

# **Political Ecology of Collaborative Forest Management**

A thesis submitted to

Department of Sociology/Anthropology Makwanpur Multiple Campus, Hetauda,

Tribhuvan University,

in partial fulfillment of the requirements for the degree of Master of Art in Sociology.

**Submitted by**

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**30 April, 2012**

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Therefore, I recommend this dissertation to the Evaluation Committee for the final approval and oral defense.

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## **Acknowledgement**

While the thesis is produced in my name as the author, I recognize that it is indeed a product of many with whom I interacted in different domains. I must recognize these crucial contributions. I benefited enormously from Birendra Sah's intellectual inputs as supervisor, mentor and indeed a highly engaging deliberative partner of this research and the coordinator of Department of Sociology, Makwanpur Multiple Campus. It is through his academic interface that I have been able to locate and articulate interesting theoretical dimensions to the case of my analysis.

I also benefited from the suggestions and contribution of Mr. Surya Binod Pokharel, through different stages of the research, including the fieldwork. I offer sincere thanks to the people of Sahajnath Collaborative Forest, Bara for entertaining me as a researcher, and sharing valuable information. I would like to extend my sincere thanks to Mr. Ram Rup Kurmi, Chairperson of ACOFUN and the executives of Sahajnath Collaborative Forest Management for their response. Similarly my thank goes to the entire team of BISEP-ST for providing me the required information.

Finally, I am very indebted to my parents and family members who have supported me throughout the study period.

April, 2012

Vijay Prasad Kesari

## **Abstract of the Study**

There is people's involvement in different types of forest management modality adopted in Nepal however there are lots of differences regarding defining users, forming executive committee, relation with state and benefit sharing(Political decisions), which has tremendous effect on the conservation and utilization of forest resources (Ecology). This study has reviewed and explored the equity and sustainability issues in the forestry sector in the Terai, Nepal with a focus on the past and present forest politics and policy in the region and its effect in the Terai Forest. The major objective of the study is to explore the political ecology of the newly launched participatory forest management modality known as Collaborative Forest Management. Collaborative Forest Management approach intends to manage the government managed forests of the Terai through the involvement of the local government and people in decision making, implementation, benefit sharing and monitoring.

The study has explored the socio-political dimension of the CFM. It has tried to explore how far this model is successful to address the issues such as involvement of distant users, establishment of rights and control of distant user in CFM, sustainable forest management in collaboration with the local people, local government and the state to achieve multiple benefits, maintaining ecological balance, harmonizing social cohesion and generating economic returns and improving livelihood from the government forests. The equity concerns among proximate and distant users also becomes a complex and prominent issue in the case of Terai as most of forests lie quite far away from the settlements, unlike the hill community forests where more readily identified local communities live near the forest patches.

The study was conducted in Sahajnath Collaborative Forest of Bara districts of Central Terai. The CFM covers 26 VDCs with 7,527 households. The study was based on three pillars namely the related theories (Political ecology), author's experiences (from forest extension worker to civil society worker, social activist and Forest Policy Analyst) and the fresh case study from Sahajnath Collaborative Forest, Bara of Central Terai. Questionnaire, interview, secondary data collection was methods adopted as tools of data collection. It is found that only 13 CFM has been approved in Nepal. Reluctance has been seen in providing approval to CFM. Total 29,799.8 area and 130,638 HH has been

covered by the CFM. It has been extended from three districts to eight districts. News and articles on CFM has been getting space in media and forestry journals. It is found that the CFM system has tried to involve both nearby and distance users in the forest management and also in the benefit sharing. On the other hand, it has involved the multi-stakeholders in the management of the natural resources. It has delegated rights to formation of group, price fixing of product, formation of different committee as required, protection of resource and fund raising rights to the users. The trend of approval of CFM clearly showed the hesitation to approve new CFM. The research clearly found that after 2061/2062 approval started again only in 2065/066. However some improvement have been required to pick up the existing condition of the CFM such as sharing of the benefit must be revised to provide greater share to the users as the number of users of CFM is very high. The CFM Manual and the CFM Scheme plans are applied in a rigid manner. As CFM is a new management modality it should be treated in a flexible way. CFM as participatory and decentralized sustainable forest management model should be replicated not only in Terai and inner Terai but also in feasible area of hill and mid hill forests. CFM is a technical and scientific forestry management so regular capacity building through training and management support should be provided to CFM-G and CFM-C. Further detail exploration on social cohesion building part seems necessary to know the silent benefits of the CFM.

# Table of Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1	Background of the Study	3
1.2	Statement of the Problem	4
1.3	Objective of the Study	5
1.4	Rationale of the Study	6
1.5	Organization of the Study	7
<b>2</b>	<b>Literature Review</b>	<b>8</b>
2.1	Political Ecology	8
2.2	Emergence of Participatory Forest Management in Nepal	10
2.3	Collaborative Forest Management	14
2.4	Political Ecology and Community Based Forest Management	16
<b>3</b>	<b>Research Methods</b>	<b>18</b>
3.1	Research Design	18
3.2	Area/Site and its Rationale	19
3.3	Unit of the Study	20
3.4	Universe and Sample	21
3.5	Nature and Source of Data	21
3.6	Tools and Techniques of Data collection	22
3.7	Validity and Reliability of Data	23
3.8	Data Analysis and Interpretation	23
3.9	Ethical Consideration	23
3.10	Limitation of the Study	24
<b>4</b>	<b>Collaborative Forest Management in Nepal</b>	<b>25</b>
4.1	Current Status of CFM	25
4.2	Approval of CFM	27
4.3	Forest Area Covered by CFM	29
4.4	Households Coverage of CFM	30

4.5	Cumulative Scenario of Approved CFM .....	31
<b>5</b>	<b>Practices of CFM in Sahajnath Case Study Area _____</b>	<b>33</b>
5.1	Analysis of Forest Resources .....	33
5.2	Socio-Economic Analysis .....	38
5.3	Analysis of Operational Procedure .....	46
5.4	Power Dynamics of CFM .....	66
<b>6</b>	<b>Summary, Conclusion and Recommendation _____</b>	<b>72</b>
6.1	Summary .....	72
6.2	Conclusion .....	73
6.3	Recommendation .....	75
	<b>Bibliography _____</b>	<b>76</b>
	<b>ANNEX – 1 _____</b>	<b>78</b>
	<b>ANNEX – 2 _____</b>	<b>84</b>
	<b>ANNEX – 3 _____</b>	<b>85</b>



## **List of Tables**

Table 1: Overview of Government Decisions.....	12
Table 2: Details of Approved CFM .....	26
Table 3: Details of Proposed CFM .....	27
Table 4: Approved CFM .....	28
Table 5: Area Covered in ha .....	29
Table 6: HH covered by CFM.....	30
Table 7: Cumulative Progress Chart of CFM .....	31
Table 8: Description of Land use .....	36
Table 9: Forest Types.....	36
Table 10: Regeneration Status .....	37
Table 11: Status of Demand of Forest Products .....	43
Table 12: Supply of Raw Material for Forest Based Industries.....	44
Table 13: Government Royalties from Sahajnath CFM .....	44
Table 14: Non-Governmental Organizations .....	45
Table 15: Description of Co-operatives .....	45
Table 16: Tasks and Responsibilities of Stakeholders of CFM .....	50

## **List of Figures**

Figure 1: Partners of Collaborative Forest Management .....	<b>16</b>
Figure 2: Conceptual Framework of Research Design .....	<b>18</b>
Figure 3: Sahajnath CFM .....	<b>19</b>
Figure 4: Framework of Research Process.....	<b>21</b>
Figure 5: Number of Approved CFM from 2061/062 to 2067/068 .....	<b>28</b>
Figure 6: Forest Area Covered by CFM.....	<b>29</b>
Figure 7: Household Covered by CFM .....	<b>30</b>
Figure 8: Trend of CFM Approval.....	<b>31</b>
Figure 9: Trend of increase in Forest area under CFM .....	<b>32</b>
Figure 10: Trend of increase in Household covered under CFM.....	<b>32</b>
Figure 11: Religion in Study Site .....	<b>39</b>
Figure 12: Linguistic Distribution.....	<b>40</b>
Figure 13: Economic Condition .....	<b>42</b>
Figure 14: Fuel Dependency .....	<b>42</b>
Figure 15: Authorities and Responsibilities of CFM Users .....	<b>66</b>
Figure 16: Stakeholder analysis of Terai block Forest before launch of CFM (Modified from Power Tools, iied, 2005) .....	<b>67</b>
Figure 17: Stakeholder analysis of Terai block Forest after launch of CFM .....	<b>68</b>

## **Abbreviation/Acronyms**

ACOFUN	: Association of Collaborative Forest Users, Nepal
BISEP-ST	: Biodiversity Conservation Sector Program for Siwalik and Terai
BS	: Bikram Sambat
CBS	: Central Bureau of Statistics
CF	: Community Forestry
CFM	: Collaborative Forest Management
CFM-C	: CFM Committee
CFM-G	: CFM Group
CFM-I	: CFM Implementation Unit
CFUG	: Community Forest User Group
DDC	: District Development Committee
DFCC	: District Forest Coordination Committee
DFCCO	: Office of District Forest Coordination Committee
DFO	: District Forest Office / District Forest Officer
DFSP	: District Forestry Sector Plan
DFRS	: Department Forest Survey and Research Centre
DOF	: Department of Forests
FUG	: Forest User Group
GON	: Government of Nepal
ha	: Hectare
HH	: Household
HMGN	: His Majesty's Government of Nepal
LFP	: Livelihood Forestry Program
MFSC	: Ministry of Forest and Soil Conservation
MPFS	: Master Plan for Forestry Sector

NEFUG	: Nepalese Federation of Forest User Group
NGO	: Non Government Organization
NTFP	: Non Timber Forest Product
OFMP	: Operational Forest Management Plan
OP	: Operational Plan
PFM	: Participatory Forest Management
RFCC	: Regional Forestry Coordination Committee
ToR	: Terms of Reference
VAT	: Value Added Tax
VDC	: Village Development Committee
WG	: Working Guideline
WTLCP	: Western Terai and Western Terai Landscape Complex Project

## CHAPTER – ONE

### 1 Introduction

This chapter firstly introduces the research topic. Secondly, it explains why the topic has been undertaken for research and what unanswered questions are addressed in the study. Thirdly, it presents general and specific objectives of the study. Fourthly, it describes the relevance of the research in the present context and justifies the study. Finally, it explains how this study has been organized in different chapters.

#### 1.1 Background of the Study

Nepal is a Himalayan country situated between China and India covering an area of 1,47,181 sq. km. It is a small country with rich social and biological diversity. It has 2,53,42,638 inhabitants with 31% living below the poverty line with 72% forest dependent. Nepal has now 5.5 million hectares of natural forest, which equates to 39.6% of its land area (DFRS, 1999). It's extremely variable topography which gives rise to diverse landscapes with climates ranging from sub-tropical to arctic. Nepal has five main physiographic zones. These are the lowland plains of Terai, the Siwalik Hills, the Middle Hills, the High Hills and the High Mountains (Himal). In the south there is a belt of 20 to 45 km wide of almost level land, an extension of Gangetic plain, known as the Terai and the Bhabar. It occupies only about 17% of the total land area where approximately 50% of the total population of Nepal are residing (CBS 2002).

Broadly, forest management system in Nepal is categorized into three phases.

1. Pre Nationalization Phase (Before 1957)
2. Nationalization Phase (Between 1957 and 1979)
3. Post Nationalization Phase (Post 1979)

In the first phase, a large chunk of forest area was provided to Mukhiya, Jamindar and other loyalists to the King and the Prime Minister. They made settlement in forest land and hence generated greater revenue.

With the legislation of Nationalization of Private Forest Act 1957(2016 B.S.) the phase of direct state control over forest initiated. It was followed by Special Measures for Forest

Conservation Act 1973 and National Park and Wildlife Conservation Act, 1977 were enacted in the phase. As the government formulated strict laws to control and regulate forest, deforestation rate had increased very rapidly in the period.

Enactment of National Forest Plan 1976 and subsequent amendment in Forest Act (1961) in 1977 to handover part of the government forest to local political units called Panchayat was the beginning of the third phase. In this period, progressive forest sector plans and policy were formulated. Master Plan for Forestry Sector (1989), Forest Act (1993) and Rules (1995) subsequently strengthen decentralization and devolution of power and authority.

Currently Nepal is practicing different participatory forest management models; such as:

1. Community Forest
2. Leasehold Forest
3. Buffer zone community Forest
4. Public land Forest
5. Religious Forest
6. Collaborative Forest

There is people's involvement in each of the management modality, however there are lots of differences regarding defining users, forming executive committee, relation with state and benefit sharing (Political decisions), which has tremendous effect on the conservation and utilization of forest resources (Ecology). The new forest use boundary in Terai created many problems and political concerns since last one decade. Various articles have indicated that community forestry in the Terai is far more complex than in the hills and have often exacerbated existing differences between the various strata in society. At many of the places conflict started between the so called defined users and the distant users who are not defined as users by the provision of Community Forest (CF) under Forest Act 1993. People who are defined as users are enjoying hundred percent benefit from the forest and people who are kept out the users list are not getting even a dried leaf from the forest.

## **1.2 Statement of the Problem**

Started from 1980 the government of Nepal has been handing over its natural forest to local community in means of community forest, lease hold forest, Buffer zone community forest. Forest Act 1993 and Forest Regulation 1995 have provided ample background for the development of participatory forestry management (HMG/N, 1993; HMG/N, 1995). The handing over mechanism has its own definition for each type of these management regimes to define the users and the boundary. This process involves construction of new forest use boundaries and allocation of specific management and use rights to certain groups of people. The pattern of settlement and the distribution of forests in hill area of Nepal is somewhat matching. Hence almost every household can be defined as users of one or another community forest. But the scenario of Terai is very different. Despite well-established community forestry practice in the hills of Nepal with local Forest User Groups (FUGs) preserving the forests, controversies and conflicting debates exist on the management of Terai forests as evident by the difference of opinions among the donors, Nepalese environment and development Non Government Organization (NGOs) and the government.

Terai comprises large block forests and regular settlements. Due to eradication of Malaria and construction of East-west Highway through the jungle of Terai a huge population is emigrating each year from hill to Terai region. The immigrants generally encroach the forest and make their settlements near the forest boundary. A review of socio-political and environmental history of the Terai also suggests that concern for environmental conservation was not a priority until recently due to the policy approach of successive governments to exploit the high-value forests for commercial purposes. The upper hand of the State in the control of Terai forests ever since the beginning of the history of Nepal remained as a legacy for a long period, even influencing current forestry policy and practice in the region.

The community forestry has also been introduced in the Terai, where parts of the larger forest blocks and smaller patches of forest have been handed over to nearby users. The definition of local forest users of community forestry providing them rights of use over the forest where the real traditional users are being far and far from the forest due to huge migration along the forest area. In such cases members of Community Forest User

Groups (CFUG) are mainly the recent immigrants residing inside the forest or along the forest boundary (Ebregt et. al, 2007). The equity concern among proximate and distant users also becomes a complex and prominent issue in the case of Terai as most of forests lie quite far away from the settlements, unlike the hill community forests where more readily identified local communities live near the forest patches (Chakraborty, 2001; Shepherd and Gill, 1999; Satyal, 2006).

Through the Collaborative Forest Management approach, MFSC (HMG/MFSC, 2003) intends to manage the government managed forests of the Terai through the involvement of the local government and people in decision making, implementation, benefit sharing and monitoring. The main objective of the approach is to develop sustainable forest management in order to 1) fulfill the needs for forest products, 2) help in poverty reduction by creating employment, 3) maintain and enhance biodiversity, and 4) increase national and local income through active management of the Terai and inner Terai forests.

Piloted from 2004 in three Terai districts namely Parsa, Bara and Rautahat, CFM in Nepal has tried to bring together multi-stakeholders considering the spatial configuration of the Terai, while using the learning from the experiences of CF and different participatory management modalities operational in other countries. Community Forestry (CF) in Nepal, which allows nearby users to manage and utilize the handed over forests, is known worldwide, but has not been taken as the most appropriate modality for big contiguous blocks of Terai hardwood forest. In the case of the Terai traditional users are nowadays living in distant villages, while also the government has an interest in the forest productivity to ensure the supply of forest products in city centers. CFM addresses more Terai specific issues linked with contiguous large blocks of productive forest, demographic pattern and socio-economic e.g. distant users and employment opportunities.

### **1.3 Objective of the Study**

The major objective of the study is to explore the political ecology of the newly launched participatory forest management modality known as Collaborative Forest Management. The study has explored the socio-political dimension of the CFM. It has tried to explore how far this model is successful to address the issues such as involvement of distant



users, establishment of rights and control of distance user in CFM, sustainable forest management in collaboration with the local people, local government and the state to achieve multiple benefits, maintaining ecological balance, harmonizing social cohesion, generating economic returns and improving livelihood from the government forests.

