigdel, lecturer of Central Department of Rural Development. I am indebted to my teacher without his guidance, suggestions and full cooperations, it would not have been possible for me to complete this work.

I am very much grateful to Bhumirajmandau VDC, Doti DDC and all its staffs especially Mr. Ganesh Joshi (Secretary of VDC) for flourishing me with necessary information and data needed for this study and their kind cooperation throughout my research work. Similarly, my sincere thanks also goes to

administration and all the teachers of Central Department of Rural Development for their valuable suggestions and kind cooperations. I am also very thankful to my brother Sagar Prasad Bhatta and sister Shanti Kumari Bhatta for their constant and regular support in data collection.

I am also thankful to the staffs of Central Library of T.U., who have helped me in many ways during the collection of information and reviewing the materials from library. I am also thankful to Mr. Madhav Prasad Bhatta and for assistance during typing this thesis. I am equally thankful to my friends Bibek, Ajit, Kishor, Pankaj, Rajiv for their help in the completion of this project work.

Finally, I would like to express my sincere gratitude to all the members of my family and relatives who were the sources of encouragement for me and inspired me emotionally for the completion of this project work.

Nabin Prasad Bhatta

Date:

TABLE OF CONTENTS

	Page No.
Title Page	
Letter of Recommendation	
Letter of Approval	
Acknowledgement	
Executive Summary	
Table of Contents	
List of Tables	
Abbreviations	
CHAPTER – 1: INTRODUCTION	1
1.1 General Background	1
1.2 Statement of the Problem	6
1.3 Objectives of the Study	8
1.4 Significance of the Study	8
1.5 Conceptual Framework	10
1.6 Limitations of the Study	12
1.7 Definition of Terminology	12
1.8 Organization of the Study	16
CHAPTER – 2: REVIEW OF LITERATURE	18
CHAPTER – 3: RESEARCH METHODOLOGY	52
3.1 Research Design	52
3.2 Rationale of the Section of Study topic and Study Area	52
3.3 Sampling Procedure	53
3.4 Nature and Sources of Data	54

3.4.1 Selection of the Key in Formation	54
3.5 Method of Data Collection/Constraints	55
3.5.1 Household Survey/Questionnaire	55
3.5.2 Discussion	55
3.5.3 Field Observation	56
3.5.4 Constraints in Data Collection	56
3.6 Method of Data Presentation and Analysis	57
CHAPTER – 4: INTRODUCTION OF STUDY AREA AND COMMUNITY	
FOREST DISTRIBUTION	58
4.1 Topography	59
4.2 Climate	59
4.2.1 Temperature and Precipitation	60
4.3 Drainage	61
4.4 Forests	61
4.5 Settlement	61
4.6 Pattern of Houses	61
4.7 Human Resources	62
4.8 Community Forest Distribution	63
4.8.1 Ward wise Distribution of Forests	65
4.8.2 NARMSAP Results	67
CHAPTER – 5: Data presentation and Analysis	68
5.1 Caste/ethnic Condition	68
5.1.1 Caste/ ethnic Condition of the Study Area	68
5.1.2 Caste/ ethnic Groups of the Respondents	69
Age	70
5.2.1 Distribution of Respondents According to Age	70
5.3 Occupation	71
5.3.1 Distribution of Respondents According to Occupation	71
5.4 Education	72

5.4.1 Educational Structure of the Study Area	72
5.4.2 Distribution of Respondents According to Education	72
5.5 Household Income	73
5.6 Livestock Situation	74
5.6.1 Respondents and Livestock Situation	74
5.6.2 Number of Livestock's and Household Average	75
5.7 Land Holding	75
5.8 Marital Status	76
5.9 Distribution of Respondents According to Family Size	77
5.10 Distribution of respondents According to Agricultural Production	78
5.11 Distribution of Respondents According to Food Sufficiency	79
5.12 Economy of the VDC	80
5.12.1 Agriculture	80
5.12.2 Land and Landholdings	81
5.12.3 Cropping System	82
5.12.4 Major types of Crops	82
5.12.5 Parma System and Labourers	83
5.12.6 Traditional Profession	84

CHAPTER – 6: PROTECTION AND MANAGEMENT OF COMMUNITY FOREST BY WOMEN 85

6.1 Historical Background of Forest Management and Protection	85
6.1.1 Respondent's Use for Cooking Food	86
6.2 Management and Protection System of Community Forest	86
6.3 Women's Participation in Community Forest Management	88
6.3.1 Definition of Participation	88
6.3.2 Ways of Increasing Participation	89
6.3.3 Levels of Participation	90
6.4 Women's Participation in Executive Committee	93
6.4.1 Aims of the Committees	94

6.5	Participation of Women in the Collection of Forest Products	95
6.6	Need and Sources of Forest Products	95
6.7	Institutional Process of Community Forests	97
6.7.1	Formation of Forest User Group	97
6.7.2	Formation of Forest User Committee	97
6.7.3	Forest Operational Plan	98
6.7.4	Forest Constitution	99
6.8	Participation in Community Forest Activities	100
6.8.1	Participation in Group Meeting	100
6.8.2	Frequency of participation	101
6.8.3	Obstacles in Participation	102
6.8.4	Factors Encouraging Participation	106
6.9	Feeling as CFUG Member	108
6.10	Opinion Towards Participation	110
6.11	Benefits from Community Forestry and Related Training	110
6.11.1	Benefits from Community Forestry	110
6.11.2	Benefits from Community Forestry Trainings	112
6.12	Marketing of Firewood	113
6.13	Past Vs. Present Community Forest	114
6.13.1	Difference Between Past and Present Community Forest	114
6.13.2	Problems of Forest Products	115
6.14	Impact of Community Forest	116
6.14.1	Positive Impacts	116
6.14.2	Negative Impacts	117

CHAPTER – 7: SUMMARY, CONCLUSION AND RECOMMENDATION

	119
7.1 Summary	119
7.2 Conclusions	122
7.3 Recommendations	123
BIBLIOGRAPHY	125
QUESTIONNAIRE	132

LIST OF TABLES

Table No. 3.1 Ward Wise Sample Size	54
Table No. 4.1 Temperature and Precipitation at Dipayal (Doti)	60
Table No. 4.2 Human Resources of the Study Area (6 years and above)	62
Table No. 4.3 VDC-wise Community Forest Distribution	63
No. 4.4 Women CFUG Distribution (VDC wise)	65
Table No. 4.5 Ward wise Distribution of Community Forests	66
Table No. 5.1 Caste/ ethnic Condition of the Study Area	68
Table No. 5.2 Caste/ethnic Groups of the Respondents	69
Table No. 5.3 Age Structure of the Sampled Population	70
Table No. 5.4 Occupational Status of the Respondents	71
Table No. 5.5 Education of the Study Area	72
Table No. 5.6 Education Status of the Respondents	72
Table No. 5.7 Distribution of Respondents According to Household Income	73
Table No. 5.8 Livestock Situation of the Sampled Households	74
Table No. 5.9 Number of Livestock	75
Table No. 5.10 Land Holding Size of the Sampled Households	75
Table No. 5.11 Marital Status of the Respondents	76
Table No. 5.12 Family Size of Respondents	77
Table No. 5.13 Agricultural Production of Respondents	78
Table No. 5.14 Approximate Agricultural Production of Different Crops (Annual)	79
Table No. 5.15 Food Sufficiency of Sampled Population	80
Table No. 5.16 Production Cycle of Different Crops	83
Table No. 6.1 Resources Used for Cooking Food by respondents	86
Table No. 6.2 Participation of Respondents in Community Forest Management	90

Table No. 6.3 Women's Participation in Executive Committee	93
Table No. 6.4 Sexwise Participation in Collection of Forest Products	95
Table No. 6.5 Sources of Forest Products	96
Table No. 6.6 Participation in Group Meeting	100
Table No. 6.7 Frequency of Participation	101
Table No. 6.8 Obstacles in Participation	102
Table No. 6.9 Factors Encouraging Participation	106
Table No. 6.10 Feeling as CFUG Member	108
Table No. 6.11 Reasons of Feeling Positive/ Neutral	109
Table No. 6.12 Present Condition of Community Forest as Compared to Starting Age	114

Table No. 6.13 Reduction in Problems of Forest Products

EXECUTIVE SUMMARY

Forest resources play an important role in the development of the human society. Forests are closely interrelated with daily livelihood as well as with religion and culture. Forest resources fulfill basic needs such as fodder for livestock, fuel wood, timber, non-wood products and raw materials for industrial sector. Deforestation is the greatest problem of forestry sector of Nepal. Since, most of the forest related activities are performed by women in rural Nepal, deforestation is directly affecting the livelihood of women of rural Nepal. So, it was realized that women should participate in forest conservation activities and hence the topic was chosen so as to show and analyze the community forestry management and participation of rural women in Nepal. The basic objectives behind the study were to analyze the institutional arrangement, to analyze the role of community forests, to examine the protection system of community forest by women's user's group and women's user's committee and so on. This study also showed the levels, extent and nature of women's participation in forest conservation. The analytical and descriptive research design was used in this study. The sampling procedures were stratified random sampling and judgemental sampling. Both primary and secondary data were used in the study. The methods of primary data collection were questionnaire survey, observation, focus group discussion and key information. Simple statistical tools like percentages were used for quantitative data analysis purpose. In the study VDC, it was found that 56.5 percent were illiterate, 99 percent were engaged in agriculture and 50.7 percent of inhabitants were chhetries. Most of the respondents used firewood for cooking food and most of them gave only moral support for forest resource management. There was the greater participation of women in community forestry executive committee. There was also found that it was the very positive impact community forestry in the livelihood of rural people, because it provided fuel wood, fodder, dry leaves,

building materials etc. to the local people. On the basis of the findings of the study, it has been suggested that awareness programs and trainings should be conducted, social forestry programs should be extended, encouraging factors should be maximized and obstacles should be minimized, special provision in operational plan for women's participation should be made, realistic plans should be implemented, there should be good coordination with DFO, consumption of firewood should be reduced, women's participation should be increased, educated people should be participated, economic assistance should be regular and at last but not least, development should be directed by gender equality rather than participation of women.

ABBREVIATIONS

ADB	:	Agriculture Development Bank
ARC	:	Agricultural Research Council
CBO	:	Community Based Organizations
CBS	:	Center Bureau of Statistics
CF	:	Community Forests
CFAD	:	Community Forest and Afforestation Division
CFD	:	Community Forest Division
CFDD	:	Community Forest Development Division
CFDP	:	Community Forest Development Program
CFFIC	:	Community Forest Field Implementation Components
CFUC	:	Community Forest User's Committee
CFUG	:	Community Forest User's Group
CPFC	:	Community and Private Forestry Components
DDC	:	District Development Committee
DFO	:	District Forest Office (r)
DFRS	:	Department for Forest Resources and Soil
DOF	:	Department of Forest
DOT	:	Doti
DU	:	Durgamandau
FAO	:	Food and Agricultural Organization
FM	:	Female Motivators
FUC	:	Forest User Committee
FUG	:	Forest User Group
GIS	:	Geographical Information System
GO	:	Governmental Organizations
ha	:	Hectare

HDR	:	Human Development Report
HH	:	Household
HMG/N	:	His Majesty Government/ Nepal
ICIMOD	:	International Centre for Integrated Mountain Development
IFAD	:	International Federation for Agricultural Development
INFO	:	Information
INGO	:	International Non-Governmental Organization
MFSC	:	Ministry of Forest and Soil Conservation
MOT	:	Ministry of Tourism
NARC	:	National Agricultural Research Council
NARMSAP	:	Natural Resource Management Sectoral Assistance Program
NBS	:	National Banking System
NGO	:	Non-Governmental Organization
NPC	:	National Planning Commission
NRM	:	Natural Resource Management
PC	:	Personal Computer
PF	:	Panchyat Forest
PPF	:	Panchayat Protected Forest
T.U.	:	Tribhuvan University
UC	:	User's Committee
UG	:	User Group
UN	:	United Nations
VDC	:	Village Development Committee
VP	:	Village Panchyat
WB	:	World Bank

CHAPTER – 1

INTRODUCTION

1.1 General Background

Nepal is a sovereign, independent, multilingual, landlocked, mountainous and multi climatic country. It is the country of non-stop festivals, divided ecologically into mountains, hills and terai and five development regions, fourteen zones and seventy five districts administratively. Nepal is the country of Himalayan, which has the highest mountain peak Mount Everest in the world as international recognition. It is located between 26°21' to 30°27' north latitude and 80°4' to 88°12' east longitude. The total area of Nepal is 147181 sq. km. and is divided into three regions Terai, Hills and Mountain covering 17%, 68% and 15% are respectively. The census of 2001 counted 7.3%, 44.3% and 48.4% of the population in the Mountain, Hills and the Terai regions respectively. Out of the total population, only 14.2 percent lives in urban areas and more than 85 percent people are still in rural areas. Therefore, Nepal is the country of villages where agriculture is the main occupation. More than 70 percent of the people depend on agriculture (CBS, 2003).

Integrating social goals (equity, justice and governance) and ecological sustainability has been central agenda of the contemporary environmental (natural resource management) and development discourses. Over the past two or three decades several policies, practices and institution have emerged all over the world in order to tackle these issues. However the continuing challenge is still to innovate the context specific, flexible and practical approaches of natural resource management that supports the livelihood of the local people while ensuring ecological sustainability.

Resources are generally defined as living phenomena, expensing and contracting in response to the human effort and behaviour. To a large extent they are human effort behaviour. creation. These resources are mainly of two types. They are subjective or internal resources and the objective or external resources. Resource does

not refer to a thing or substance but to a function that a thing or a substance may perform or to an operation in which it may take part namely the function or operation of attending a given and such as satisfying a want. There are two types of resources namely the human and natural resources, according to their origin. Natural resources can be divided into inexhaustible and exhaustible natural resources. Inexhaustible natural resource constitutes the immutable and measurable natural resources while the exhaustible natural resources contain maintainable and renewable, maintainable and non-renewable, non-maintainable and renewable, and non maintainable and non-renewable natural resources. According to some scholars, natural resource is divided into renewable, non-renewable and inexhaustible natural resources. The forests, here, are regarded as the renewable natural resources (Tamang, 1993).

The extensive utilization of the natural resources is the characteristics of the economy of the most of the under-developed countries which include lands and forests. The importancy and power of the forests can not be expressed in words. Forest accounts 3 times more area than cropland and 75 percent more area than grass land in the world. Forest one of the important renewable natural resource which can provide the sustained economic and social contribution for the development of the country. Forest resources play an important role in the development of the human society. Forests are closely interrelated with daily livelihood as well as with religion and culture. (CF Manual, 1995).

Forest resources fulfill basic needs such as fodder for livestock, fuel wood, timber, non-wood products and raw-materials for industrial sectors. They also help in protecting the natural calamities. It is very essential for the production of goods and services and inherent part of human environment and medium for recycling energy and wastes. Forests are the major source of energy and other basic requirements for rural population in Nepal (Bajracharya, 1983). People use forests not only for fuelwood, fodder, timber but also for minor forest products like fruits, medicine, honey etc. It is essential to protect soil against erosion, providing clean water, reducing landslides, floods, maintaining ecological balance, and preventing environmental degradation. (Kayastha, 1991).

Forests provide food, shelter and firewood etc to the people. Besides this, forests also play the enormous role to protect the top soil at the time of intense rainfall and prevent landslide. The direct annual revenue from this sector is comparatively low and conventional approach always tries to interrelate everything to the market and always seeks for benefit. Forest is also responsible for the intensity and amount of rainfall in respective area. But the natural forest are now only found far from settlements due to deforestation, which is the biggest problem for forests now a days. The decrease of the forest is in the alarming rate, the real situation is, however, worser than the figure suggests because many areas of the hills and terai region, now classified as forests, are in fact degraded waste land, with few or no standing tree and encroached by human. So, to remove this unbalanced situation, the communities are playing a significant role by preventing the forests themselves, which are known as community forests and the whole system is called community forestry.

Forest is not only essential for environmental stabilization but also for source of energy, fodder for animals and consumption materials and agriculture production. (Jha, 1992) Over the last three decades, the rapid increase in human and livestock population pressures on natural forest through expansion of agricultural and grazing lands and the cutting down of more trees to meet fuel, fodder and timber requirements (Poudel, 1993). Realizing the problems of forest degradation and the importance of people's participation, the government of Nepal took an initiative to establish community forestry. This policy recognized the importance of forests. Under this policy forest land could be owned and managed by village community for their own use. This change has been accompanied by the emergence of a new paradigm which can be described as a people centred as opposed to the earlier forest centred one. (Tamang, 1993). Community forestry as envisioned in Nepal is perhaps one of the most innovative and truly community oriented programme (Kinsley, 1993). To solve the increasing serious problem of deforestation, in 1957, the government nationalized all forests to prevent the destruction of national wealth to nationalize private forest for their adequate protection. (Regmi, 1978).

According to FAO report in 1983, the area of forest in Nepal was in the range of 4.5 to 5.5 million ha and in 1993, the area of forest in Nepal was 5.02 million ha which was 36.7 percent of the total land. (Ganguli, 1995). The forestry act of 1961 and its subsequent amendments and rules became the basic law governing forest administration in Nepal. Likewise the forestry act and forestry protection act (1967) attempted to establish strong state authority over forest. Although some provisions were made for transferring government forest area to VDC, yet for some year no steps were taken to implement these provisions. Through the forestry act 1979, recognizing the reality of forests as inseparable part of farming and farmers in 1970s, the community forest development programme introduced the concept of panchayat forests and panchayat protected forests with the purpose of handing the forests back to the people especially for its protection and management. To foster and establish local people and organizations respectively, decentralization regulations were introduced in 1980s in the management and development of panchayat forests and panchayat protected forests. Later, after 1990, concept and status of panchayat forest and panchayat protected forests changed and the term community forest was used to refer to any forest under user's group's protection and management (Chhetri and Pandey, 1992).

To fulfill the needs of daily life, the seventh national plan of the country emphasized to increase the maximum people's participation in the management of forest resources. (NPC, 1985). During the eighth five year plan period (1992-97), 5000 forest user's groups would be formed throughout the kingdom and 252000 hectare of forest and would be handed over to forest user's groups. (NPC, 1992). Ninth five year plan also stated community forestry as in similar fashion. The tenth plan stressed on poverty alleviation and thus, ministry of forest and soil conservation had also focused its policies and strategies on improving the poor, women and undeveloped groups through natural resource management in the form of forest act 1993, forestry regulation 1995 and community forestry operational guidelines 1995 which recognized forest users groups as legal entities and had legalized the process of handing over community forests to them. (NPC, 2003).

The community forestry is a small scale, village level forestry management practice where decisions and actions are often made on the basis of community and where the rural population participate in planning, establishment, management and harvesting of forest products and receive a major proportion of the socio-economic and ecological benefits from the forests. (Gilmour and Fisher, 1991). Community forestry is any situation, which intimately involves local people in a forestry activity embracing a spectrum of situation ranging from woodless areas which are short of wood and other forest products for local needs through the growing of the trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to generate income to the activities of the forest dwelling communities, that is why community forest was planned as encompassing activities by individual households, women and men farmers and other people as well as those involving a community as a whole. Community forestry visualize the symbiotic relationship between people and natural environment (FAO, 1978)

Community forestry is defined as the any forest under user's groups protection and management. It is a small scale, village level social forestry. The various plans of Nepal, especially the eighth plan plays a significant role for the concept and establishment of community forestry. Many research studies on forest resources and their protection and management have made it clear that indigenous system of forest management are widely distributed throughout Nepal and the user's groups are the units of forest management and decision makers in community forestry in Nepal. Now, the government and development practitioners have begun to take local people's participation as essential for the assessment, monitoring and evaluation of the forest management and practices in village communities in Nepal.

In community forestry, a direct link is found between community development and forest conservation. Policy of community forestry is to develop and manage forest resources through active participation of individuals and communities to meet their basic needs. The critical component of community forestry is people's participation especially women's participation. In past, there was limited people's participation, only

to the contribution of free labour for the consumption of nursery and plantation activities, but now a days, the active participation of local people is a must thing. (Barlett, 1992) And even now, women's participation is being underestimated not only in community forestry but also in every fields. In Nepal, women play a key rle in productive activities as users of forest resources and around 84 percent of the fuel wood is used to collect by women and girls from forests in Nepal. So, women's participation in forest's user's groups need to be encouraged. For centuries women have used the forest products. They collect fodder, firewood, leaf litter, and other non-wood products but their work is often unvalued. So, these realities forced us for the active participation of women in community forestry.

1.2 Statement of the Problem

The continued population growth is negatively affecting the land resources in the hills and mountains of Nepal. It has result in the expansion of farming into marginal cultivable land, with ensuring environmental degradation, soil erosion, loss of soil fertility and deterioration of forests and forest covers. (NARC-ADB-1991).

Even though forests are the largest natural resources in terms of area coverage resources in Nepal , the annual deforestation rate is estimated to be 1.7 percent. (DFRS, 1999). Forest products contribute about one half of the total digestible nutrients of the cattle. If the forest declination continues in the present rate, the fodder supply for the total digestible nutrients requirement will be in deficit for the as a whole by the year 2010 (HMG/ADB, 1988). The forest area has also declined due to continuous extraction of non-timber forest products. Forest area in the Terai region also declined due to the planned resettlements programs undertaken in the forests. About an equal area of the forest was occupied illegally by the migrants for the settlements during the same period. So, these are some of the problems seen in the forest resources of Nepal.

The forest is the main source for composting dung, fuel wood, fodder, leaf litter and timber for cooking and heating purposes and for the animals. It is also the source

of the non-timber products for making home and other basic infrastructures. The rural poor people heavily dependent in forest the source of energy due to having no alternative. Energy sources electricity is present for lighting purpose and not even for so. In past, because of growing population, forest lands were cleared for the purpose of land for crop production and even government and development practitioners did not succeed for the protection, management and sustainable use of the forest resources. Before the introduction of community and leasehold forestry in Nepal, there were various problems basically related to firewood, fodder, leaf litter etc and there was no authorized body to conserve the forest resource in the local level and hence people had to go too far to collect forest products.

Due to heavy deforestation rate in Nepal, government only can't solve this problem and hence community should itself wake up for the protection of forests. The major problem of the deforestation are lack of grass, fodder, firewood, fallen dried leaves, and timber etc and declining water resources and increasing soil erosion. Even though, people still promote the traditional attitude towards forests as a common property. In the context of Nepal, women are the primary users of the forest products and hence clearance of forest means more time and energy to be spent for forest products for rural women. In the other hand, women are backward in every aspects in Nepal due to gender inequality and hence they are facing a lot problems for their daily life span (Gurung, 1988). Various researches regarding people and their participation were carried out but a small number of researches regarding women and women's participation in forestry practices with reference to community forestry had been made.

1.3 Objectives of the Study

The general objectives of the study are to analyze women participation in community forestry management in Nepal.

The specific objectives of the study are pointed out as below:

1. To examine women's participation in activities of the user's committee and in the implementation of programs for forest resources.
2. To identify the constraints and the problems as well as the potentials related to community forestry and women's participation in forestry practices (community forestry)
3. To examine the protection system of community forests from women's user's group.

1.4 Significance of the Study

Community forests are the well established and accepted forestry programs, by the participation of local people in Nepal. To understand the perception and the relationships between user's groups, communities, committees and local people, the study plays a very significant role by the micro-level study of community forests with regard to women's participation. Government can formulate and implement such plans and programs which helps in the development of community forest programs in the village level. This research work is also helpful for those researchers and interested persons who are choosing this particular area for their research studies and programs. This study also analyze the participation and factors affecting participation of women in the forest user's committee and forest user's groups and their involvement in the forest resource management. The impact of community forests on rural development has not been adequately documented in Nepal. So, this study is also significant to analyse such impacts.

