Participation of Marginalized Groups in REDD+ Pilot Project, Dolakha District, Nepal

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List of Abbreviation

ANSAB Asia Network for Sustainable Agriculture and Bio-resources

B/C Bhramin/Chhettri

CDM Clean Development Mechanism

CF Community Forest

CFUGs Community Forestry User Groups

CO₂ Carbon dioxide

COP Conference of Parties
CSO Civil Society Organization
CTFs Conservation Trust Funds

DANAR Dalit Alliance for Natural Resources of Nepal

DoF Department of Forest

DCC District Coordination Council
DDCs District Development Committees

DFO District Forest Office

DFID Department for International Development
DFRS Department of Forest Research and Survey

DNF Dalit NGO Federation

DNPWC Department of National Park and Wildlife Conservation

EC Executive Committee

FACD Foreign Aid Coordination Division FAO Food and Agricultural Organization FCPF Forest Carbon Partnership Facility

FCTF Forest Carbon Trust Fund

FECOFUN Federation of Community Forestry Users, Nepal

FRA Forest Resource Assessment FSC Forest Stewardship Council GBS General Budget Support

GHGs Greenhouse Gases GoN Government of Nepal

ha. Hectare HHs Households

HIMAWANTI Himalayan Grassroots Women's Natural Resource Management Association

ICIMOD International Centre for Integrated Mountain Development

ICS Improved Cooking Stove

I/NGOs International/Non- Governmental Organizations

IPs Indigenous Peoples

IPCC International Panel on Climate Change

IUCN International Union for Conservation of Nature

KP Kyoto Protocol

LFP Livelihood and Forestry Program

MoE Ministry of Environment

MoFSC Ministry of Forestry and Soil Conservation

MoEST Ministry of Environment, Science and Technology

MPFS Master Plan for Forestry Sector

NAPA National Adaptation Program of Action

NBS National Biodiversity Strategy

NFCAG National Forest Carbon Action Group

NEFIN Nepal Federation of Indigenous Nationalities

NFDIN National Foundation for Development of Indigenous Nationalities

NPC National Planning Commission

NORAD Norwegian Agency for Development Cooperation

NSCFP Nepal Swiss Community Forestry Project NTNC National Trust for Nature Conservation

NTFPs Non-Timber Forest Products

PES Payment for Environmental Service

PMU Project Management Unit

REDD Reducing Emissions from Deforestation and Degradation

R-PIN Readiness Plan Idea Note RWG REDD Working Group

RPP Readiness Preparation Proposal

SBS Sector Budget Support

SBSTA Subsidiary Body for Scientific and Technological Advice

SDC Swiss Development Cooperation

UNDRIP United Nations Declaration on Rights of Indigenous People

UNDP United Nations Development Program
UNEP United Nations Environmental Program

UNFCC United Nations Framework Convention on Climate Change

UN-REDD United Nations Reducing Emissions from Deforestation and Degradation

VDCs Village Development Committees

WB World Bank

WMO World Meteorological Organization

WTLCP Western Terai Landscape Conservation Program

WWF World Wildlife Fund

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CHAPTER 1: INTRODUCTION

1.1 Introduction:

There has been a growing consensus among scientists and other stakeholders that climate change is real and is probably the single most important threat to the survival of human civilization. Since the industrial revolution in the mid 1970s, there has been a significant increase in the greenhouse gas concentration in the atmosphere and most of it can be traced to the anthropogenic sources like burning of fossils fuel from industrial and transport sector, deforestation, energy demands. The green house concentration in the atmosphere has increased by 70% between 1970 and 2004 due to human interference and corresponding to this the temperature of earth is increasing by 0.8 °C (IPCC, 2007). Some of the consequences of a warmer planet and the change in climate are already visible like shrinking of glaciers, shifting of plant and animal ranges and an accelerated rise in sea level etc. Even if some radical actions are taken right now, some of the damages to the earth system are already been done and are irreversible. Nevertheless urgent actions are needed to curb impending disasters and to save humanity from this doom.