***Specifically the study aims to explore:-***

- The social dimension of CFM i.e. involvement of distant users in management and benefit sharing of CFM
- The political dimension i.e. decision making system and power devolution to the users of CFM
- Establishment of rights and control of distance users in CFM
- Strengths and constraints of practicing CFM

**1.4 Rationale of the Study**

The study is required for the partial fulfillment for the Master degree in Sociology. The study is based on the scientific research methodology, procedure and logic which are its own rationale. The study is explorative sociological study which has reviewed and explored the equity and sustainability issues in the forestry sector in the Terai, Nepal with a focus on the past and present forest politics and policy in the region and its effect in the Terai Forest. Terai forestry has been historically an inequitable domain that only benefited the State and the ruling class whereas the common Nepali people did not get a fair share of the benefits from it. The newly launched CFM has claimed sustainable forest management in collaboration with the local people, local government and the state to achieve multiple benefits, maintaining ecological balance, harmonizing social generating economic returns and improving livelihood from the government forests. The study has tried to look into the field reality and assess the happening vs the philosophy. The study has not only explored the current political ecology of the CFM but also recommended for the further improvement of CFM in the aspect of balancing the socio political tension in Terai region due to use rights of forest resources. The study could be helpful in improving the current situation of CFM in Nepal. The findings of the study may also be useful to the

researchers, the projects and departments which are supporting the CFM in Terai area of Nepal.

### **1.5 Organization of the Study**

The thesis is organized in six chapters. First Chapter gives details on the introduction of the study. The chapter is divided in five sub-chapters: background of the study, Statement of the Problem, Objectives of the study, Rationale of the study and organization of the study. Second chapter is about the literature review. This chapter is also divided into Political ecology, Emergence of participatory forest management in Nepal, Collaborative Forest Management and the Political Ecology and Community based forest management. Third chapter deals with the details of Research methods. It has sub chapters on Research design, Rational of the selection of the study area, Unit of the Study, The Universe and the sample, Nature and source of the data, Data collection tools and techniques, Data processing and analysis, Ethical consideration and Limitation of the study. Fourth chapter gives details about socio-demographic of the study area and the respondents. Fifth chapter gives the details of the findings of the study. Chapter Six is about conclusion and recommendation.

## CHAPTER – TWO

### 2 Literature Review

#### 2.1 Political Ecology

Political ecology attempts to address how human practices of resource use are shaped by social relations at multiple levels over time, and the ways that these relations shape and are shaped by the physical environment. Numerous authors have observed that political ecology constitutes less of a theoretically coherent field of study than a loosely knit body of research with broadly similar approaches and concerns. Among these are: (1) the role of the local resource user and the capabilities and "decision-making environment" that affect the ways that resources are used; (2) the ways that local resource use is shaped by social and economic relations at multiple scales (the household, the community, the market, the state, transnational capital); (3) the ways that historical processes have shaped and continued to shape these relations; (4) the ways that society and the "natural" or human-modified physical environment mutually shape each other over time. Blaikie and Brookfield are probably the most frequently cited quotation in political ecology, who describes it as the "shifting dialectic between social groups and their physical environment" (Walker, 1995).

Shifting dialectic has been examined from multiple perspectives, often involving efforts to creatively synthesize multiple theoretical and disciplinary traditions. As a result, the theoretical boundaries of political ecology are highly porous, drawing on works in political economy, behavioralism, cultural ecology, natural ecology, social movements' theory, cultural anthropology, cultural and economic geography, environmental history, and feminist theory. Partly reflecting this diversity of theoretical traditions and the backgrounds of the scholars working in the field of political ecology, the political ecology literature can be broadly characterized by a number of themes. These include political economy, gender analyses of resource use and studies of the household, environmental and livelihood movements, struggles over social identity and symbolic meaning, discourse and sustainable development, social analyses of conservation, and environmental history.

Too often, explanations of society-nature relations have been fragmented along disciplinary lines and plagued by dualistic thinking that analytically isolates physical and social phenomena. Political ecology is an interdisciplinary, non-dualistic strategy that remains under development, and perhaps deliberately so, seeking to describe the dynamic ways in which, on the one hand, political and economic power can shape ecological futures and, on the other, how ecologies can shape political and economic possibilities. Often identified with political economy, political ecology frequently takes political economy's interest in the expression and influence of state and corporate power on environmental politics and combines this with insights derived from understanding and analyzing environmental influences on social activity. In this manner, political ecology extends theoretical inquiry beyond the insights of the conventional social and natural sciences. Political ecology's ability to engage the philosophy and values of ecological justice has made it attractive to many who expect analysis to facilitate social change (Center for Energy and Environment Policy).

Political ecology is the study of the relationships between political, economic and social factors with environmental issues and changes.

Political Ecology is both a set of theoretical propositions and ideas on the one hand and on the other a social movement referred to as the "ecology movement" or, latterly, the Green movement (Atkinson, 1991:18).

Much debate in political ecology has focused on the social justice of environmental disputes and resource struggles in developing countries (Watts, 1983; Blaikie, 1985; Escobar, 1995).

Yet, in addition, much political ecology within developing countries may be seen to be an extension of so-called cultural ecology, or the research focusing on local environmental practices often in an anthropological fashion (Conklin, 1954; Geertz, 1963; Rappaport, 1967).

The influential cultural ecologist, Robert Netting summarized cultural ecology as a focus on the "particular circumstances of geography, demography, technology, and history" that result in a "splendid variety of cultural values, religion, kinship systems, and political structures" in local environmental strategies (Netting, 1993:1).

Ostrom (1990) uses the term "common pool resources" to denote natural resources used by many individuals in common, such as fisheries, groundwater basins, forest and irrigation systems. Such resources have long been subject to overexploitation and misuse by individuals acting in their own best interests. Conventional solutions typically involve either centralized governmental regulation or privatization of the resource. But, according to Ostrom, there is a third approach to resolving the problem of the commons: the design of durable cooperative institutions that are organized and governed by the resource users themselves. A group of principals who are in an interdependent situation can organize and govern themselves to obtain continuing joint benefits when all face temptations to free-ride, shirk, or otherwise act opportunistically."

The three dominant models — the tragedy of the commons, the prisoners' dilemma, and the logic of collective action — are all inadequate, she says, for they are based on the free-rider problem where individual, rational, resource users act against the best interest of the users collectively. These models are not necessarily wrong, Ostrom states; rather the conditions under which they hold are very particular. They apply only when the many, independently acting individuals involved have high discount rates and little mutual trust, no capacity to communicate or to enter into binding agreements, and when they do not arrange for monitoring and enforcing mechanisms to avoid overinvestment and overuse. Ostrom concludes that "if this study does nothing more than shatter the convictions of many policy analysts that the only way to solve common pool resource problems is for external authorities to impose full private property rights or centralized regulation, it will have accomplished one major purpose."

## **2.2 Emergence of Participatory Forest Management in Nepal**

Forest Act 1993 made a provision of handing over the patch of forest to the nearby community to use and manage. Community forestry has evolved as one of the major components of Nepal's forest development strategy during the past 30 years, with local Forest User Groups (FUGs) preserving the forests with support from the government and donor agencies. Community forestry is most accurately and usefully understood as an umbrella term denoting a wide range of activities which link rural people with forests, trees, and the products and benefits to be derived from them. Gilmour and Fisher (1991)

define community forestry in terms of control and management of forest resources by the rural people who use them especially for domestic purposes and as an integral part of their farming systems.

Community forestry in the mid-hills is often regarded as one of the few notable success stories in the national context of poor public sector management, improving people's livelihoods on the one hand and conserving natural landscapes on the other. The formation of FUGs has proceeded at the rate of about 1,000 per year. Some critics suggest that the emphasis on 'quality' of the formation process has gradually changed to an emphasis on 'quantity'. The implementation of community forestry has also proceeded in the Terai region, with 1,477 FUGs (12 percent of the total) now managing 2,24,136 ha. However, different conditions of high-value and accessible forests, recent settlement and problems in identifying and organizing user groups, together with wide-spread and organized illegal timber-felling, have caused much slower progress. Illegal logging, fuelwood cutting, grazing, fire and agricultural conversions have contributed to the deterioration of Nepal's forests.

The Master Plan for the Forestry Sector (1989) recognized that the restoration of public forestlands in the hills could only be achieved through the participation of local people (the users). It envisaged that people, principally through community forestry, should manage all accessible forestland in the hills. Community forestry concept was institutionalized through Forest Act (1993), Forest Regulations (1995), the Operational Guidelines (1995), Revised Operational Guidelines (2001-02), and the Forestry Sector Policy (2000). These legal instruments have legitimized the concept of CFUG as an independent, autonomous and self-governing institution responsible to protect, manage and use any patch of national forest with a defined forest boundary and user group members. CFUGs are to be formed democratically and registered at the District Forest Office (DFO), with CFUG Constitution, which defines the rights of the users to a particular forest. The forest is handed over to the community once the respective members through a number of consultative meetings and processes prepares the Operational Plan (OP), a forest working plan, and submits it to the District Forest Officer (DFO) for approval. The plan has to be countersigned by the Chairperson of the CFUG. The general assembly of the CFUG is the supreme body to finalize the plan before it is

submitted to the DFO for its approval. The plan is generally implemented by an executive committee nominated by the general assembly.

### **Overview of government decisions related to user participation in small to large track of productive forest management**

**Table 1: Overview of Government Decisions**

<b>Date</b>	<b>Decision</b>	<b>Implication for forest management</b>
1957	Nationalisation of Forests	State control over the forest and loss of the participation of people to manage forests
1961	The Forest Act	Timber management of government managed forests
1967	Forest Regulation with special provision	Reinforced state authority, more power to the forest bureaucracy
1976	Panchayat and Panchayat protected forest Act	State realised the importance of people's participation in forest management.
1988	Master plan for the forestry sector	Emphasised the sustainable management of forest and livelihood of the community
1993	Forest Act	Legal basis of community participation through the forest user groups
1995	Forest By-law	Forest user groups register in District Forest Office (DFO) and received a legal mandate to manage the part of national forest under community forestry
1997	An Operational Forest Management Plan (OFMP) is prepared for 17 Terai district by Department of Forest	OFMP was geared towards timber harvesting under "Scientific management" but the plan was not focused to community participation

2000	GON introduced a new concept Collaborative Forest Management (CFM) policy for managing the large track of productive forests of the Terai, Churia and Inner Terai	<p>Contiguous large block of forests now existing in the Terai and the Churia hills will be delineated, gazetted and managed as national forests.</p> <p>A CFM system, following natural processes, will be applied to improve forest and biodiversity through multi- stake process (participation of central and local government and user group).</p>
2003	CFM Guidelines	<p>The CFM guideline to be piloted in 11 Terai districts, considering the participation of distant users in management of large blocks of productive forest management. Focus on participation and representation of women and ethnic minorities in forest management and livelihood support programme. Provision for keeping 25 % of the revenues at local level (district) for forest management and created revolving fund contributing to livelihood of poor and ethnic minorities</p>
2005	District Forest Coordination Committee (DFCC) establishment and operational directives	<p>Establish a multi-stakeholder forum including government, local authority, forest user groups, civil society and private sector in forest management and biodiversity conservation.</p> <p>Prepare multi-year District Forest Sector Plan (DFSP) in coordination with stakeholders and coordinate its implementation and monitoring. Establish District Forest Development Fund (DFDF) for investment in forest management and livelihood development.</p>

Despite three decades of supporting local forest management practices and the achievements and contribution that community forestry has made in Nepal, there is huge issue in Terai about defining the users and benefit sharing. The migration pattern from



Hill to Terai, defines the new inhabitants as users. Considering the above mentioned fact along the sensitivity of Churia forests; the government has introduced a new forest management concept with the following major elements:

1. Contiguous large blocks of forests will be demarcated, gazetted and managed as national forests;
2. A collaborative forest management system will be applied to improve forests and biodiversity;
3. Barren and isolated forestlands will be made available to communities as community forests; and
4. All forests will be managed with people's participation.

Graner (1997) mentioned in her book Political Ecology of Community Forestry of Nepal that it is primarily groups which are economically better-off those who become members in forest user groups whereas economically disadvantaged groups, as for instance ethnic minorities and groups of occupational castes are usually not included in these groups. Above all, some of them lose actual access to "common property" forests when these forests are handed over to user groups, as the members exercise a strict control over these forests, denying any type of utilization to non-members. Thus, this often-praised policy of user group forest management has extremely negative effects upon groups which are excluded from membership. As they are at the same time the ones who heavily depend upon these resources in order to meet their subsistence needs. The new policy can not only be seen as a successful development strategy but at the same time it has the extremely negative side-effect of fuelling a marginalization process for economically-disadvantaged groups.

### **2.3 Collaborative Forest Management**

In 2000, Nepal embarked on a new decentralized forest management modality, called Collaborative Forest Management (CFM). Although CFM as forest management modality was already practised elsewhere in the world, the interpretation of what it entailed was everywhere different however.

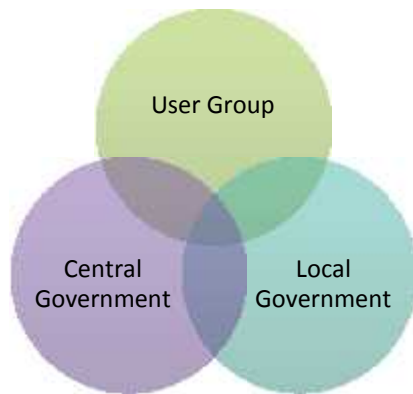
CFM is loosely defined as a working partnership between the key stakeholders in the management of a given forest - key stakeholders being local forest users and state forest departments, as well as parties such as local governments, civic groups and non-governmental organisations, and the private sector (Carter and Gronow, 2005). This definition includes a variety of partnerships, in different tenure situations, and implies a need to manage complex social and institutional, as well as silvicultural issues. The focus on partnerships is less ambiguous than the term 'participatory approach.' Many researchers (e.g. Cornwall 1996; Borrini-Feyerabend 1997) have found that 'participation' can mean different things, ranging from manipulation or co-option, in which lip-service is paid to local involvement, to autonomy or self-mobilisation, in which local people control decision-making. The same authors also defined CFM as a working partnership between the key stakeholders in the management of a given forest.

A 'minimum standard' of participation will entail genuine consultation, respect for different perceptions and values, and the incorporation of such information into planning processes. The nature of partnerships is clarified further by Berkes (1997), who stresses the importance of 'trying to develop equitable partnerships, drawing upon the complementary strengths of forest departments and local users' in the co-management of forest resources. Equitable partnerships imply that each partner takes on a share of the responsibility and reward for forest management based on a clear understanding of and respect for the other partners' rights or entitlements.

Taking a conventional view of forest management, a broad distinction may be drawn between professional forest management as a 'scientific' discipline that enables states and nations to control, regulate and exploit forest resources under their jurisdiction (e.g. government managed forest in the case of Nepal) and indigenous forest management systems, developed locally by forest-dependent communities and varying greatly in technical and social sophistication (e.g. community forestry model of Nepal).

CFM as forest management modality is used all over the world, but everywhere applied in a different manner based on political, social, economic and cultural conditions. Maybe the most known form is Joint Forest Management (JFM) in India, which is seen as a success in halting deforestation. Also in the Northern hemisphere forms of CFM exists, e.g. in British Columbia where the government, timber industry and environmental

movement have come to an agreement on how the rain forests along the coast will be managed. CFM can be applied in government forests (e.g. Nepal, India), but also on privately/communally owned forests (e.g. Switzerland, Congo, Gabon).



**Figure 1: Partners of Collaborative Forest Management**

In Nepal, CFM Working Group (CFM WG, 2003) defines CFM as an approach of sustainable forest management in collaboration with the local people to achieve multiple benefits, maintaining ecological balance, generating economic returns and improving livelihood from the government managed forests.

CFM fits well in the decentralization and devolution process, with direct involvement of the District Forest Coordination Committee (DFCC) and relevant stakeholders, while more revenues remain within the district.

More specifically CFM aims at:

- Creating coordination mechanisms for multiple stakeholders of Terai productive forests;
- Decision making by multi-stakeholders for planning, implementation, monitoring and evaluation of active management of Terai productive forest;
- Developing mechanisms for sharing rights, responsibilities and benefits with due consideration of gender and social inclusion;
- Developing mechanisms for distribution and marketing of forest products.

## **2.4 Political Ecology and Community Based Forest Management**

Political Ecology allows the successful integration of political analysis with the formation and dissemination of understandings of ecological reality. A key ambition is to avoid the simplistic separation of science and politics (or facts and norms), and the use of a priori

notions of ecological causality and meaning, and instead to adopt a more politically aware understanding of the contexts within which Natural resources explanations emerge, and are seen to be relevant. The major relation with the politics and ecology is who and what may be considered as “community or users,” has significant political implications. For example, in case of CF the users are defined as the people living in or surround the forest whereas in CFM users have been defined by nearby, mid and distant users. Another major political decision play vital role at the level of benefit sharing. Percentage of sharing of benefit between different stakeholders is a political matter which play greater role in ecological part of the resource utilization. If managed efficiently, it is argued, the Terai forests could not only boost the local and national economy but also help in environment conservation (Springate-Baginski *et al.*, 2003; Mitchell, 2001). However, given the historical context of inequitable and ecologically unsustainable forestry practice in the Terai, which has still shaped the current forest politics and policy in the region, the question of how equity and sustainability issues can be addressed remains important. With the recent political change in Terai forest management in the name of Collaborative Forest Management after years of inequality and conflict, and the emphasis on equity, inclusive management involving distance users, it is timely to ask how the CFM has addressed the socio political tension between the close user and the distance user of the Terai forest. What are the powers distances users are using? So the aim of the CFM is to address two goals firstly environment management (ecological sustainability) and equity and power sharing with distance and close user (Political Power Dynamics).