Women of Nepal are backwarded in every field. Although they constitute about one half of the total labour force, they are not being engaged in the productive fields due to absence of knowledge, skill and illiteracy. To encourage and empower women for their participation in the community forest activities and in user's groups and user's committee, is the another significance of this study.

There is widespread indigenous system of forest resource management and protection throughout Nepal, which has effectively arrested the rate of deforestation

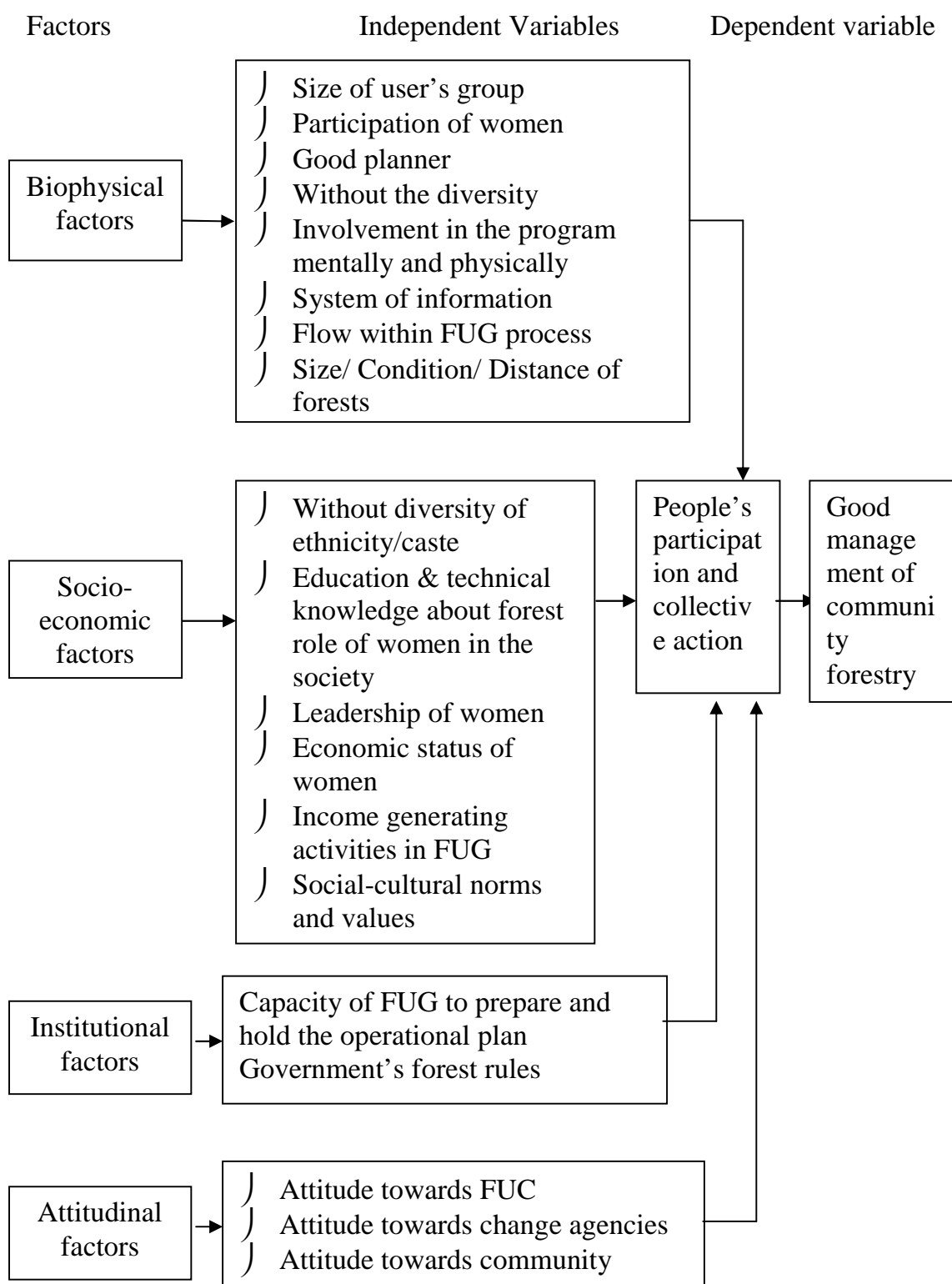
and ensuring sustainability. In past most of the studies were carried out in western and central Nepal only and rest of the country got less importance. Various researches regarding people's participation in community forestry were carried out but women's participation got less importance. In Nepal, the most of the community forest programs are centred in the Hills. Hence, a vast study of Hills and community forestry is of utmost importance for the success of the program. Various institutional mechanisms operating within community forestry activities and the impact of community forestry in Nepal should be explored and explained before any conclusions or generalization is made. This study focuses on institutional arrangement and socio-economic impact of community forests in rural Nepal. To empower and encourage the rural women, their participation should be studied clearly and thoroughly. To attract donors, NGOs, and INGOs, in the overall development of the community forestry in the study area by the participation of women, this study may play a crucial role.

1.5 Conceptual Framework

The concept of community forestry was originated due to people's participation in conservation and management of the forests. Hence this program is launched by government and succeeded only by the help of people or people's participation within the context of local culture, norms and values and their perception and knowledge. There are mainly four types of factors responsible for people's participation and forest management and are the evolutionary organs of theoretical framework. They are socio-economic, attitudinal, biophysical and institutional factors. Any types of program is successful only by people's participation, if they are treated for their common welfare, mentally, physically and economically. (K.C., 1995). The reason for the failure of any programme could be the negligence of planner about people's interests and their religious attitudes.

Diagrammatically, Conceptual Framework for this study can be described as below:

Fig. No. 1.1 Conceptual Framework



Source: Adapted and Modified from Chhetri and Pandey (1992)

1.6 Limitations of the Study

Social research can hardly be done without limitations. So, each and every research work has its own limitations. This study is mainly carried out for the partial fulfillment of the requirements of master's Degrees in Rural Development. So, the time and financial constraints are the main limitation of this study. Some of the other limitations of the study are pointed out as below:

1. This study is limited to the study area only. So, it might not be generalized and is not the same as the figures indicate but is the most accepted data of the study area.
2. Various secondary sources are used for supporting primary data but are not exactly followed and copied.
3. Self prepared questionnaire are used for primary data collection. So, thorough study of respondents and vast knowledge about topic is under limit.
4. This study is related to general management and protection systems of community forests.
5. This study does not include women's participation in terms of ethnicity, caste, education, age in the protection and management system and environmental impact etc.

1.7 Definition of Terminology

Forest protected, managed and utilized by local user's groups is called community forestry. For this study's context, it means a national forest handed over to a FUG for its conservation, development and utilization for collective benefit under forest act 1993 and forest by laws 1995.

Community forestry program

Total process by which the government makes community forest successful in several communities in Nepal.

People's Participation

Involvement of people in the substantive and procedural process for assessing, monitoring and evaluating the project and activities that affect and benefit them or involvement of intended beneficiaries in decision making process.

Sustainable Management

Not disturbing the balance between man and environment/An equilibrium or ecosystem concept that allows utilization of forest resource without compromising the needs of the future generation/process of conserving forests and fulfilling the demand of present generation and in this concept neither the forest nor the people are given extra priority but both are taken as the components of a whole.

Operational Plan

Formal document prepared and followed by the FUG in which overall functioning process is documented/work plan.

User Group

Group of individuals who use the products of the forest area.

User's committee

committee formed from the user group to protect, develop and utilize the forest groups.

Collective Action

Activities which are taken by the communities for the provision or management of collective goods or common property.

Collective Goods or Property

The goods or property utilized by the community as a whole.

User Group Assembly

Gathering of the people who are the direct beneficiaries of the forest to discuss or prepare a plan or to discuss forest management activities.

Forest Management

A set of technical and the social arrangement involved in the management of forest including the protection, harvesting and distribution of forest products.

Forest User Group

The total members of a social group or community that regularly uses a particular area of forest for grazing and collection of forest products and form themselves into a group to protect, manage and utilize that area of forest/A group which has fulfilled the organizational criteria set by the government act with an operational plan, i.e. formed under the condition required by the forest at 1993, and forest by laws 1995.

FUG Process

All the activities performed within an FUG and it begins with the formation of an FUG and continues until the FUG exists/The totality of the functioning system of an FUG.

Village Development Committee

A grass root level administrative and political unit consisting of the population divided into smaller sections containing more or less an equal number of the households and size of the area.

Ward

One of the nine small sections of a VDC.

Beneficiaries

Those people who directly benefit from project activities.

Upper Caste

Brahmin and Thakuri etc.

Middle Caste

Chhetri and Mongolians etc

Lower Caste

Damai, Dholi, Parki, Bhul etc

Timber

A forest product mostly used for the construction of houses and other construction processes (only matured trees used).

Fodder

Prime source of animal feeding, which includes green leaves and twigs of trees. The local people collect fodder from their own agricultural and forest. Fodder from tree is used in winter season when there is the scarcity of green grass

Production Technique

It has been divided into two parts like improved and traditional. Improved one refers to those respondents who have adopted the improved seed and traditional one refers to those respondents who have not adopted the improved seed.

Age

Adult (20 to 34 years), Middle (35 to 59 years) and old age (over 60 years)

Sex/Gender

Sex refers to biological division of human beings and gender refers to socio-economic and cultural power, prestige and performances of male and female.

Education

Illiterate (not able to read and write), literate (can read only) and educated (Able to read and write).

Live Stock Size

High (Above 8 live stocks), Middle (4-8 live stocks), Low (1-4 live stocks) and No (0 live stock).

Occupation

Agriculture (Main source of income is agriculture), Agriculture + Live stock, Agriculture + Live stock + Poultry and others (Main source of income is other like service/business).

Household Income

High household income (Above Rs. 30,000 income per year), Middle household income (Rs. 15,000 – Rs. 30,000 income per year) and Low household income (Below Rs. 15,000 income per year).

Land Holding Size

High (Above 2 hectare of land), middle (1 to 2 hectare of land) and Low (Below 1 hectare of land)

1.8 Organization of the Study

The Project work is presented in seven sections namely introduction, review of literature, research methodology, introduction of study area and community forest distribution, presentation and analysis of data, protection and management of community forest by women and conclusions, summary and recommendations. Introduction gives the meaning of women's participation in forestry practices, statement of the problem, objectives, significances, rationale and limitations of the study, theoretical framework and definition of various terms related to community forest. Literature review provides the information about the published and unpublished documents and clear investigation on those documents related to the study topic. There is the revision of various books, journals, previous theses, dissertations reports etc. related to the study topic. Research Methodology provides the idea and steps to be followed in the research. The type of research, various terms used and their descriptions, various data collection procedures and constraints, nature and sources of data, method of collection, presentation and analysis of data, time frame and budget, variables and their operationalization, reliability of the study etc. are described in this chapter. Chapter IV provides general information about study

area and reason for selecting that area. The overall distribution of the community forests in the study area is also described in this chapter. Chapter V is presentation and analysis of data which is about socio-economic aspects of respondents. This provides the general information like age, caste/ethnicity, education, occupation, landholding, income, livestock etc. of the respondents. Chapter VI deals with protection and management of community forests by women. It identifies the ways of increasing women's participation and the problems related to women's participation and so on. And last chapter is about summary, conclusions and recommendations. In this chapter various new findings and their reliability, overall significance of the study and main outcomes are concluded. Overall description of theses and its procedures are also summarized in this chapter. And at last but not least it recommends the various policy measures to the development practitioners, planners, policy makers, related organizations and related persons under the heading of recommendations.

CHAPTER – 2

REVIEW OF LITERATURE

Participation is defined differently by different thinkers. Some defined participation as being the member of voluntary organizations, while other defined participation as sharing in decision making and remaining defined participation as monetary, material and labourer contribution. Participation is affiliation, attendance at meetings, taking part in the programs and activities of the meetings performing special assignments or jobs for the groups, contributing financially, exercising leadership, responsibilities and working in the projects. Participation is the involvement of the people in the decision making process, implementing programs, sharing benefits of development programs and their involvement in the efforts to evaluate such programs.

Forest management is the set of technical and social arrangements including protection, harvesting and distribution of the forest products involved in the management of forests. Community forestry is any form of forestry activity undertaken specifically and principally to provide the communal benefits to the people living in the villages or small communities in the vicinity of the forest area which involves them directly in its management. Community forestry incorporated the social approach to forestry, where the foresters are the extension workers, regardless of the names and they need to know not only about the trees but about the people and society in the context of their behaviour, interaction and depending upon the forest ecosystem. Community forestry is the forest protected, managed and utilized by local forest user's groups. (Thapa, 1991)

Social forestry and village wood forestry are the synonyms of community forestry. Bhasin in the publication "What is patriarchy" stated that Nepalese society is basically organized around the tenets of patriarchy and Casteism. Patriarchy ensures social, economic and political power to men and allows them to dominate, control and even exploit woman. Women are socialized into being silent, tolerant and almost invisible, and their roles are relegated to inside the household only (Bhasin, 1999).

The tenth plan stressed on poverty alleviation and thus, ministry of forestry and soil conservation had also focused its policies and strategies on improving the poor, women and deprived groups through natural resources and focused on the policies and strategies for natural resource management in the form of forest act, 1993, forestry regulations, 1995, and community forestry operational guidelines, 1995, which recognized the forest user's groups as legal entities and had legalized the process of handing over community forests to them. It also gave the idea that 25 percent of the income from community forestry should be used for forest development activities.

It also recommended that the programme of community forestry would attempt to address equity issues at the community level by raising the awareness among women and the poor about their rights and obligations and by improving their self confidence and capacity to participate in the community forestry development process through literacy awareness and informal education. The main strategy of tenth plan was the conservation of the forest resources by empowering and involving the local people (NPC, 2003)

The amendments and rules of forestry act 1961 were the basic laws governing forest administration in Nepal. Similarly, forestry act; 1967 and forestry protection act, 1967 attempted to establish strong state authority over the forest. Although, some provisions of handing over the forests to the VDC were made, it did not significantly used in the practice. In forest policy, 1978, new categories having PF, PPF and leasehold forest rules were introduced to involve the local communication and private interests in the management of forests. Forest act, 1979, had launched the community forestry programs in 58 districts to develop and manage both PF and PPF firstly, under the department of forest (CFDP, 2005). Decentralization act, 1982, introduced the concept of participation of user's groups in local community level development activities in the first time.

Forest sector, 1989, forest act, 1993, forest by laws, 1995, and Master plan for forestry sector (HMG: 1988) were dependent upon community forestry program as the basic forest sector policy in Nepal. Forest act, 1993, divided forest in two types which

were national forests and private forest. It defined national forests as the forest within the boundary of Nepal, or may be kept within the boundary or left without the boundary including uncultivated land within or around the forests, roads, food tracks, ponds, lakes, rivers etc. within the forest. This was further divided into contract forests, government managed forests, religious forests, conserved forests and community forests. Contract forests were in order to assist the need of local people for their various purposes. It was used for tourist trade, for the production of rare plants, agricultural plants and other protection works of forests to rear cattle, to forest different species of insects and plants and for the production of raw materials for the industry related to the production of forest related goods, to use it for the income generation by producing timber and herbal plants. Government managed forests were totally managed, controlled and served by the government by the help of the management committee and by various rules and regulations of the government for the protection, fostering and utilization of forest according to the need basis and not for trade, the government grants the national forest to the religious groups and communities which were called as religious forests. If the groups cannot handle the forest properly, government can dismiss the agreement. Conserved forests covered the field which affect the public of somebody destroyed it, having environmental, scientific and cultural imporances. Community forests are the forests protected, managed and utilized by local forest user's groups, which is based on the notion of people's participation.

To supplement animal fodder, fuel wood and other basic resources or simply to provide saleable products, trees on private agricultural or forest land used, are called private forests. Government supports development in private forestry due to the reason that it can add to fodder and fuelwood resources reducing the pressure on other sources, it is important to the land stability and sound watershed management. Planning in the private land has social benefits like greater self sufficiency and improved income generation through entrepreneurship development. Goals of private forestry programmes are agroforestry system appropriate to subsistence farming and recognition of the importance of on farm wood lots with technical support for proper

people's management. In the study area, every household has some trees in its private land which were used for fuel wood, animal fodder, fallen leaves and dry twigs etc. (MFSC, 1993)

Sharma in his publication entitled "Natural resources of Nepal" stated that mountain people's economy was dependent upon three things. They were for their food they grew corn or rice and for manure they required cow dung, they must have had cattle to get cow dung and they should produce ghee to get cloth and other necessities which they did not produce and to be better than the existing state, went to the foreign land, served there and brought money back. (Sharma, 1978)

Regmi stated that the government nationalized all forests in 1957 to review the destruction of national wealth to nationalize the private forests for their adequate protection to solve the increasing problem of deforestation (Regmi, 1978). Similarly Budhathoki in his research study entitled "Importance of community forest management in remote areas" pointed out that, in the study area of Jajarkot district there was large natural forest area but very little storage of the forest products and forest were protected by traditional system of management by continuous or substantial participation of the local people Budhathoki also stated that, in Nepal, indigenous system of forest management were widely distributed whose protection and management had effectively and successfully operated. (Budhathoki, 1987). Similarly, Poudyal stated that local forest management systems were still found in the most parts of the hilly region of the country Nepal. (Poudyal, 1991)

Fisher and Malla defined community forestry as the control, management and use of the forest resources by the villagers which seeks to increase the local people awareness and to involve them actively in all aspects of the forestry activities. Malla in his research report entitled "community forestry extension in Nepal" told that due to the peculiar nature of the Nepalese society where women had a minimal role in decision making and illiteracy of the rural women, it was difficult to involve women in forestry sector. Male-dominated society of Nepal also did not willing to share the power and authority with women. (Fisher and Malla, 1987).

Campbell in his study entitled “Community involvement in conservation: social and organizational aspects of the proposed resources, conservation and utilization project in Nepal” discussed that the socio-economic factors in traditional forest users and management of 47 VDCs of 4 districts and found that there was the reduction in the usage of forests and per household livestock because of community forestry and there was a kind of growth in cattle feeding and planting private forest activities (Campbell, 1987). Similarly P.B. Chand and A. Wilson in their study entitled. “A case study of development of local forests management in Darchula” mentioned that people has to protect and manage forests by forming local forest committees on the study area and not all the forest committees found there under the initiatives of CFDP had been effective (Chand and Wilson, 1987).

K.C. in his research study entitled “participatory inputs in community forestry” pointed out that more than the poor and illiterate people of the village; literate, upper class and economically, well off people were in community forestry. In his further study, he discussed that the negligence of planner about people’s interests and their religious attitudes was the reason for failure of any porgramme. So, people’s participation was necessary for the success of any programme which means involving the people in a programme mentally. Physically and economically for their common welfare. (K.C., 1995)

According to Gurung, women were the primary users and having responsibility for the protection of forest from its depletion, in the context of Nepal. For rural women, more time and energy to be spent on household requirements resulted in deforestation. For carrying water and gathering the forest products, children also had been invested time. So, that reflected that deforestation affected everyone who depends on the land for any part of their livelihood. (Gurung, 1988)

A. Inserra in her study report entitled “women’s participation in community forestry in Nepal. An analysis for the forestry development project” mentioned that women’s participation in community forestry in Nepal was very little and she also recommended that forests should be managed and protected by user’s groups

especially of women because they were the users and collectors of the forest products in the rural areas of Nepal. She also defined community forestry as the management of forests by local villagers who dependent upon those resources to use fuel wood, fodder and raw materials for domestic purpose. (Inserra A, 1988) Deforestation rate is also very high in the case of Nepal. According to Worlds Bank, the deforestation rate of that time in Nepal, if countered, would result into the complete finishing of the reachable forests within 15 years in the Hills and 25 years in the Terai, which clearly gave the concept of community forestry in the case of Nepal. (W.B., 1978).

According to Barlett and Nurse, the principal aim and the essential feature of community forestry was to involve people in all stages from decision making to harvesting. The rural poor in and around the forests were expected to cooperate in forest protection and management measures, if goods and services derived from forest resources were made available to people. To assist with the conduction for widespread application in Nepal, PRA technique was widely being used. By using these techniques fieldworker would develop continuously a positive relationship with the villagers during the conduction of investigations. The collected information was more likely to be relevant to the needs of the users by involving the users in the all stages of information gathering and hence useful for the preparation of the operational plan. (Barlett and Nurse, 1991). Further Barlett stated that the local organizations sponsored by government to manage and conserve forests was the special feature of community forestry in which there was the direct link between community development and forest conservation. For arresting the rate of land degradation and fostering the return of species to previously degraded habitats, community forestry was the viable strategy in Nepal. Rural welfare and the forest conditions can be improved by community forestry because the same entity was the manager and the user of the resources. During past ages, people's participation in community forestry was limited in providing free labourers and for the construction of nursery and plantation but now a day, the scope of community forestry is widened and is seeking the active participation of the local people in decision making also. (Barlett, 1992).

According to community forest development division (CFDD), through the participation of individuals and communities to meet their basic needs, development and management of forest resources was the prime policy of community forestry having the strategy of phased handing over of all accessible hill forests to the communities to the extent that they were able and willing to manage them. According to the division, 1876000 hectare (32 percent of total land area of Nepal) of forested areas could be converted into community forestry and 1585000 hectare (27 percent of total land area of Nepal) of forested area could gradually be developed as community forests. (CFDD, 1991).

National research associates identified that 70 percent of the land in Hills, 21 percent of the land in Mountains and 21 percent of the land in Terai was under forest cover which indicated the increased migration of people to Terai from the Hills, Mountains and across the borders. (National Research Associates, 1990). Yadav and Dhakal in their study report entitled “Leasehold forestry for poor: An innovative pro-poor programs in the Hills” stated that community forestry was the most focused and prioritized programme of forestry sector. (Yadav and Dhakal, 2000).

IFAD in its publication entitled “Hills leasehold forestry and foraged development project” indicated that impact of community forestry and leasehold forestry with reference to women, in general, the women benefited little from community forestry. User’s groups were generally heterogenous bodies embracing both the elite and the poor families. Their executive committees, however, tend to be dominated by the elite and high caste families irrespective of their representation in the total groups. Taken representation from the poor families, women and ethnic group was usual, but given their weak status, they were unable to participate effectively. Utilization of the production of the community forestry was generally based on equal share per household. This was not equitable as the poor and women were more dependent on the forests for their requirements than the rich. (IFAD, 1990).

Kayastha in his book “Elements of community forestry in Nepal” indicated that prevention of environmental degradation and maintenance of ecological balance were

the important advantages of the forests. For the generation of socio-economic and ecological benefits from forests, rural people participated in planning, management and harvesting of the forest crops and products. He defined community forestry as small scale, village level forestry management practice where decisions and actions are made on the basis of community, excluding large scale industrial and other forms of forestry. It aimed at the benefits of rural poor population. People's participation was very essential in all stages of community forestry programmes and its results. Private planting was the most successful component of community forestry programme due to the fact that individuals planted trees, and took care to grow them in their own land. That is why, poor populations could also collect freely the fuel wood and fodder from community forests and save their time for earning wage. Women were the major collectors and the users of forest products like fuelwood, fodder, fallen leaves, fruits, grasses etc. So, involvement of women was very essential for the success of community forestry programme. The process of deforestation which resulted in spending more and more time and in walking the longer distances in the search of these essential forest products, therefore, directly affecting rural women. However, they should not be considered in isolation and total community participation should be effected. The men, on the other hand, generally took care of cutting and selling timber and of administrative decisions about the forests. The study showed that women had worked successfully on both mixed and all female forestry committees in Nepal compared to that of men. According to the author, forest provided goods like timber, fuel wood, fodder as major products and fruits, cordage, game neat waxes, medicines, honey, ivor etc. as the minor products. It also provided services like social environment protection, soil erosion protection, provided clean water, reduction in landslides and floods, provided organic fertilizer, cropland and the settlement protection against hot winds and excessive temperatures, regulation of streams and springs, rogation of local micro-climate, stabilization of agricultural production etc. (Kayastha, 1991).