The increasing concern over the deterioration of the environment due to anthropogenic sources, led to international discussions on ways to respond to its threat. One of the most important steps was the establishment of an international regime to protect the ozone layer "The Vienna Convention for the Protection of Ozone Layer, 1985" and the "Montreal Protocol on Substances that Deplete Ozone Layer, 1987. Later in 1988, with the establishment of Intergovernmental Panel on Climate Change (IPCC) by United Nations Environment Program (UNEP) and World Meteorological Organization (WMO), there was a clear scientific data on the current state of climate change and its potential environmental and socio-economic consequences on the human society in the future, which was lacking in the past. Similarly, the cause of climate change, especially initiated

by human civilization, came into highlight by the assessment reports of International Panel on Climate Change (IPCC).

In the IPCC 4th Assessment Report, it was stated that deforestation contribute 18% of GHGs emission more than transportation sector (IPCC, 2007). So, the process of halting deforestation can help in mitigating climate change especially in developing countries, where rate of deforestation is very high. Thus, controlling deforestation is taken as one of the most feasible option for controlling climate change, which is a cost-effective measure as described by Stern Review in 2006 (Stern 2006 as stated in Schroeder, 2010).

Policies related to deforestation and forest degradation were excluded in Kyoto Protocol (1997) due to complexity in calculation, measurement and monitoring of diverse forest resources in terms of carbon storage. However, later on 11th Conference of Parties (COP 11) 2005, it was recognized as an important technique for combating climate change and was taken back into consideration. During the 13th COP meeting in 2007 at Bali, the Coalition of Rainforest Nations, Papua New Guinea and Costa Rica, proposed that Reducing Emissions from Deforestation and Degradation (REDD) should be an agenda for post-2010 regime. This is when the issues of deforestation and forest degradation were put on the global table for the official negotiation and their key elements like rights of local people, sustainable development of local people, etc came under highlight.

Nepal is one of the countries that have expressed its commitment through various international conventions and treaties to jointly work on the initiative for climate change responses. Nepal had submitted the Readiness Preparation Proposal (RPP) for REDD on April 19, 2010 to the World Bank, and has got fund access from its Forest Carbon Partnership Facility (FCPF). With this fund and two years of time period (2010-12), Nepal has to prepare itself in every way "institutionally, legally, technically and socially" to benefit from REDD mechanism after 2013 (MoFSC, 2010).

1.2 Background Information:

Nepal is a landlocked sandwiched country between India and China, covering an area of 147,181 sq km. Geographically, the country is divided into the Terai, Hill, Mountain Himalaya region. and Administratively, Nepal



Figure 1: Map of Nepal (worldatlas.com, 2011)

is divided into 75 districts, out of which 20 districts are in the Terai, 39 districts are in the Hills and 16 districts are in the Mountains (Wagley & Ojha, 2002). Nepal is in the southwest monsoon region, and average rainfall generally decreases from east to west. Due to the topographical variations, climatic and rainfall patterns vary a lot contributing to rich and diverse biodiversity (Singh & Chapagain, 2006) and also it is rich in sociocultural diversity as well.

About 87 percent of Nepal's populations are dependent on subsistence and semi-subsistence farming systems combining agricultural production with animal husbandry (Singh & Chapagain, 2006). Thus, most people depend on forest products for household use and animal husbandry, making forests in Nepal as one of the most important natural resources for the livelihood of people. The forestry sector contributes 9.45 percent from direct products and 27.55 percent including indirect services to the national gross domestic product (Acharya & Dangi 2009: 1).