## CHAPTER – THREE

### 3 Research Methods

#### 3.1 Research Design

Mainly my research was based on three pillars namely the related theories (Political ecology), my own experiences (from forest extension worker to civil society worker, social activist and Forest Policy Analyst) and the fresh case study from Sahajnath Collaborative Forest, Bara of Central Terai.

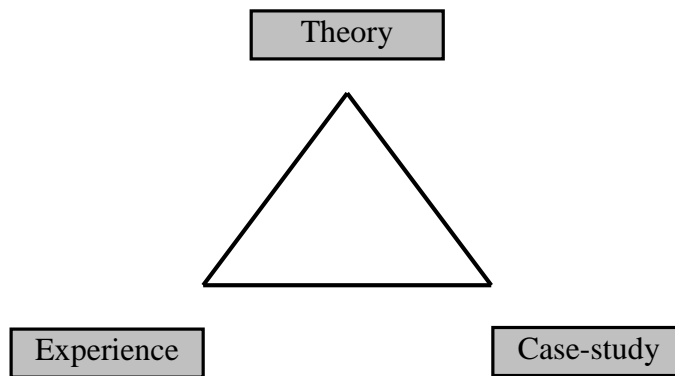


Figure 2: Conceptual Framework of Research Design

I explored and reviewed the conceptual literature at first based on insights from this review; I made a research design comprising a flexible set of questions, and checklist for group discussion and interview with key stakeholders. I have also tried to incorporate my learning during my involvement in the movement to reactivate the CFM policy. I was involved at that time in different forum of discussion where the subject was CF vs. CFM in one or another way.

### 3.2 Area/Site and its Rationale

The study was conducted in Sahajnath Collaborative Forest of Bara districts of Central Terai. The total area of the forest is 2,058 hectares and it lies in Madhuvan Area Forest Office under District Forest Office jurisdiction. This CFM is located 10 kilometres east and east-west highway from Pathlaiya. The location is 7 kilometres south of Pasaha Bridge.



Figure 3: Sahajnath CFM

It is one of the productive Terai forest areas, which is also religiously important. The climate of this area is temperate to sub-temperate. Out of 2058 ha, 15 ha of the area is barren land and about 40 ha encroached area. The boundary to the east is fire line, west-pasaha river, north- Tangya settlement and national forest and to the south Haraiya Village Development Committee (VDC) settlements. The CFM covers 26 VDCs with 7,527 households. The male population of the area is 56,847 and female population 53,466 with the total of 1,10,313. The total forest area is located towards the north with the settlements to the south. Chamar, Dusad, Musahar and Dome are the socially deprived people living within the areas with the population of about 12,000. Women of the areas are backwarded in literacy, employment and their business. These people have negligible representation in the main stream of development. Agriculture and livestock are the main occupation of the people within the areas. Moreover, poor people depend on labour for their livelihoods. Mostly the people near by the forest fulfill their basic needs from the adjoining forest by selling forest products. Umjan, Ganj Bhawanipur, Parsauna, and Rahuyahi are local markets in this area.

The site is selected because it is one of the three CFMs started in Nepal and it lies between two CFM namely Rangapur CFM, Rautahat and the Sabaiya CFM of Parsa district. Very few studies have been conducted in this area and it is also situated at the nearest point from Hetauda. It is purposively selected taking economic point of view such as accessibility, time consumption and resource requirement to conduct the research.

### **3.3 Unit of the Study**

Collaborative Forest Users are the Households which are defined as users by the Collaborative Forest Management Scheme. For this research the households of 26 VDCs covered by the Sahajnath Collaborative Forest are defined as forest users.

The unit of the study in this research is the households. Information related to the collaborative forest management was collected from the head of the households.

### 3.4 Universe and Sample

Illustration: Overall Framework of the Research Process

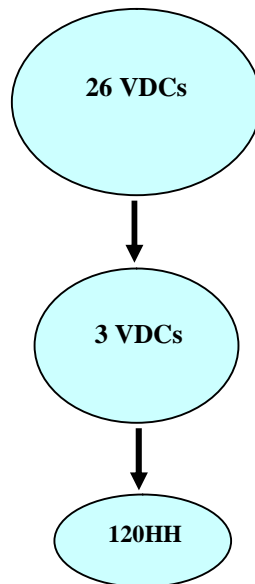


Figure 4: Framework of Research Process

The study has been done by using purposive sampling method. The researcher selected the sample according to the personal judgment. Taking 26 VDCs as universe, three VDCs (10% =2.6) were selected for the beneficiaries level first hand data collection. The whole VDCs were divided in three strata nearest, mid and distant and one VDC from each stratum were selected for the detail study. 5% of the totals HH, 120 HH were covered. While selecting the respondents from the VDCs random sampling method was applied.

### 3.5 Nature and Source of Data

Both primary and secondary data were collected and used for the analysis of the research. Required secondary data, maps and specific cases relevant to the thesis were collected from, projects, management plan and scheme of Sahajnath CFM and from government and non-government organisations i.e. DFO of Bara, Sahajnath, ACOFUN and BISEP-ST.



Primary data were collected using Interview schedule survey from the users of the Sahajmath CFM. Whereas Interview with key stakeholders and group discussion were also conducted to find out the details and triangulate the data.

### **3.6 Tools and Techniques of Data collection**

#### ***3.6.1 Interview Schedule***

Haraiya, Babuain and Kabahijabdi are the VDCs where detail Interview schedule survey was conducted in 5% of the total HH in each VDC. In total 120 HH were covered while administrating the Interview schedule survey. This is used to find out the socio-economic status, use of forest product and working procedure of the CFM. One set of questionnaire has been given in annex.

#### ***3.6.2 Interview with Key Stakeholders***

Interviews were taken with the key stakeholders i.e. Coordinator of the CFM and two more members of the CFM committee, AFO who has been assigned for the Sahajmath and DFO. Interview was carried out with the Chair of Association of Collaborative Forest Users of Nepal (ACOFUN), Regional Manager of Biodiversity Sector Program for Siwalik and Terai (BISEP-ST). Interview was based on a checklist. A checklist has been attached in the annex for the reference.

#### ***3.6.3 Focus Group Discussions***

Three focus group discussions were conducted in each VDC. The users of the Sahajmath forest were the participants of the focus group discussion. A checklist was designed to handle the group discussion in proper shape. The model of the checklist has been included in annex.

#### ***3.6.4 Self Reflection***

I have been involved and working in collaborative forest management since the year 2002 with different role and responsibilities. The experience of relevant matters was also incorporated as a research finding because CFM is new approach and has faced different

level of hurdles during its initial days. It was difficult to capture all the strengths and issues during the fieldwork within a limited timeframe. Important events related with CFM were also occurring during the period at research sites and most of them could not be recorded. Theory related to different practices and experiences are not found in any published literature but 'best practice' in different aspects is happening on in CFM large areas and settlement. The current progress in CFM has been through 'learning by doing'.

### **3.7 Validity and Reliability of Data**

Simple tools were utilised to insure the reliability and validity of data. Cross question were designed in questionnaire to get the reality. Collected data were validated with minute of the meetings and other written available documents. Outliner type of data was verified by re-checking with the respondent and verifying with other relevant sources. Triangulation methodology was adopted during the group discussion and while going through the interview with key stakeholders.

### **3.8 Data Analysis and Interpretation**

Collected data have been tabulated in excel and analyzed using simple mathematical tools such as mean, median, mode, average etc. Findings have been presented in diagrammatic form such as pie chart, bar chart at the appropriate places. Interpretations are made based on both quantitative and qualitative base. Trend is analyzed to see the variables like distribution of forest products, cases of disobey and conflict.

### **3.9 Ethical Consideration**

In this study some ethical norms and values are used which guide for unbiasedness during study period. Such as:

1. Respondents or key informants were explained the purpose and objective of the study clearly and in understandable ways. This study did not try to raise any expectation and false information assurance.
2. The persons refusing to participate were respected and better tried to motivate to participate and never tried to give pressure

3. No any data / information were exploited or manipulated during the study period.  
Data and information were used in a scientific way.
4. Secrecy of source of data / information has been maintained wherever required.

### **3.10 Limitation of the Study**

As every study has some limitation, this study also has some limitations which are as follows:

1. The study covers political ecology of collaborative forest management and compared with community forestry and is not extended to other type of forest management regimes prevalent in country.
2. The time and resource limitation prohibited to go in detail of social cohesion part of the study.
3. The study has been done in the partial fulfillment of the requirement of the master's degree in Sociology / Anthropology

## CHAPTER – FOUR

### 4 Collaborative Forest Management in Nepal

#### 4.1 Current Status of CFM

Instead of managing the forest resource itself, the government joined hands with the local government and with both close and distant users for managing the resources in order to achieve better support for better result delivery and fulfill the requirements of all parties. CFM is in line with the present policies, rules and regulations of the Government of Nepal.

The main features of CFM in Nepal as outlined in the CFM Manual 2060 (2003) are:

- CFM is a partnership between people, local government and central government. This partnership has been worked out in a membership organization with a CFM Group (CFM-G), CFM Committee (CFM-C) and CFM Implementation Unit (CFM-I).
- The CFM-G is the decision making body of the CFM Scheme and consists of elected ward representatives from close (often relatively recent settlers) and distant users. The CFM-C is responsible for the implementation of the CFM Scheme on behalf of its members. The CFM-I resorts under the CFM-C and runs the CFM on a day to day basis.
- Joint decision making for the management of big contiguous forests. Article 5 of the CFM Manual 2060 (2003) clearly explains how the CFM area and CFM plan are developed.
- The CFM Manual 2060 (2003) is not clear on the revenue sharing. 75% of the revenue is to be deposited in the saving fund and 25% to be deposited in the local level, to be decided on by the DFCC.
- Article 4.6 of the Forestry Sector Policy 2000 talks about the benefit sharing which is 25% for the local government and 75% for the national government.
- The role of the DFSP and DFCC is interrelated with CFM. The DFCC has a facilitating, supervising, monitoring and controlling role.

- The model has been supported by three program namely BISEP-ST in Central Terai; Livelihood Forestry Program (LFP) in Western Terai and Western Terai Landscape Complex Project (WTLCP) in Far West Terai.

**Table 2: Details of Approved CFM**

<b>District</b>	<b>Name of CFM</b>	<b>Area (ha)</b>	<b>HH Covered</b>	<b>VDC/Municipal Covered</b>	<b>Date of Approval</b>
<b>Parsa</b>	Sabaiya	3,139	33,097	15/1	2061/062
	Bindabasini	4250	21,163	34/0	2066/067
<b>Bara</b>	Sahajnath	2,058	17,527	30/0	2061/062
	Halkhoria	1,938	27,108	25/1	2065/066
<b>Rautahat</b>	Rangpur	1,473	29,312	24/1	2061/062
	Jangalsaiya	4,049.60	41,000	40	2066/067
<b>Sarlahi</b>	Phuljorbaba	2,482.70	27,953	20	2066/067
<b>Mahottari</b>	Bankemahra	2,006	23,075	35/1	2065/066
	Tuteshwornath	1,334.20	24,151	20/0	2066/067
	Gadhanta Bardibas	1,450.50	25,736	22/0	2067/068
<b>Kapilbastu</b>	Tilaurakot	2,722.30	72,932	23/1	2067/068
<b>Rupandehi</b>	Lumbini	1,118.30	21,874	16/0	2067/068
<b>Navalparasi</b>	Budhhashanti	1,778.2	10,096	9/1	2067/068

*Source: Respective DFO, BISEP-ST, 2011 and ACOFUN, 2011*

The replication effect of CFM has been observed and some block forest area has been proposed for CFM implementation in various districts.

**Table 3: Details of Proposed CFM**

<b>SN</b>	<b>Districts</b>	<b>Name of CFM</b>	<b>Area (ha)</b>	<b>VDC/Municipality</b>	<b>HH Covered</b>
1	Parsa	Bindawasini	4,250	30/0	21,163
2	Bara	Tamagadhi	2,580	23/0	18,032
3	Rautahat	Brindawan	3,800	30/0	24,269
4	Sarlahi	Janki nagar	2,200	36/0	NA
5	Makwanpur	Sunachari	450	1/0	NA
6	Rupandehi	Bhishai	1,500	7/0	11,000
7	Kapilbastu	Gautam Budhha	3,743.4	10/0	8,918
8	Kailali	Basantahasulia	17,000	14/0	25,328
9	Kanchanpur	Laljhandi	21,500	9/1	22,500

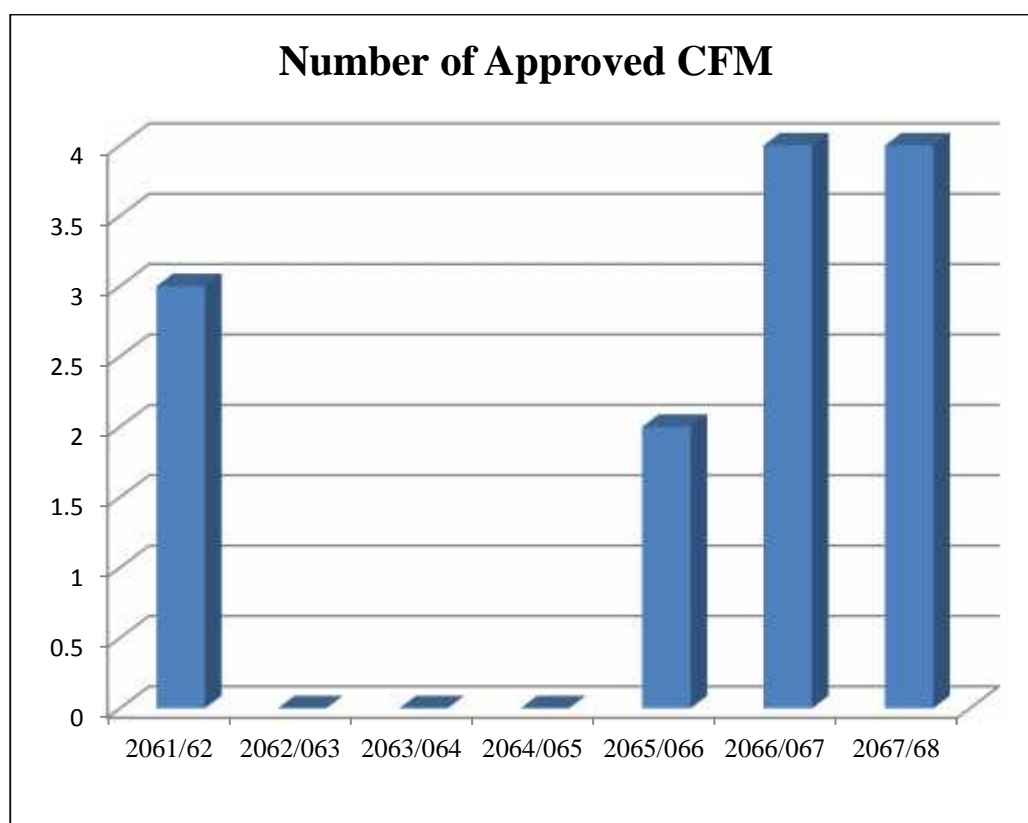
*Source: Respective DFO, BISEP-ST, 2011 and ACOFUN, 2011*

## **4.2 Approval of CFM**

However the Collaborative Forest Management approach was brought out by Government in 2003, it has been noticed that the progress of CFM is not smooth during this last 10 years. The approval of the CFM started from the three piloted CFM schemes one in each Parsa, Bara and Rautahat district in BS 2061/062 (2007 AD). During 2062 to 2065 there is not any progress in number of CFM. In BS 2065/066 only two CFM approval were provided by the government whereas in Year 2066/067 and 2067/068 four CFM in each year has been approved.