Gulmore and Fisher in their book entitled "Villagers, forests and foresters: the philosophy, process and practice of CF in Nepal" defined community as any group of

persons such as professional group, a residential unit, a club, a voluntary association etc. united by a community of interest. Forest is a biological community consisting of trees and other wood vegetation. Community forestry shares its meaning with people's forestry which is a vague notion, according to authors, aiming at providing direct benefits to rural people who have major role in decision making also. At this level, that is, as a statement about the philosophy behind the community forestry, there is nothing wrong with the term. According to A.S. Carter and D.A. Gilmour, increasing population of man and livestock particularly in the hilly regions of Nepal was rapidly diminishing the contemporary natural resources in their book "Increasing in tree cover in private land in central Nepal. (Gulmore, Fisher, Carter, 1991/92).

According to Koirala, community forest development project was basically structured for people's participation. Although social forestry involved active participation of local communities in planning and managing local forest resources, the implementers had no attempt to improve opportunities, and minimize constraints of such local people. A deep study of cultural, historical, political and other socio-economic determinants of people's participation was indispensable to promote the participation and for the study of people's participation, rural people's perception towards social forestry and cost and benefits of social forestry was essential one. (Korjala, 1992). P.K. Jha in his research paper entitled "Implication of indigenous forest management systems in the management of community forestry of Kaski district" indicated that the forests were the dominant source of energy, fodder for animals and consumption materials and were very important for environmental stabilization and agricultural production in the case of Nepal. (Jha, 1992).

By doing the case studies of Baitadi and Achham districts, Chhetri and Pandey carried out a research work entitled "User's groups forestry in the far western region of Nepal" and pointed out that through the forestry act 1979, recognizing the reality of forests as inseparable part of farming and farmers in 1970s, the community forestry development programme introduced the concept of panchayat protected forests with the purpose of handing the forests back to the people especially for its protection and management. To foster and establish local people and organizations respectively,

decentralization regulations were introduced in 1980s in the management and development of panchayat forests and panchayat protected forests. Later after 1990, concept and status of panchayat forests and panchayat protected forests changed and the term community forests was used to refer to any forest under user's groups protection and management.

Although women and children were the main collectors of the forest products like fodder, leaf litter, firewood etc....., they were not taking part in decision making and not inviting in the public meetings, due to local cultural norms and values. Success and failure of community forestry programme was really dependent upon people's participation which should be determined within the context of local culture, norms, values and people's knowledge and perception about their ecosystem for its success. The study of the authors also pointed out that people's participation in stake holding and decision making was the solution to the effective management of common property resources especially forests. Participation should not be induced or co-opted and people's should be the subjects not the objects of development initiatives. (Chheri and Pandey, 1992).

According to Aacharya, as reflected in the master plan of the forestry sector HMG: 1988 and eighth five year plan (NPC: 1992), community forestry had received a high priority in the forestry sector programmes to the government. On the basis of the simple operational plans which were prepared and endorsed by forest user and assistant ranger from the district forest office who applied rules, schedules and other institutional arrangements made for forest product management and utilization, the phased transfer of management and utilization of community forestry to the actual users was the main thrust of community forestry policy of government. (Acharya, 1993).

Bajracharya in his publication "Forestry Policies of Selected Countries in Asia and the Pacific" pointed out that the eighth five year plan (1992-97) defined community forestry management practices and programmes as a main source of fulfilling the employment opportunities for the communities (Bajracharya, 1993).

Similarly. Paudel and K.C. in their publication “Community forestry management” pointed out that over the last three decades soil erosion, down stream floods, siltation and loss of soil fertility had threatened the farming system and environment due to being heavy pressure on natural forests through expansion of agricultural and grazing lands cutting down of more trees to meet fuel, fodder and timber requirements due to rapid increase in human and livestock population. (K.C. and Paudel, 1993).

Keeling after doing the research study on community forests of Baitadi district found that, in Baitadi district, participation of women in decision making was negligible in all community forests and there were no women chairman and secretaries in such cases. In some community forests of Baitadi district not only participation of women but also the participation of men in decision making was very poor. According to him, women of Baitadi districts were only involved in the collection of fuel wood, fodder, leaf litter and so on. (Keeling, 1994).

After doing the research on “A review of forest user’s groups of eastern Nepal” Dahal described about participation and role of women in forest user’s group management. He found that women were considered as weak and were being discouraged from being active members of forest user’s groups. In enhancing the collective action and effective management of forest user’s groups, there were no evidence of women’s participation locally. (Dahal, 1994).

In one research, ICIMOD identified that there had been some conflicts within the user’s groups hampering in the efficient management and utilization of resources arising at various points (ICIMOD, 1995). According to tenth plan of NPC, among its ten strategies, first one was integrated development of agriculture and forestry sectors and high, sustainable and poverty alleviation oriented economic growth with the focus on those stated sectors. (NPC, 2003).

According to Mellor, leasehold forestry deals exactly with increment in productivity per land unit rather than commercialization as source of agricultural growth, i.e., it vastly increases the productivity to the leased land. (Mellor, 1999).

According to community forestry manual, in the development of human society, forest resources played a significant role which was closely related with daily livelihood as well as with religion and culture. Consumption rate of forest products like firewood, fodder, tiber etc... had increased in Nepal due to the growth of the population having direct impact on forests. Forests as being the essential part of the wealth of country, it had to be protected and nationalized if they were private one to protect our national wealth. But the government was not successful in protecting the forests because of the poor infrastructure and management. (CF Manual, 1995).

According to Ganguli in the publication entitled “Nepal: management and protecting of natural forests break through in the forestry development” stated that FAO (1983) report showed the range of forest area in Nepal as 4.5 to 5.5 million hectare while the report of FAO (1993) pointed out that there was 5.02 million hectare of the forests area in Nepal which was 36.7 percent of total land area. Recent studies found that middle hills were greatly suffering from the concept of deforestation. (Ganguli, 1995).

Chhetri and Rana in their research study entitled “A gender analysis of women’s participation in community forestry in Sindhupalchowk and Kabhrepalanchowk” found that as compared to the Brahmin and Chhetri groups, involvement of women in community forestry management was better in Tamang groups in the study area. According to them, involvement of women in community forestry was necessary for its development and community forestry had reduced the workload for men and women in the collection of forest products like fodder, fuelwood and timber etc...in the study areas of sindhupalchowk and kabhrepalanchowk districts. (Chhetri and Rana, 1995).

Singh in his study entitled “conflict management in leasehold forestry for the poor” stated that most of the community forestry user’s groups were controlled by elite groups which do not gave adequate consideration to the needs of the members of the socio-economically deprived sections of community. (Singh, 1996). Similarly, Khanal in his research study entitled “Lessons from community in Nepal. Implications

for Himalayan watershed management 11 pointed out that a way of land protection and management which increases the productivity of agricultural and forest lands really reduces soil erosion and sedimentations is community forestry and which was gaining a wide support in the hills of Nepal. He also found the positive impacts of community forestry management as socio-economic welfare, institutional performance and better forest management. (Khanal, 1996).

Similarly, Subedi in his study topic “Community forestry in Nepal” described people’s participation as the best way for the protection and management of community forestry. According to him, the distribution of community forestry in Nepal was not uniform ecologically and hilly regions had very high number of community forests compared to that of Mountain and the Terai regions. (Subedi, 1996).

Kafle in his publication entitled “ People centred management practices in the Koshi Hills of Nepal” defined the role of DFO (District Forest Officer) who is the link between the local people and government for the handing over of the forests as handing over of forests, helping in the formation of user’s groups and providing the technical assistance to forest user’s groups according to new forest act 1993. (Kafle, 1997). Similarly, according to Shrestha, the total areas of community forests that was handed over in 54 districts was 397,652 hectare by September 1997, among which 48 percent were in good condition and only 2 percent were in very degraded condition in his publication “status of community forestry in Nepal.” (Shrestha, 1997).

By doing the case study of lele watershed, Thapa carried out a research work entitled “Forest land use change and management in the middle hills of Nepal using GIS” and found that the distribution of forests was dependent upon altitude, in her study of forest management practices and women’s participation in forest management. She discussed that the protection and management of forest resources is the major role of community forestry. Women’s participation was very low in decision making in the development activities on forests but very high in the collection of forest products. (Thapa, 1997).

In her research study of Bhaktapur district entitled “Women’s participation in community forests management”, Maharjan tried to find out the present condition of women’s participation in community forestry and concluded that community forest area was not equally distributed and the people were involved in the different activities of community forestry programme in the study context. In the executive committee, number of male was greater than female and having powerful role than female in the decision making process. Educational and cultural factors were the main causes of low women’s participation in decision making and high involvement in the collection and use of the forest products (Maharjan, 1997).

According to Wallace, to assume the technical and administrative responsibilities of forest ownership, government was unprepared. Therefore, due to curtailing of their traditional rights of access and use of forest products, villagers went against nationalization, resulting in the disappearance of local responsibility for forests, whereas previously there had been communal responsibility for managing the forest. But after nationalization, no one took responsibility of managing the forest resource. Due to being no land records, villagers started to destroy the forests for claiming as private property after its clearance and cultivation. As a result of adverse local reaction to the nationalization and inadequate government control, Nepal’s forests effectively became common property. Due to that reason, a lot area of forest cover in Hills, Terai and Mountain was cleared. (Wallace, 1987).

According to Box, in his publication entitled “Integration of leasehold and community forestry”, indicated that after the nationalization of forests in Nepal, people were afraid they were no longer in control and no longer could obtain the forests products needed for their daily life. The forest department was not able to protect all the forests and so in many places forests were over grazed or overexploited. Countless patches of forests were converted to almost treeless shrub lands. Government soon realized that the only way to protect the forests from total destruction would be to put it under the control of the real users again. Furthermore, community forest user’s groups were formed within a certain community or groups of communities and the political power structures in such an area was automatically

absorbed in the user's groups lending structure. Although, one of the objectives, it was very hard to create extra advantaged for the poorer layer of the society, with community forestry. The evidence seemed to be straight forward, leasehold forestry reduced the plight of women especially through time saving in the collection of fodder and forest products. However, that evidence was based on interviews with women, who had been for more than five years members of leasehold forestry groups. (Box, 1998).

Shrestha in his publication entitled "Community Forestry in Nepal in Danger" identified that in recent days, community forestry was been criticized for not being able to address the needs and requirements of underprivileged and marginal group of the community especially women. (Shrestha, 1999).

According to department of forest, community forestry division , community forestry development process includes five phases as identification phase, FUG formation phase, operational plan preparation phase, implementation phase and review and revision phase. This community forestry development programme also indicated that women often had a key role in forest product collection and utilization. Therefore, women's participation and the interests must be considered equal to, if not greater than, those of men in forest management and forest product utilization and institutional development activities of the forest user's groups. (Department of forests, community forestry division, 2001/2002 (2058 B.S.).

Department of forest in the book "Hamro Bana" stated that one person can get wood for the purpose of agricultural equipment, God's epidemic, house constructions and development constructions in different amounts at different rates from community forestry. Upto 2058 B.S., there were 4601 community forestry user's groups number, providing 28,88,300 cubic feet of wood and 175,437 chotta of cooking wood, among which 418 were women CFUG contributing 9 percent of the total community forestry user's groups number. Women number in community forestry user's groups was 26,508 and that of men was 94,790. According to the book, Nepal is the only country where the life span of women was less than that of men having a literacy rate of less

than 50 percent. First women CFUG was established in 2046 B.S. in Kabhrepalanchowk. Nepal was the first country which prepared master plan for forest development. It also recognized that women's participation was being affected by social, economic, and political factors even various exercises were being held at governmental and non-governmental level. This book also recommended some suggestions like increasing educational seat and provisions for special programs for training and tour for women, implementing income generation and literacy programs for forest programmes being operated by women, advertising the successful forest development programmes more aggressively that were being handled by women and involving the women under poverty line in various community foresters programmes. (DOF, 2002).

According to Ohler in the publication entitled "The impact of leasehold forestry and forests development programs", tackling the problem of degraded forest lands had brought mixed results under community forestry and many community forestry plantations failed. Community forestry tends to be the most successful where the forest handed over was still in a reasonable condition. It tended to be less successful where the forest handed over was severely degraded. one of the main differences between leasehold and community forestry, as pointed out by women, was that fodder collection in community forestry was restricted to a few weeks per year, while in leasehold forestry individual woman or a small group of women could decide for themselves if and when they want to collect fodder. Leasehold women were very appreciative of the easier availability of fodder and the enormous amount of time saved. That time saved made that easier for women to attend meeting, to participate in training, to engage in income generating activities and so on which in turn strengthen their positions within the household in terms of income and decision making. The provision of secured access to degraded land, combined with training and input assistance, increased the availability of animal feed. Since the collection of fodder was a time consuming activity for women in the household, the effect of increasing access and availability of fodder was to increase time available to women. That in turn allowed women to undertake more socially and economically productive activities

including learning and income generating activities. As a result the household income increased as well as the educational and social status of women. (Ohler, 2002).

Statistical year book of Nepal published by center bureau of statistics indicated that in the far western region of Nepal, number of forest user's groups was 1418 having an area of 99442 hectare and 14144 households were involved in that sector. The year book also indicated work burden of women was more than that of men in agricultural and extended economic activities and that of men is more than women in economic activity other than agriculture. It indicated that 57.8 percent of women and 46.7 percent of men were in the agriculture, 16.5 percent women and 43.5 percent men were in economic activity other than agriculture, 11 percent women and 1.8 percent men were in extended economic activity, 0.7 percent women and 2 percent men were seeking job, 7 percent women and 0.4 percent men were in household activities, 4 percent women and 3.8 percent men were in study and 2.9 percent women and 1.8 percent men had no work. (CBS, 2003)

According to human development report of Nepal, women of Nepal had generally three types of works namely reproduction, household works and employment. They were less involved in political, economic and professional domains even they were 50.1 percent of total population (CBS, 2001). According to the report, women were 43 percent literate having life expectancy of 61.5 more than that of men and sex ratio was 98.7:100. Violence against women in Nepal were traditional violence, violence based on superstition, sexual violence, family violence and dowry-related violence. Employment status of women in Nepal was 34.31 percent in non-agricultural sector (CBS, 2001). The group power in community based economic development of women were participation in development activities, changes in mobility, access to and control over natural resources, enhancement of decision making capacity, access to economic opportunities, needs fulfillment, changes in men's attitude and contribution to time savings and time allocations. In 10th plan, women targets were raising GDI to 0.550, raising GEM to 0.500 and raising women's participation to 20 percent. The greater value of GDI lowers the degree of gender disparity in human development. Current GDI of Nepal was 0.452, of rural areas was

0.430 and of urban areas was 0.562. Women of hills had less GDI value than that of mountain and terai, and women of eastern and western region had high GDI than others. For far western region, GDI was 0.377 and Doti had also less than 0.400. Similarly, GEI for Nepal was 0.391, for Doti district was less than 0.325. Work burden of women in Nepal was 16 hours per day higher than global average. Exclusion had a distinct regional dimension in Nepal. The continuous impoverishment and under development of the mid and far western developmental regions constituted a glaring manifestation of the historical geographical exclusion that had shut every population segment, irrespective of caste, religion and sex-out of mainstream development. The tenth plan had, for the first time, included gender and human rights as a cross cutting as well as the sectoral issue. The government had yet to adopt a policy of mainstreaming gender as its core strategy in promoting gender equality and equality. Though Nepal has very stringent laws regarding the trafficking of the girls and women, that kind of violence persisted, largely because of poverty. An informalization of the formal labour market was taking place through piece work, home working and other kinds of outsourcing that had undermined the collective bargaining power of the workers and increased exploitative working conditions for women. In a culture rife, with patriarchal structures, women then mobilized one another to initiate and effect social change in their communities. (HDR/ Nepal, 2004)

The journal “Women 2000 and beyond” published by United Nations indicated that women coped with environmental degradation. They started specific activities aimed at making available more natural resources and increasing the supply like tree planting and reforestation and forest conservation activities by establishing the kitchen gardens near houses, installed water points and regenerate the degraded land. It also identified that gender roles put women in hazardous position and environmental degradation has very negative effect on women. Women were reducing risk and also responding to disasters and mitigating environmental hazards. Women were also assessing disaster vulnerabilities and capacities locally and increasing awareness about and preparing for disasters. (UN, 2004).

Bista in the study entitled “corridor forest management initiatives in Nepal” recommended regarding the preparation of integration management plan by every organization including settlements and private land, strict law enforcement against the destruction of government forests, handing over a maximum number of forests to the community and considering local livelihood and introduction of diverse alternative income generating activities in the community. (Bista, 2005)

The publication of United Nations forestry department entitled “State of the World’s Forests” was based on the realization of the economic benefits from forests. That focused on key trends and built on the thematic elements of sustainable forest management drawn from the regional and ecoregional criteria and indicators processed as a reporting framework forest in small island developing states covered an estimated 75 millions hectares or 63 percent of combined land area but forest cover varied greatly among those countries. Close to 90 percent of the more than 176 million hectares certified around the globe were situated in the common wealth of independent states, Europe and North America. (UN, 2005).

According to department of forest, total number of CFUG was 19804 in Nepal among which 705 (around 5 percent) were only the women CFUG in Nepal. In Doti District, there were 206 CFUG among whom 14 were the women CFUG. The number of men in committee was 1926 while number of women was 657 in the committee and number of women in community member as a whole was 163 for women CFUG only. According to the record, there were 4 CFUG number in the study VDC, 2 in ward number 4 and 2 in ward number 7 named Jogi Dhara, and Pashupati of ward number 4 and Mahatara Balami Kulabhind and lama Khola Dando Mahila of ward number 7. The last one was only the women CFUG of the VDC having 11 member. Mahatara Balami Kulabhind had 11 committee members among whom only 3 were women. Similarly. Pashupati and Jogi Dhara has 10 and 11 committee members respectively among whom 4 and 4 were number of women in respective CFUG respectively. It indicated that out of 43 committee members of the VDC, 22, i.e. more than 50 percent (around 51.2 percent) were the women committee members, which showed the greater participation of women in community forestry in the respective VDC. (DoF, 2005)

Danida reviewed the “NARMASAP’s social mobilization approach in community forestry, soil conservation and watershed management”. Social mobilization, which can be defined as a dynamic and participatory process for the active inclusion of the poor and socially excluded, was for involving women in community forestry for social and gender equity and equality. That research found that the social mobilization approach was accepted as an effective strategy for organizing the members of the community, especially women, for active participation in forestry for sustainability and equity in NRM programmes. For ensuring the maximum participation of women as forest user, their registered membership should be ensured so that at least one woman per household become a FUG member, which result in the boosting of the status of women in community. That also recommended that the terms and conditions of young women of child bearing age should be, more carefully considered and appropriate policies should be designed and enforced. That study also told that, after September 2002 only some attempts had been made to make some of sweeping reforms in the Nepalese legal system to end the legal discriminations against women, to overcome socio cultural barriers and to participate actively in decision making in NRM. It also described some problems of women's participation in community forestry as sexual harassment and security concerns, lack of interaction and unequal salary and benefits, lack of recognition and job insecurity, training and placement and support team approach and gender training, work duration and social mobilization, and education and orientation to caste issues. It also suggested some recommendations like stressing the worth of social mobilization, mainstreaming social mobilization approaches, adopting a holistic NRM approach, sustainability of social mobilization approach and challenges confronting the social mobilization approach (for MFSC) and regarding social aspects of NRM as important as the technical aspect, confining the practice of hiring the local young women as motivators, increasing empowerment inputs to groups, addressing gender issues in totality, improving central and district level coordination, the need for monitoring and evaluation indicators, adopting a number of approaches, hiring women at least 50 percent for the positions of forest guards by developing FUGs into CBOs, working through NGOs, working through local governance agencies, working through other

line agencies, strengthening NGOs and CBOs with membership of FM and MOTs and regularizing motivators (HMG/N, Danida, NARMSAP, 2060).

According to department of forest, community forest bulletin, the objective of fourth community forestry programmes was poverty alleviation, good governance and sustainable forest management. According to the study, only women CFUG were more managed than men and mixed CFUG and small size were more successful than the larger one. About 35 percent of the population of Nepal was getting benefit from community forestry programme. According to the bulletin, from 1990-1995, only 990 CFUG were formed per year but between 1995-2000, 1297 CFUG were formed per year due to the forest act 1993 and forest regulation 1995 and after 2000 (2000-2003) only 340 CFUG were formed per year. Out of the total community forest area of Nepal, 83 percent natural forest, 14 percent shrub land, 3 percent plantation and 0.2 percent grass land. Region wise, Hills plus Mountains contributed 93 percent of total CFUG while the Terai constituted only 7 percent. Sal forests, pine forests, sub-tropical deciduous forests, schima cashnonops is forest were the dominating community forests respectively by major forest type. Community forestry needs to be looked at from three dimensions, communities, forestry and community forestry management. Main challenge is community forestry lied in integrating community forestry policy and practiced with democratic governance and livelihood imperatives, in the form of institutional, forest management and economic perspectives and livelihood and social justices. It recommended some suggestions as compulsory involvement of women in planning and decision making need to be designed and promoted to ensure their proper representation and to help them to understand their authority, responsibility and accountability. In community forestry, HMG/N (2000) transferred to communities the responsibility of managing government forests and the right in using the forest products in a sustainable way and with the ultimate policy objective of improving livelihoods of rural communities. According to a subsectoral programme of 10th plan, community forestry should aim to promote employment and income generation opportunities to poor and disadvantaged families and women. (DoF, 2061).

According to Joshi in the article entitled "programme planning in community forestry", characteristics of community forestry are people's participation in resource utilization and management, CFUG with legal status, responsibility to the CFUG for sustainable forest management and biodiversity conservation, use of forest products independently by the users as per the forest act 1993 and provision of the use of the CFUG fund for community forest development and rural development and income generation. Two components supporting community forestry programmes were community forestry field implementation component (CFFIC) and community and private forestry component (CPFC). The author concluded and recommended that the planning process in the community forestry had been a learning experience for the forestry development sector and had been improving. In the planning process, bottom up planning had strictly been followed to enhance the planning skills at all levels. Since the process involved and consulted each and every stakeholders, one can guarantee that the principles of good governance, transparency and sustainability were met. However, further improvements can be made by considering certain issues like goals of the program resources, and man power available, and timely completion of the programmes. (Joshi, 2061)

Kanel and Kandel in their article entitled "Revising community forestry in Nepal: Achievements and challenges" stated that due to the original concept of protecting the forest and to fulfill the basic needs for forest products of the local people, community forestry was initiated in late seventies. From its start, a movement had been evolving to involve local communities in the management and utilization of forests. The policy of the governance was originally intended to meet the basic forest products required by the communities through the active participation of the communities in the forest development and management. Later, it was expanded to include the mobilization and empowerment of the members of CFUG in the development of their local communities. It had been observed that the trend of forest degradation had decreased since the handing over of natural forests to local communities, but a number of unintended social anomalies had also cropped up. Such anomalies essentially constituted inequity and unfairness of the local and

national level and in terms of the long term sustainability of the forest resources. The key words of community forestry are governance, livelihood and sustainable forest management. (Kandel, Kandel, 2061)

After studying the four different districts namely Dang, Kanchanpur, Siraha and Palpa and identifying the topic “Relationship between community forestry and livelihoods”, Kandel and Niraula found that there was the close relationships between community forestry and poverty reduction and community forestry and livelihoods. They also found that community forests affected all the five types of capitals of livelihoods namely natural capital, financial capital, human capital, social capital and physical capital (Kandel, Niraula, 2061).