1.2.1 Forest Status of Nepal.

The forest is a major natural resource in Nepal. **The National Forest Inventory** (1989-1996) revealed that forest and shrub together cover 39.6% of the total land area of the country. **The National Forest Inventory** of base year 1994 shows that the land area occupied by more than 10 percent tree crown cover is about 4.2 million ha which is about 29% of the total surface area. The shrub land which includes shrubs as well as trees of less than 10 % crown coverage occupy about 1.6 million ha area which is almost 10.6% of the total country area (REDD Cell, 2009: Online). At the same time, the country is home for 28 million people with population growth rate 2 percent per year (World Bank, 2010) and hence this growing population is creating pressures on forest resource of the country resulting in its degradation.

Between 1990 and 2010, Nepal lost an average of 59,050 ha or 1.23% of forest per year. In total, between 1990 and 2010, Nepal lost 24.5% of its forest cover or around 1,181,000 ha. (NFID, 2011). The annual rate of forest depletion in the hills was 1.3 percent from 1978/79 to 1990/91. In the Terai area, forest areas have declined at an annual rate of 2.3 percent from 1978/79 to 1994. The statistics shows that during 1978/79 to 1994, the country was experiencing deforestation at an alarming rate of 1.7% per annum (Kandel, 2010). This trend indicates the continuing pressure on forest resources, especially in the Terai. Forest depletion has caused serious problems including decline of agricultural productivity and environmental degradation.

Nepal is suffering acutely from different sources of forest degradation. Forest encroachment is a serious problem in the Terai plains. An estimate shows that 100,000 ha of forest are under encroachment in the Terai and many more are coming under threat of encroachment by illegal squatters (Acharya & Dangi, 2009). Similarly, at high altitude deforestation is mainly due to grazing by livestock higher than the carrying capacity of land (NBS, 2002). So, the cause for deforestation and forest degradation varies with the topographic regions and are complex issues for addressing. Thus, the major challenges

for reducing deforestation and forest degradation as identified by RPP-interim are as follows:

Table 1: Major challenges for reducing deforestation and forest degradation.

Terai	High Mountains
High demand of forest product due to	Weak monitoring due to difficult
population pressure.	topography
High demand in the Indian market	Lack of motivation of the DFO staff to
	work in this area
Poor governance and law enforcement	Non-compliance of rules and regulations
Open border with India, easy road access to	Poor coordination among politicians and
forests and it's high economic values	government staff and local government.
Lack of tenurial rights to forest with local	
communities.	
Weak institutional capacity of DFOs,	
poorly motivated forest staff to protect	
forests and the practice of taking undue	
benefits from illegal loggers.	

Source: MoFSC, 2010

1.2.2 Forest and Indigenous People.

Indigenous people (IPs), in the case of Nepal, are defined as "communities who consider themselves as distinct groups and have their own mother tongues, religions, traditions, cultures, written or unwritten history, traditional homelands, geographical areas and egalitarian social structure" (NFDIN, 2001). 59 groups of IPs are identified by National Foundation for the Development of Indigenous Nationalities Act, 2002, covering 37.2% of the total population, but only 43 IPs are identified by national census and the rest 16 are missing (NEFIN, 2010). It is due to the lack of awareness among the IPs in remote areas, the lack of enumerator knowledge during the population census and including

some IPs in other castes by the census itself. IPs of Nepal are spread in vast area with different forms of settlement ranging from nomadic or semi-nomadic to forest and city dwellers (ibid). But most of the IPs are dwelling near the forest area and have been managing and protecting the resources in a sustainable manner through their unique knowledge, skills and traditional techniques that have been passed from generation to generation.

Internationally, Nepal has both ratified *C169 Indigenous and Tribal People Convention,* 1989 on 14th September, 2007 and also voted in favor of *United Nation Declaration on Rights of Indigenous People (UNDRIP)* in the UN Conference in the same year. This makes the government responsible to amend and implement the national laws in line with these documents. Similarly, at national level, Nepal has formulated National Foundation for Development of Indigenous Nationalities (NFDIN) Act, 2001 for the social, economic and cultural development of the indigenous peoples. The Act is aimed at the protection and promotion of language and culture of indigenous peoples. It also aims to conserve and promote the traditional skills, ideas and technology of indigenous peoples and help them bring into commercial use (NEFIN, 2010).