**Table 4: Approved CFM**

<b>Year</b>	<b>Number of CFM Approved</b>
2061/062	3
2062/063	0
2063/064	0
2064/065	0
2065/066	2
2066/067	4
2067/068	4
<b>Total</b>	<b>13</b>



**Figure 5: Number of Approved CFM from 2061/062 to 2067/068**

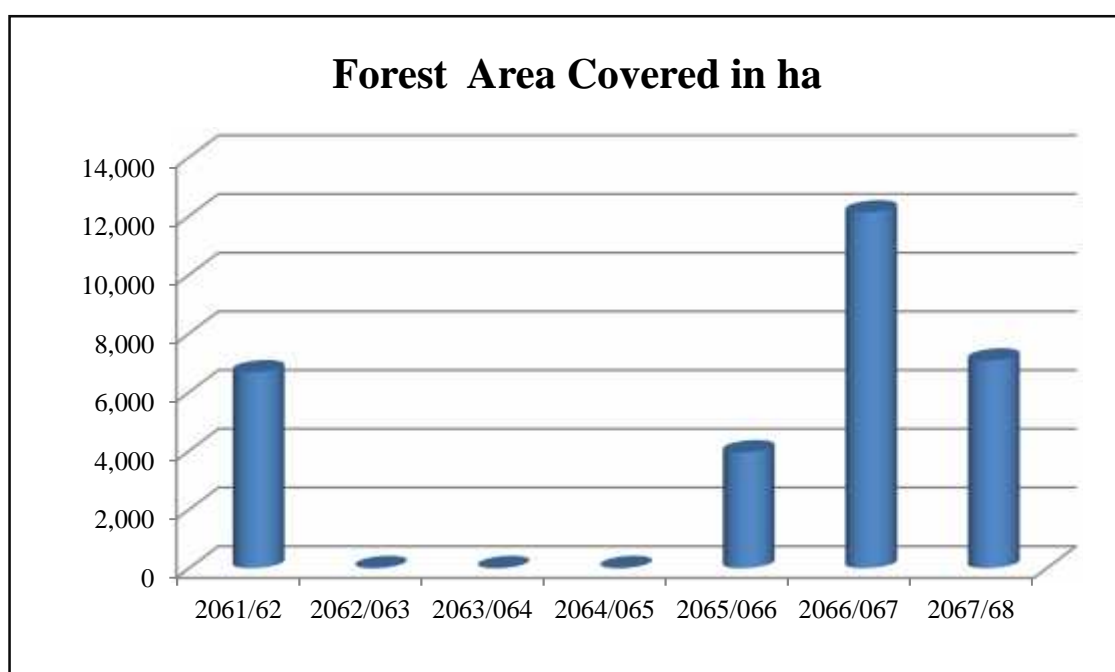
During the study it is found that 85% respondents believe that Ministry of Forest and Soil conservation is not behaving equally with CFM as with other types of community based forest management systems.

### 4.3 Forest Area Covered by CFM

The distribution of forest area in Terai is very different than Hills of Nepal. Large Block Forest areas are found in Terai. Hence the size of CFM also depends upon the Block Forest size. During its development the scenario of forest area coverage started from 6,670 ha in year 2061/062. There was no any progress in CFM approval from 2062/063 to 2064/065. In 2065/066 additional 3,944 ha forest areas have been added under CFM. In Year 2066/067 and 2067/068 the forest area covered under CFM added by is 12,116.5 and 7,069.3 respectively.

**Table 5: Area Covered in ha**

Year	Area Covered in ha
2061/062	6,670
2062/063	0
2063/064	0
2064/065	0
2065/066	3,944
2066/067	12,116.5
2067/068	7,069.3



**Figure 6: Forest Area Covered by CFM**

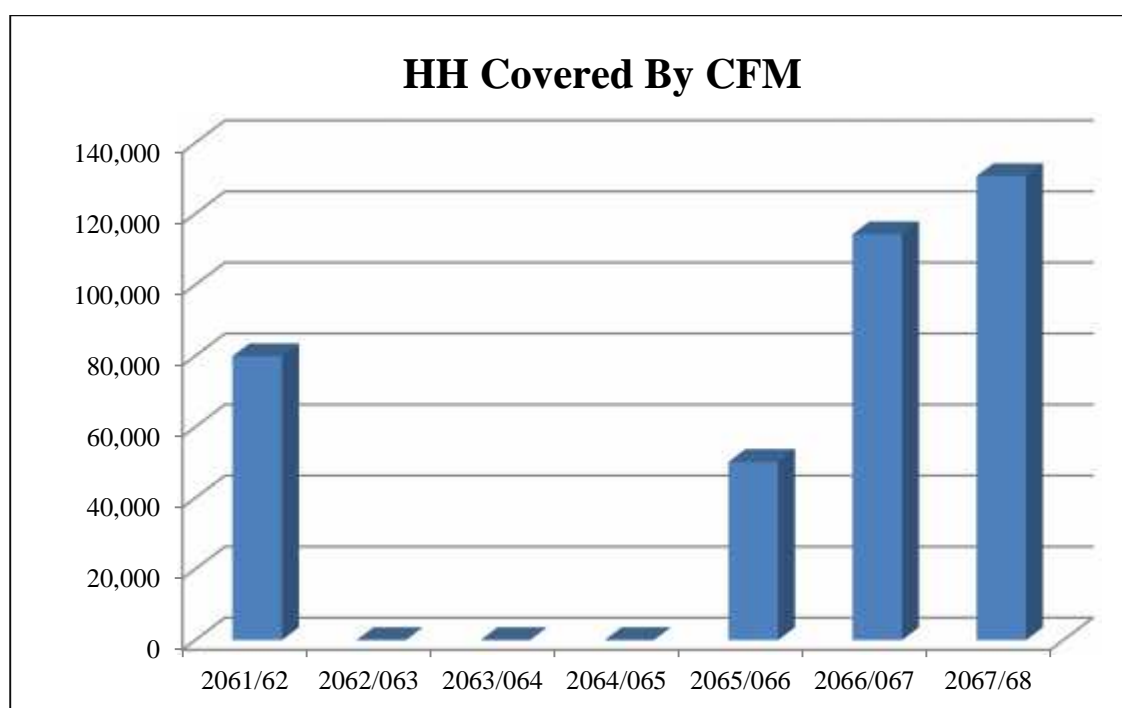


#### 4.4 Households Coverage of CFM

The density of Terai is quite higher than Hill area. The distribution of forest of Terai however is in Block type, but the settlements depending upon the forests are also very huge in number. During its development the scenario of households coverage started by CFM started with 79,936 HH in year 2061/062. There was no any progress in CFM approval from 2062/063 to 2064/065, so no any additional HH is included in CFM. In 2065/066 additional 50,183 HH are added under CFM. In Year 2066/067 and 2067/068 the HH covered under CFM are added by 1,14,267 and 1,30,638 respectively.

**Table 6: HH covered by CFM**

Year	HH Covered
2061/062	79,936
2062/063	0
2063/064	0
2064/065	0
2065/066	50,183
2066/067	1,14,267
2067/068	1,30,638



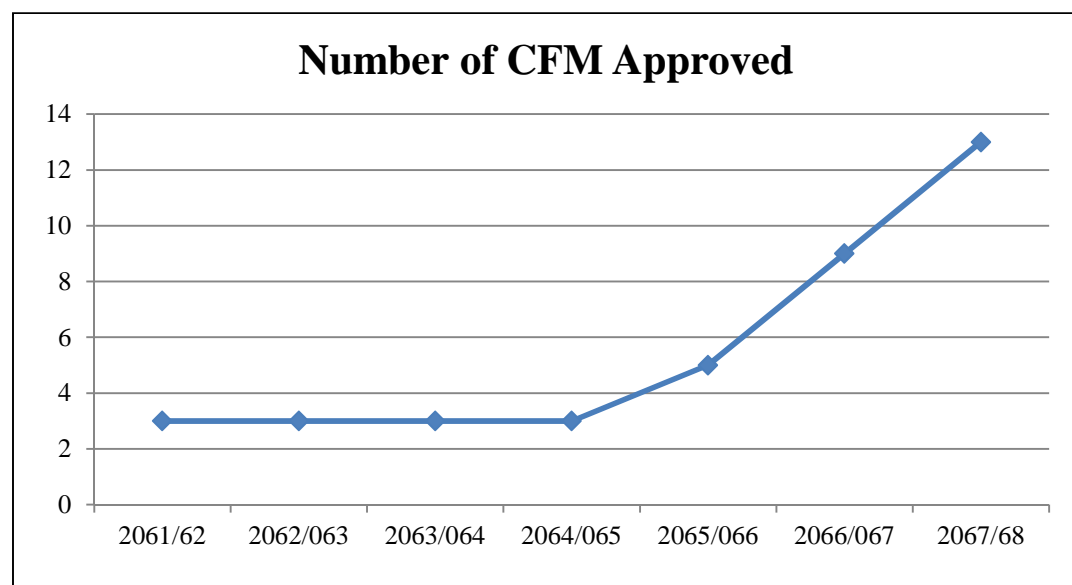
**Figure 7: Household Covered by CFM**

#### 4.5 Cumulative Scenario of Approved CFM

Due to null progress in CFM approval after approving of three piloted CFM in 2061/062 the cumulative figures till 2064/065 remains three where as it increased by two members in 2065/066 and after that it reaches 9 in 2066/067 and finally the total approved CFM are 13 now.

**Table 7: Cumulative Progress Chart of CFM**

Year	Number of CFM Approved	Area Covered in ha	HH Covered
2061/062	3	6,670	79,936
2062/063	3	6,670	79,936
2063/064	3	6,670	79,936
2064/065	3	6,670	79,936
2065/066	5	10,614	1,30,119
2066/067	9	22,730.5	2,44,386
2067/068	13	29,799.8	3,75,024



**Figure 8: Trend of CFM Approval**

Likewise the area covered under the CFM was 6,670 ha till 2064/065 which reached to 10,614 in 2065/066, 22730.5 ha in 2066/067 and finally 29,799.8 ha forest area has been managed under the Collaborative Forest Management model. The similar situation can be observed in the HH covered under the CFM. The number of HH staged 79,936 till 2064/065 and finally reached to 3,75,024. The distribution of forest area per HH has been observed 0.079 ha.

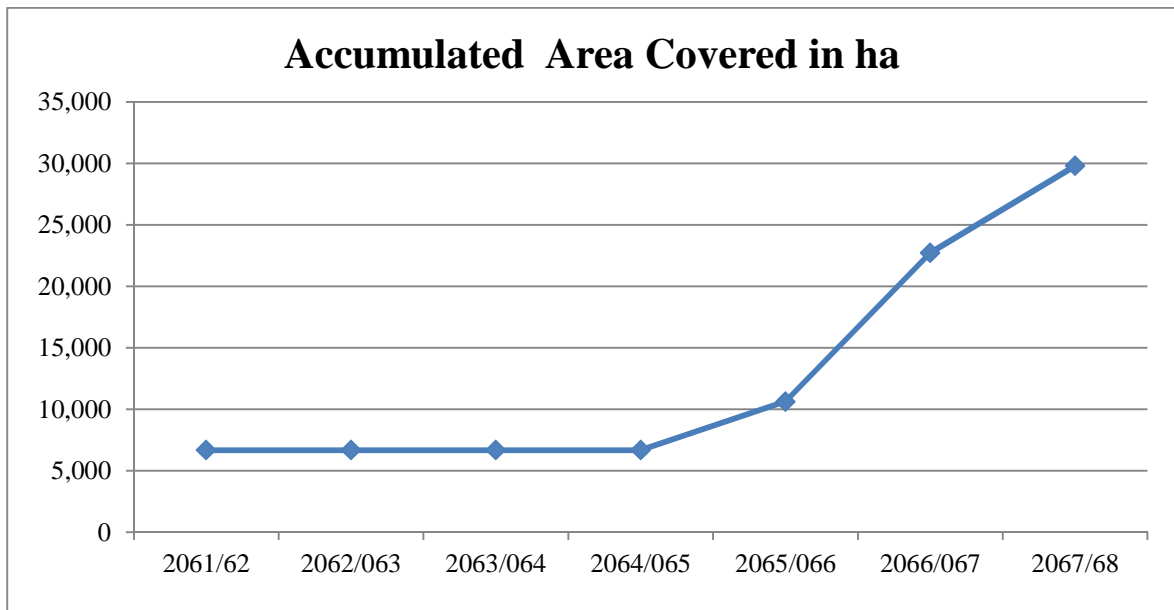


Figure 9: Trend of increase in Forest area under CFM

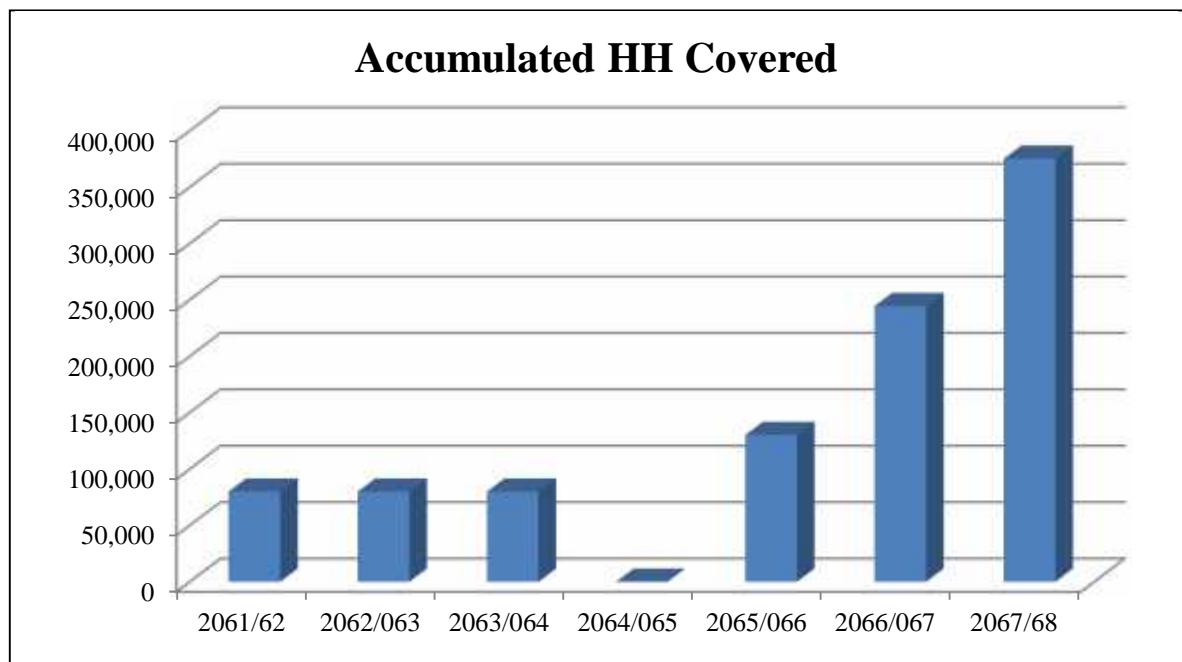


Figure 10: Trend of increase in Household covered under CFM

## CHAPTER - FIVE

### 5 Practices of CFM in Sahajnath Case Study Area

#### 5.1 Analysis of Forest Resources

##### 5.1.1 *Historical Background of Sahajnath Forest*

It is believed that Bandurga of Bara Gadhi from the beginning of Mithila State to the end operated the administration of Bara. Apart from these, Gadhis were called as Baraha Gadhi i.e. Nijgadh, Tamagadhi, Bariyarpur Gadhi, Simraun Gadhi, Rama Gadhi, Budhgai, Benaui, Newal Gadhi, Parsa Gadhi and so on. Bara Ban Durga was situated at the middle of Jamuni and Tiya River as the hillock is the proof of Bara Gadhi. Thus, historically Bara was named in the name of Baraha Gadhi. Sahajnath collaborative forest is named in the name of famous Sahajnath Temple, a holy name of Lord Shiva.

According to local people this area was covered by dense Sal forest before Rana Regime but later thousands of cubic feet Sal timbers were exported to India for railway sleeper by Rana rulers to East India Company erstwhile India Ruler. Apart from, there is huge amount of destruction due to people migrated from Hill to the Terai. In addition, population increment and fulfillment of the basic needs of forest products resulted in depletion of forest quality.

Forest Research and Survey Department made research on forest biodiversity and condition and concluded depletion of forest cover one decade ago. This conclusion was drawn as a result of agro-based economy, population increment, illegal settlements and forest dependency for basic needs fulfillment. It is also valid that forest was converted into agriculture land as an easy alternative to feed growing population.

It is concluded from the study that the forest depletion is not new but it started from the Rana Regime and is in regular way till date due to adverse security situation.

Forest management was implemented by giving whole sole authority to the district forest office of the Department of Forest through formulation of the plan by forest technician. People's participation was not taken into account while implementing the past management plans.

### **5.1.2 Geographical Description**

Longitude and Latitude: Bara district is extended from 26<sup>0</sup>51' to 27<sup>0</sup>02' north latitude and 84<sup>0</sup>51' to 85<sup>0</sup>96' east longitude. Sahajnath CFM is extended from 7 km south of east-west highway to Indian border as command area.

#### **(i) Altitude**

This forest area lies from 97m to 165m above the sea level.

#### **(ii) Boundary Description of CFM**

East: 16 Km fire line

West: Pasaha River

North: Taungya Basti and National Forest

South: Village boundary of Haraiya VDC

#### **(iii) Area**

Total area of this Sahajnath CFM is about 2058 ha.

### **5.1.3 Geology and Soil**

The forest area, extended to Indo-Gangetic plains, is covered by flat and fertile land. Most of the forest area is covered by sandy-loam and sandy soil around the Riverbeds. Riverbeds are rising every year due to flood deposited sand, gravels from Siwaliks one of the most vulnerable geological surface of the country. This deposition results in degradation of forest and fertile agriculture land of Bara District.