According to Kandel in his research work entitled “Marketing of forest resources of community forestry- why and for whom?”, 7.4 percent of community forests was in good condition and around 19 percent of community forests was in bad condition. According to him, Ilam, Makawanpur, Dang and Udayapur were the top four districts who sold the forest resources outside the user’s groups (Sal, Khayar etc) having a contribution of 18 percent, 17 percent, 16 percent and 12 percent respectively. (Kandel, 2061)

According to Sigdel in his article entitled "Community forestry for biodiversity conservation and poverty alleviation", transformation of protection oriented existing management strategy into production oriented scientific management approach could help to fulfill the diverse needs of local community on one hand and on the other hand, it supported for maintaining biodiversity resources for a long run even in the absence of the formally established protected area systems in Nepal. the strategy ultimately supported for the alleviation of poverty in Nepal. (Sigdel, 2061)

M.Gautam (Upadhyay) in her article entitled "Gender equality and community forestry programme" stated that in the modern society, there were three principles for watching justice namely equality principle, merit principle and welfare principle for equality of men and women, for powerless and disadvantaged, and for qualitable

respectively. UN celebrated 1976-85 decade as women decade, which gave stress on equality of capacity and equality of opportunities. There were 642 community forestry which were established and operationalized by women, having Rs. 80 Lakh income (according to Kantipur daily) as a whole. 52195 households were involved having an area of 18063 hectare and number of women in committee was 7162 according to CFD database. She pointed out that there was no indication about women in forest act 1993 and forest regulations 1995 for their daily life span and upgrading of there life style. So, there was no indication of gender equality in community forestry. That is why, development should be directed by gender equality rather than women's participation (Gautam 2061).

Poudel used various tools like observation, formal and informal discussion, interview and case study for data collection in the research study entitled “People’s participation in community forestry”. The objectives of the study were to access the institutional process of community forestry, to judge the people’s participation in decision making, implementation and benefit sharing, to find out the factors effecting participation and to examine the changes of people’s skill and knowledge. The research used both primary and secondary data in the study. The research analyzed qualitative data on the basis of descriptive design and quantitative data on the basis of simple statistical tools like arithmetic mean and percentages. The researcher found the high level participation of women in benefit sharing than in management and protection. Forest user’s committee has satisfactory leading capacity and good relation to DFO and other forest user’s group of VDC. Economy and education levels were the major effecting factors in participation of users of Kafle community forest. Educated users occupy all leading position of forest user’s committee. Since community forest launched there, forest user’s groups were benefited by direct benefits (firewood, fodder, lead litter, and grass etc.) and indirect benefits like getting training and tour opportunities and gaining knowledge from the programs. On the basis of the findings, the researcher suggested various recommendations like Tamang community should be incorporated with FUG, more extensive awareness and communication training should be conducted, training materials of technical aspects should be provided, women’s

participation in decision making should be encouraged, technical knowledge should be provided, feasibility study should be carried out on commercial values of trees and so on. (Poudel, 2002)

Rimal in his research study entitled “Community forest management in Taplejung District: A case study of Sablakha VDC” concluded that there was no discrimination in the participation by economic condition, caste, region and religion. He further recommended that community forest program should be extended to other parts, women should be motivated for community forest development programs, close coordination between DFO, village leaders and FUGs is essential, alternative fuel for firewood should be managed, community forest income should be free of tax, user’s identification must be clearly defined, food quality trees should be planted, men and women should be trained in community forest management, educated people should participate in community forest management, and local people should be made aware about the importance of forest etc. (Rimal, 2005).

According to Sangroula in his research study entitled “People’s participation in community forests: A Case Study of Patte community forest of Lamatar VDC, Lalitpur”, user group was highly dominated by Brahmins and hence their representation in user’s community was also high. User’s committee was responsible body to take decision in minor issues while major issues were decided in general assembly group meeting. Education was the major influencing factor in decision making and leading the group in user committee. Other users rather than Brahmin and Chhetri were somehow affected by their economic condition. The researcher also recommended that training materials of training aspects should be provided to user’s committee, women’s participation in decision making should be increased through awareness, FUG should keep their good relation with other NGO working in the study site, technical knowledge should be provided to them and linked them to appropriate market and during the formation of FUC, criteria regarding caste/ ethnic groups, and religion should be included (Sangroula, 2005).

Ghimire in his dissertation entitled “The contribution of community forest resources on household income. A case study of Bhagure-Paderipakha community forest of Ramechhap District, Nepal” indicated that “Community forest resources are more valuable to the poor as these are the resources accessible to them. However, as community forest increase in resources, the poor are likely to be marginalized and their access reduced. It is necessary that adequate institutional mechanisms are ensured that the poor have sufficient access to these resources. If possible, community forest resource can be a measure for poverty alleviation in the country.” He also added that additional plantation programs should be launched, FUGs should be motivated to use improved stoves, biogas plants etc. to reduce consumption of the firewood, appropriate forest land should be provided by identifying poor families, income generation groups should be formed among interested FUGs and pilot program should be conducted, and NGOs should be approached for obtaining training for better management of community forests and utilization of forest resources. (Ghimire, 2004).

According to Yadav in his research study entitled “FUGs in Nepal: Impact of community forest management and community development”, a site specific operational plan is required wherever possible, the harvest level should be set for each main timber or non-timber product. Simple and practical forest resource assessment methodology need to develop where users also participated and operational plan should be based on the resource conditions and needs of users. Realistic plan should be developed and implemented. Emphasis should be placed on desirable and site suitable seeding production in the FUG nursery and on the promotion of natural generation. Managing community forest should look beyond the basic needs requirement, i.e. towards generating financial, physical and social capital and the establishment of a participatory implementation of the plan monitoring and evaluation system for forest management is a crucial aspect of community forests so that the production and use of forest resources would be more appropriate and effective. (Yadav, 2004)

Thakur in his research study entitled “The impact of commercialization of community forests on the rural community Nepal” formulated three hypotheses statements. They are:

- i. If the FUGs manage their community forests for commercial purpose, then they will get more tangible benefits in the forms of goods and services. Therefore, the contribution of commercialization has positive impact on the livelihood of rural people.
- ii. The benefits are equally distributed to all income groups and
- iii. The commercialization of community forest does not make any difference in people’s participation in different forest activities.

So, according to the study the first hypothesis was accepted while later two are rejected. Various recommendations of the study were in terms of potential markets, marketing system and marketable products of the community forests, mechanisms of institutional strengthening of user groups, detailed study on the contribution of forest on the livelihood of local people, impact of commercialization (harvesting of timber and other forest products) on local natural environment and sustainable management of the community forests etc. (Thakur, 2001).

According to Sharma in his dissertation entitled “An assessment of leadership quality in community forest development in Deupur VDC, Parbat”, involvement of lower caste and women in the committee was low. Most of the community forest members were literate and involved in agriculture. Forest was found well protected, reforest rated and afforest rated in the CFUC where there was good leadership. Most of the CFUC were following the rules and regulations according to their constitution. He also recommended that increased participation of lower caste and women should be done, awareness generating and capacity building trainings and workshop as well as self employment oriented skill development training should be provided for women and lower-caste, good coordination and cooperation between and within FUG and other organisations was needed, community fund should properly be implemented, CFUC and CFUG must follow rules and regulations, CFUG should be active in

forestation and reforestation, and forest products should be distributed between CFUG and committee members appropriately. (Sharma, 059/060).

Mikkola in the publication “Community forest’s impact on biodiversity conservation in Nepal” recommended that macroeconomic policies need to take account of environmental and social costs, application of adaptive learning design and implementation of a community forest consolidation phase should be done, government’s role in regulating the NTFP trade should be revisited to remove precise incentives, NBS provisions for increased community participation and information sharing to be fully implemented, usage of indigenous knowledge to develop the marketable products should be done, implementation of research programs to identify values, uses and services of biodiversity in different localities was needed, internally generation of the core funding was also necessary, supporting of the continuous capacity building of all stakeholders should be performed, equitable decision making and representation was also necessary, operational plan should be prepared in a participatory manner and undertaking of the constant monitoring and evaluation and development of the local indicators were also very necessary etc. (Mikkola, 2005)

According to Acharya in his research study entitled “women’s participation in community forests - A case study of Bhenu VDC, Tanahu, Nepal” indicated that participation of women was affected by age. Main occupation of the respondents was agriculture. Level of education status seemed not encouraging because most of the respondents were illiterate. Those were consisted of multiethnic group people. Representation of women in executive committee was very low. Women’s participation in group meeting was low during operation plan preparation. Most of women were not familiar with executive committee member. Participation of women on regular group meeting was low but in specific group meeting was higher comparatively. Women’s participation in protection and distribution of forest products was not high but satisfactory while participation of women in forest related works such as firewood collection, fodder collection and grazing, and medicinal plant collection was very high. Family support, education, absent of male, self motivation etc. were the encouraging factors of women’s participation. Similarly big family size,

education, poor economic status, gender biases, occupation, age were the obstacles of women's participation. The recommendations were more extensive awareness programs should be conducted, special training should be provided by concerned personnel, obstacles should be minimized, encouraging factors should be fostered, special provisions should be made in operational plan about women's participation in community forests and women's representation in committee, government should also make some special provision about women's participation in community forest related policy, plans and programs, and NGOs should promote women to participate in such programs. (Aacharya, 2005).

Subedi in his thesis work entitled "women's participation in community forests- A case study of Basantapur CFUG, Dang District" indicated that level of educational status was very low. Participation in statute building and decision making process was also very low. There was satisfactory participation in protection and distribution of forest products. High participation in collection of firewood while low participation in plantation was found. Main occupation was agriculture and about 70 percent users were benefited from firewood and livestock farming. Women were feeling self dependent from being the member of CFUG. Various recommendations were more extensive awareness and communication training should be conducted, decision making participation should be increased, their participation in forest management should be increased, feasibility study should be carried out on commercial values of trees, obstacles should be decreased, encouraging factors should be fostered, agriculture occupied women should be converted into other occupations, there should be equal proportions between men and women in statute, GO/NGO/INGO agencies should promote women on income generating works from forest products, Care Nepal programs should again be launched, tendency of sucking to user group by DFO should be avoided and action should be changed to participate more women to manage community forests. (Subedi, 2004)

Bista in his research paper entitled "The community forest situation in the far western hills of Nepal: A case study of Hat VDC of Baitadi District" indicated that Chhetri, agriculture and illiteracy were the major caste, occupation and problem of the

VDC respectively. Around 66.2 percent are chhetri, 90 percent were involved in agriculture and 40 percent people were illiterate. Between 1978 and 1996, the forest land, cultivated land and sandy area had been increased by 10.1 percent, 8.71 percent and 0.39 percent respectively and grazing land was decreased by 19.60 percent. The density of user household was different for different community forests ranging from 6.4 to 0.56 household per ha. Similarly, the size of the forest also varied for different community forests. All community executive committee were found male dominated. Female participation was much more in the collection of forest products than the male. Only a few community forests had a good protection system, forest product collection system, and management system. The local people had positive view towards the community forests. Reduction in the problem of fuelwood, fodder, and soil erosion are the major positive impacts while fear of wild animals and the boundary conflicts between the user's groups were some major negative impacts.

On the basis of the findings, the researcher recommended some suggestions. Among them, extension of community forestry programme, encouragement of people towards plantation, conservation and utilization of forest and forest products, provision of plants and technical support from government, provision of economic assistance, encouragement of NGOs and other organizations for awareness building and implementation, provision of forest guard by government, provision of village level training for management and decision making, and regular meeting of executive committee for comment, searching ideas and giving suggestions, were the major recommendations. (Bista, 1999)

According to Devkota in his research study entitled "Women's participation in community forestry management: A case study of Laxmi Mahila Community Forest User Group at Laxmin Bazar, Gorkha", the hindrance factors for women's participation in forest management were lack of technical knowledge and education, maximum time devotion in household chores, low level of economic condition, maximum dominance of male and socio-cultural restricts and maximum workload of women in miscellaneous works etc. Similarly, the levels of women's participation were identifying of the problem, participation in decision making, participation in

implementation, participation in management, participation in sharing of benefits and participation in monitoring and evaluation- And benefits from community forests were healthy and sound environment, provision of fodder and forage grass, controlling of landslide and erosion, timely available of wood or timber, sufficient availability of mulching materials, reduction of poverty, prevention of illegal export of timber, and development of we feeling etc. Most of the respondents had 4 – 8 livestock size, Rs. 15,000 to 30,000 income per year 1 to 2 ha. of land, having agriculture + poultry occupation, having 35 to 59 years of age, middle caste and so on. And economy of the village was determined by agriculture and cropping system, parma system and wage labour, making local wine, indigenous professions, women group and establishment of cooperative attitude especially by male. (Devkota, 1998).

At last, participation of women in management and protection of community forests, collection of forest products and distribution of forest resources was studied by a lot of the researchers limited only in facilitated area. Fewer studies in the community forests of the remote and rural areas are present there. This study is somewhat based on and related to community forests which also includes forestry practices by women's participation in rural Nepal. There were no any previous researches on the community forest of the study area and hence this study aims to view the condition of community forests and its implementation status in one of the least developed, one of the most rural and one of the most remote areas of Nepal.

CHAPTER – 3

RESEARCH METHODOLOGY

3.1 Research Design

This study is mainly based on the micro study of community forestry with respect to women's involvement. It also analyzes the level of women's participation in the protection and management of forests resources. So, this study is mainly analytical and descriptive in nature. So, descriptive research design is used in this study. So, this study searches the adequate information about the study area and women's participation in community forestry practices. So, for this study, both field research and desk research are followed. Survey research is carried out by the help of the sampling method. So, this research is not necessarily seek to explain the relationships, test hypotheses, make predictions or get at meetings and implications of the study. So, this research is more qualitative rather than the quantitative aspects of the phenomenon. This design has been chosen purposively as the goal of the study. This study also describes the activities and tasks of women's committee, women's participation in different activities, and lists some recommendations to improve the organization and participation of women in the forest resource management

3.2 Rationale of the Section of Study topic and Study Area

A lot researches regarding community forestry and people's participation have be carried out but there is the unavailability of excess data about women's participation in forest practices. So, the main reasons of the selection of study topic are to analyses the role of women in forestry sector. The aim of the research is to study the community forest managed by the women. To analyse the development of their own system of management also, this study is carried out.

For the overall development of the country, development of the rural VDC is must. Bhunirajmandau VDC is one of the rural VDC of far western region of Nepal. So, the most of the inhabitants, of this VDC even cannot taste the fruit of development

and even unknown. So, to empower the people for their own development should be the main aim of the all educated persons. so, to empower them to reduce their poverty by the utilization of their natural resources is very necessary. The study of the condition of natural resources of the whole country is out of reach and it is the first step for the researcher to develop rural Nepal. So, the main rationale behind the selection of the study site is that the rural people of Nepal are spending a very difficult life and so, it is necessary to upgrade their lifestyle. The problems of the hilly areas of Nepal and of the study VDC are also put forward in this dissertation. For the development of the VDC, women inhabitants of the VDC and community forests of the VDC, this dissertation may play a significant role for donor agencies. A lot researches regarding the more developed regions are present there, so to study the community forests and women's participation in it, the rural area of Nepal is selected.

3.3 Sampling Procedure

Any type of social research is carried out by the collection of data from the samples which are drawn from population because the study of the whole population is out of reach due to limited time frame and budget. In this research, the simple random sampling was used because in this sampling method, every element of the population has an equal chance of being selected. Similarly for key informants, the judgmental sampling was used. Out of total 413 households of ward no. 1, 4, 7 and 9, 50 household, were selected for household survey, which represent 12.11 percent of the total households. Random table is constructed in order to select households randomly. The sample size used in this study is given in table number 3.1.

Table No. 3.1
Ward Wise Sample Size

Ward Number	Total Number of Households	Number of Sample households
1	148	18
4	101	12

7	36	5
9	128	15
Total	413	50

3.4 Nature and Sources of Data

For this study, both primary and secondary data are used. Primary data were collected by field visiting, by the help of interview, questionnaire and observation of the respondents. Keeping in the mind the objectives of the study and nature of the data required, these primary data collection instruments were used. Hence, the sources of primary data were women of forest committee, local inhabitants, local leaders and district forest officers. Secondary data were collected from the publication of district forest office, district development committee, center bureau of statistics, community forestry division (department of forest), National planning commission, department of hydrology and meteorology and department of geography etc. The collected data were firstly categorized on the basis of major activities of women's committee. Descriptive research design was followed to analyze and present the data for the fulfillment of the objectives. The necessary tables have also been used and analyzed in the chapters.

3.4.1 Selection of the Key Informants

The Key informants for this study were ten. Five were taken from the local leaders and five were taken from district forest office. These key informants were selected according to judgmental sampling on the basis of their position and their knowledge of the research topic.

3.5 Method of Data Collection/Constraints

3.5.1 Household Survey/Questionnaire

In this case, the interview was based on field survey. The household survey was carried out from ward level using structured questionnaire. Household survey was

carried out to acquire information on socio-economic conditions and management practices of the user's groups in community forestry. Questionnaire was used for the collection of data to fulfill the objectives of the study with people from different ages, sex, family and background. This was also used to collect te various information's about the sources of income and activities of the forest committee. During the field study, such interviews were taken with different individuals. For the interview, the regular duties and works were not disturbed, their leisure time was utilized. Such interviews were taken especially with women, local leader, district forest staff, DFO and political leaders.

3.5.2 Discussion

Group discussions were conducted to collect the information. Members of executive committee were discussed about the present condition of committee rules and regulations and development practices/functions and the status of community forests.

Discussion with key informants was helpful in the collection of te information. Local leaders were interviewed for the forest history. Forest user group member were discussed about the condition of the forest, rules and regulations to use the forest products, duties and responsibilities of the forest women's committee, user groups and other issues like aims and objectives of the forest management system.

3.5.3 Field Observation

Field observation was done throughout all the community forestry areas to observe the present condition and management practices. The duties of forest guards and the consumer's forest utilization system were also observed. This was conducted during field visit. The whole time in the morning and day is devoted to interview with respondents of the community and observing their various activities like community development and forest management. The long observation of the respondents provides the abundant knowledge about the forest management and other activities of FUC.

3.5.4 Constraints in Data Collection

Conflict and Maoist fear was the main constraint of data collection of this study. Another problem in the data collection was the belief of the local people. They were not easily convinced that this study was a student's study. The other constraints of data collection were as follows:

1. They did not have sufficient records and documents about their forest.
2. Initial disinterest and suspicion of the people towards the study, as their needs were not met by earlier visitors to the study area.
3. They hesitated to say their disagreement of not participating in the committee's activities and programs etc.

The first problem was solved by frequent visiting in committee's working area by intensive observation of the committee's activities and the discussion with focused person and key informants. The second problem was solved after establishing good relationship with people and clarifying them the purpose of the study. The third problem was solved by understanding their social constraints which were unavoidable thing, they were always surrounding them. The usual problem encountered while doing the study on women in Nepalese rural areas was the difficulty in contacting women because of the cultural and social norms which prescribe that women have to speak only to other women and not to men so they hesitated to speak with males. This problem was solved by motivating the women with friendly manner and polite words according to the situation.

3.6 Method of Data Presentation and Analysis

The impact of the independent variables, i.e., literacy rate, economic level, level of income, employment size of user's groups, participation of women, good planning without diversity, involvement in the program mentally and physically, system of the information's, flow within FUG process, size, condition and the distance

of the forest, leadership of women, economic status of women, income generating activities in FUG, social and cultural norms and values, diversity of ethnicity, caste, educational and technical knowledge about forest, role of women in the society, capacity of FUG to prepare and hold the operational plan, the forest rules of government, attitude towards FUC, change agencies and community forests etc. in the dependent variable, i.e., participation of women in community forestry management was calculated according to the context of the study. In such a case, variables were identified and operational zed.

For data processing and presentation, unnecessary details and insignificant information were eliminated by editing the collected data. Quantitative data were presented in tabular form. To analyze the nature of women's participation in community forestry, descriptive and analytical methods were used for qualitative data. Relevant simple statistical tools were also used for the analysis of quantitative data. For quantitative data, simple quantitative models like calculation, percentages etc. were used for data analysis.

CHAPTER – 4

INTRODUCTION OF STUDY AREA AND COMMUNITY FOREST DISTRIBUTION

Nepal is divided into 5 developmental regions and 3 ecological regions. Eastern, Middle, Western, Mid-Western and Far-Western are the names of development regions while Mountain, Hill and Terai are the name of ecological regions from north to South. The area selected for this study is Bhumirajmandau VDC of Doti District, which falls in the hilly region where most of the area is slope. The main reason for selecting this region is that most of the research work have been concentrated on those areas where the transportation and other facilities are available. But this area is out of reach of such facilities and regarded as one of the remote VDC of the country. In this area, women also have developed their own managing system for their forest. The personal inclinations of the researcher to this study are his familiarity with the area and villagers. Therefore, it is easy to work and stay there for him during research period. Thus, considering the field visiting, economic aspects and time duration, this VDC is proposed for study. The research station is also chosen because women have taken participation and formed female committee there.

Bhumirajmandau VDC is located almost in the central part of the district and approximately 1000 m height from sea level. Religiously, all of the inhabitants of VDC are Hindu and for most of them, mother tongue is Nepali and citizenship is also Nepali. All of the populations are born on same district. Its borders are Kapallekhi in west, Dipayal-silgadhi in north, Gadsera in south and wayal in east. The number of community forests present in the VDC is four and one of them is fully handled and operated by female which is Lama Khola Dando Mahila community forest. Other three community forests are Jogi Dhara, Pashupati and Mahatara Balami Kulabhid, which occupy slightly a lesser participation of women. Jogi Dhara and Pashupati community forests are located in ward number 4 while other two are in ward number 7. The range post for this VDC is Durgamandau. The total area of these four community forest is 117.30 hectare and total number of community forest member is 43 among whom 22 are women. So, this VDC clearly indicated the grater number of women in community forestry than men. Lama Khola Dando Mahila community

forest is the main sight of this study having 14.30 ha of area, 31 households involved and all of 11 community forest members are women.

4.1 Topography

The eastern part of the study area is hilly showing its roughness with moderately steep slopes. The elevation gradually lowers down to the westward. The western part of the VDC has a plain land which gradually slope downs into the river.

The sloppy land contains unfertile and sandy soil. Hence, it is not important and useful for agriculture. Since, agriculture is impossible without good soil, it is the most important natural resource of the agricultural country like Nepal. Basically soil is found in both types of land like low and upland. People used more organic manure than chemical fertilizer in the study VDC. And it shows that only the lower Khet land has dark, grey and sandy soil which is similar to the fertile alluvial soil. Even though the soil is fertile, farmers can not produce desired level of production due to the lack of improved seeds, fertilizers, pesticides and insecticides, and irrigation facility. The major crops of the area are maize, wheat, paddy, soybean, millet and leguminous crops. If government or other concerned agencies can provide irrigation facility, productivity per unit area per unit time could increase.

4.2 Climate

Being a hilly area of Nepal, the climate of the study area ranges from moist sub tropical in the west to temperate in the hill slopes in the east. So, the climate of the most of the study VDC is neither hot nor so cold. In the absence of meteorological station within the area, it is not possible to discuss about the nature of temperature and precipitation. However, attempts have been made to analyze temperature and precipitation data recorded in the nearest meteorological altitude.

4.2.1 Temperature and Precipitation

The temperature and precipitation of this area are given in accordance with department of hydrology and meteorology. The monthly mean temperature and precipitation of one year are presented in the table number 4.1.