With the emergence of REDD concept that is directly linked to forest resources of developing countries, the indigenous peoples fear that either they will be displaced from their ancestral land or their rights to use land and resources will be neglected by imposing strong rules and regulations regarding agricultural farming, hunting, food stock and medicine, pasture and other uses of the resources. So, many IPs have negative sentiments towards the REDD process, because they doubt that the problems such as shifting, displacement, landlessness and poverty may arise due to REDD (Schroeder, 2010). However, if the fundamental rights of IPs are undertaken in the policy of REDD along with their involvement in the programs, then it is believed that REDD can be an opportunity for IPs to improve their livelihood.

1.2.3 Forest and Women.

In Nepal, women are the central part of many societies are facing more discrimination than men due to structures like caste/ethnicity, locale of residence, age, religions, social norms and cultural values. In the rural areas of developing countries, women are the ones who are responsible for taking care of family and managing and conducting daily household chores, collect fuel wood, fodder, water, etc; but they are the ones who face abasement by their own family and society and are often boycotted in communal programs. And with the expected effect of the climate change within the forest in ecological, economical, social and aesthetic services, it can be predicted that rural women will have to face more problems than men in the society.

But with the initiation of the community forestry (CF) program in the forest of Nepal, the involvement of women in social process is increasing and women are given more space for their active participation in these programs. The importance of women's involvement and their experiences are being recognized in many parts of country, but still due to caste discrimination and lack of awareness among women themselves, it is hard for them to get involved. Also, women do not have control over the decision making process related to the land and other forest resources, so it is expected that projects such as REDD can undermine the role and importance of women in the management of forest resources. But at present women are struggling for their customary rights for participation and inclusion.

1.2.4 Forest and Dalits

Dalits are the group of people who are considered as low and untouchable caste in the society and have been facing discrimination for decades. There are several terms given to them for recognition either in derogatory or in non-derogatory nature. Terms like "paninachalne" (water polluting), "acchoot" (untouchables), "doom" and "tallo jat" (low caste) are used in Nepali society are derogatory, and other terms, such as "utpidit" (oppressed), "sosit" (exploited), "bipanna" (downtrodden), "simantakrit" (marginalized), "subidhabata banchit" (disadvantaged), "alpasankhyak" (minorities),

"banchitikaranma pareka" (excluded) are some non derogatory terms (UNDP, 2008). According to the national census 2001, 13% of total populations of Nepal are Dalits and are deprived of many socio-economic, political and cultural rights in the society due to the traditional practices of denying these groups of people (Nepali, 2008). Some examples of denials by "high castes" are no entry into houses, temples, hotels and restaurants, work places etc and even in some common places like drinking water sources, community forest, etc.

Dalits are mostly dependent on the forest resources for their livelihood, like many other communities in the society. Their traditional occupations are making agricultural tools like knives, axes, hoes, spades, etc and household utensils from wood and bamboo, leatherwork, etc and these require forest resources. Some of the people also make their living by selling firewood to the market. So, Dalits' livelihood is closely associated with the forest and their resources, and now with the implementation of REDD in the forest area, it is important to recognize the relationship between these people and forest. Thus, it is an essential component for inclusion of Dalits in REDD program for natural resource management and distribution and to provide social justice, rights and responsibility to them.

1.2.5 Evolution of REDD.

Kyoto Protocol (KP) in 1997 was negotiated in Kyoto, Japan as a measure to reduce concentrations of GHGs in order to mitigate global warming (Banskota et. al, 2007). Kyoto Protocol recognized only two forest activities: afforestation and reforestation, which was useful only to industrialized countries which can gain carbon credits by those activities in their areas. But in case of non-industrialized developing countries, the scope for carbon trading under clean development mechanism was limited, as reducing emissions from deforestation was not credited. However, at the 2005 Conference of Parties in Montreal, the forest related mitigation approach of Kyoto Protocol i.e. afforestation and reforestation was modified to include reducing emissions from