There is large amount of sedimentation deposition within the areas of Pasaha River and agricultural land during monsoon season resulted in riverbed increase and widening year after year. About 100 meters wide forest area of Pasaha River has been identified as sensitive/vulnerable areas for soil conservation point of view. Pasaha river has diverted into two sides on the upstream side has resulted heavy damages of forest. Thus, this area is important to protect from soil conservation point of view.

#### **5.1.4 Climate**

Tropical and sub-tropical climate is prevalent in the area. Temperature varies from 7<sup>0</sup> Celsius in the winter to the 40<sup>0</sup> Celsius and above during summer time with an average of 18.0 and 31.3<sup>0</sup> Celsius respectively. Average annual rainfall is 1760 mm (80%) especially from June to September as main rainy season. There is only 20% rainfall during winter season from January to April. There is dry season from February to April in which forest fire is prevalent that result in destruction of regeneration and saplings.

#### **5.1.5 River, Lake and Stream**

Pasaha is the only main river located at the western boundary of this forest. This river has originated from siwaliks area, which brings large devastating floods and deposits large amount of sand, gravels and stone during monsoon season every year. A Sikar and Tear stream passes through this area and results the destruction of forest as well agricultural field. Due to the deposition of sand, gavel and stones, riverbeds of Pasaha are rising and agriculture land is converting into unfertile land.

#### **5.1.6 Accessibility**

Simra airport is one of the accessible air service centers of the district, which is located 4 km south east of Pathlaiya (east west highway). Sahajnath CFM is located 10 km east from Pathlaiya and 7 km south of Pasaha Bridge. It takes 2 hours to reach to Kant Gaun Ilaka office, which is command area of CFM Scheme. There is also bus service from Kalaiya, Bara Distric Headquarter to the Kakdi-Parsauna route to reach to the southern boundary of CFM forest.

### 5.1.7 Land use

Total area of Sahajnath CFM is 2,058 ha out of which 15 ha is marginal land and 40 ha encroachment area.

**Table 8: Description of Land use**

<b>Description</b>	<b>Area (ha)</b>
Forest Area	2,003
Grass Land	15
Encroached Forest Area	40
<b>Total</b>	<b>2,058</b>

### 5.1.8 Forest Type

This Sahajnath forest covers an area of 2,058 ha out of which Sal forest having 21%, Sal-Terai hardwood 64%, Sisso-Khair plantation 6%, Teak plantation 3%, Terai mixed hardwood 5% and marginal land 1% respectively. Sal dominant species and Jamun, Botdhayero, Asna, Karma, Sindure are associates of Sal.

**Table 9: Forest Types**

<b>S.N.</b>	<b>Types of Forest</b>	<b>Area (ha)</b>	<b>Percentage</b>
1	Sal	430	21
2	Sal and Terai Hardwoods	1,317	64
3	Sisso- Khair	137	6
4	Teak	57	3
5	Mix forest	105	5
6	Barren land	12	1
	<b>Total</b>	<b>2,058</b>	<b>100</b>

Source: Sahajnath CFM, 2011

### 5.1.9 Forest Condition

#### (i) Regeneration Condition

Average number of regeneration in this forest is 7,250 per hectare out of which 87 % is Sal regeneration and rest 13% are other species.

**Table 10: Regeneration Status**

S.N.	Description	No. Per Hector	Percentage
1	Sal seedling < 1.3 m height	5,800	80
2	Sal seedling > 1.3 m height	500	7
3	Others	950	13
<b>Total</b>		<b>7,250</b>	<b>100</b>

*Source: Sahajmath CFM, 2011*

#### (ii) Forest Encroachment

There is old settlement in the heart of this forest called Kant Gaun. The number of household is increasing year after year within the periphery of this settlement. There was about 30 ha of the forest area encroached for 4-5 years ago. Now the area is increased by 40 ha at the boundary of Haraiya VDC.

#### (iii) Endangered and Rare Flora

Endangered Flora of this areas are Bijayasal, Semal, Khair, Kumkum, Sandan, Pajan, Chille Kurilo, Pipla, Sikakai, Kachnar, and Bhorla have been identified as endangered flora within the areas as per their availability.

#### (iv) Endangered and Rare Fauna

Endangered and rare fauna comprised of Tiger, Chituwa (leopard), Langur, Elephant, Nilgai, Chamgadar, Large Wild Cat, Pangolin, Bear, Wild Dog and Percupine respectively.



## **5.2 Socio-Economic Analysis**

### **5.2.1 Population**

This Sahajnath CFM covers an area of 26 VDCs from Haraiya to the North and Kabahigoth to the southern border of India. Total population of the area is 1,10,313 with 53,466 female and 56,847 males having 17,527 households (CBS 2001). Adjacent VDCs are Haraiya, Karaiya, Parsauna, Kakadi, Sirorawa, Umjan and Tetariya whereas the far distance VDCs are Gunjbhawanipur, Bariyarpur, Gadhal, Dahiyar, Madhurijabdi, Binauli, Patharhatti, Babuain, Piparpati Pachrauta, Telkuwa, Bishanpur, Parsurampur, Bagahi, Narhi, Kabahijabdi, Amarpatti, Piparabirta, Pakadiya and Kudwa.

#### **(i) Population Density**

Forest area of the Shajnath CFM is confined in the North whereas the settlement in the middle and to the south. Density of the population of Bara is 349.5 (District profile 2004).

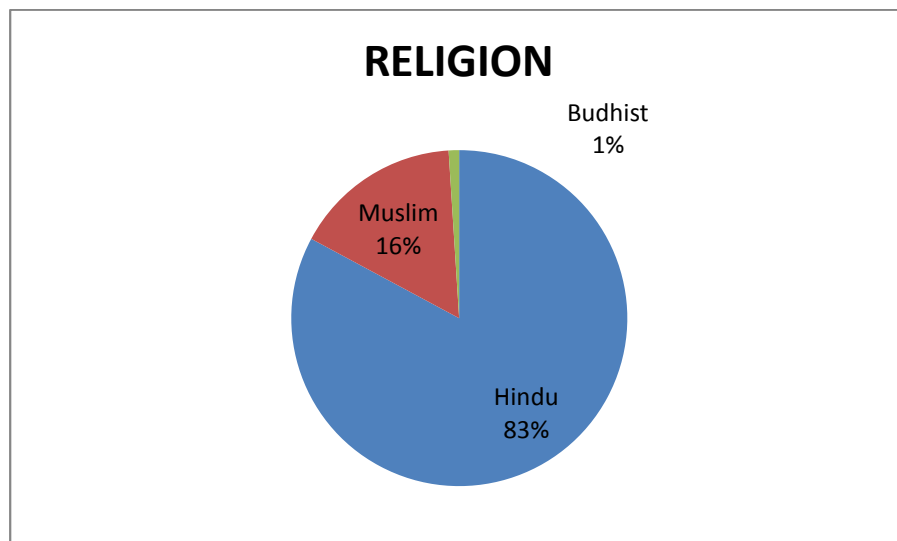
#### **(ii) Migration**

Mostly the families residing nearest to the forest are migrated from Kabhre, Sindhupalchowk and Dolakha districts. Due to migration, it is felt a pressure in the forest products as well encroachment. People from Sahajnath area specially young are migrating to India as well to the Gulf Countries including Malaysia for employment and is in fast pace from one and half decade ago.

### **5.2.2 Religion, Ethnicity and Language**

#### **(i) Religion**

82 % of the people within of the studied area are Hindu and the 16 % comprise of Muslim population. Some of the people migrated from the hills are Buddhist which is almost 1% and the other religions fall under 1%.



**Figure 11: Religion in Study Site**

**(ii) Ethnicity**

The highest population is of Yadav that comprises 20,000 whereas, Tharu population is 19,000, second highest, and third highest is Muslims with about 18,000 population. Business people are Kanu, Baniya and Teli having population of almost 20,000 and also Koiri and Dushad have population of 5000 each. Other caste people are less than 5,000 within 26 VDCs. Indigenous people of the areas are Tharu who have good experience of the areas. Skilled families of the areas are Koiri for vegetable production, Kumal for earth pot, Badahi for wood carving and furniture making, Mallah for fishing and Muslims for tailoring.

**(iii) Language**

Bhojpuri is the main language of the people from south and mid VDCs whereas, the people speak Nepali from the North migrated from the hills. Tamang people migrated from hills, speak Tamang language. Moreover, Nepali is formal education language. Therefore, school student study Nepali language and national language/ official language is also Nepali. Almost 72.5% of the people speak Bhojpuri whereas, 12.6% Nepali, Tharu language 4.5% and Tamang 2.7% respectively.

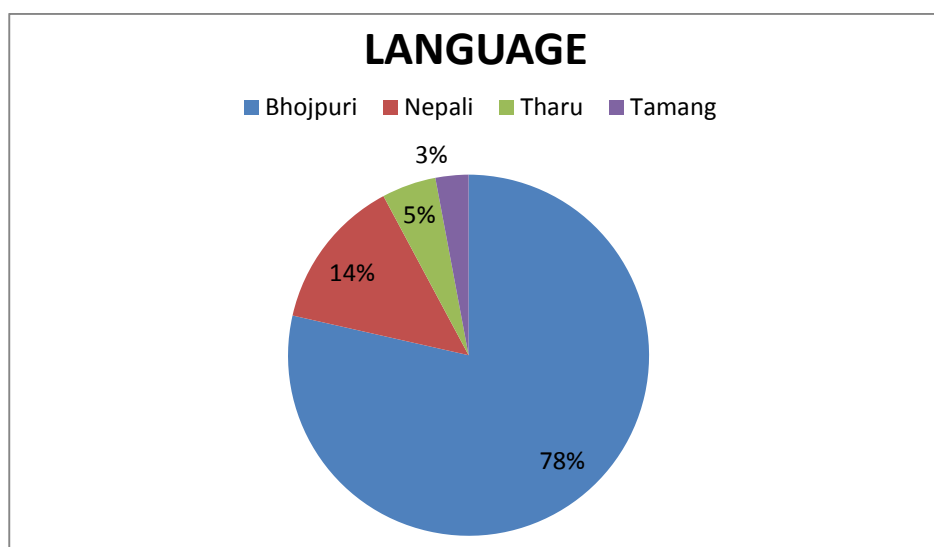


Figure 12: Linguistic Distribution

### 5.2.3 *Socially Deprived/Backward Group*

Dushad, Chamar and Musahar are the main deprived people within the areas. Total population of Dushad within the areas is almost 4,000 in almost all VDCs of 26. The population of Chamar (leather work) is almost 5,000 dispersed in almost all VDCs within the areas. Third position is for Musahar having population of 3,000 almost confined either to the north VDCs or to the south.

Terai women are also categorized as deprived due to backwardness and low in education. Women are not supposed to open their face in front of men (Parda System) when they are newly married. They are also confined in house chores and not given opportunities on social and development work.

### 5.2.4 *Main Occupation and Education*

#### (i) **Main Occupation**

One third of the income of the population within the areas of Bara get from Agriculture whereas, Business is the second income source of the district. Third income source is service sector having almost 7% and livestock 5% respectively.

Main occupations of these areas are Agriculture and livestock. Poor and mid-families depend on labor work for livelihoods. Poor and Mid-level people adjacent

to the forest sell forest products as fuelwood and timber as well Bhorla leaves in local market and generate income. Young people migrate to India and to other Gulf-countries for employment generation. Gunj Bhawanipur, Umjan, Parsauna, Rahuahi etc. are local markets within the areas. Apart from furniture industries, Brick kilns, Sawmills, Rice mills are also located within the areas.

## **(ii) Education**

Literacy rate of Sahajnath area is 42.7% out of which 55.2% are males and 29.1% females. There is very low literacy rate among poor, middle family, dalit, women and ethnic groups. There is no higher-level college education in rural areas so people from higher economy go to city areas as Birgunj, Kalaiya as well India for higher education. There are very limited people having technical education.

### **5.2.5 Cattle Population**

It is a trend to rear cows, buffalos, goats and pigs as income source in agro-based economy of Bara District. Census shows that there are 5 cattle in each household. Cows and buffalos are reared for milk and goats and pigs for meat production. Cows and buffalos are main source of income to the poor and middle family. The lower cast people as doom and musahar rear pigs as source of income. People adjacent to the forest graze their cattle in the forest areas where as people far from the forest depend on partial stall feeding to their cattle. They only graze their cattle at the time of not having any crops in farmland. People from far distance cook food from cow dung by making dung cakes which results in importing chemical fertilizer due to shortages of compost. This makes depletion of agricultural production on one hand and dung cakes burning makes health hazards for the rural women.

### **5.2.6 Economic Condition**

Economic condition of the study site is defined on the basis of roof quality of their main house. The study found that 8.4% of the people are having cemented roof, 1.9% house having galvanized roof, 31.1% tiles and 58.5% thatched roof.

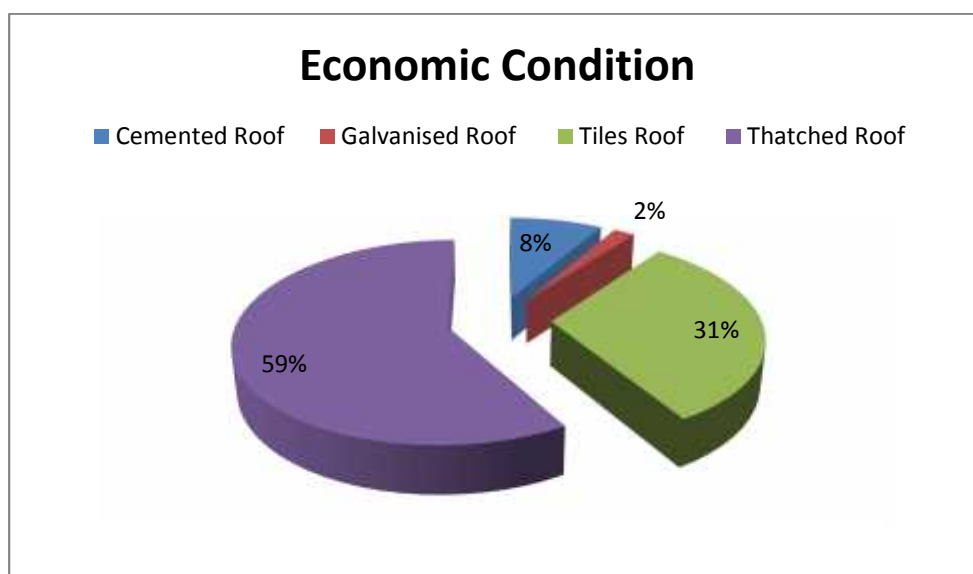


Figure 13: Economic Condition

### 5.2.7 Forest Products

#### (i) Fuel Dependency

It is found that 64% of the family depends on firewood, 31% on cow dung and kerosene, 0.5% on electricity and rest on biogas and others as sources of energy.

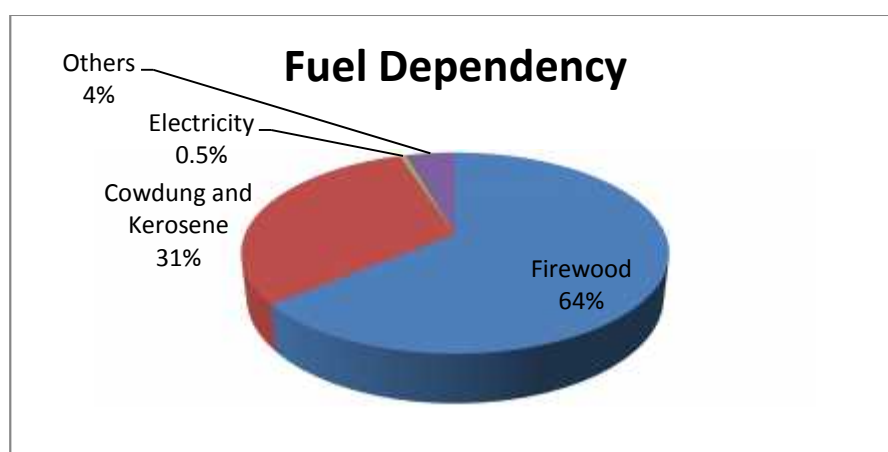


Figure 14: Fuel Dependency

Population growth rate of Bara is 2.4% and demand of timber, firewood and fodder per person is estimated to 0.045 m<sup>3</sup>, 0.32 m<sup>3</sup> and 0.26 metric tones (OFMP 1994). Fuelwood supply in this area is 23.4% from private forest, 7.9% from

community forest, 1.2% leasehold forest and 67.5% from CFM. This data shows heavy amount of fuelwood supply from Collaborative Forest. Home consumption of different types of forest products is given in table 11.