In a year, the maximum temperature reaches to 37.5⁰ C and minimum temperature falls to 3.9⁰ C showing a great variability in the temperature. The difference between maximum and minimum temperature reaches upto 33.6⁰ C. And the average temperature is 20.7⁰ C. Similarly, rainfall per year is 1261 mm showing 105.1 mm per month, (low precipitation).

Table No. 4.1
Temperature and Precipitation at Dipayal (Doti)

Month	Temperature (⁰ C)			Total Rainfall (mm) = 1261 mm/year (2003)
	Maximum	Minimum	Average	
January	24.6	3.9	14.3	
February	25.3	7.5	16.4	
March	29.3	11.2	20.3	
April	35.5	15.9	25.7	
May	37.5	18.4	27.9	
June	37.5	24.1	30.8	
July	34.6	24.6	29.6	
August	35.0	24.5	29.8	
September	32.1	22.6	27.4	
October	33.4	16.1	24.8	
November	28.9	9.9	19.4	
December	25.8	6.6	16.2	

Source: Department of hydrology and meteorology (2003)

4.3 Drainage

Drainage of the VDC consists of several small rivers and streams. Gairi Gad is the main river which flows towards the north part of the VDC. Thulo Khola, Chipathe Khola, Pairo Khola and Chimaradi Gad are main tributaries of Gairi Gad, which meet in the Bhumirajmandau VDC. All rivers are originated from the upper parts of the surrounding ranges.

4.4 Forests

In the study area, subtropical type of forest is found. The common species of this types of forest are Sal, Khanayo (*Ficus sps*), Sallo (*Pinus roxburghii*), Uttish (*Alums nepalensis*), Katus (*Castonopsis indica*), Gurans (*Rhododendron sps.*), Kaphal (*Myricaesculanta*), Bakaino (*Melia azadirach*) and Painyu (*Prunus sps.*). Saal and sallo are the main species in the study area.

4.5 Settlement

Settlement pattern of the study area is found rural type, which is agglomerated but not compact. There are no motorable roads but only foot trails in the study area. Socio-cultural and economic condition of the villagers as well as geographical formation of the land is reflected by settlement pattern. The VDC is situated in the slopes of the hills, so the settlement pattern is scattered and the houses are built separately. With increasing population, the settlement area is now giving to be more congested for the construction of new houses. As result, few of them have migrated in the southern Terai region of the zone.

4.6 Pattern of Houses

Socio-cultural norms and values, geographical formation, climate and economic condition etc. affect the pattern of houses. The houses of the study area are especially made up of mud, wood, stone, grass, zinc plate and governmental houses by cement. Some shelters are thatched huts and made with bamboo stick. On the VDC,

most of the mud and stone made house are available and their roofs are made up of wood, grass or stones. Among the 831 households of the VDC, 600 household roofs are made up of stone/ slate and remaining roofs are made up of khar and dry grass. Around 492 houses are of three two stories, 30 houses are of one story and 309 houses are of stories. The ground floor is generally used for kitchen and keeping cattle, buffalo goats etc. 1st floor is generally used as bed room and the remaining top floor is used for storing grains, goods and as a room of god.

4.7 Human Resources

The total population of Bhumirajmandau VDC is 4561. Among them, 604 are the populations below 6 years. According to CBS, population by 6 years of age and over is 3957. Among them 1921 are male and 2036 are female. The total of 2237 populations can not read and write, 361 can read only and 1305 can read and write and 54 not stated (Table 4.2). Only a few number of non-governmental organizations relating to literacy programs are working there. So, the educational status of this VDC is also bad. In this VDC, no secondary school is available and only primary level school is there. Although campus level education is available in the district headquarters, it has no impact in the livelihood of local people. Some technical skill training classes and vocational training classes are also often available in the district headquarters.

Table No. 4.2

Human Resources of the Study Area (6 years and above)

Education Level	Male	Female	Total	Percentage
Cannot read and write	772	1465	2237	56.5
Can read only	218	143	361	9.1
Can read and Write	898	407	1305	33.0
Not stated	33	21	54	1.4
Total	1921	2036	3957	100

4.8 Community Forest Distribution

Doti district has 206 number of forest user's groups. The number of committee members is 2583 among whom 657 are women and 1926 are men. All women's community forest user group-committee number is 14 for Doti district covering an area of 543.66 ha. Average forest area is 38.83 ha and average household number is 70.71. total household number and number of women committee members are 990 and 163 respectively. VDC wise the distribution of all community forests is given below:

Table No. 4.3
VDC-wise Community Forest Distribution

Name of VDC (Ward no.)	Number of CFUG	Number of Women CFUG
Ganguda (7,8)	2	0
Satpheri (4,5)	2	0
Chamarachautara (1,2,3,4,8,9)	8	0
Kedarakhada (4,5,6,7,8)	2	0
Kanachaur (5)	1	0
Simchaur (3,4,5,6,7,8,9)	8	0
Basudevi (1,6,8)	2	0
Ranagawn (1,2,3,4,7,8,9)	3	0
Durgamandau (1,4,5,6,7)	3	0
Kapallekhi (1,4,5,6,7,8,9)	8	0
Bhumirajmandau (4,7)	4	1
Saraswatinagar (7)	2	1
Gadhasera (3,4,5,7,8,9)	2	0
Nirauli (4)	2	0
Ghanteshwor (1,4,5,6,8)	4	0
Chhatiwan (1,3,4,5,7,9)	7	0
Laxminagar (1,2,5,6)	7	1
Banlake (6)/ Kaipalmandau (1)	1	0

Barpata (1,4,5,6,7,8,9)	7	1
Jijaudamandau (1,2)	2	0
Latamandau (1,3,8)	3	1
Pachnali (1,2,3,4,5,6,8)	6	0
Mudbhara (1,2,3,4,5,7,8,9)	7	0
Tijale (1,2,8)	3	0
Chapali (3,5,6,7,9)	4	0
Girichaur	1	0
Dahakalikasthan (1,2,5,6)	4	0
Banjhkakani (2)	1	0
Lamakhal (5,6,7,8)	4	0
Kalikhasthan (1,2,3,4,5,6,9)	8	0
Mannakapadi (1,2,7,8,9)	4	0
Kedareswar (1,2,3,4,5,7,8,9)	6	0
Berchen (1,3,5,6,7,9)	6	0
Gairagaun (1,2,3,4,5)	7	1
Khirsain (1,2,3,4,6,7,9)	2	0
Kadamandu (1,2,3,5,6,7,8,9)	8	0
Sanagaun (1,2,3,4,5,8,9)	3	0
Gajari (1,2,3,4,5,6,7,8,9)	5	0
Pokhari (1,2,3,4,5,6,7,8,9)	3	0
Baglekh (4,5,6,7,8,9)	5	0
Khatwada (4,5,6,7,8,9)	5	1
Dipail (1,3,4,5,6,7,8,9,11,13,14)	30	6
Kalaina (1,2,3,8,9)	2	1
Ladgada (3)	1	0
Total	206	14

Source: CFD Database (2005)

Hence, there is regular distribution of community forests throughout the district. But the number of women CFUG is quite low which is around 7 percent of total CFUG, (i.e., 14 out of 206 CFUG). In the other hand, around 25 percent of forest user committee members are women (i.e. 657 out of 2583).

Table No. 4.4
Women CFUG Distribution (VDC wise)

VDC name	No. of Women FUG	Total HH	Total Forest Area	No. of Committee Members
Bhumirajmandau	1	31	14.30 ha	11
Saraswatinagar	1	12	6.50ha	11
Laxminagar	1	36	12.86ha	11
Barpata	1	25	76.00ha	11
Latamandau	1	112	2500ha	11
Gairagaun	1	23	8.05ha	12
Khatwada	1	204	18ha	11
Dipail	6	424	182.95ha	72
Kalaina	1	123	200.00ha	13
Total	14	990	543.66	163

Source: CFD Database (2005)

The distribution of forests mainly depends on various natural phenomena like soil, slope, altitude etc. the vegetation type of this VDC is subtropical and the forest types includes subtropical deciduous forest (Lamakhola Danda Mahila), pinus roxburghii (pine) forest (Mahatara Salani Khlabhid), Oak-rhododendron forest (Pashupati) and upper slope mixed hardwood forest (Jogi Dhara). All the community forests are natural forest. No shrub land, plantation and grassland is available. All the community forest are in good condition, i.e. reasonably dense forest.

4.8.1 Ward wise Distribution of Forests

Community forest is a kind of forest, which is managed by user's group for conservation as well as utilization of forest product. Community forest program has solved the problem of fuelwood, fodder, leaf litter etc. of the people.

Table No. 4.5
Ward wise Distribution of Community Forests

Ward no.	FUG name	CF Area (Ha)	Household number	Percent	Household density
4	Jogi Dhara	20	34	17.1	1.7
4	Pashupati	65	26	55.4	0.4
7	Mahatara Salani Kulabhed	18	30	15.3	1.7
7	Lamakhola Dando Mahila	14.3	31	12.2	2.2
	Total	117.3	121	100	1.03

Source: CFD Database (2005)

The community forest constitutes 117.3 ha. area of the total area of VDC. Pashupati community forest has the largest area (65 ha), constituting 55.4 percent of total community forest area. The second largest community forest is Jogi Dhara of ward no. 4 (20 ha), constituting 17.1 percent of total community forest area. Similarly, third largest and smallest community forests are Mahatara Salani Kulabhid and Lamkhola Danda Mahila, having an area of 18 ha and 14.3 ha respectively constituting 15.3 and 12.2 percent of total CF area.

The forest user household density has been almost equally distributed in all community forests of the VDC. The data showed that Lama Khola Dando Mahila community forest has household density of 2.2, i.e. 2.2 households depend on per hectare. Similarly, for Mahatara Salani Kulabhid, Jogi Dhara, and pashupati community forest have household density of 1.7, 1.7 and 0.4 respectively. As a whole, the total density of households is almost 1, i.e. 1 household depends on one hectare, in the study area.

Among all four community forests of VDC, operational plan app. data for Lama Khola dando mahila was 2055/2/30, while for others it was 2051/4/23. (CFD

Database, 2005). It has been shown that for Mahatara Salani Kulabhid for fiscal year I (59/60), the income was Rupees 19,888 and expenditure was zero, similarly for fiscal year II, the income and expenditure both are zero. But for the other 3 community forests, the data is unavailable.

4.8.2 NARMSAP Results

According to NARMSAP, the total community forest area handed over in Doti district is 31,994 ha. and number of household involved are 20,692. Maximum number of committee member is 31 while minimum number is 5. Maximum number of women in committee is 15 while minimum number is zero. Average income of FUG is Rs. 23511 while the average expenditure of FUG is Rs. 11,948. These are the records available from 2049/3/30 to 2061/11/25. (NARMSAP, 2005)

CHAPTER – 5

DATA PRESENTATION AND ANALYSIS

5.1 Caste/ethnic Condition

5.1.1 Caste/ ethnic Condition of the Study Area

In the study area, different caste/ ethnic groups of people are found. It can be shown in following table.

Table No. 5.1
Caste/ ethnic Condition of the Study Area

Caste/ ethnic group	Total population	Percentage
Chhetri	2313	50.7
Brahman hill	1200	26.2
Sarki	165	3.6
Thakuri	158	3.5
Kami	429	9.4
Damai/Dholi	202	4.4
Sanyasi	67	1.5
Lohar	7	0.2
Yadav	11	0.3
Others/ unidentified caste	9	0.2
Total	4561	100

Source: CBS, 2003

The study area is mostly inhabited by Chhetries sharing 50.7 percent of the total population. Similarly, Brahmin, Kami, Damai, Sarki, Thakuri and Sanyasi constitute 26.2, 9.4, 4.4, 3.6, 3.5 and 1.5 percent respectively. And other caste constitute only a negligible percentage.

5.1.2 Caste/ ethnic Groups of the Respondents

Table No. 5.2
Caste/ethnic Groups of the Respondents

Caste/ Ethnic group	Male		Female		Total	Percent
	No.	%	No.	%		
Upper caste	5	33.33	10	66.66	15	30
Middle caste	6	23.1	20	76.9	26	52
Lower caste	3	33.33	6	66.66	9	18
Total	14	28.0	36	72.0	50	100

Source: Field Survey, 2006.

The researcher divided different caste and ethnic groups into main three divisions. They were upper caste (Brahmin Hill- Bhatta, Joshi etc and Thakuri), middle caste (Chhetri- Balayar, Nayak etc., Sanyasi, Yadav and other) and lower caste (Lohar, Damai, Dholi, Kami, Sarki etc.) It was found that out of 50 respondents, 26 were of middle caste indicating highest number of respondents and 9 were of lower caste indicating the lowest number of respondents. In fact, it was found that so many households of the lower caste around that area than the actual study area but they were poorly included in CFUG. So, if the lower caste were educated or they were aware about the community forest, they would easily come under this FUG. So, due to the lack of technical education, regarding the forest, the low number of lower caste were included in FUG. Similarly, 36 out of 50 respondents were female and only 14 are male because the study focused on participation of women in forest management. With comparison to upper caste and lower caste female, middle caste female were more included in the study both by number and by percent.

5.2 Age

5.2.1 Distribution of Respondents According to Age

According to the age category of respondents, they were divided into three groups. They were adult (10-34 years), middle (35-59 years) and old (60 years and above). Among the respondents majority fell in middle age. Around 64 percent of the respondents were between 35 to 59 years of age. Similarly 24 percent of respondents were between 20 to 34 years of age and remaining 12 percent were 60 years of age or above.

Table No. 5.3
Age Structure of the Sampled Population

Age	Male	Percent	Female	Percent	Total	Percent
Adult (10-34 years)	2	16.67	10	83.33	12	24
Middle (35-59 years)	10	31.25	22	68.75	32	64
Old (60 years and above 60 years)	2	33.33	4	66.67	6	12
Total	14	28	36	72	50	100

Source: Field Survey, 2006

The middle age population played a crucial role to manage the community forestry. The respondents below 10 or 15 years of age were not included due to their lesser knowledge about the study topic. The distribution of respondents according of age group was quite homogenous.

5.3 Occupation

5.3.1 Distribution of Respondents According to Occupation

Table No. 5.4
Occupational Status of the Respondents

Occupation	Male	Percent	Female	Percent	Total	Percent
Agriculture	4	25	12	75	16	32
Agriculture + livestock	8	28.6	20	71.4	28	56
Agriculture + livestock + poultry	1	33.3	2	66.7	3	6
Other (Business/ service etc.)	1	33.33	2	66.7	3	6
Total	14	28	36	72	50	100

Source: Field survey, 2006

The occupation of the respondents was categorized into 4 main parts. They were agriculture, agriculture + livestock, agriculture + livestock + poultry and others. Agriculture was the main occupation of the respondents and their economy was dominated by the agriculture. Many respondents told that they had another profession, but agriculture cannot be separated from their life. Majority of the respondents around 56 percent was of agriculture + livestock occupation. Similarly, agriculture only, agriculture + livestock + poultry and other occupation occupied 32, 6 and 6 percent respectively. So, above table showed that the majority of respondents were doing agriculture or agricultural oriented jobs even if they were literate or educated. So, it can be concluded that the agriculture can not be separated from the life of rural poor people.

5.4 Education

5.4.1 Educational Structure of the Study Area

Table No. 5.5
Education of the Study Area

Education group	Male	Female	Total	Percentage
Can not read and write	772	1465	2237	56.5
Can read only	218	143	361	9.1
Read and write	898	407	1305	33.0
Not stated	33	21	54	1.4
Total	1921	2036	3957	100

Source: CBS, 2003

Above table showed that majority of the population of the study area cannot read and write (around 57 percent). The problem was more serious in female. Out of the total illiterate people, female constituted around two third part. Similarly, the percentage of people who can read and write, can read and not stated were 33.0, 9.1 and 1.4 percent respectively. The problem of illiteracy was very serious in women in the study area.

5.4.2 Distribution of Respondents According to Education

Table No. 5.6
Education Status of the Respondents

Level of education	Male	Percent	Female	Percent	Total	Percent
Can't read and write	4	16.6	20	83.3	24	48
Can read only	4	40	6	60	10	20
Read and write	5	38.5	8	61.5	13	26
Not stated	1	33.3	2	66.7	3	6
Total	14	28	36	72	50	100

Source: Field Survey, 2006

The education category was divided into 4 groups which were can't read and write, can read only can read and write, and not stated. According to the context, "can't read and write" groups were regarded as illiterate, "can read only" groups were

regarded as literate and “can read and write” groups were regarded as educated. The study showed that almost 48 percent of the respondents were illiterate, 26 percent were educated and 20 percent were illiterate. Of the total respondents (illiterate), women constituted above 83 percent and in all the education groups women dominated the men. But the data showed that illiteracy was very serious among women of the study area and somewhat serious in men also.

5.5 Household Income

Table No. 5.7

Distribution of Respondents According to Household Income

Household income	Male	Percent	Female	Percent	Total	Percent
High	1	25	3	75	4	8
Middle	8	28.6	20	71.4	28	56
Low	5	27.8	13	72.2	18	36
Total	14	28	36	72	50	100

Source: Field survey, 2006

The household income category was divided into 3 groups. They are high, middle and low, if the annual income was above 30 thousand’s, between 15 thousands and 30 thousands, and below 15 thousands respectively. Out of 36 female respondents, the majority fell in middle income level which was 55.6 percent of total female respondents similarly, low income level and high income level female respondents were 36.1 percent and 8.3 percent respectively of the total female respondents. Similarly, out of 14 male respondents, majority again falls in middle level income which was 57.1 percent of total male respondents. Similarly, low income level male respondents and high income level male respondents were 35.7 percent and 7.2 percent respectively of the total male respondents. This data did not exactly showed that male and female respondents had difference in earning.

5.6 Livestock Situation

5.6.1 Respondents and Livestock Situation

Table No. 5.8
Livestock Situation of the Sampled Households

Livestock size	Male	Percent	Female	Percent	Total	Percent
High	4	20	16	80	20	40
Middle	4	33.3	8	66.7	12	24
Low	3	27.3	8	72.7	11	22
No livestock	3	42.9	4	57.1	7	14
Total	14	28	36	72	50	100

Source: Field visit, 2006

The livestock situation category was divided into four groups, which were high, middle, low and no group, if the number of livestock was greater than 8, between 4 and 8, less than 4 and zero, respectively. According to the field survey, 40 percent of total respondents were of high group, 24 percent, 22 percent and 14 percent were of middle, low and no livestock groups respectively. Similarly, out of the total male respondent 28.6 percent, 28.6 percent, 21.4 percent and 21.4 percent were of high, middle, low and no livestock category. And, out of the total female respondents, 44.5 percent, 22.2 percent, 22.2 percent and 11.1 percent were of high, middle, low and no livestock category. Although, all of the respondents were dependent on agriculture directly or indirectly, some of them did not have livestock due to their own family case like low number of family members, grown-ups were far-from home for further study or services etc. The data showed that the female respondents would prefer to rear livestock for livelihood than that of male.

5.6.2 Number of Livestock's and Household Average

Table No. 5.9
Number of Livestock

Livestock	Total number of livestock	Average Households
Cow (ox)	180	3.6
Buffalo	40	0.8
Goats	100	2.0
Others	30	0.6
Total	350	7.0

Source: Field Survey, 2006.

Cow, buffalo and goats were the main livestock raised by people. Out of 50 households sample survey, it was found that average households raised 3.6, 0.8, 2.0 and 0.6 for cow, buffalo, goat and others, respectively. The average household raised total 7.0 live stock. Cows and buffaloes were used for milk production, ox were used for polughing and goats were mainly used for meat production in the study area. So, it showed a well distribution of livestock per household.

5.7 Land Holding

Table No. 5.10
Land Holding Size of the Sampled Households

Land holding size	Male	Percent	Female	Percent	Total	Percent
High (Above 2ha)	5	23.8	16	76.2	21	42
Middle (1-2ha)	5	26.3	14	73.7	19	39
Low (Below 1ha)	5	42.9	4	57.1	7	14
No (Zero ha)	1	33.3	2	66.7	3	6
Total	14	28	36	72	50	100

Source: Field survey, 2006.

The land holding size category was divided into four groups which included high, middle, low and now, if the respondent constituted above 2 ha., between 1 to 2 ha, less than 1 ha and landless respectively. According to the study, 44.4 percent, 38.9 percent, 11.1 percent and 5.6 percent female respondents had high, middle, low and no land holding respectively. Similarly, 35.7 percent, 35.7 percent, 21.4 percent and 7.2 percent male respondents had high, middle, low and no land holding respectively. The total respondents, 42 percent, 38 percent, 14 percent and 6 percent were categorized into high, middle, low and no landholding groups. The distribution of respondents was not quite homogenous.

5.8 Marital Status

Table No. 5.11
Marital Status of the Respondents

Marital Status	Male	Percent	Female	Percent	Total	Percent
Single	2	16.7	10	83.3	12	24.24
Married (Single spouse)	8	28.6	20	71.4	28	56
Married (more than 1 spouse)	1	100	–	0	1	2
Remarried (Single spouse)	1	100	–	0	1	2
Widow/Widower	2	25	6	75	8	16
Total	14	28	36	72	50	100

Source: Field Survey, 2006

The marital status of respondents was categorized into five groups. They are single, married (single spouse), married (more than 1 spouse), remarried (single spouse) and widow/widower. According to the study, majority of respondents (56 percent) fell in married (single spouse) category. Similarly, 24, 22 and 16 percent of respondents fell into single, married (more than 1 spouse), remarried (single spouse)

and widow/widower group. The study showed that no female respondents are remarried (single spouse) and married (more than one spouse) due to various cultural norms and values. The present of male respondents falling in the category single, married (single spouse), married (more than 1 spouse), remarried (single spouse) and widower were 14.3, 57, 7.1, 7.1 and 14.3 percent respectively. Similarly, the percent of female respondents falling in the category single, married (Single spouse), married (more than 1 spouse), remarried (single spouse) and widow were 27.8, 56.6, 0,0 and 16.6 percent respectively.

5.9 Distribution of Respondents According to Family Size

Table No. 5.12
Family Size of Respondents

Family Size	Male		Female		Total	
	No.	%	No.	%	No.	%
Large (more than 8)	2	0.2	8	0.8	10	20
Medium (4 – 8)	10	31.3	22	68.7	32	64
Small (less than 4)	2	25	6	75	8	16
Total	14	28	36	72	50	100

Source: Field Survey (2006)

The category of family size was grouped into three groups, which were large, medium and small, if the numbers of family members were greater than 8, between 4 and 8 and less than 4 respectively. According to the research work 64 percent of respondents had medium family size. Similarly 20 percent and 16 percent respondents had large and small family size respectively. Out of the total male respondents, 14.3 percent, 71.3 percent and 14.3 percent had large, medium and small family size. And out of the total female respondents, 22.2 percent, 61.1 percent and 16.7 percent had large, medium and small family size. In the study area majority of population had medium family size.

5.10 Distribution of respondents According to Agricultural Production

Table No. 5.13

Agricultural Production of Respondents

Agricultural Production	Male	Percent	Female	Percent	Total	Percent
High	2	40	3	60	5	10
Middle	7	26.0	20	74.0	27	54
Low	5	27.8	13	72.2	18	36
Total	14	28	36	72	50	100

According to the amount of agricultural production of paddy, the agricultural, Production group was categorized into high, middle and low. If the production was greater than 50 bhari (around 100 kg per bhari) or 20 to 50 bhari or less than 20 bhari, the groups were categorized into high, middle or low respectively. According to the study, majority (around 54 percent) of respondents had middle agricultural production. Similarly, low and high agricultural percentage was 36 and 10 percent respectively. Out of the total male respondents, 14.3 percent, 50 percent and 35.7 percent had high, middle and low agricultural production respectively while out of the total female respondents, 8.3 percent, 55.6 percent and 36.1 percent had high, middle and low agricultural production respectively.