deforestation and degradation in form of REDD. Costa Rica and Papua New Guinea, on behalf of the Coalition for Rainforest Nations, proposed to give developing countries access to the carbon market through credits generated from REDD activities. This proposal refocused attention on forest carbon and catalyzed the current debate about how to achieve the best sustainable, environmentally robust emissions reductions through forestry. This was also supported by Stern Review on the Economics of Climate Change in 2006. According to the Stern Review, reducing deforestation is the "single largest opportunity for cost-effective and immediate reductions of carbon emissions" (Stern, 2007). The Stern Report also suggests that a 50% reduction in these emissions could be achieved at an annual cost of \$5-10 billion.

The pressure for the development of REDD as a global concern started to develop after this. In Bonn 2006, the Subsidiary Body for Scientific and Technological Advice (SBSTA) began considering REDD. They 'noted the need to address reducing emissions from deforestation in developing countries as part of mitigation efforts to achieve the ultimate objective of the Convention.' Later, at the 2007 Bali UNFCCC meeting (COP-13), an agreement was reached on "the urgent need to take further meaningful action to reduce emissions from deforestation and forest degradation". During these negotiations both developed countries and developing countries discussed how they could take appropriate mitigation actions to reduce the greenhouse gas emissions. They agreed that the developed countries should help the developing countries in form of technological transfers, capacity building and financing.

At COP-14, Poznan in 2008, it was argued that REDD can underestimate the requirement of local people and thus, in a long term, it can have negative effects. Due to which, "+" was added to REDD forming REDD, where three terms - sustainable management of forest, forest enhancement and forest conservation – were added, thereby turning it into a potential win-win-win situation with reduction of carbon emissions, enhanced poverty alleviation and biodiversity conservation within one policy (Skutsch 2011; Vatn and

Vedeld 2011). Here, in this thesis, "REDD+" is represented simply by "REDD", having the same meaning. At COP 15 in Copenhagen in 2009, REDD was fully adopted and included in the Copenhagen accord saying that "We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries" (UNFCCC 2010). However, the COP-15 in Copenhagen was considered a failure since it did not reach consensus about a final agreement on REDD, thereby passing on the responsibility to Cancun and COP-16 to finalize an agreement (Lang 2009).

Along with REDD negotiations at the global arena of climate change, there are number of programs related to REDD are going on at the national level that includes national readiness, pilot projects, etc under private initiatives (Scheyvens & Lopez-Casero, 2009). According to Scheyvens & Lopez-Casero, 2009, 9 industrialized countries have committed US\$ 82 million through the World Bank's Forest Carbon Partnership Facility (FCPF); Norway have pledged US\$ 35 million to The United Nations Collaborative Program on UN-REDD and Australia committed AU\$ 200 million through its Global Initiative on Forests and Climate to initiate REDD process in different developing countries. The potential scale of REDD is massive at the international level, but the need for REDD must not be underestimated in relation to each countries specific challenges.

1.2.6 **REDD in Nepal.**

Nepal covering only about 0.09% of total land of world is highly blessed with biological diversity. It is equally rich in socio-cultural diversity due to the physiographic regions and indigenous peoples. Forest covers about 29% of Nepal's area and shrub-land (mainly located in the hills and the Terai) about 10.6% giving a total of 39.6% forest cover for Nepal (MoFSC, 2010). These forests acting as sink for the carbon have a great role to play in curbing the negative impacts of climate change. Being a signatory party to United

Nation's Framework Convention on Climate Change (UNFCCC), Nepal shares responsibility to contribute in reducing global warming (although Nepal's contribution to climate change is very negligible). After the endorsement of Bali Action Plan in COP-13, 2007, developing countries like Nepal were able to participate in carbon financing through REDD mechanism. (REDD Cell 2011: Online). The main objective of REDD is to reduce the existing rate of deforestation and forest degradation in developing countries by providing them financial incentives (Dahal & Banskota, 2009). Nepal entered formally into the REDD mechanism from the year 2008, with the help of World Bank, through its Forest Carbon Partnership Facility (FCPF).