**Table 11: Status of Demand of Forest Products**

Year	Demand		
	Timber (m <sup>3</sup> )	Fuelwood (m <sup>3</sup> )	Fodder (M. Ton)
2003	4,964	35,300	28,681
2004	5,361	38,125	30,977
2005	5,501	39,116	31,782
2006	5,644	40,133	32,608
2007	5,791	41,177	33,456
2008	5,941	42,248	34,326
2009	6,084	43,262	35,151
2010	6,230	44,304	35,997

*Source: Sahajnath CFM, 2010*

## (ii) Industrial Consumption of Raw Materials

There are many forest-based industries registered in Bara District out of which some of them are located within Sahajnath CFM areas. Many of the industries get raw materials as forest products from local level for operation. Name list of the forest-based industries are given in the table 12.

**Table 12: Supply of Raw Material for Forest Based Industries**

<b>Types of Industries</b>	<b>Number Registered</b>	<b>Annual Supply of Forest Products (m<sup>3</sup>)</b>
Saw Meal and Veneer Industries	16	32000
Block and Tile Industries	34	10000
Cutch Industries	3	13800
Furniture Industries	20	1000

*Source: District Forest Plan, Bara 2003*

**(iii) Government Royalty from Sahajnath CFM**

As mentioned above there is provision of sharing the benefit among users, local government and central government in the management modality of CFM. The data of Royalty collected from Sahajnath CFM has been presented here.

**Table 13: Government Royalties from Sahajnath CFM**

<b>Year</b>	<b>Types of Forest Product</b>				<b>Total Income</b>
	<b>Timber (Cft)</b>	<b>Income (NRs)</b>	<b>Fuelwood (Cft)</b>	<b>Income (NRs)</b>	
2007/08	13,875	24,28,160			24,28,160
2008/09	4,341	12,48,399	6180	10,79,421	23,27,820
2009/10	3,518	8,12,257	4287	9,18,780	15,23,017

*Source: Sahajnath CFM, 2010*

### 5.2.8 Social/ Community Groups, Co-operatives and Market Center

Sahajmath CFM covers 26 VDC in which a number of social communities and cooperatives are working for the welfare and development of the district. List of the organizations are given in the table 14 and 15.

**Table 14: Non-Governmental Organizations**

S.N.	Name of Organization	Location (VDC)
1	Child and Women Development Service Center	Bariyarpur
2	Shrijna Mother (Aama) Group	Haraiya
3	Gramin Uthan Abhiyan	Haraiya
4	Women and Child Welfare Union	Ganj Bhawanipur
5	Nepal Terai Uthan Union	Ganj Bhawanipur
6	Ohm Shanti Youth Organization	Babuwain
7	People Welfare Society	Babuwain

*Source: Bara District Profile, 2009*

**Table 15: Description of Co-operatives**

S.N.	Name of Co-operatives	Location (VDC)
1	Sahajmath Chetanshil Women Saving and Loan Organization	Haraiya
2	Democratic Women Saving and Loan Co-operatives	Haraiya
3	Shuraya-Jyoti Milk Production Co-operatives	Haraiya
4	Gagan Multiple Co-operatives	Bariyarpur
5	Laxmi Multiple Co-operatives	Ganj Bhwanipur

*Source: Bara District Profile, 2009*



### **5.2.9 Main Commercial Centres**

Maduban, Ganj Bhawanipur and Bariyarpur are main commercial center for food crops market.

#### **(i) Agriculture and Livestock Service Centre**

There is livestock service center located at Haraiya VDC where as Bariyarpur, Haraiya, Pakadariya and Narahi VDCs have agriculture service centers.

#### **(ii) Telephone Service**

Ganj Bhawanipur, Haraiya, Bariyarpur, Badaki Phulwariya and Piparadhi VDC have telephone services.

#### **(iii) Electricity Service**

Umjan, Haraiya, Ganj Bhawanipur, Narahi, Bariyarpur, Pipra Birta, Piparadhi and Babuwain have electricity services.

#### **(iv) Constituency Area**

These 26 VDCs of Shajnath CFM area located in constituency number 2 and 4 of Bara District.

## **5.3 Analysis of Operational Procedure**

### **5.3.1 Defining the Users**

Users of the Sahajnath Collaborative Forest Management are the inhabitant of 26 VDCs as mentioned above.

### **5.3.2 Provision of Group Formation**

Collaborative forest management group has been formed from direct related stakeholders of Sahajnath Collaborative Forest Management group, local government (VDCs and DDC) as well to the government and non-government organizations participating for conservation and improvement of the forest resources.

Following are the member of the Sahajnath Collaborative Forest Management group as per the recommendation of the VDCs or line agencies formulated by District Forest Coordination Committee (DFCC):

- |  |     |
|--|-----|
| a) One representative from one ward depending on daily forest products consumption. In order to select the representative, it is mandatory that there will be at least three women and one dalit | 252 |
| b) Village Development Committee's representatives related to the collaborative forest management unit   | 28  |
| c) Ilaka representative of DDC within CFM unit areas   | 4   |
| d) Forest related government representatives (soil conservation, women development, Agriculture Development , Livestock development)   | 4   |
| e) Non-government organization, local community organizations and women group representatives  | 10  |
| f) Representative from District Forest Office  | 1   |
| g) Assistant Forest Officer, Ranger, Forest guard or official  | 3   |

**Total: 302**

### 5.3.3 Provision of CFM-Committee Formation

There will be a CFM-Committee members among the user members of CFM-groups. Selection of the Committee representatives and formation will be as follows:

- |    |  |                  |
|----|--|------------------|
| a) | DDC nominated Ilaka member among the DDC member                | 1 Coordinator    |
| b) | Two VDC representatives from adjacent and far distance         | 2 Members        |
| c) | Two Members from within 5 km users (at least one woman)        | 2 Members        |
| d) | Two Members from more than 5 km far users (at least one woman) | 2 Members        |
| e) | One government representative related to forest                | 1 Member         |
| f) | Forest Working Assistant nominated by Area Forest Office       | 1 Member         |
| g) | One representative from women groups                           | 1 Member         |
| h) | One representative from dalits and deprived groups             | 1 Member         |
| i) | One member from political parties                              | 1 Member         |
| j) | One member from forest and environment related NGOs            | 1 Member         |
| k) | One ranger from respective Range posts                         | 1 Member         |
| l) | Ilaka Forest Officer of the respective Ilaka office (AFO)      | Member Secretary |

**Total Number 15**

#### **5.3.4 Formation of CFM Implementation Unit**

A five members committee has been formulated with the consent of the District Forest Officer for daily CFM implementation from among the CFM committee members:

- |   |                     |
|---|---------------------|
| a) Assistant Forest Officer from respective Ilaka Forest Office | Coordinator         |
| b) Two members including women                                  | Member              |
| c) One committee member from adjacent users/stakeholders        | Member              |
| d) Ranger from respective Range post                            | Member<br>Secretary |

#### **5.3.5 Provision for Formation of Management Sub-committee**

- a) A sub-committee of 5-11 can be formed for Scheme implementation in effective and efficient way. There must be at least 3 members from women, dalits and ethnic group mandatory.
- b) There is provision to form sub-committees of income generation, forest product collection, forest protection, agro-forestry, saving and credit, community development, monitoring and evaluation as well auditing as mandatory in pilot areas of CFM.
- c) The sub-committees themselves can decide office operation and daily functioning.
- d) There is provision to submit the progress report prepared by the sub-committees to the committees through implementation unit.

#### **5.3.6 Tenure System**

- a) Member of CFM group is for 5-years tenure except by position
- b) CFM committee member tenure is for 5-years except by position
- c) CFM unit member is for two years except by position

- d) Sub-committee member is for one year and if the programme is closed before one year then member's position is terminated.
- e) There is a provision to be nominated maximum two times within CFM group/ committee/ unit/ sub-committees

### 5.3.7 Institution and their task and responsibility

CFM is based on multi-stakeholder management modality. As there are many stakeholders of this modality, each has its specific role.

**Table 16: Tasks and Responsibilities of Stakeholders of CFM**

<b>Institution</b>	<b>Tasks and Responsibilities</b>
<b>Ministry of Forest and Soil conservation</b>	<ul style="list-style-type: none"> <li>) Approval of Forestry Sector Plan (DFSP), but preferably to be delegated to the DFCC</li> <li>) Approval CFM Scheme</li> <li>) Development and Implementation of CFM relate guidelines and policies</li> <li>) Coordination with donor organisations</li> <li>) Monitoring and Evaluation</li> </ul>
<b>Department of Forest</b>	<ul style="list-style-type: none"> <li>) Recommend Ministry for approval of DFSP</li> <li>) Support implementation of policy, guidelines and plan</li> </ul>
<b>Regional Forest Directorate</b>	<ul style="list-style-type: none"> <li>) Support planning, policy formulation, coordination and capacity building</li> <li>) Monitoring and Evaluation</li> </ul>
<b>District Forest Office</b>	<ul style="list-style-type: none"> <li>) To investigate the pilot scheme and produce in DFCC for support and forward to the Regional Forest Directorate with its recommendation for final approval.</li> </ul>

	<ul style="list-style-type: none"> <li>) Agreement with the committee for implementation of the approved pilot scheme</li> <li>) Assist and coordinate in planning and implementation of the pilot scheme</li> <li>) Assist in parallel implementation of the private, public land forest management with collaborative forest management.</li> <li>) Monitoring of the annual plan preparation and implementation</li> <li>) Assist in implementation of the programmes wherever needed</li> </ul>
<p><b>Local Government (DDC, VDCs, Municipality)</b></p>	<ul style="list-style-type: none"> <li>) Assist in formation of users committee / unit / sub-committee,</li> <li>) Incorporate in annual programmes by respective VDCs / Municipality / DDC and assist in implementation by providing budget as well support (Anudan).</li> <li>) Assist for providing data related to the population, education, geographical location and so on.</li> <li>) Implementation of the Income Generation Activities in collaboration with groups</li> <li>) Finalization of the programmes to improve livelihoods of poor, dalits and women</li> <li>) Prioritize far-distance users in promotion of private and public forest management</li> <li>) Assist and access in establishment of depots for fuelwood and timber supply</li> <li>) Monitoring and evaluation</li> </ul>

<b>DFCC</b>	<ul style="list-style-type: none"> <li>) Support formulating district level strategy and programme</li> <li>) Delineating CFM area and its users location</li> <li>) Endorsement of DFSP and CFM Scheme</li> <li>) Management of District Forest Development Fund for implementing DFSP</li> <li>) Identification of stakeholders, their roles and coordinate them in order to manage conflict</li> </ul>
<b>CFM-Group</b>	<ul style="list-style-type: none"> <li>) Elect CFM committee members</li> <li>) advise and approve long term policies, strategies and management plan for the CFM</li> <li>) Selection of the committee chairman and member</li> <li>) Policy formulation for forest conservation and improvement coordinating with stakeholders following directives from the Ministry</li> <li>) Approve the annual financial and audit report</li> <li>) Approve the annual work plan and investment scheme</li> <li>) Propose and approve revenues sharing</li> </ul>
<b>CFM-Committee</b>	<ul style="list-style-type: none"> <li>) Assist in implementation of the decision made from coordination committee and units as well to the collaborators</li> <li>) Assist to develop agro-forestry in private land for forestry development</li> <li>) Record keeping for forest products distribution and report writing as well to make up to date record keeping and close relation with the District Forest Products Supply Committee and submit report to the District Forest Office</li> </ul>

	<ul style="list-style-type: none"> <li>) Forest products distribution programme implementation as well as monitoring it</li> <li>) Approval of the proceeding policies of the CFM unit and sub-committees</li> <li>) Recruitment of staff with terms of reference (ToR) to assist daily implementation of the CFM</li> <li>) Annual budget preparation and submitted to meeting</li> <li>) Preparation and submit the Terms of Reference (ToR) for staff of the CFM group for its approval</li> <li>) Assist to create good relation between stakeholders and collaborators from time to time</li> <li>) Formulate an implementation unit for daily working environment from among the committee members</li> </ul>
<p><b>CFM- Implementation Unit</b></p>	<ul style="list-style-type: none"> <li>) Approve Scheme implementation within the areas of CFM unit</li> <li>) Annual plan preparation of the implementation unit and submit through the committee</li> <li>) Keeping up date record of the CFM groups/committee/units/sub-committees in black and white as separate files/register</li> <li>) Monitoring of the office regular staff for their work</li> <li>) Assist in other work as per the decision of the CFM committee and group</li> <li>) Initial investigation on the prohibited work for further action to the staff and officials.</li> </ul>



<b>Management Sub-committee</b>	<ul style="list-style-type: none"> <li>) Function defined by committee and units of CFM</li> <li>) Research, analysis and detail report preparation and submit to the committee through implementation unit of CFM.</li> </ul>
<b>Forest Users (Close and Distance)</b>	<ul style="list-style-type: none"> <li>) Support for CFM scheme preparation and implementation</li> <li>) Ward level users representative selection as CFM Group member</li> <li>) Contribution to forest protection and management</li> <li>) Follow up CFM Group and committee decisions</li> <li>) Support formation of different sub-committee</li> <li>) Participate in public audit and public hearing to enhance good forest governance</li> </ul>
<b>Non-Government Organization (NGO)</b>	<ul style="list-style-type: none"> <li>) Assist in groups programme</li> <li>) Capacity building of the users through training, seminars and interaction as per users annual programme</li> <li>) To play a role as facilitator in programme implementation</li> <li>) To assist in identification of the target groups and places for programme implementation,</li> <li>) To facilitate in plan preparation, implementation and monitoring</li> </ul>
<b>Local Political Parties</b>	<ul style="list-style-type: none"> <li>) Assist in programme finalization and group formation,</li> <li>) Support in Group mobilization, awareness programme and extension through political parties followers</li> <li>) Assist in implementation and monitoring of the approved programme</li> </ul>

	<ul style="list-style-type: none"> <li>) Assist in formulation of collaborative forest management as political agenda (manifesto) from different political parties</li> </ul>
<b>Forest Entrepreneurs</b>	<ul style="list-style-type: none"> <li>) Assist in distribution system of fuelwood and timber to group/committee</li> <li>) Assist in depots management for fuelwood and timber supply</li> <li>) Assist in rate fixing of fuelwood and timber to the committee</li> <li>) Assist and encourage in operation of saw-mill, furniture at different places</li> <li>) Assist in poverty reduction through employment generation within local areas</li> </ul>
<b>Civil Society</b>	<ul style="list-style-type: none"> <li>) Awareness campaign on collaborative forest for users and citizens within the areas,</li> <li>) Publicity of better results done by users</li> <li>) Awareness and alertness to the local people for controlling fuelwood and timber smuggling</li> <li>) Publicity of the collaborative forest and its programmes through press media e.g. article, news up to local level</li> <li>) Organize Interaction Programme with implementation agencies and users, collaborators and stakeholders for common ideas development on collaborative forest management</li> </ul>

### **5.3.8 Working Procedure**

#### **Decision Making Number (Ganapurak Number)**

These are the numbers that makes decision valid while conducting meeting for CFM scheme group/committee/unit/sub-committees:

- a) 51% of the total number of the body for the first time in CFM group
- b) 30% for the second time if the number doesn't reach to 51% for the first time
- c) If the number doesn't reach 30% in second time then the number of people present will be deciding number for third time and onwards.
- d) 51% of the members will be the deciding number in CFM committee
- e) At least three members will be the deciding number for the unit of CFM scheme
- f) There will be at least three members in the sub-committee as deciding number

#### **Decision**

- a) Generally the decision will be made based on the majority of the present members of the meeting on groups/committee/units/ sub-committees of CFM
- b) Decision should be made publicly in transparent and be placed in public places as VDCs, DDC etc.

### **5.3.9 Meeting and functioning system**

#### **Provision of Group Meeting**

- a) There is a Collaborative Forest Management -Group meeting at least once a year
- b) Information of the meeting to the CFM group member should be given 15-days prior to the meeting with the directives of CFM committee coordinator. Letter to be dispatched by the secretary of the committee and information should be published in local daily paper

- c) The system of calling Group's first meeting is by the DFCC and second on wards by CFM committee
- d) Generally, group meeting is called in mid-Sept (Bhadra last) and Mid-February (Magh last) twice a year
- e) Ilaka member of the DDC chairs group meeting. If the Ilaka member is more than one then the chairman is based on alphabetical order.
- f) Secretary of the committee works as the secretary of the groups
- g) Secretary certifies the decision of the meeting
- h) Other procedure of the group meeting is sanctioned from the first group meeting and is assisted from CFM committee.

#### **Provision of Management Committee Meeting**

- a) There is a meeting at least once a month
- b) Secretary of the committee calls meeting with the directive from coordinator. If the coordinator does not direct secretary to call meeting within two months time then with the request of the five member of the committee in black and white, secretary will call meeting.
- c) Generally the coordinator chairs the meeting and in absence of the coordinator women member chairs meeting.
- d) Secretary informs committee members about the date, time and venue of the meeting three days prior by writing letters in members' name and address.
- e) Secretary certifies the meeting decision
- f) Other procedure of the meeting is decided by committee and implemented accordingly.

### **Provision of Management Unit Meeting**

- a) There is a meeting at least once a month
- b) Date, time and venue of the meeting is decided by the coordinator and meeting is called
- c) Coordinator chairs the meeting but in absence of coordinator women member of the CFM Unit chairs the meeting
- d) The Unit itself decides procedure of the Management Unit.