Table No. 5.14

Approximate Agricultural Production of Different Crops (Annual)

Crops	Agricultural Production	Sampled Household	Average Household
Paddy	1,35,000 kg	50	2700 kg/household
Wheat	85,000 kg	50	1700 kg/household
Maize	100,000 kg	50	2000 kg/household
Cash Crops	20,000 kg	50	400 kg/household
Others	1,20,000 kg	50	2400 kg/household
Total	4,60,000 kg	50	9200 kg/household

Source: Filed Survey, 2006

Agricultural production was categorized into different crop groups. Since no exact record was given by respondents, the researcher tried to calculate the annual production of different crops after discussing with the respondents and by the utilization of his own knowledge. According to the study, paddy, wheat and maize were the major crops of the area and the data showed that the annual production of paddy, wheat, maize, cash crops and others per household were 2700 kg, 1700 kg, 200 kg, 400 kg and 2400 kg respectively. So, it showed a acceptable agricultural production of the area.

5.11 Distribution of Respondents According to Food Sufficiency

The food sufficiency category was classified into five groups according to the number of months that the food was sufficient to consumers, which were less than 3 months, 3 – 6 months, 6 – 9 months, 9 – 12 months and more than 12 months.

Table No. 5.15

Food Sufficiency of Sampled Population

Food Sufficiency	Male	Percent	Female	Percent	Total	Percent
3 months or less	1	33.3	2	66.7	3	6
3 months –6 months	1	25	3	75	4	8
6 months – 9 months	3	33.3	6	66.7	9	18
9 months –12 months	6	23.1	20	76.9	26	52
More than 12 months	3	37.5	5	62.5	8	16
Total	14	28	36	72	50	100

Source: Field Survey (2006)

The study showed that the majority of respondents had food sufficiency around 9 to 12 months (52 percent). Similarly, the percentage of respondents for food sufficiency less than 3 months, 3 – 6 months, 6 –9 months and more than 12 months was equal to 6 percent, 8 percent, 18 percent and 16 percent respectively. Similarly, out of the total male respondents, the percent of male respondents having food sufficiency for less than 3 months, 3 to 6 months, 6 to 9 months, 9 to 12 months and more than 12 months was equal to 7.1 percent 7.1 percent 21.4 percent, 43.0 percent and 21.4 percent respectively. And out of the total female respondents, the percentage of female respondents having food sufficiency for less than 3 months, 3 to 6 months, 6 to 9 months, 9 to 12 months and more than 12 months was equal to 5.6, 8.3, 16.7, 55.6 and 13.8 percent respectively. So, it also proved that the condition of the respondents was not so poor as compared to other rural areas.

5.12 Economy of the VDC

5.12.1 Agriculture

Nepal is predominantly an agricultural country. Above 75 percent of the economically active population are dependent directly or indirectly in agriculture.

Agriculture is the main source of livelihood for the people and is the backbone of the economy. The data showed that above 99 percent of the economically active population are dependent on agriculture in the VDC. As in the other rural areas of the country, the people are mostly subsistence farmers because they produce most of the grains for own consumption and not for trade. Lack of appropriate marketing facilities and small size of landholding are the main reasons behind that. The other reasons of being subsistence farmers are lack of irrigation facilities, lack of modern technology, unavailability of improved seed, less utilization of fertilizers, absence of pesticides and insecticides, lack of technical knowledge and so on.

5.12.2 Land and Landholdings

There is the very little availability of productive and suitable agricultural land in the study area. Although major of the VDC cropping land is plain, the agricultural productivity is very low due to less use of fertilizers, indigenous system of farming and lack of improved seeds and above described factors. Generally maize and other cash crops are produced in bari (non-irrigated land) and paddy and wheat are produced in khet (irrigated land). Due to barrening season from Poush to Chaitra, bari-produced crops are cultivated during rainy season only. The soil of khet is found more fertile than the soil of bari. Generally Khet is manured 2 or more than 2 times a year. In the VDC, due to the current situation of the country, no “maate” (mortgaging) system is found. But in early years, the person who gives loan (Sahu) used to accept the land as mortgage and used to utilize the land till the loan is returned. If the loan cannot be returned, the land is used to utilized by ‘sahu’ forever as a legal process. In the other hand, the land of one is cropped by another farmer and they used to take half/half benefit i.e., amount of crops. Such system is very famous in the VDC and is Known as “Dhaniya” system. In this case, the households who have not food sufficiency for a year can able to get more crops by more laboring for their daily livelihood.

5.12.3 Cropping System

Due to very limited agricultural land and other facilities, the farmers used to grow two or more than two crops in the same land at the same time for their livelihood. Both inter cropping and relay cropping are practiced mainly in connection with maize. The major pattern of intercropping includes millet + maize, maize + bean, maize + soyabean, rice + pulses etc. Such types of intercropping is very useful in maintaining; the fertility and quality of soil and in helping the people as subsistence. It can not give them to have more grain at a same time from the same land but it is useful/helpful in many ways to survive.

5.12.4 Major types of Crops

Paddy, wheat, maize and millet are the top four major crops of the study area.

Paddy and wheat are generally cultivated in "Khet" while maize and millet are cultivated in "Bari". The production cycle of these major types of crops is shown in table no. 5.16. Mustard is also one of the important crop of the study VDC. The major vegetables found in the area are cauliflower, cabbage, tomato, potato, pumpkin, cucumber, bean etc. The pulse crops are soybean, Gahat, Maas, Matar etc. The cash crops found in the area are mustard, sugarcane etc.

Table No. 5.16**Production Cycle of Different Crops**

Type	Maize	Paddy	Millet	Wheat
Work				
Seedling preparation	–	–	Baisakh/Jes.	–
Land Perparation	Baishakh	Ashadh/Srawan	Jes./Asad	Kartik/Mangsir
Planting (Seedling + transplanting)	Baisakh/Jestha	Jestha/Asadh/Srawan	Jes./Asad	Mangsir
Weeding	Baishak/Jestha	Bhadra	Asad/Srawan	Magh
Harvesting	Bhadra	Kartik/Mangsir	Kartik	Chitra/Baisakh

Source: Field Survey, 2006

5.12.5 Parma System and Labourers

Labour exchanging labour or reciprocal relationship of family labour is called Parma system and it is popular among small farmers because they have poor condition to pay wage for labourers. Each year particularly during the times of planting and harvesting every household mobilizes labour form other households in addition to their own family labour and an agreement is made between several households to work in each household in turn on a reciprocal basis. Both men and women are equally integrated in Parma system in the study area.

Wage labour is a kind of labour system among the farmers where labourers are hired individually for a day work. The labourer are paid on the basis of the amount of work done. The wage rate is very low for agricultural labourers in the study area, i.e., Rs. 20 – 30 per day. In other words, those people which have very low agricultural land and which have no member for Parma system, generally use wage labour. Labour may be engaged on a contract basis whereby an entire household will work collectively with payment made to the group on the basis of the amount of the work

done. Women are generally hired for transplanting, weeding, applying manure and harvesting while men are mostly employed for ploughing and threshing in the study area. In the hills there are very limited opportunities for income from agricultural wage employment due to the small size of landholding and a tradition of mutual help from family labourers during peak agricultural period.

5.12.6 Traditional Profession

Traditional profession is that profession which is transferred from generation to generation. It is mostly found in the rural areas according to the ethnic/caste groups having historical importance. Lower caste people generally have different indigenous professions. Lohar and kami of the study area following the profession on formation and repairing of iron tools and metals Sarki are following the profession on formation and repairing of lethar and lethar products and Dholi/Damai are following the profession on sewing of different clothes to make garments. Those lower caste people are getting the grains instead of money from the upper caste people according to their profession. Although the society has been changing day by day, the higher castes always encourage the lower castes to follow their own profession. As a result, they could preserve or protect their own culture which help to reflect their original identity.

CHAPTER – 6

PROTECTION AND MANAGEMENT OF COMMUNITY FOREST BY WOMEN

6.1 Historical Background of Forest Management and Protection

According to the local population, there was a dense forest and was managed directly by the local people before panchayat system. There was no problem of dry and green wood, fodder and timber. But after the establishment of panchayat system and after the abolition of birta system, the responsibility of conservation and protection of the forest was given to village panchayats. However, this programme could not achieve success. The existing forests started to be exhausted rapidly because of the lack of fuel and fodder, became a great problem that directly affected the local people. Realizing the critical situation of forestry, the government change the forestry management system. The government recognized the need of people's participation in forest management.

In 1970, HMG Nepal adopts the community forestry programme by enacting legislations which allowed the transfer of responsibility for forest management from government to local village Panchayat. Failure of the previous government efforts for forest protection and management, and people's involvement in local forest management lead to the adoption of this programme. The master plan of government recognizes the sector of community forestry as the major strategy and includes policy statement to encourage the handing over the forest resources to the communities for their protection, management and sustained utilization.

6.1.1 Respondent's Use for Cooking Food

The data showed that the great percentage of the respondent were dependent on firewood for cooking food. Hence, it essentially described the importunacy of forests in the study area.

Table No. 6.1

Resources Used for Cooking Food by respondents

Resources	Male	Percent	Female	Percent	Total	Percent
Firewood	11	36.2	31	73.8	42	84
Kerosene	2	33.3	4	66.7	6	12
Biogas	1	50.0	1	50.0	2	4
Total	14	28	36	72	50	100

Source: Field Survey (2006)

Almost 84 percent of total respondents were dependent on firewood for cooking food. Similarly the percentage of dependent people on the kerosene and biogas, were 12 percent and 4 percent respectively. Similarly out of the total male respondents, 78.6 percent, 14.3 percent and 7.1 percent were using firewood, kerosene and biogas for cooking purposes respectively. And out of the total female respondents, 96.1 percent, 11.1 percent and 2.8 percent were dependent on firewood, kerosene and biogas respectively for cooking purposes.

6.2 Management and Protection System of Community Forest

In the study VDC, the concept of community forest was introduced in 2051 by involving the local community. But the only one women's community forest was established in 2055 The government forest of the study area was handed over to the local people in different years. The present condition of the protection and management system of community forests in Bhumirajmandau VDC is different for different community forests. Some community forests allows the firewood collection, fodder collection, leaf litter collection and grazing while others do not allow. Similarly, some community forests allow some of the above described sectors but not all. Similarly, for protection system, some community forests give employment to the forest guards and some protect selfly. The different community forests of the study VDC are described as follows;

1) Jogi Dhara Community Forest User Group

Operation plan app. date for this CFUG is 2051/4/23 having a FUG code of DOT/DU/28/01. The range post for this community forest is Durgmandau. It is located in the word number 4 of Bhumuirajmandau VDC. The area of this community forest is 20 hectare. There are 34 user households. The vegetation of community forest is natural forest. No plantation, Shrubland and grass land is available. The forest type is upper slope mixed hardwood forest and is in good condition. Out of the total 11 committee members only 4 are women. In the first fiscal year (59/60), the income of community forest was Rs. 3000 and expenditure was Rs. 2000 but in the second fiscal year, no income and expenditure data are available.

2) Pashupati Community Forest User Group

The code of the CFUG is DOT/DU/28/02 having Durgamandau as range post. It lies in ward number 4 of the VDC and the operational plan app. date is 2051/4/23. It occupies 65 hectare land of VDC. The number of user household is 26. Its vegetation is also natural forest and its type is oak-rhododendron forest. The forest is also in good condition. The total number of committee members is 10 among them 4 are women. It has no income-expenditure record.

3) Mahatara Salani Kulabhid Community Forest User Group

It is situated in the ward number 7 of the VDC. The range post for this community forest is Durgamandau and its FUG code is DOT/DU/28/03. The operation plan app. date for this CFUG is 2051/4/23. It covers an area of 18 ha. The number of households involved in the CFUG is 30. The vegetation and forest type are natural forest and pinus roxburghii (pine) forest respectively. Only three women are in committee out of the total eleven members. Its operational plan was revised in 2055/3/30. The income of the first fiscal year (59/60) was 19888 having no expenditure. But after that no financial reports are available.

4) Lama Khola Dando Mahila Community Forest User Group

The FUG code is DOT/DU/28/04 having Durgamandau as range post. The location of the community forest is in ward number 7 of the VDC covering an area of 14.3 ha. It was established in 2055/2/30. There are 31 user households. The vegetation type and forest type of the community forest are natural forests and subtropical deciduous forests respectively. The community forest is also in good condition. It is the one and only one women managed community forest of the study VDC. Hence, out of total 11 committee members all are women. It has also no financial report available yet.

6.3 Women's Participation in Community Forest Management

6.3.1 Definition of Participation

Mass sharing of benefits of development, mass contribution to development and mass involvement in the decision making process of development are the ingredients of popular participation which has some what same meaning as people's participation. The involvement of the concerned persons to do the work successfully is called participation. In the context of Nepal, participation means collective action. It should also not stand for the same nature of work to all sorts of status, age and sex. It is not to be supposed as the compulsory participation of all who are also unwilling to do. Participation can also be maintained through different aspects. It is not said the well participation if every member does equal work. The division of labour according to their work show good participation. The main key factor for good participation is the consensus of the members in their plan through discussion, listening to other's words and taking responsibility. Interaction and discussions are the only way of success of any work, so the members have to follow this way strictly. Good participation can be made only with the sharing of its outputs indiscriminately among the participators.

6.3.2 Ways of Increasing Participation

Real Participation is not influenced by external force, deviation by physical materials etc., it arises selfly. The participation developed by force, by showing of fear material, by attraction, by oldering and by cheating etc., is not real participation. One can motivate others by showing and teaching the bright and dark sides of the work to develop natural participation. So, real participation is very essential for the success of any types of development work or community. Welfare activities by the joint efforts of both sexes to meet the goal. Protection of environment or natural resource management, hence are impossible without good participation of people/women.

Women are the primary users and protectors of forest or forest products. Men cannot protect forests singly and hence used to say that the importance of forest is usually realized by women and they are very conscious. The collectors of forest products like fallen leaves, fuelwood, fodder, timber etc. are women and they use such products for cooking, grazing for animals and other household activities. Hence, life of women is impossible without the forests in the rural areas of Nepal. Some women's groups also formed forest user committee for its protection and hence the concept of women FUC was originated in the country. From this point of view, women are seen as the real protectors, consumers and managers of the local forest resource so, they are playing multiple roles and have shown active participation in forest management programs. Most of the women of the study area are satisfied with the existing system of management and distribution of forest products and are active in the forest management and conservation. Women are also involving in community development activities. Women's participation in forest management is determined by their need, education level, economic status, age and social status etc. In the study area, it is also seen that women can make and implement their decisions strongly in forest protection and management.

6.3.3 Levels of Participation

Table No. 6.2

Participation of Respondents in Community Forest Management

Participate	Male	Percent	Female	Percent	Total	Percent
Moral Support	6	30	14	70	20	40
Giving Suggestion	4	33.3	8	66.7	12	24
Discussion	2	20	8	80	10	20
Decision Making	2	25	6	75	8	16
Total	14	28	36	72	50	100

Source: Field Survey, 2006

It was observed that out of the total respondents, 40 percent had their moral support for the development of the community forest. They had direct involvement in the management too. Similarly, 24 percent had assisted by giving suggestions. And, 20 percent were involved in discussion and 16 percent were in decision making. Out of the total female respondents, the percentage of women having their moral support, giving suggestion discussion and decision making were 38.9, 22.2 and 16.7 percent respectively. Similarly, out of the total male respondents, the percentage of men having their moral support, giving suggestion, discussion and decision making were 42.9, 28.5, 14.3 and 14.3 percent respectively.

6.3.3.1 Identification of Problem

The local inhabitants working cooperatively with local resources and sharing benefits, i.e. deciding what their problems are and what has been done to solve their problems means active participation of women. The six stages of participation are conceptualization and identification, decision making, mass participation in resource mobilization, mass participation in implementation, mass sharing of benefits and evaluation and control.

To increase the cultivable land, large part of land was deforested in the study area because of growing population which resulted in the shortage of firewood and fodder. That consequently resulted in the decrease in livestock population and hence agricultural productivity also decreased due to shortage of dung manure. In the study area it is also found that no problem is solved until women realize the problem. With comparison to the 8 -10 year of situation, after the establishment of community forest in the study area, the problems of forest and forest products has been solved to some extent.

6.3.3.2 Participation in Decision Making

Participation is affected not only by those who make and implement the decisions but also by how decision are made in the study area, key informants reported that executive committee has always consulted with group members while taking any decision and implementing its decision. Women's FUC have proved very effective because the women are one who have to suffer badly in the absence of forest resources. Because, the women of Nepal are performing all forest related activities like cooking food, collecting fodder, grazing animals etc. they have to spend more time also to collect, fuelwood, fodder etc.

6.3.3.3 Participation in Implementation

Participation in implementation is either in cash or in the form of voluntary labour. Voluntary labour participation in implementation is mostly found in the study area. The major activities in implementation are forestation and conservation. The participation in the study area is self motivated.

6.3.3.4 Participation in Management

Participatory management means gathering individuals in the community widely for responsible decision on what their problems are and what has to be done to manage well the community forest. This term is used from the start to the stage of benefit sharing of community forests. It is very essential for sustainable supply of

forest products to fulfill the basic needs of the community. In the study area, the role of committee in the management activities is:

- 1) Prepared management plans for community plantation in barren land with the consultation of D.F.O.
- 2) Updating of Management Plan.
- 3) Undertaking of task of pruning and thinning, setting the minor forest offences, guarding the community forest, supervision, monitoring and benefit sharing.

6.3.3.5 Participation in Benefits Sharing

In the absence of equal benefit sharing, disparity increases between the advantageous and underprivileged groups. In the study area, it is found that there is not equal benefit sharing among the people from community forests but are satisfied with the present condition of the community forests. The respondents can collect the fuelwood and other basic necessities from the community forest when it opens free.

6.3.3.6 Participation in Monitoring and Evaluation

To provide the feedback to the community forest management regarding any corrective actions to be taken for adjustment in the policies to be made during the implementation of the development activities, monitoring and evaluation are essential. Women's perception of the implementation and management expressed either in a formal gathering or an private is included in evaluation while continuous collection of necessary information on community forests inputs and on condition and complimentary activities that are essential to the success of the community forests is included in monitoring. In study area, the user's committee's works are to monitor the works of forest guards and the growth of seedlings planted in the community forest area. The main objectives of evaluation and monitoring are to improve performance, to identify and analyze the problems., to increase people's communication with line agencies, to evaluate the project result and to improve future planning process through measuring its effect and impact and evaluating concepts, assumption and models in

the light of actual performance, and to keep the track of community forestry development programmers regularly.

6.4 Women's Participation in Executive Committee

Table No. 6.3

Women's Participation in Executive Committee

S.N	Name of User Group	Total User households	Executive Committee					
			Male		Female		Total	
			No.	%	No.	%	No.	%
1	JD CFUG	34	7	63.6	4	36.4	11	25.6
2	Pashupati CFUG	26	6	60	4	40	10	23.2
3	MSK CFUG	30	8	72.7	3	27.3	11	25.6
4	LDM CFUG	31	0	0	11	100	11	25.6
	Total	121	21	48.8	22	51.2	43	100

Source: CFD Database (2005)

) MSK - Mahatara Salani Kulabhid

) LDM - Lamakhola Daudo Mahila

) JD - Jogi Dhara

The executive committee has to play a vital role in the development of community forests. The involvement of executive committee involves in different activities like decision making, people's participation, monitoring and evaluation. There were 43 people participating in the committee and number of user households was equal to 121. The table showed that except in the Lamakaola Dando Mahila CFUG, male participation was always dominating the female participation. But in the overall participation in forestry of the VDC, the total number of women was greater than the total number of men in the committee. As a whole, out of the total female, which constitute 48.8 and 51.2 percent of the total 43 members participating in the committee 21 were male and 22 were respectively. That showed that participation of

female in executive committee was quite higher and satisfactory than male and female participation was also very essential in the utilization of forest resources.

6.4.1 Aims of the Committees

The aims of the forest user committees of Bhumorajmandau VDC are already mentioned in the contact paper of forest management which are as following:

- 1) to fulfill the certain amount of fuelwood, green grass and timber
- 2) to mention the statement “Green forest is the wealth of Nepal”
- 3) to do plantation in empty places to control soil erosion
- 4) to conserve the environment
- 5) to fulfill the basic needs of the people
- 6) to provide the various income and employment generative jobs
- 7) to take the community forest in the mainstream of poverty alleviation etc.

6.5 Participation of Women in the Collection of Forest Products

Table No. 6.4
Sexwise Participation in Collection of Forest Products

Forest Products	Collectors							
	Male	Percent	Female	Percent	Both	Percent	Total	Percent
Fuelwood	6	12	18	36	26	52	50	100
Fodder	3	6	17	34	30	60	50	100
Green grass (Leaf)	1	2	18	36	31	62	50	100

Source: Field Survey, 2006

Various types of forest products like firewood, timber, fodder, grass, dried leaves etc. were collected from the forests in the study area. But fuelwood, fodder and green grass (leaves) were taken as the major forest products for this study. The participation of male in the collection of fuelwood, fodder and green leaf was 12 percent, 6 percent and 2 percent respectively. Similarly, the participation of women in the collection of fuelwood, fodder and leaf was 36 percent, 34 percent and 36 percent respectively. And, the participation of both men and women in the collection of fuelwood, fodder and leaf was 52 percent, 60 percent and 62 percent respectively. So, in overall, it was found that participation of women was dominating the participation of men in the collection of all types of the forest products.

6.6 Need and Sources of Forest Products

The life of the almost all population of the study area is totally dependent upon forest and forest products. Their lives can not be separated from forest. According to the study, most of the populations required high need of the forest products, i.e., more than 10000 kg per year. And there was also high number of populations who need medium quantity i.e, between 5000 to 10000 kg per year. But the number of people,

who utilized low quantity of forest products, i.e. less than 5000 kg per year was quite low in overall.

Similarly, according to the class wise, fuelwood were required in highest quantity in the study area. Similarly, fodder, leaf litter, timber, fruits and vegetables, and medicinal plants were required in decreasing quantity respectively. So, as the sources of such forest products, community forest was playing a crucial role in its fulfillment.

Table No. 6.5
Sources of Forest Products

Sources	Male	Percent	Female	Percent	Total	Percent
Community forests	6	2.5	18	75	24	48
Government forests	4	28.5	10	71.5	14	28
Others (Private, leasehold, agro etc)	4	33.3	8	66.7	12	24
Total	14	28	36	72	50	100

Source: Field Survey, (2006)

There are different sources of forest products like community forest, government forest and others (private, leasehold etc). According to this study 48 percent of people used community forest as their forest products source. Similarly, 28 percent and 24 percent of people used government and other forests respectively for their need fulfillment. The data showed that 43.0 percent, 28.5 percent and 28.5 percent of male collected the forest products from community, government and other forests respectively. Similarly, 50 percent, 27.8 percent and 22.2 percent of female collected the forest products from community, government and other forests respectively. Hence, the data clearly indicated that the most of the people of study area were not getting benefits from community forests. Hence, more community forests should be established in the study area to solve such types of various problems.

6.7 Institutional Process of Community Forests

6.7.1 Formation of Forest User Group

To form the forest user groups in different wards of the VDC, all the villagers discussed in meeting where teachers, social workers, villagers, representatives from district forest office and women were present. They were agreed to form male +female user groups and only female user groups to protect and strengthen the forest according to the operational plan. After the detail discussion, 121 user households (i.e., 34 HH for Lama Khola Dando Mahila forest user group) form the forest user groups differently for the different community forests. So, the users of the forests are the general members.