In the 16th Conference of Parties held in Cancun, Mexico there was a clear guidance regarding the phases that need to be included in REDD implementation process: Readiness, Demonstration and Implementation (MoFSC, 2011). Presently, Nepal is in the first phase i.e. readiness phase within which the Government of Nepal (GoN) is in the process of developing a national REDD strategy (MoFSC, 2011). Nepal prepared R-PIN (Readiness Plan Idea Note), a starting point for REDD readiness, on the initiative of Foreign Aid Coordination Division (FACD) of Ministry of Forest and Soil Conservation (MoFSC) along with the representatives of government, non-government, civil society, private organization and donor organization. After several rounds of meetings and working sessions, with active involvement of 26 individuals from nine organizations, a final draft of R-PIN was prepared and submitted to the Bank on 15th April, 2008; which got approved in July, 2008. Then, Nepal formally became participating country in FCPF after signing Memorandum of Understanding (MoU) by MoFSC and the Bank on 08th September 2008 (REDD Cell, 2011: Online).

Several REDD piloting projects have already started in Nepal at the initiative of vairous non-governmental organization in different aspect of REDD. The table (2) below provides concise descriptions of the ongoing pilots. These pilots will be able to provide critical input to make the national REDD strategy robust and play a major role to guide future development.

Table 2: Summary of the pilot projects and activities on Climate Change and REDD*

Project/Activity	Funded By	Coverage	Major Objectives
Kyoto: Think Global, Act	Netherlands	3 Districts	To conduct research into REDD
Local (K:TGAL)	Development		plus management through
	Cooperation		community forest management
			and to have this activity
			accepted internationally as a
			valid REDD strategy.
Design and establishment of a	Norwegian Agency for	3 Watershed	To build capacity of civil
Governance and Payment	Development		society on REDD.
System for Community Forest	Cooperation (NORAD)		To facilitate establishment of
Management under REDD	coopermion (ryoth 12)		Forest Carbon Fund
			To contribute to carbon
			measurement, monitoring and
			verification.
Grass roots level capacity	NORAD	9 Districts	To develop extension materials
building on REDD in Asia	TOTALE) Districts	on REDD to build local capacity
and the Pacific			on REDD.
Reducing Poverty through	WWF, Finland; WWF,	13 Districts	To develop a methodology for
REDD: early action	USA	13 Districts	carbon assessment,
REDE: carry action			To assess the benefit from
			carbon financing for
			livelihoods.
			To support for the development
			of the national REDD Strategy
Livelihood and Forestry	UK Government	Centre and 15+ Districts	To build capacity and awareness
Program (LFP) – actions on	(DFID)		of different stakeholders at
climate change and REDD			different levels; to support the
enmate enange and REBB			most vulnerable households and
			communities to adapt to climate
			change through community
			based adaptation planning; to
			set up a pilot to build experience
			and capacity on PES of different
			local stakeholders and to
			support the national REDD
			Strategy Development
Nepal Swiss Community	Swiss Development	Centre level and 4	To assess the impact of climate
Forestry Project – actions on	Cooperation	districts.	change
climate change and REDD	Cooperation	GIGHTOU.	To explore adaptation activities
ciminate cinarige and REDD			To create awareness to local
			level about the climate change,
			adaptation and mitigation.
*0	Lin BEDD Cell		adaptation and mitigation.

*Only those projects noticed in REDD Cell.

Source: MoFSC, 2010.

Most of these pilot activities are being carried out in forests where communities are playing a major role in conservation (for example, through community forestry),

however, there is a strong and urgent need to test pilots in forested lands where community involvement is not as strong. There is also a concern that the piloting activities could be picking the "low hanging fruit" thereby making future government implementation challenging (MoFSC, 2010).