### **5.3.10 Monitoring and Evaluation**

- a) Management unit through its sub-committee carries out Monitoring and evaluation of the pilot scheme after implementation of the scheme.
- b) Progress report of the sub-committee is produced in every three months.
- c) Progress report is produced in groups for discussion and final feedback is made from discussions
- d) Monitoring and evaluation is done by creating indicators decided by the CFM Committee
- e) Monitoring and Evaluation is also done with the coordination of the committee
- f) Sub-committees produce meeting decision in management implementation unit, implementation unit submits in management committee and finally management committee submits to the District Forest Office.

### **5.3.11 Economic Investment and Benefit-Sharing**

#### **(i) Process of Economic Investment and Benefit Sharing**

There is joint venture on the common issues of sustainability on the supply of forest products, bio-diversity conservation and environmental protection. Therefore, there is equal opportunity for benefit sharing based on the investment

of the stakeholders. The District Forest Coordination Committee (DFCC) decides the sharing process of investment and benefits.

**(ii) Provisions on Forest Products Collection**

The system of harvesting of the forest products is only from the areas prescribed in pilot scheme of Sahajnath and annual harvesting not exceed from it. The process of the collection of the forest products and staking of the products either by contract or by labor is decided by the DFCC but fallen trees are collected from entire Sahajnath CFM areas.

**(iii) Price Fixing**

The provision of areas and price of forest products distribution to the users of the CFM groups is decided by the DFCC only.

**(iv) Investment and benefit sharing from forest resources**

- a) Priority of the forest products is given to the users for investment and benefit sharing within Sahajnath CFM scheme.
- b) Users of the CFM scheme areas is benefited through income generation activities as well employment opportunities,
- c) The sharing of the revenue is 75% to the central government in national treasury and rest 25% to the local government (VDCs and DDC) and local people which is deposited accordingly,
- d) Amount distribution system of 25% at the local level is decided by the DFCC based on the investment amount is spend on adjacent VDCs' users and far distance VDCs' users.
- e) Out of 25%, some percentage of the amount separated for daily functioning of offices and staff management.

**(v) Distribution of Forest Products and Benefit Sharing**

- a) A provision of free distribution or nominal price for fodder and small timber to the users as per decision from CFM users through implementation unit of pilot scheme
- b) Non Timber Forest Product (NTFPs), except stone, gravel, sand are given to the users as per the decision of the groups but in commercial purpose, CFM group decides the price of the products and implementation unit give permission of it. The amount is deposited in-group account except Value Added Tax (VAT).
- c) Forest products for the users are provided from CFM sub-committees' decision whereas; auction of the forest products is made for commercial purposes. Auction of the forest products is only made in case there is surplus of the forest products in CFM. Forest products selling rate cannot be less than the government's royalty rate.
- d) 75% of the auction amount is deposited in central government's treasury whereas rest 25% in users group of CFM and local government (VDCs, Municipality and DDC).

**5.3.12 Provision on Prohibition and Control**

**(i) Prohibited Works**

There is restriction to work without permission of the authority delegated official of the government. They are as following:

- a) Agricultural practices in forest areas and house construction
- b) Forest fire and other burning work
- c) Cattle entrance in prohibited areas of forest
- d) Removal of forest products, transport and selling of the products

- e) Damaging other forest products while dragging the permitted products from forest areas
- f) Tree felling, pruning, resin tapping and other damages
- g) Collection of stone, gravels, sand and soil, coal and limestone burning as well production of other products
- h) Working against the permitted documents or violating forest law
- i) Export of the prohibited forest products
- j) Damaging forest boundary, shifting pillars or removal of the permanent marking
- k) Damaging the seedlings of the nursery or plantation areas
- l) Damaging the pillars, stole barbed wire fencing from plantation areas or damaging physical assets
- m) Illegal hammer marking or removal of the government hammer marking either in timber or in standing trees
- n) Poaching
- o) Working against forest act, regulation and directives

**(ii) Process for Controlling Mechanism on Illegal Activities**

District Forest Coordination Committee has adopted a process on controlling illegal activities.

- a) Meeting is called to inform all stakeholders within VDCs, Municipality and DDC about the pilot CFM Scheme annually as ward level meeting of VDCs and municipality.
- b) Awareness and implementation of existing forest act, regulation, directives and circular from District Forest Office including DFCC's decision and guidelines



- c) Formulation of the sub-committee for monitoring and evaluation to restrict illegal activities

**(iii) Punishment Process**

There is a provision to follow by the implementation unit for punishment to culprit

- a) Evidence collection
- b) Document of the spots and damage as well available materials from the area
- c) Chance for not being guilty
- d) Details of the clients
- e) Eye witness paper as proof
- f) Discussion with implementation unit and submit for further action

**(iv) Rewards and Punishment**

- a) There is system of punishment depending on the nature of work that has done
- b) There is also a provision of reward to those individuals or institutions who help to control illegal works

**5.3.13 Fund Mobilization System**

**(i) Sources of Incomes of CFM - User Group**

The sources of income of CFM-UG have been given as follows:

- a) Money from the sale of forest products allowed for groups
- b) Budget allocation from VDCs, Municipality and DDC
- c) Budget allocated for pilot scheme implementation
- d) Money donated by donor agencies
- e) Other income to the CFM-C and CFM-G

**(ii) Fund Mobilization**

- a) Group approves budget prepared from unit and forwards through committee
- b) There will be two types of accounts
  - i. Revolving fund
  - ii. Development fund

"Revolving fund" is spend on collection of the forest products (timber and fuelwood), transportation and staking of the timber in piles for commercial purposes whereas," Development fund" is spend on office management and development activities.

**(iii) Revolving Fund**

- Revolving fund of the forest products is spent on commercial purposes felling, transportation and staking of the timber and fuelwood
- Revolving fund of the forest products is reimbursed after selling of the forest products
- Overall, the fund should not be less than initial investment
- Revolving fund is made available from GON/donor agencies through District Forest Office for the first time
- Fund is operated from District Forest Office, Bara
- Fund available from HMG/Donor agencies and coordination committees District Forestry Sector Investment Fund (DFSIF) is the source of seed money.

**(iv) Development Fund**

- All of the money is deposited in development fund except revolving fund
- Development fund is being spent on forest management, office operation/Administrative expenditure and community development work.
- Forestry development activities are given high priority while spending development fund
- Fund is made available for sub-committees and working group that formulated from time to time as per required
- Daily operation of the CFM implementation unit office is made available through CFM committee decision which should not exceed NRs 5000.00 at a time

***5.3.14 Account Operation and Expenditure***

- a) Account has been opened in Bank with the joint signature of group Member-Secretary and accountant of the District Forest Office
- b) Unit Coordinator is responsible and authorised for spending Revolving fund, Development fund and Economic assistant within the limitation of the approved budget as per rule.
- c) Economic statement is produced from implementation unit in every month.

***5.3.15 Auditing***

- a) Annual auditing is made and it is informed to all stakeholders, collaborators and users about income and expenditure
- b) A registered Auditor has been appointed for up to date record keeping from license holder of Attorney General. A sub-committee is formulated under the chairmanship of registered auditor who will be entitled for preparing economic statement of every three months.

- c) Auditing report prepared by the auditor is submitted in CFM group through CFM committee. Auditing report will be passed from the group meeting and copy of the report is submitted to DFO and DFCC as well publishes in public places.
- d) Auditor has to submit annual report at the end of the fiscal year.
- e) There is system of regularization of any irregularities of the report within 35 days time.

### ***5.3.16 Provision of Group Operation***

#### **(i) Group Office**

There is a separate office for group's administrative work. Unit coordinator is the chief of the office and office is operated in consultation with DFO by DFCC.

#### **(ii) Group Stamp**

A group stamp has been made as per the format developed by Regional Forestry Coordination Committee (RFCC).

Staff of the office has been recruited as per needed for the office. Chief of office and staff are responsible for CFM committee. DFCC is doing monitoring of office staff through Member-Secretary of DFCC.

### ***5.3.17 CFM Group Property Detail***

- a) Head of the implementation unit Office is responsible for the property of the CFM group.
- b) All details of the group/committee/Unit /sub-committees have been kept within the CFM office
- c) Office Head is responsible for meeting call, decision writing and implementation of the decision within group/committee/unit /sub-committees
- d) Office head is responsible for writing letter to the HMG line agencies, stakeholders, and users so as to inform on the activities within CFM areas.

## 5.4 Power Dynamics of CFM

### 5.4.1 Authority and Responsibilities of CFM Users

The case study of CFM showed the involvement of nearby, mid and distant users in User group formation (Analysis of Operational procedure point 2), formation of CFM committee (point 3), Formation of CFM implementation unit(point 4) and other sub unit(point 5). It has been mentioned above about the authority, rights and responsibilities of each stakeholder. The definition of CFM users itself is inclusive and it has included the inhabitants of 26 VDC. The system of representation in CFM group and different committee is also democratic and representation has been secure for all. The rights, responsibilities and inclusiveness have been highlighted here.



Figure 15: Authorities and Responsibilities of CFM Users

### 5.4.2 Stakeholder Analysis of Terai Forest Management

State realisation on importance of Peoples' participation in forest management during 1976 resulted in handing over of Panchayat and Panchayat protected forest. Master Plan of forestry sector supported the involvement of local people in the management and benefit sharing from the forest. Further Forest Act 1993 has accelerated the handing over of forests in hill area as community forest, but the scenario in Terai is quite different. As shown below, before launching the Collaborative forest management there was very few or only one stakeholder of Terai Forest except few cases of Community Forest in Terai.

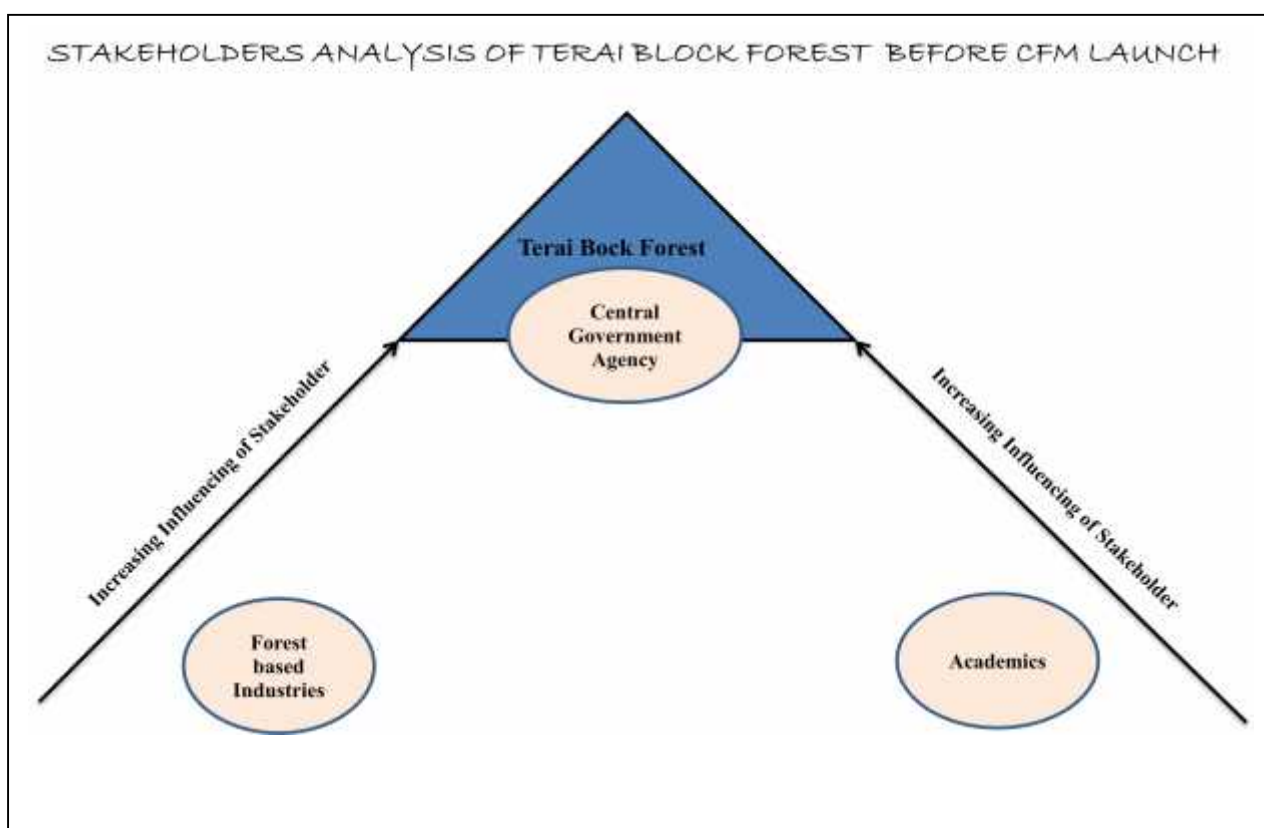
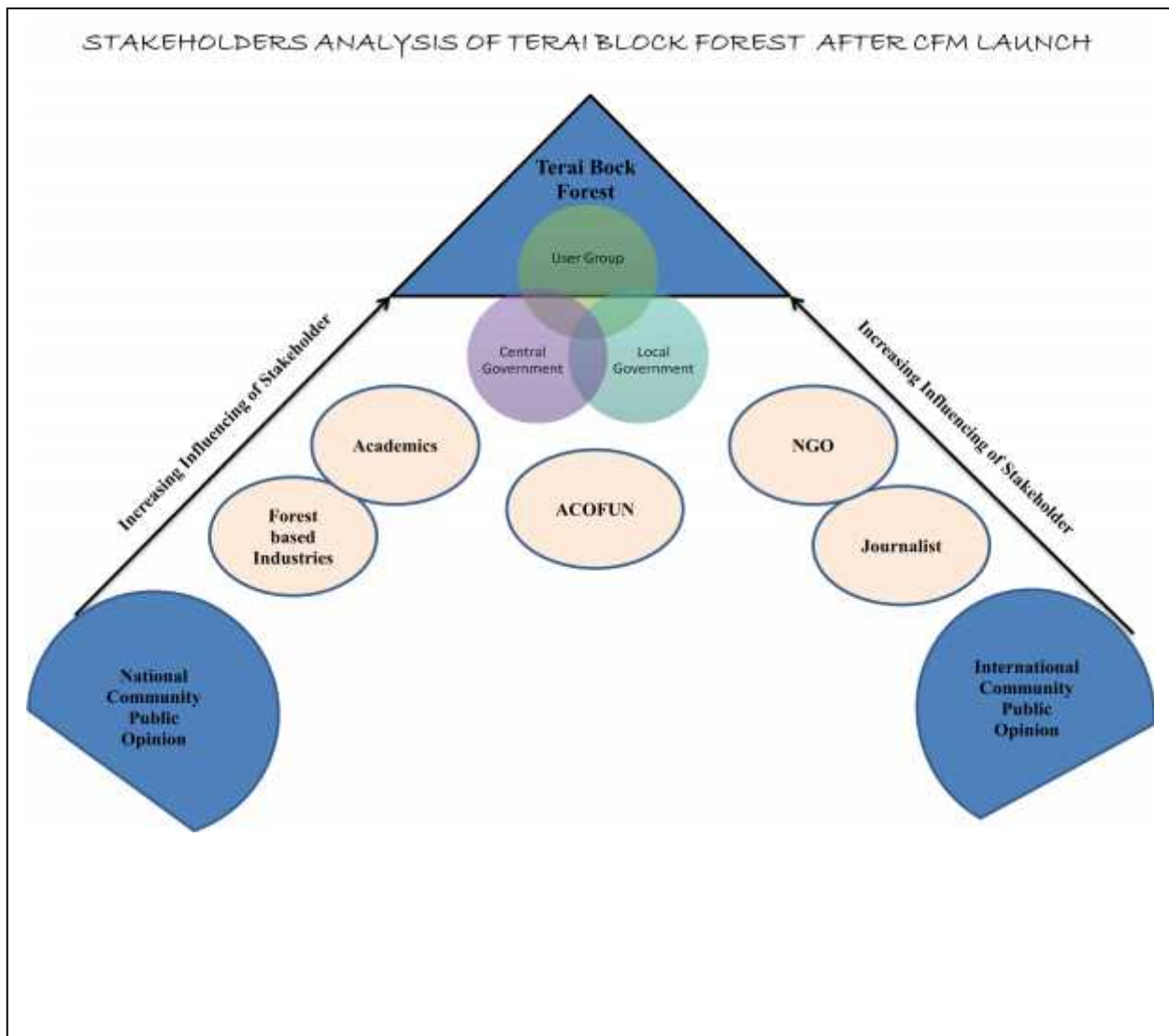


Figure 16: Stakeholder analysis of Terai block Forest before launch of CFM (Modified from Power Tools, iied, 2005)

Some provisions were made to collect the forest based product i.e. Timber, Fuelwood and gravel from Forest area in Terai where a little influence of Forest based industries were observed. In the diagram, Academics have been presented as debates were started to involve people in Terai Forest Management.