6.7.2 Formation of Forest User Committee

The members for different committees are variable. For Jogi Dhara, 11 membered committee was formed among whom 4 were women. Similarly for pashupati community forest, 10 membered committee was made among whom also 4 were women. And, for Mahatara Salani Kulabhid, 11 membered committee was formed among whom 3 were women. At last, Lama Khola Dando Mahila consisted of all 11 women membered committee. The duration of members is different for different FUC for the protection and management of community forests which is usually selected by CFUG. Committee member can be expelled if 51 percent of user group sign and send it to the forest user committee, if his/her work is unsatisfactory. But after realizing the fault, he/she may join committee again.

6.7.3 Forest Operational Plan

The various duties and responsibilities of the forest user committee is generally determined by forest operational plan, which can be clearly described as below.

- 1) to discuss on forest management and other casual problems and call the meeting if needed.

- 2) To take the necessary steps for the development of forest such as choosing the spot, planting, caring the plants etc.
- 3) to collect the forest products, use it properly and take the necessary steps for its sell and distribution.
- 4) to punish and fine the individual who is against the rules and regulations of OP and get necessary help from DFO for further discussion .
- 5) to conserve the forests and protect the plants from being harmed illegally.
- 6) to prevent it from cattle grazing and firing.
- 7) to consult the DFO, take necessary technological advice and other helps.
- 8) to write the DFO for permission, if anything changed in the working plan of forest or new rules formulated
- 9) to notify users once a year about the decision.
- 10) to send one duplicate copy of the decision effect by the forest user committee to the DFO.
- 11) to announce publicity, the income and the expenditure of the committee every year within the month of Bhadra and Send the necessary information to the DFO
- 12) to take necessary steps for resignation of the members

6.7.4 Forest Constitution

All the activities performed inside the forest, FUG and FUC is determined by forest constitution. It is the backbone of community forests. It also constitutes various aims and objectives of forest protection and management. Various criteria were set like representation from different caste, on the basis of geographical location, key women if possible, literate and married women and so on to make an acceptable committee. These committees formulate the rules and regulations towards forest protection and management which can be discussed as below for the following reasons:

- a) below for the following rescues:

- 1) to fulfill the needs of forest products such as firewood, fodder, timber, fallen leaves etc. for the users of the village.
 - 2) to protect the village from landslides and floods.
 - 3) to increase agricultural production and to prevent soil erosion.
 - 4) to make local environment fresh.
 - 5) to increase and preserve water resources.
- Conduction of meeting and phase wise techniques of forest management.
 - Development and protection of forests via plantation training, pruning and sanitation of the forests and soil erosion control.
 - Usage of the forest products such as forage grass cutting, fallen dry leaves, firewood, timbers, green leaves and branches of sal etc.
 - Description with the forest user villagers and the forest user group.
 - Punishment and rewarding system
 - Determination of price of forest products and mobilization of income fund.

6.8 Participation in Community Forest Activities

6.8.1 Participation in Group Meeting

Table No. 6.6

Participation in Group Meeting

Participation	Male	Percent	Female	Percent	Total	Percent
Always	4	18.2	18	81.8	22	44
Sometimes	4	22.2	14	77.8	18	36
Never	6	60	4	40	10	20
Total	14	28	36	72	50	100

Source: Field Survey, 2006

The study showed that 44 percent, 36 percent and 20 percent of population participated in group meeting always, sometimes and never respectively. Similarly, out of the total male population, 28.5 percent, 28.5 percent and 43.0 percent

participated in group meetings always, sometimes and never respectively. And, out of the total female population, 50 percent, 35.9 percent and 11.1 percent participated in group meetings always, sometimes and never respectively. So, the study clearly indicated the more dedicated participation of the females than the males in the study area in group meetings.

Most of the respondents do not ever participate in the group meetings during the formation of forest user group and forest user committee as well as during the formulation of constitutional and operational plan. With comparison to females, there is the high number of males who took part in the formation of FUG, FUC, OP and constitutional plans. so, this also indicates that there is the greater backwardness of the women of the study area. More than 20 percent of male respondents told that they had been participated but that the number of female respondents was less than 15 percent

6.8.2 Frequency of participation

Table No. 6.7
Frequency of Participation

Activities	Sex	High	Percent	Moderate	Percent	Less	Percent	Never	Percent
Protection	Male	4	28.5	6	42.9	3	21.4	1	7.2
	Female	12	33.3	19	52.7	3	8.4	2	5.6
	Total	16	32	25	50	6	12	3	6
Implementation of Management Operation	Male	3	21.4	7	50	2	14.3	2	14.3
	Female	8	22.2	18	50	7	19.4	3	8.4
	Total	11	22	25	50	9	18	5	10
Distribution of Forest Products	Male	4	28.5	7	50	3	21.5	0	0
	Female	12	33.3	18	50	5	13.9	1	2.8
	Total	16	32	25	50	8	16	1	2

Source: Field survey, (2006)

In the protection activities, the percent of males who participate high, moderate, less and never were 28.5 percent, 42.9 percent, 21.4 percent and 7.2 percent respectively. Hence it clearly indicated the moderate participation of males was high

in the protection activities of forest. Similarly, out of the total female, the percent of females who participate high, moderated, less and never in the protection were 33.3, 52.7, 84, and 5.6 respectively. It also indicated that there was the high percent of female involving moderately in the protection activities. People's participation in the protection of forest was 32 percent, 50 percent, 12 percent and 6 percent respectively for high, moderate, less and never participation.

In the implementation of management operation, the percent of males who participated high, moderate, less and never were 21.4 percent, 50 percent, 14.3 percent and 14.3 percent respectively. In this case also, moderate participation of males was high. Out of the total females, the number of females who participated high, moderate, less and never in the implementation of management operation were 22.2 percent, 50 percent, 19.4 percent and 8.4 percent respectively. It also indicated the high percentage of female involving moderately in the implementation of management operation. People's participation in the implementation of management operation was 22 percent, 50 percent, 18 percent and 10 percent for high, moderate, less and never participation respectively.

In the distribution of forest products, the percent of males who participated high, moderate, less and never were 28.5 percent, 50 percent, 21.5 percent and zero percent respectively. It also showed that moderate participation of males was high. Out of the total females, the number of females who participated high, moderate, less and never in the distribution of forest products were 3.3 percent, 50 percent, 13.9 percent and 2.8 percent respectively. It also indicated the high percentage of female involving moderately in the distribution of forest products. People's participation in distribution of forest products is 32 percent, 50 percent, 16 percent and 2 percent for high, moderate, less and never participation respectively.

In overall, people's participation or women's participation in the various forest related activities is high in the case of moderate participation in various activities.

6.8.3 Obstacles in Participation

Table No. 6.8
Obstacles in Participation

Category	Male	Percent	Female	Percent	Total	Percent
Family size	0	0	4	100	4	8
Education	2	25	6	75	8	16
Economy	1	20	4	80	5	10
Occupational Nature	4	44.4	5	55.6	9	18
Caste /Ethnicist	2	28.7	5	71.3	7	214
Gender	0	0	8	100	8	16
Age	1	50	1	50	2	4
Other	4	57.1	3	42.9	7	14
Total	14	28	36	72	50	100

Source: Field Survey (2006).

It was found that occupational nature, education, gender, caste/ethnicity, economy, family size age and others were the main obstacles of people's participation in the study area which included 18 percent, 16 percent, 16 percent, 14 percent, 10 percent, 8 percent, 4 percent and 14 percent respectively. While the main obstacles in the participation of women in the study area were gender, education, occupational nature, caste/ethnicity, family size economy age and others contributing 22.2 percent, 16.7 percent, 13.8 percent, 13.8 percent, 11.1 percent, 11.1 percent, 2.8 percent and 8.5 percent respectively. Similarly, the main obstacles in the participation of men in the study area were occupational nature, caste/ethnicity, education, economy, age and others contributing 28.6 percent, 14.3 percent, 14.3 percent, 7.1 percent, 7.1 percent and 28.6 percent respectively. Hence, for women's participation the gender is the main obstacle in overall.

6.8.3.1 Education

Lack of technical education and knowledge are the main hindrances for women's participation in forest management., In the study area, illiteracy is serious

among women than the men and hence are playing an inactive role in each and every phase of their life. Even the literate women have lack of technical knowledge and hence they are hesitating in the participation for forest management. When they do not have technical knowledge they will be in confusion to participate even if they are educated. So, if education and technical knowledge is provided, participation of women on forestry practices and management can be increased.

6.8.3.2 Family Size

Large family size, i.e., maximum time devotions in household chores is the another obstacle in the participation of women. Females have to devote maximum time in household chores so that they can not think and create new approach about forest management. Firewood, fodder etc. collection is their work and they have no part in conservation and plantation, Due to the absence of more time, they cannot participate in the forest activities even though they are interested. They have to spend their maximum time in cooking, cleaning of utensils, collection of forest products, doing agricultural tasks and some other household works. So, lack of time is another hindrance of the women's participation in forestry practices and its management.

6.8.3.3 Economy

One of the important obstacle in participation of women in forest is low level of economic condition. Economically secured persons can participate in forest practices but people having low level of economic condition have to engage in subsistence economy and hence cannot participate. In the other hands, females are compelled to think about their own problems only because of the low economic standard. Economically sound person of the village dominates the low economic conditioned people and they do not give preference to the poor's decision. Some women have interest in forest management but they have to labour for subsistence wages, sot they can not participate, women cannot expense their income for their own interests. Male has made the women economically weak and inactive or all income of

women is spent by men. The economic dependency also makes women less interested in active involvement in income generating activities.

6.8.3.4 Gender

Maximum dominance by male and socio cultural restrict are other obstacles of participation of women in forestry practices. The voices of women are not heard by men in meeting or other activities. Even if the women have leisure time they do not show their interest in forestry because their opinion is considered as valueless. Because of the male domination, women are being illiterate and restricted from the technical knowledge, for example among their children, first priority is given to sons in the fields such as training, schooling and other personality development activities. Daughters are restricted from every opportunity.

6.8.3.5 Occupational Nature/Workload

Occupational nature and the maximum workload of women in miscellaneous works are also the hindrances of women's participation. Women of the study area have total responsibility of cattle herding collection of forest products, agricultural activities, cooking, cleaning of utensils, water fetching, caring of child etc. Women know about using the forest but not protecting the forest. It is well accepted fact that in the absence of women the males alone can not protect and manage the forest. Due to their heavy workload, women are not participating in the forestry activities/ practices.

6.8.3.6 Age

Due to the age factor also, forestry practices and women's participations being affected very deeply. Unmarried and teen-agers women are found to be less involved in the protection and management of forests while they are as much collecting the forest products as the other women. Similarly, old women are also found less involved in forestry practices. With comparison to these two groups, mature women, i.e. married women are highly participating in the forestry practices. Hence, it clearly indicates that age is also affecting and appearing as a hindrance of the participation.

6.8.3.7 Caste/ Ethnicity

Lower caste, disadvantaged and deprived women are less participating in the forestry practices with comparison to the upper-caste and economically powerful women. Various social norms and values as well as cultural factors are appeared as the obstacle in the participation of lower-caste women. Their economic position and traditional beliefs of the local people also obstacle their participation in forestry even if they are interested in participation. So, caste/ ethnicity is the another obstacle in the participation of women in forestry practices.

6.8.4 Factors Encouraging Participation

6.8.4.1 Family Support

One of the encouraging factor of participation of women in forestry practices is family support. More family support results in the greater and positive participation of women. Family support not only supports but also promotes the participation. Hence family support is an important encouraging factor of women's participation. In this case out of the total 36.

Table No. 6.9
Factors Encouraging Participation

Family supports	Number of female respondents	Percent
Family support	8	22.2
Education	6	16.7
Absent of male	4	11.1
Self motivation	4	11.1
DFO staffs	1	2.8
With the request of general users	10	27.8
Others	3	8.3
Total	36	100

Source: Field survey, 2006

Respondents, 8 (around 22.2 percent) had told that the factor encouraging their participation was family support.

6.8.4.2 Education

Education is also one of the important factor of encouraging women's participation. The most of the case studies showed that literate women are more participating than the illiterate women and also they occupied higher position in the executive committee with comparison to illiterate women. So, women's participation can be promoted only by excess educational facilities. And it can be said that without education, participation of women is nothing at all. Out of the total 36 respondents, in the case, 6 (around 16.7 percent) had told that the factor encouraging their participation was education.

6.8.4.3 Absent of Male

The society of Nepal is male dominated society. Without the back force of the male, female cannot do anything in this country. The only factor which might play a active role in participation of women may be absent of male in his family. If working age male is absent in the family, all works has to be performed by women. In such a case, women can also participate in the forestry practices. In the case, out of 36 female respondents, 4 (around 11.1 percent) had told that their participation was due to the absent of male in their family.

6.8.4.4 Self Motivation

Some women used to participate in various activities of society due to their self motivation. But in case of traditional society of rural areas of Nepal, women even can not participate after self motivation. Because they are well under the men who are continuously dominating women and not give them the right to participate in various activities. But in the case, this factor was quite satisfactory. Out of the total 36 female respondents, 4 (around 11.1 percent) had told that their participation was due to self motivation.

6.8.4.5 DFO Staffs

The staffs of district forest office are somehow encouraging the participation of women in the forestry practices. But they can not reach upto the grass root level. So, their motivation should be reached to the grassroots level for the more participation of women in the whole country. In the study area, it was found that only one (about 2.8 percent) of the female respondents had told that she participated in forestry practices due to the encouragement from DFO staffs.

6.8.4.6 With the Request of General Users

Another factor which enhances the participation of women in the forestry practices is the request of general users. This factor has done a good job for increasing women's participation in the study area. Women are hungry of respect and request. Hence a sentimental request can easily change their thinking and way of behaviour. So, the request of general users results in the positive change in their participation. In the study area, it was found that, out of the total 36 female respondents, 10 (around 27.8 percent) had told that they had participated with the request of general users.

6.9 Feeling as CFUG Member

Table No. 6.10
Feeling as CFUG Member

Feeling	Male	Percent	Female	Percent	Total	Percent
+ve	10	32.3	21	67.7	31	62
-ve	-	-	-	-	-	-
Neutral	4	21.7	15	78.3	19	38
Total	14	28	36	72	50	100

Source: Field Survey, 2006

All of the respondents felt positive or neutral but not negative as CFUG member. Around 62 percent of the respondents felt positive and 38 percent of respondents felt neutral. Out of the total female respondents, 58.3 percent and 41.7 percent felt positive and neutral respectively. While out of the total male respondents

71.4 percent and 28.6 percent felt positive and neutral respectively. Hence, it indicated that as comparison to the male respondents, female felt less positive and more neutral. This may be due to the domination of male over female in the study area in every types of aspects.

Table No. 6.11
Reasons of Feeling Positive/ Neutral

Reasons	Male	Percent	Female	Percent	Total	Percent
Provides fodder	2	33.3	4	66.78	6	12
Provides fuelwood	3	27.3	8	72.7	11	22
Provides building materials	2	50	2	50	4	8
Wild beauties	1	50	1	50	2	4
All of the above	5	20	20	80	25	50
Others	1	50	1	50	2	4
Total	14	28	36	72	50	100

Source: Field Survey, 2006

The reasons of feeling positive/ neutral were that the forests provided fodder, fuelwood, building materials and wild beauties etc. Out of the total respondents 12 percent, 22 percent, 8 percent, 4 percent, 50 percent and 4 percent told that their reasons of feeling positive/ neutral were that the forests provide fodder, fuelwood, building materials, wild beauties, all the above and others respectively. Similarly, out of the total male respondents 14.3 percent, 21.4 percent., 14.3 percent, 7.1 percent, 7.1 percent, 35.8 percent and 7.1 percent told that their reasons of feeling positive/ neutral were that the forests provide fodder, fuelwood, building materials, wild beauties, all of the above and others respectively. And out of the total female respondents, 11.1 percent, 22.2 percent, 5.6 percent, 2.8 percent, 55.5 percent and 2.8 percent told that their reasons of feeling positive/ neutral were that the forests provide fodder, fuelwood, building materials, wild beauties, all of the above and others respectively. Hence, it can be said that homogenous distributions of respondents in the study area depending on the forest products (reasons of feeling positive/ neutral) was found.

6.10 Opinion towards Participation

In the study area, it is also found that there is no idea and reasons that can describe the opinion of people towards the participation of women and lower caste. There is the great disparity in people according to their caste/ ethnicity. Upper caste people are dominating the lower caste ones since generations. Hence, the children of lower caste people born in domination live in domination and die in domination. Hence, the people of upper caste are not giving any chance for the participation of lower caste people in any types of community development activities. But now a days, due to education, people are becoming slightly aware about the participation of lower caste and hence their participation is also gradually increasing. Hence, most of the respondents respond that their opinion is positive towards the participation of lower caste people. Similarly, Nepal is a male dominated society and hence women are also continuously dominated by males since generations and hence their participation in various community development activities are found to be very less. Most of the male even can not tolerate the participation of women. But now a days, due to the changing age, education, and other factors, participation of women is increasing in different sectors day by day. People even used to think, now a days, that any types of work program etc. are unsuccessful and can not get its achievements without the participation of women. Hence, in the study area, most of the respondents respond that their opinion is positive and encouraging towards the participation of women not only in forestry practices but also in the various development activities of the society.

6.11 Benefits from Community Forestry and Related Training

6.11.1 Benefits from Community Forestry

i) Provision of fodder and grass

The most of the inhabitants of Bhumirajmandau VDC are farmers and hence they rear cattle, sheep, goat, buffalo and other livestock. Community forest is the sources of fodder and grass and hence by using the forest products of community forest, the farmers can increase the livestock productivity hence income.

ii) Healthy and sound environment

The forest help in keeping the environment healthy and sound and fresh air is absolutely necessary for human beings to remain healthy.

iii) Controlling of land slide and erosion

During the windy and rainy reason, air and heavy rain cause landslide and soil erosion resulting in the loss of fertile soil. Hence, community forestry is mainly for controlling of landslide and soil erosion. It not only increase agricultural productivity but also keeps the environment free from pollution, dryness and ugliness and prevents biodiversity loss as well as maintains ecosystem.

iv) Alleviation of poverty

The number of livestock, their productivity and agricultural productivity increase due to community forestry and hence it directly ends into the greater income generation of the farmers of the rural areas. Hence, alleviation of poverty occurs.

v) Development of We-feeling

The users of community forestry realize the strength of unity, their local capacity, their own strength and so on, only after the establishment of community forestry in the area. And it directly results into the development of we feeling.

vi) Sufficient availability of mulching materials

Mulching materials for agricultural production can be obtained from plants, shrubs and herbs of the community forestry of the study area because the forest is going to be dense day after day.

vii) Prevention of illegal export of timber

Before the establishment of community forestry, wood and timber were exported illegally, but after the establishment of community forestry all people feel that the forest is their own social property. People have also formulated the rules and regulations to conserve the forest. Hence it results in the prevention of illegal export of timber.

viii) Timely available of wood/ timber

For personal interests and desire, people had destroyed the forest and hence there was no sufficient wood and timber for people before the establishment of community forestry. But now days, there is very sufficient wood and timber for the people in the community forests.

6.11.2 Benefits from Community Forestry Trainings

In the study area, most of the respondents, committee members and user groups members are unknown about the community forestry trainings. High percentage of them are never participated in such trainings. It is found that that such trainings are being carried out in the district in a very few number. Hence, for taking trainings, they cannot visit the another districts due to various factors. Sometimes, they are even not informed for the participation in the trainings. Mostly, women are not participating in the training programs due to various cultural and social norms and values and family problems. But it is found that, due to the development of awareness in the people, they are encouraging women for their participation day after day.

6.12 Marketing of Firewood

It is found that the people having low economic status generally used to sell the firewood for their daily life span. Only a few respondents told that they used to sell firewood to fulfill their basic needs like salt, oil, sugar etc. (Around 8 percent). The people who sell firewood do not earn extra income from the marketing of firewood. It is just for their basic fulfillment. In the other hand, they are selling the firewood in a very low price with comparison to their labour. This creates a very big problem for the rural poor people for their daily livelihood.

The more urban areas of districts are also lack of modern cooking systems like liquid petroleum gas, biogas, kerosene (in a small amount) and so on. So, the people of the urban areas are also dependent upon the firewood for their cooking system. Due to the various barriers of the rural people, they (urban people) used to dominate them (rural people) and bargain very much for their firewood. They pay a very small percentage of the labour of rural people, hence making them unable to upgrade their lifestyle. And in the area, nobody is focused on such a miserable condition of rural people. In one hand, they are increasing the deforestation rate while in the other hand, even they are not getting the acceptable price.

The main place of the firewood selling of the people of this VDC is Dipayal, Rajpur, and Military camps. The hotel and restaurant owners as well as local inhabitants used to buy the firewood. The distance from the VDC to market area is around 5 to 6 kms. and it takes around 2 hours by walk. Hence, it can be said that the people are spending almost one day for their firewood selling. But, they usually plan the same day for firewood selling and buying of the daily requirements.

Before the start of the community forestry program in the study area, the deforestation rate was very high. Almost all of the people used to collect the forest products from the national forest. They had no feeling that the national forest was their. But after the establishment of community forest in the area, the deforestation rate decreased dramatically and people's awareness about the forest had changed.

They thought forest as their common property and worked for the conservation and management of the forest.

Being the national forest as the main source of the forest products, in the past, people gradually deforested the forest area and hence they had to move a very long distance for their forest products. This problem enlarged drastically after few years. Hence, the people thought about the protection and management of the forest selfly. And after getting the acceptable support from the government, they implemented the community forestry programme in the study area.

6.13 Past Vs. Present Community Forest

6.13.1 Difference Between Past and Present Community Forest

After the field visit, it was found that the community forest were in good condition at the time of survey. To know about the past community forest, the sampled units were interviewed and according to their response, they were grouped into table 6.12.

Table No. 6.12

Present Condition of Community Forest as Compared to Starting Age

Condition	Male	Percent	Female	Percent	Total	Percent
Better	10	25	30	75	40	80
No Change	3	33.3	6	66.7	9	18
Worse	1	100	0	0	1	2
Total	14	28	36	72	50	100

Source: Field Survey, 2006

Most of the respondents (around 80 percent) told that present condition of community forest was better than the forest of starting age. Similarly, 18 percent of the respondents found no change and only 2 percent of the respondents told the bad condition of the community forest. Out of the total male respondents, 71.4 percent, 21.4 percent and 7.2 percent told that the community forest was in better, no change and worse condition respectively. And out of the total female respondents, 83.3

percent and 16.7 percent told that the community forest was in better and no change condition respectively. Hence it can be accepted that the community forest obviously, was in better condition as compared to its starting age.

6.13.2 Problems of Forest Products

Table No. 6.13

Reduction in Problems of Forest Products

Reduction	Male	Percent	Female	Percent	Total	Percent
Yes	11	25.6	32	74.4	43	86
No change	2	33.3	4	66.7	6	12
No	1	100	0	0	1	2
Total	14	28	36	72	50	100

Source: Field survey, 2006

The field visit of the research clearly found out the reduction in the problems of forest products and decrease in the problems of the local inhabitants regarding the forest products. According to their response, the following findings of the study are drawn.

Around 86 percent, 12 percent and 2 percent of the total respondents responded that the problems of forest products reduced, no change and not reduced respectively. Similarly, out of the total male respondents, 78.5 percent, 14.3 percent and 7.2 percent told that the problems of forest products reduced, no change and not reduced respectively. And, out of the total female respondents, 88.9 percent and 11.1 percent told that the problems of forest products reduced and no change respectively. Hence, it can be accepted that the problems of forest products, of course, reduced after the establishment of community forest in the study area.

6.14 Impact of Community Forest

Positive and negative impacts are the two sides of a coin. Every types of launched program has some positive as well as negative impacts in the program

implemented site. But it should be remembered that every program is focused for positive impact and as much as the minimization of negative impacts. According to the respondents, there are much more positive impact of the community forestry program in the study area with comparison to the negative impacts. An assessment of the community forestry programme from the study area indicates that the impacts of community forest management in terms of environmental, socio-economic and institutional parameters are positive during the 8 to 12 years of period.

6.14.1 Positive Impacts

Forestry and farming are intimately integrated in the hills of Nepal. Rural communities depend on forest for the supply of fodders, fuelwood, grass, timber and other forest products for household energy, livestock feeds, house construction and agricultural implements. So, the positive impacts of community forests in the study area are in terms of fuelwood, fodder, leaf litter, building materials, soil erosion, landslide and natural beauty etc.

Being no alternative source of energy in the area, fuelwood is the main source of cooking energy. Kerosene is used for cooking purpose only in a small percentage. It is widely used for lighting purpose due to the absence of electricity. Fuelwood is mostly collected from community forest area and this can be easily collected by women, men and children as well as old people.

Grass is the primary source of fodder. But most households are found using grass crop residues (dry biomass), grain husks and the products as the source of animal fodder. Grass is generally collected from private forest and community forests. But most of the people collect grass from community forests. Dry biomass is also collected from community forests in the study area. Most of the community forest area is used as the source of fodder and hence decreased the problems of fodder collection.

Due to the absence of large number of large trees only few building materials are provided by community forests in the study area. But it is expected that, after few years, the community forests of the study area will provide required amount of

building materials. Leaf litter is mainly used for animal bedding in the study area, during winter season. After being used as livestock bedding it is found to be used as much on farm lands along with animal dung. Leaf litter is also collected from community forests in the study area. People get fuelwood, fodder, timber leaf litter from the community forests sufficiently is comparison to the previous situation.

Due to the slopping land of the study area, natural hazards were taking place there but community forests control such natural disasters to some extent. Wild life beauty, natural beauty, slight development of tourism industry, provision of tree leaf etc. are some of the other positive impacts of community forests. The saved time of the people from the collection of forests products easily from community forests is being used in other economic activities like agriculture, business etc. but the people.

6.14.2 Negative Impacts

As compared to the positive impacts, there are very few negative impacts of the community forest. Some of them are fear of wild animals and boundary conflict etc. Monkeys destroy crops and lead to low production, leopard and tiger are harmful for livestock, snakes can directly affect human populations etc are some of the fears of wild animals. The boundary conflict of forest between the user groups is the another negative impact of community forest Boundary conflict is generally based on the lack of clear ward boundary demarcation. These are some of the positive and negative impacts of the community forests in the study area.

CHAPTER – 7

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter summarizes the study topic, draws some conclusions about issues affecting participation of women and provides some recommendations to enhance the activities of the women's user committee in forest resource management. That is why, this chapter represents the overall body of this dissertation highlighting the valuable, environmental and economic resources for supporting natural systems and for improving the human welfare.

7.1 Summary

No strict rules and regulations governed the use of the forest in Nepal before 1957. At that time, the government paid no attention to develop the forest believing that there was more than enough forest. Under the forest nationalization act of 1957, HMG nationalized all of the its private forests. The act was passed with good faith to protect and manage the forest and the government expected cooperation from the people. However, the government failed to explain the act to the rural people and the result was more destructive. Private owners convert forests to the agricultural land, so, the forest was destroyed day after day. Although, the government gave attention to protect and develop by act of 1961 but the government could not succeed to achieve the aim. Then, the government amended the act of 1961 and made forest act 1967. The government could not fulfill own aim by this act also. In 1978, a real change of policy was initiated with two categories like PF and PPF.

They were intended to involve local communities and private interests in the management of the forest. Through the forest act of 1979, community forest programme was initiated to develop and manage both PF and PPF in 29 districts of hilly regions and 13 terai districts with the financial support from world Bank and the other donor agencies. The government also established the community forest and afforestation division (CFAD) under the department of forestry to support community forest programme. Thus, in 1980, the community forestry development project was set

up in the hilly districts with the assistance of World Bank. So, the community forestry development programme is a national level program. The need of the program was realized by central level policy makers and was not the choice of the villagers of Nepal. Taking into view the fast depleting forest resources, this program has received high priority during recent years.

Bhumirajmandu VDC is located almost in the central part of the district approximately above 1000 meter from sea level. Its borders are Dipayal-silgadhi municipality in north, Gadsera in south, wayal in east and kapallekhi in west. The total population in the VDC is 4561 of which 2256 are male and 2305 are female. The area is mostly inhabited by Chhetri covering 50.7 percent of the total population. Agriculture is the major occupation of the people living in the area and more than 99 percent of the population are engaged in agriculture. Out of the total population, 56.5 percent are illiterate.

Similarly, most of the respondents have an income of Rs. 15,000- Rs. 30000 annually (56 percent). And around 40 percent of the total respondents have livestock number greater than 8. Similarly, around 42 percent of the respondents have landholding size of above 2 hectare. All of the populations of the VDC are Hindu and having Nepali as mother tongue. Similarly, 61 percent of the population are married with single spouse. Medium size of the family size (4-8 member) and medium agricultural production (20-50 bhari) are mostly distributed among the respondents. The food sufficiency is 9 months- 12 months for most of the sampled population.

In the study area around 84 percent of the respondents used firewood for cooking food, 40 percent of the respondents give only moral support for forest resource management. Out of the total members of the executive committee, 51.2 percent are women showing the greater participation of women in executive committee. Women are found to be much more participating in the collection of the forest products in the study area. Around 48 percent of the respondents used community forests as the sources of forest products. And around 44 percent of the respondents always participate in the group meetings. Most of the respondents have

moderate frequency of participation. Most of the respondents find occupational nature as the main obstacle of participation. The factor which is predominant for encouraging participation is with the request of general users. Most of the respondents feel positive as being the CFUG member. The reasons of feeling positive are that the community forest provide fodder, fuelwood, building materials and wild beauties etc. Most of the respondents found the better condition of community forests as compared to the starting age. And the respondents feel the reduction in the problems of the forest products after the establishment of community forest in the study area.

The number of community forests present in the VDC is four and one of them is fully handled and operated by female which is Lama Khola Dando Mahila community forest. Other three community forests are Jogi Dhara, pashupati and Mahatara Salani Kulabhid which occupy a slightly lesser participation of women in executive committee. Jogi Dhara and Pashupati community forests are located in ward number 4 while other two are in ward number 7. The total area of the four community forests is 117.30 hectare and total number of CFUC member is 43 among women 22 are women showing a greater participation of women.

The largest community forest is Pashupati having an area of 65 hectare and 26 households involved. Similarly, Jogi Dhara, Mahatara Salani Kulabhid and Lama Khola dando mahila have an area of 20 hectare, 18 hectare and 14.3 hectare respectively. The household density is 2.2, 1.7, 1.7 and 0.4 (HH/ha) for Lama Khola dando mahila, mahatara Salani kulabhid, Jogi Dhara and pashupati respectively.

The impact of community forest in local people is positive. It provides fuelwood, fodder, building materials etc. to the local people easily. The people have positive view towards the community forests. It has reduced the problem of fuelwood, fodder and soil erosion in the study area. Besides positive impact there are some negative impacts too, for example, fear of wild animals and boundary conflict between the user groups.

7.2 Conclusions

Forest is one of the most essential natural resources in Nepal. People use the forests for many purposes such as fuelwood, fodder, timber and minor forest products such as fruits, nuts, medicine, honey etc. It is essential to protect soil erosion, providing clean water, reducing landslides, floods, maintaining ecological balance and preventing environment degradation.

Present study is conducted to find out the level, extent and nature of participation of women in forestry sector by selecting Bhumrajmandau VDC as its study area.

In case of Nepal, generally women are being dominated in every sector. In case of the forestry sector of the study area, it is well known fact that the participation of women in mixed community forestry user's committee is quite low with comparison to the male participation. But in overall, almost half of the CFUC members are female in the study area which is due to the availability of one women's user committee in the VDC.

In the other hand, among the participated women, it is found that most of them are upper and middle caste women, i.e. very low participation of women of lower caste in the study area. Similarly, the higher and middle economic class women are found much more participating in this sector. Educated and literate women of the study area have both the powerful role and dominant function in the protection, management and utilization of the forest and forest products.

The encouraging factors of women's participation in the study area are family support, education, absent of male, self motivation, DFO staffs and with the request of general users etc. Similarly, the obstacles of women's participation in the study area are family size, education, economy, occupational nature, caste/ethnicity, gender, age, social factors, and cultural norms and values etc.

7.3 Recommendations

On the basis of the above described facts (overall research work) various recommendations are suggested. Some of which are pointed out as below.

(A) User's Groups

1. About women's participation in community forest and user committee, special provision should be made in operational plans.
2. Usage of indigenous knowledge to develop the marketable products should be done.
3. Good coordination and cooperation between and within FUG and other organizations as well as DFO and village leaders should be needed.
4. CFUG and CFUC should follow the rules and regulations and forestation and reforestation activities.

(B) Policy Makers

5. Realistic plans should be developed and implemented.
6. More extensive awareness programs, communication training and feasibility study should be conducted.
7. FUGs should be motivated to use improved cooking stoves, biogas plants etc. to reduce consumption of the firewood.
8. Development should be directed by gender equality rather than participation of women.

(C) Further provision/ studies

9. People should be encouraged to practice community forest or private forest plantation and farm forest to shift their pressure on forest user towards conservation and they should be given full authority for its utilization according to their needs.
10. Economics assistance should be provided, eg., for forest guards, for the initiation of programmes, for plantation activities and so on.
11. Overall upliftment of women by education, economy etc. should be promoted in the study area for self-dependency and awareness generation etc.
12. Participation of women in decision making and benefit sharing should be increased by awareness.

BIBLIOGRAPHY

- Aacharya H. (1993). *Participation of Women in the Management of Community Forest in Gorkha, Nepal*, A Report Submitted to Nepal Field Office of Save the Children Federation.
- Aacharya R. (2005). *Women's Participation in Community Forests: A Case Study of Bhenu VDC, Tanahu, Nepal*, An Unpublished Master's Dissertation, T.U., Kathmandu.
- Bajracharya K.M. (1993). *Forestry Policies of Selected Countries in Asia and the Pacific*. FAO, Forestry Paper 115, UN-Room.
- Barlett A.G. and Nurse M.C. (1992). *A Participatory Approach to Community Forestry Appraisal*, Banko Jankari Vol. 3 No. 2.
- Bhasin K. (1998). *What is Patriarchy*, Kali for women, New Delhi.
- Bista G.S. (1999). *The Community Forest situation in the Far Western Hills of Nepal: A Case Study of Haat VDC of Baitadi District*, An Unpublished Master's Dissertations, T.U., Kathmandu.
- Box A. (1998). *Integration of Leasehold and Community Forestry*.
- Budhathoki P. (1987). *Importance of Community Forest Management in Remote Areas*, An Unpublished Master's Dissertation, T.U., Kathmandu.
- Campbell J.C. (1987). *Community Involvement in Conservation: Social and Organizational Aspects of the Proposed Resources, Conservation, and Utilization Project in Nepal*
- CBS (2003) *Statistical Year Book of Nepal, 2003*, CBS, Kathmandu, Nepal.
- Chand P.B. and Wilson A. (1987). *A Case Study of the development of Local Forest Management in Darchula*, In Banko Jankari (4) P. 20-23.

- Chhetri Gyan and Rana, Sita (1995). *A Gender Analysis of Women's Participation in Community Forestry*, Dissertation Paper, Nepal-Australia Community Forestry Project, Kathmandu.
- Chhetri R.B. and Pandey T.R. (1992). *User Group Forestry in the Far Western Region of Nepal: Case Studies from Baitadi and Achhams*, ICIMOD, Kathmandu.
- Dahal D.R. (1994). *A Review of Forest User Groups: A Case Study from Eastern Nepal*, ICIMOD, Kathmandu.
- Devkota G.H. (1998). *Women's Participation in Community Forest Management: A Case Study of Laxmi Mahaila CFUG at Laxmi Bazar in Gorkha*, Unpublished Master's Dissertation, T.U., Kathmandu.
- Division for Advancement of Women UN (2004). *Women 2000 and Beyond*, UN publications, UN-room.
- FAO (1978). *Forestry Local Community Development*, FAO, Rome.
- Forestry Department/ UN (2005). *State of the World's Forests*, UN publications, UN-room.
- Ganguli, B.N. (1995). *Nepal: Management and Protection of Natural Forest Break Through in Forestry Development* Asian Development Bank.
- Gautam (Upadhaya) M (2061). *Gender Equality and Community Forestry Programme*, CF Bulletin, Community Forest Development division, Kathmandu.
- Ghimire R.S. (2004). *The Contribution of Community Forest Resources on Household Income of Ramechhap District, Nepal*, Unpublished Master's Dissertations, T.U., Kirtipur, Nepal.

- Gilmour D.A. and Fisher R.J. (1991). *Vilagers, Forests and Foresters: The Philosophy, Process and Practice of Community Forestry in Nepal*, Sahayogi Press, Kathmandu.
- Gurung G. (1988) *People Participation in Forest Development: A Case Study of Banasharkha VDC*, Unpublished Master's Dissertation, T.U. Kathmandu.
- HDR/Nepal (2004) UN publications, UN-room.
- HMG/Nepal, Danida (2004). *NARMSAP's Social Mobilization Approach in Community Forestry, Social Conservation and Watershed Management*, NARMSAP, Community Forestry Division, Kathmandu, Nepal. (MFSC)
- HMG/Nepal, Department of Forest (2002). *Hamro Bana*, Kathmandu.
- HMG/Nepal, Department of Forest (2005). *Community Forest Database*, Babarmahal, Kathmandu, Nepal.
- HMG/Nepal, Department of Forest (2058). *Guidelines of Community Forest Development Program*, MFSC, Kathmandu, Nepal.
- HMG/Nepal, Department of Forest (2061). *Community Forest Bulletin*, Babarmahal, Kathmandu, Nepal.
- HMG/Nepal, Department of Hydrology and Metereology (2003). *Preliminary Weather Survey of Nepal*, Babarmahal, Kathmandu, Nepal.
- Inserra Anne (1998). *Women's Participation in Community Forestry in Nepal: An Analysis for the Forestry Development Project*, USAID, Kathmandu.
- Jha P.K. (1992). *Implications of Indigenous Forest Management Systems in the Management of Community Forestry: A Case Study from Sarangkot VDC, Kaski*, Nepal- Australia Forestry Project, Kathmandu.

- Joshi D.B. (2061). *Programme Planning in Community Forestry*, CF Bulletin, Community Forest division, Kathmandu, Nepal.
- K.C. Ganga (1995). *Women's Participation in CF Management: A Case Study of Sima VDC of Baglung Distrcit*, An Unpublished Master's Dissertations T.U., Kirtipur, Kathmandu, Nepal.
- K.C. Kishore (1988). *Participatory Inputs in Community Forestry: A Case Study of Chhang VP of Tanahu Distrcit*, Forestry Research Paper.
- Kafle R. (1997). *People Centred Management Practices in the Koshi Hills of Nepal*, Unpublished Master's Dissertations, Edinburgh Univeristy, Pp 24.
- Kandel B. (2061). *Marketing of Forest Resources of Community Forestry: Why and for Whom?*, CF Bulletin, Community Forest Division, Kathmandu.
- Kandel K.R. and Kandel B.R. (2061). *Revising Community Forestry in Nepal: Achievements and Challenges*, CF Bulletin, CF division, Kathmandu.
- Kandel K.R. and Niroula D.R. (2061). *Relationship Between Community Forestry and Livelihoods*, CF Bulletin, CF division, Kathmandu.
- Kayastha B.P. (1991). *Elements of Community Forestry in Nepal*, Mrs. Sabitri Devi, Kathmandu, Nepal.
- Keeling S,J, (1994). *Baitadi District's Community Forests: A Progress Report*, District Forest Office, Baitadi.
- Khanal K.R. (1996). *Lessons from Community in Nepal: Implications for Himalayan Watershed Management: Recent Developments, Status and Gaps in Participatory Watershed Management Education and Training in Asia*, FAO (UN), Kathmandu.
- Koirala B.P. (1992). *People's Participation in Forestry must for Nepal*, The Nepalese Journal of Public Administration, Centre Forestry Library, Kathmandu.

- Maharjan, Shila (1997). *Women's Participation in Community Forest Management: A Case Study of Bhaktapur District*, An unpublished Master's Dissertations, Kirtipur, Kathmandu, T.U., Nepal.
- Mikkola K. (2005). *Community Forest's Impact on Biodiversity Conservation in Nepal*, An Unpublished Master's Dissertations, Kathmandu, Nepal.
- National Planning Commission (1985). *The Seventh Five Year Plan (1985-1990) of Nepal*.
- National Planning Commission (1992). *The Eighth Five Year Plan (1992-1997) of Nepal*.
- National Planning Commission (2003). *The Tenth Five Year Plan (2002-2007) of Nepal*.
- Paudel K.C. (1993). *Community Forest Management: A Case of Nepal*, An Unpublished Master Dissertations, University College of North Walls, Bangar, U.K., P.L.
- Paudel L. (2002). *People's Participation in Community Forests: A Case Study of Tamang Communities*, An Unpublished Master's Dissertations, T.U., Kathmandu, Nepal.
- Rimal B (2005). *Community Forest Management in Taplejung Distrit: A Case Study of Sablakha VDC*. Unpublished Master's Dissertations, T.U., Kathmandu, Nepal.
- Sangroula P. (2005). *People's Participation in Community Forests: A Case Study of Patle Community Forest of Lamatar VDC, Lalitpur* Unpublished Master's Dissertations, T.U., Kathmandu, Nepal.
- Sharma C.K. (1978). *Natural Resources of Nepal*, Narvana Printing Works Pvt. Ltd. Calcutta.

- Sharma S.P. (059/060). *An Assessment of Leadership; Quality in Community Forest Development in Deupur VDC, Parbat*, An unpublished Master's Dissertations, T.U., Kathmandu, Nepal.
- Shrestha K.B. (1997). *Status of Community Forestry in Nepal*, A Paper Presented at Workshop on Biodiversity Community Forestry on 3 October 1997, Lalitpur.
- Sigdel E.R. (2061). *Community Forestry for Biodiversity Conservation and Poverty Alleviation*, CF Bulletin, CF division, Department of Forest, MFSC, Kathmandu, Nepal.
- Subedi B. M. (2004). *Women's Participation in Community Forests: A Case study of Basantapur CFUG, Dang District*, An unpublished Master's Dissertations, T.U., Kathmandu, Nepal.
- Subedi Y.R. (1996). *Community Forest in Nepal*, Unpublished Master's Seminar Paper, T.U., Kiritipur.
- Tamang Edited et al (1993). *Indigenous Management of natural resources in Nepal*, Winrock international, Kathmandu.
- Thakur G.K. (2001). *The impact of Commercialization of Community forests on the rural community Nepal*, An unpublished Master's Dissertations, Central Library, T.U., Kathmandu, Nepal.
- Uphoff N. and Cohen I. (1973). *People Oriented Development Strategy Concept and Questions Relating to Nepal*, CEDA.
- Wallace B. (1987). *Community Forestry in Nepal: Too Little Too Late*, HMG: USAID, GTZ, et.al.
- Yadav N.P. (2004). *FUGs in Nepal: Impact of Community Forest Management and Community Development*, An Unpublished Master's Dissertations, Central Library, T.U., Kathmandu, Nepal.

Questionnaire

1) General Information about Respondents

1.1. Name of Respondent:

1.2. Age

1.3. Sex

1.4. Occupation

1.5. Religion

1.6. Marital Status

1.7. Education

1.7. Family Size

2) Family Descriptions:

S.No.	Name	Age	Sex	Relation to household head	Education	Occupation	Martial status	Remarks
1								
2								
3								
4								
5								
6								
7								
8								

3) Economic Information

3.1 Land Ownership

S.No.	Land type	Area in Ropani	Cultivations Ownership			Remarks
			Self	Rented out	Rented in	

3.2 Production of Agricultural Crops (muri)

a) Paddy ()

b) Wheat ()

c) Maize ()

- d) Other cash crops ()
- e) Others ()
- Total ()

3.3 Food Sufficiency in Moths

- a) 3 months
- b) 6 months
- c) 9 months
- d) 12 months
- e) Specify

3.4 Live Stock Ownership

- a) Buffalo ()
- b) Cow ()
- c) Goat ()
- d) Poultry ()
- e) Others ()
- Total ()

4. Need of Forest Products

S.No.	Particulars	Amount	From CF	From NF	From Own farmland	Remarks
1	Fuel Wood					
2	Fodder					
3	Timber					
4	Leaf Litter					
5	Medicinal Plants					
6	Others					

CF = Community Forest/NF = National Forest

5) What you use for Cooking Food?

- a) Firewood
- b) Kerosene
- c) Biogas
- d) Gas (LP)
- e) Others

6) Institutional Process of Community Forest

- 6.1 How did you make forest user group?
- 6.2 How did you make forest user committee?
- 6.3 How did you make forest operational plan?
- 6.4 How did you make constitution of forest user group?

7) Participations in Community forest Activities

- 7.1 Have you participate in the group meeting during the formation of forest user group and forest user committee?
- 7.2 Have you participate in the group meeting during the preparation of constitutional and operational plan?
- 7.3 How many times have you participated in group meeting (frequency)
 - a) Always
 - b) Sometimes
 - c) Never
- 7.4 What is your frequency of participation in following community forestry activities
 - a) Protection: (i) Moderate (ii) Less (iii) High (iv) Never
 - b) Implementation of management operation: (i) High (ii) Moderate (iii) less (iv) Never
 - c) Distribution of forest products: (i) High (ii) Moderate (iii) Less (iv) Never

8) What do you think why you are participating?

9) What are the main obstacles to you to participate in every activities of community forestry? Why?

- a) Family size
- b) Education
- c) Economy
- d) Occupational nature
- e) Caste/Ethnicity
- f) Gender
- g) Age
- h) Others (Specify)

10) What factors encourage you to participate?

- a) Family support
- b) Education

- c) Absent of male
- d) Self motivation
- e) District forest office staffs
- f) With the request of general users

11) What is your opinions towards participating of women and lower caste?

12) What types of knowledge & Skills have you gain through community forestry programmes? List them.

- a)
- b)
- c)
- d)
- e)

13) Have you benefited form any community forestry related trainings?

14) Are you satisfied with community forestry programme?

- a) If Yes, why?
- b) If No, why?

15) How far is your community forest?

Distance:–

Time:–

16) Who collect following things from community forests?

S.No.	Name of things	Male	Female	Both

17) Where from you collect fodder fuel wood and green grass?

- Community forest ()
- Government forest ()
- Private forest ()

- 18) **Do you sell firewood?**
 Yes ()
 No ()
- 19) **If yes, when do you sell? And how far from your village?**
 Name:–
 Time:–
 Distance:–
- 20) **Do you think the grass, fodder and fuelwood problem has been reduced after the community forests?**
 Yes ()
 No ()
- 21) **If you are the member of community forests user's group, what do you feel?**
 Positive ()
 Negative ()
 Neutral ()
- 22) **If positive, why?**
 Provides fodder ()
 Provides fuelwood ()
 Provides building materials ()
 Wild beauties ()
 All of the above ()
 Others ()
- 23) **What is the present condition of this community forestry as compared to starting age?**
 Better ()
 Worsen ()
 No change ()
- 24) **How did you participate in community forestry management?**
 Moral support ()
 Giving suggestion ()

Discussion ()

Decision making ()

- 25) What is the difference between past forest and present community forest?**
- 26) From where you were collecting the firewood, grass and fodder before the start of community forestry?**
- 27) Please suggest how management of community forest can be improved?**