*Fig 17: Stakeholder analysis of Terai block Forest after launch of CFM*

**Figure 17: Stakeholder analysis of Terai block Forest after launch of CFM**

CFM modality directly involves User group from nearby, mid to distance users, the local government and central government as its core stakeholders. Even there is role of local NGOs, journalists, forest based industries, Academics and other stakeholders. There is also provision to honour the national and international public opinion. It has been realised that it is more democratic institution, which has provision to involve all the stakeholders in the management and benefit sharing of the resources.

### 5.4.3 *Strength and weakness of CFM*

Being a new concept there are many strengths as well as weaknesses of CFM. Based on the study mainly group discussion with stakeholders and Interview with informants, these issues have been explored. Some major points are presented below:

#### (i) **Strengths**

- User participation in planning process is highly encouraged where high number of women, *dalits*, marginalized community and distant users are being involved in planning process through sub-committee in VDC level.
- Encroachment and smuggling of timber is drastically decreased in CFM area where the CFMG actively involved in coordination with DFO and security personnel, as result Tamagadi CFM planted NTFPs around 15 ha. as livelihood promotion of poor and disadvantaged groups.
- The CFMG has been improved the transparency through public audit of CFM activities and discuss income and expenditures.
- The CFMG consists of close and distant users it represents a wide range of people, including women, *dalits* and poor. Distant users are also benefiting from the revenues and benefits of CFM.
- Awareness and ownership has been created within CFM areas.
- Forest policies and guidelines on decentralization and CFM are in place, thus facilitating the process of developing decentralized forest management modalities.
- The institutional system and decision making is clear and transparent.
- Feeling of ownership and responsibility has clearly led to better forest protection and more responsible management.
- In some cases people themselves have taken up the challenge to develop CFM.



- Within CFMG and CFMC a variety of stakeholders are represented and involved in decision making.
- The CFM institutional structure facilitates inter-sectoral coordination and creation of self-help and thematic groups, so-called sub-committees, which play an important role in supporting CFMC and CFM-IU in implementation and its stakeholders.
- Firewood sales depots are established in the CFM area and benefit sharing takes place between CFMG and government.
- Through the CFM Scheme income generation activities are promoted (e.g. pig farming, handicrafts making training/production, NTFP cultivation. Revenues from CFM have been utilized for these initiatives.
- Within CFM Schemes development of private and public land forestry will be taken up by the CFMG.
- A lot of area previously considered as encroached has been re-covered and IGA such as NTFP cultivation has been started.
- CFMG is financially responsible for the CFM Scheme. This also means that they can do fund raising themselves, which gives them more flexibility.

**(ii) Weaknesses**

- Better control over the CFM forest by the CFMG also means restrictions placed upon people making a living out of the forest (e.g. cycle *walla*) In this case, proper identification of these households and involvement in different IGAs is necessary for the successful implementation of the CFM Schemes.
- Because of better protection, potential conflicts and confrontations are occurring between timber smugglers and CFMG members protecting the forest.
- It is felt that there is limited transparency within the DFO and CFM Committee regarding program, budget and implementation process.

- Poor, dalits and women in CFM especially from distant VDCs, are not yet taken care of sufficiently. The CFM Manual 2060 (2003) does not address this issue in detail.
- Inadequate funding to start up the scheme is still a major issue.
- The confusing statement from policy makers and implementers is a weakness as well as a major threat. Within MFSC (DoF) the commitment is conflicting: there are clearly proponents and opponents of CFM.
- Interpretation of directives to fulfill the self interest (especially in benefit sharing aspect) among the stake holders is the major elements which hinder the smooth implementation of CFM.
- The study shows that the poor coordination and communication among the stakeholders is one of the major challenges for sustainability of CFM.
- The benefit sharing ratio 25% vs. 75% is becoming as a negative points in motivating local people.

## CHAPTER –SIX

### 6 Summary, Conclusion and Recommendation

#### 6.1 Summary

There is people's involvement in different types of forest management modality adopted in Nepal, however there are lots of differences regarding defining users, forming executive committee, relation with state and benefit sharing(Political decisions), which has tremendous effect on the conservation and utilization of forest resources (Ecology). This study has reviewed and explored the equity and sustainability issues in the forestry sector in the Terai, Nepal with a focus on the past and present forest politics and policy in the region and its effect in the Terai Forest. The study has explored the socio-political dimensions of the CFM. It has tried to explore how far this model is successful to address the issues such as involvement of distant users, establishment of rights and control of distant users in CFM, sustainable forest management in collaboration with the local people, local government and the state to achieve multiple benefits, maintaining ecological balance.

Piloted from 2004 in three Terai districts namely Parsa, Bara and Rautahat, CFM in Nepal has tried to bring together multi-stakeholders considering the spatial configuration of the Terai, while using the learning from the experiences of CF and different participatory management modalities operations in other countries. Community Forestry (CF) allows nearby users to manage and utilize the handed over forests but has not been taken as the most appropriate modality for big contiguous blocks of Terai hardwood forest. CFM addresses more Terai specific issues linked with contiguous large blocks of productive forest, demographic pattern and socio-economic e.g. distant users and employment opportunities. CFM has claimed sustainable forest management in collaboration with the local people, local government and the state to achieve multiple benefits, maintaining ecological balance, harmonizing social generating economic returns and improving livelihood from the government forests. The study has not only explored the current political ecology of the CFM but also recommended for the further improvement of CFM in the aspect of balancing the socio political tension in Terai region due to use rights of forest resources.

The study was conducted in Sahajmath Collaborative Forest of Bara districts of Central Terai. The CFM covers 26 VDCs with 7,527 households. The total forest area is located towards the north with the settlements to the south. Chamar, Dusad, Musahar and Dome are the socially deprived people living within the areas. Mainly the research was based on Political ecology theories, Author's experiences and the case study from Sahajmath CFM, Bara of Central Terai.

It is found that only 13 CFM have been approved in Nepal. Reluctance has been seen in providing approval to CFM. Total 29,799.8 area and 130,638 HH has been covered by the CFM. It has been extended from three districts to eight districts. News and articles on CFM has been getting space in media and forestry journals. It is found that the CFM system has tried to involve both nearby and distance users in the forest management and also in the benefit sharing. On the other hand, it has involved the multi-stakeholders in the management of the natural resources. It has delegated rights to formation of group, price fixing of product, formation of different committee as required, protection of resource and fund raising rights to the users. The trend of approval of CFM clearly showed the hesitation to approve new CFM. The research clearly found that after 2061/2062 approval started again only in 2065/066.

User participation in planning process is highly encouraged where high number of women, dalits, marginalized community and distance users are being involved in planning process through sub-committee in VDC level. The CFMG consists of close and distant users. It represents a wide range of people, including women, *dalits* and poor. Distant users are also being benefited from the revenues and benefits of CFM. Within CFMG and CFMC a variety of stakeholders are represented and involved in decision making. The benefit sharing ratio 25% vs 75% is becoming as a negative points in motivating local people. However some improvements have been required to pick up the existing condition of the CFM.

## **6.2 Conclusion**

CFM has been emerging as a valid model to protect and economically exploit the large productive chunk of Terai forest. Involvement of local as well as distant users is increasing day by day. National consensus on the modality, adequate and appropriate

capacity development activities, commitment from DoF and proper benefits sharing mechanism within the users, and strong coordination are the necessary factors that can speed up the implementation of CFM. CFM has the potential to contribute to poverty reduction. This is the major objective of the tenth plan, three years interim plan and responds to MDG 1. Revenues going to the district can also be used for the same purpose. Revenues and technical support can be provided by the CFM Scheme to different income generating activities, such as NTFP/MAPs cultivation, agro-forestry, private forestry, skill development, pig farming, sewing/cutting, bee keeping, fishery, etc, with special focus on women, *Dalits* and poor. Part of the revenues derived from CFM can be used for different development activities in order to contribute to the development of the social sector. The CFM Scheme could become a major employer. There are several employment opportunities within the CFM Scheme implementation, with special focus on poor households.

Based on the study, user's survey, stakeholder group discussion, Interview with CFM facilitating project officials and key stakeholders, it can be concluded that, CFM has established the rights of distant user on the block forest resources of Terai. The rights of claim of distance users have been increased on green forests of Terai. The provision of formation of CFM users, CFM management committee, and implementation committee is inclusive which has especial provision of involving so called lower caste and gender.

It is also found that the role of central authority, local governance and the users can not be neglected in the conservation and proper utilisation of Natural resources like forest in developing country like Nepal. Forest being as multiple benefit resources and means of livelihood for many marginalized group cannot be handled all and protected by a single authority. Hence multi-stakeholder management system is must to conserve and utilize properly the forest resources of Terai. Forming association of CFM Users as ACOFUN played a vital role in lobbying, advocacy and extension of CFM in all over Nepal. The extension of CFM from three piloting scheme to 13 approved schemes proved its political importance as well as the importance of distant users in forest management (ecology).

### 6.3 Recommendation

Based on the research following recommendations are made for improvement of CFM:

- CFM-I should consist of trained human resources.
- Regular capacity building through training and management support should be provided to CFM-G and CFM-C.
- Providing subsidized products is not the solution. The only way to make sure that marginalized group and ultra poor receive benefits from CFM.
- One of the main opportunities is ongoing decentralization process, with a major role for the DFCC. The DFCC together with CFM could play a major role in managing the natural resources in a sustainable way.
- The CFM Manual and the CFM Scheme plans are applied in a rigid manner. As CFM is a new management modality it should be treated in a flexible way.
- CFM as participatory and decentralized sustainable forest management model should be replicated in not only in Terai and inner terai but also in feasible area of hill and mid hill forests.

## Bibliography

- Berkes, F. (1997).** 'New and not-so-new directions in the use of the commons: co- management' *The Common Property Resource Digest* 42: P 5-7
- Blaikie, P. (1985).** '*The Political Economy of Soil Erosion in Developing Countries*'
- Borrini-Feyerabend, G. (1997).** 'Participation in Conservation: why, what, when, how?'  
*In: Borrini-Feyerabend, G. (ed) Beyond fences: seeking social sustainability in conservation. Vol.2, a resource book, IUCN, Gland, Switzerland* 26-31.
- Carter, Jane and Jane Gronow, (2005).** 'Recent Experience in Collaborative forest Management' A Review paper, *CIFOR Occasional Paper No. 43*
- CBS (2002).** '*Statistical Year Book*', Central Bureau of Statistics, Kathmandu, Nepal.
- Chakraborty, R.N. (2001).** 'Stability and outcomes of common property institutions in forestry: evidence from the Terai region of Nepal'. *Ecological Economics* 36: 341-353.
- Cornwall, A. (1996).** '*Towards participatory practice: PRA and participatory process*'  
*In: de koning, K. 9ed0 Participation and health. Zed Book.*
- Dahal, G.R. (February 2003).** 'Devolution in the Context of Poor Governance: Some learning from Community Forestry. *Journal of Forest and Livelihood* 2 (2)
- DFRS (1999).** '*Forest Resources of Nepal (1987 – 1998)*' HMGN, MFSC/HMGN
- Ebregt, A.; Paudyal, D.; Siwakoti, RS; Sah, RN and Thapa, YB (2007).**  
'*Collaborative Forest Management in Nepal: Challenge and Prospects*'
- Graner, E. (1997).** *Political Ecology of Community Forestry of Nepal.* Verlag fur Entwicklungspolitik, Searbrucken. - 340
- HMG/MFSC (2003).** '*Collaborative Forest Management Manual*' (2060 B.S.)
- HMG-MFSC (1993).** '*Forest Act of 2051*', Ministry of Forests and Soil Conservation, Kathmandu

- HMG-MFSC (1995).** *'Forest Regulations'*, Ministry of Forests and Soil Conservation, Kathmandu
- Mayers, J. and Vermeulen, S. (2005).** *'Stakeholders Influence Mapping'* International Institute for Environment and Development.
- Mitchell, A., Bajracharya, P. & Baral, N.R. (2001).** *Nepal Fuelwood and Timber Marketing Study.* World Bank/Ministry of Forests and Soil Conservation, HMGN, Kathmandu.
- NEFUG (2005).** *'Case study report on relationship between sustainable forestry Management and livelihood Development in the Critical are of TAL'*
- Ostom, E. (1990).** *Governing the Commons; The Evolution of Institutions for Collective Action.* Cambridge University Press
- P. Walker (1995).** *Politics of Nature: An Overview of Political Ecology\** University of California, Berkeley
- Satyal, P. (2006).** *'A History of Forest Politics in the Terai, Nepal: A Case of Equity or Ecology?'* Paper Prepared for the ECPR Summer School on Environmental Politics, Keele University, June 26th - July 7th, 2006
- Shepherd, G. and G. Gill (1999).** *'Community Forestry and Rural Livelihood in Nepal: Issues and Options for the Future of the Nepal-UK Community Forestry Project.* Overseas Development Institute, London.
- Springate-Baginski et al. (July 2003).** *'Community forest management in the middle hills of Nepal: the changing context'. Journal of Forest and Livelihood 3 (1).*



## ANNEX – 1

### Interview Schedule

#### 1. Identification

a. Name of the head:

b. VDC:

c. Tol name:

d. Religion:

e. Caste

#### 2. Main basis of livelihood

Job  Farming  Business   
Labour  Others

#### 3. Type of Roof of main house

Cemented  Galvanized  Tiles  Thatched

#### 4. Family

SN	Name	Age	Education	Relation	Occupation
1					
2					
3					
4					

#### a. Asset

a. Land

b. Khet

#### b. Animals

i. Ox(en)

ii. Cows

iii. He-buffalo

iv. She-buffalo

**c. Birds**

i. Chicken

ii. Duck

iii. Pigeon

**d. Savings**

Financial institution

Rupees

**e. Credit**

Lenders

Amount

**f. Communication equipments**

Radio

Television

Others

**4. Occupational skills**

Name

Occupation

## 5. Cash income and expenditure

Income		Expenditure	
Source	Monthly Amount	Aspects	Monthly amount

## 6. Farm production

Crops	Annual production	Annual consumption
Paddy		
Maize		
Mustard		
Alas		
Beans		
Lentil		
Cabbage		
Potato		

### 8. Children education

SN	Name	Boys/Girl	School Type	
			Government	Boarding
1				
2				
3				
4				

### 9. Language

a. mother tongue:

b. Other language:

### 10. Organisational Affiliation

Organization Membership

Ordinary

Executive

### 11. Since when You are leaving here?

### 12. From where your family migrated here?

### 13. Which type of forest belongs to your village or vicinity?

Collaborative Forest

Community Forest

Leasehold Forest

Private Forest

Government Managed Forest

No forest by 5 KM range

### 14. Are you affiliated with any type of forest group?

Yes

No

**If yes**

Executive Member

General Member

**15. Forest products obtained from Forest**

Timber

Fuelwood

Grass

Thatch grass

Animal bedding material

**16. Who owns the collaborative Forest**

Nearby User

Mid User

Distant User

**17. Who can be the member of the Collaborative forest?**

Nearby User

Mid User

Distant User

**18. Which type of User you are?**

Nearby User

Mid User

Distant User

**19. How often did you participate in CFM meetings?**

**20. Do you think CFM provides rights to distant user?**

Yes  No

**21. Do you think due to launch of CFM illegal felling and smuggling of timber has been decreased?**

Yes  No

**22. what are the major strengths of CFM? mention four points**

- a.
- b.
- c.
- d.

**23. what are the major weakness of CFM, mention three points**

- a.
- b.
- c.
- d.

## **ANNEX – 2**

### **Check List for Group Discussion**

1. Who can be a member of CFM?
2. What are the roles and Responsibilities of Users?
3. What are the existing provision of Users Groups formation in Sajanath CFM ?
4. What is the provision of CFM committee formation?
5. What are the roles and responsibilities of CFM Committee?
6. What is the provision of CFM implementation unit formation?
7. What are the roles and responsibilities of CFM implementation unit?
8. What is the provision of CFM sub-committee formation?
9. What are the roles and responsibilities of CFM sub-committee?
10. What are the roles of central government Ministry/ DoF/RD and DFO in CFM?
11. Role and responsibilities of journalist and NGO.
12. Role and responsibilities of civil society and other stakeholders.
13. How do you see the illegal felling and smuggling of timber in Sahajnath forest area before and after launch of CFM?
14. What is the provision for pricing the forest product and its distribution?
15. What is the system of benefit sharing among central government, local government and users?
16. Role and Responsibilities of ACOFUN

## **ANNEX – 3**

### **Check List Questions for Interview**

1. How you see the CFM progress till now?
2. Is CFM able to establish rights of distant Users?
3. Is the power balance between central government, local government and users is appropriate in CFM?
4. How do you compare between CF and CFM?
5. How the benefit sharing has been established between these three right holders?
6. How DFCC supporting the community based forest management?
7. Is the number of users in the DFCC sufficient?
8. How do you see the sharing of the benefit, is there enough share for the users?
9. What is your observation regarding illegal felling and smuggling of timber in Sahajnath forest area before and after launch of CFM?
10. How you see the role of ACOFUN?
11. What recommendations do you suggest to improve current CFM practice?