For my research purpose, I will be looking into the "Design and establishment of a Governance and Payment System for Community Forest Management under Reducing Emissions from Deforestation and Degradation" pilot project conducted by a consortium of three different organizations: The Asia Network for Sustainable Agriculture and Bioresource (ANSAB), International Centre for Integrated Mountain Development (ICIMOD) and Federation of Community Forestry Users, Nepal (FECOFUN) with financial support of Norwegian Agency for Development and Cooperation (NORAD). The specific objectives of the project include: strengthening the capacity of civil society actors in Nepal for active participation in the planning and preparation of National REDD strategies; establishing Forest Carbon Trust Fund and contributing to the development of REDD strategies that can effectively and efficiently monitor carbon flux in community managed forests (Community REDD, 2011: Online).

1.3 Problem Statement and Justification:

Reducing Emission from Deforestation and Degradation (REDD) plus has emerged as a process for not only mitigating climate change but also as an opportunity for conserving biodiversity and improving livelihoods of the local people. In this process, developed countries are the buyer of the carbon stored in forest of developing country. This concept is a new and emerging one and its payback and outcomes are still required to be explored. So, there are many questions regarding feasibility of REDD in several countries.

In case of Nepal, REDD is in the initial stage where the complete strategy for implementation of REDD from government is still underway, but already some projects related to REDD by different I/NGOs have begun. With this situation, it will be

interesting to know how the government is framing the whole REDD process in terms of institutional structure, trust fund, etc and how they are planning to incorporate the results of the different projects in national strategy and what are the challenges they may face in linking the project result with the national strategy of REDD. Likewise, studying actors like IPs, women and Dalits who are trying to make their position in this process at the national level will also be relevant; and at the ground level, it is important to know how the people are considering REDD in terms of inclusion and benefit sharing.

1.4 Objectives and Research Questions:

- 1.4.1 To explore the forest management approach in Nepal.
- i. How has the forest management history in Nepal evolved?
- ii. What are the policies formulated till date in order to manage forest of Nepal?
- 1.4.2 To identify and analyze how Nepal is preparing itself for REDD.
- i. What is the current institutional set up prepared by the government at national level and by the project at the community level for implementing REDD?
- ii. What are the capacities and competencies of the REDD governance structure?
- iii. What are the challenges for the implementation of REDD at national and local level?
- 1.4.3 To analyze the participation and benefit sharing mechanism of REDD by indigenous people, women and Dalits.
- i. How are indigenous people, women and Dalits participating in the decision making process related to REDD at national and local level?
- ii. To analyze the proposed benefit sharing mechanism developed within REDD pilot project.

1.5 Structure of Thesis:

In this first chapter, I have presented relevant background information about the country – Nepal and its forest status and also the information about REDD that is necessary to have in mind before starting the thesis. Chapter two is about theories related to governance aspects and participation and benefit sharing in the community. Later, in chapters three and four, I present the methods used for collecting and analyzing data, followed by a brief description of the local study area to present the status at the local level. After that, in the preceding chapters five, six and seven are I present an analysis related to the objective of the research, with chapter eight being my conclusion.

CHAPTER 2: THEORITICAL FRAMEWORK

In this chapter, I present theories that are relevant for this thesis. First, I look into the theory of governance and governance structure with focus on environmental governance and then a study of REDD governance system will be done. Lastly, I present theory related to participation and benefit sharing.

2.1 Governance and Governance Structure.

For understanding the theories of governance it is important to know the concept and definition of institution. North (1990) explained that "institutions are the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction" (as stated in Vatn, 2005). Later, Young (2002) defined institution as "a sets of rules, decision-making procedures, and programs that define social practices, assign roles to the participants in these practices, and guide interactions among the occupants of individual roles." Vatn (2005) defines institutions as "conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions regularize life, support values and produce and protect interests"

Governance concerns both the making of social priorities/goals and setting up and running systems to attain these goals (Vatn, et.al, 2009). It is important to mention here that the concepts of government and governance are very different; the latter refers to the procedural component for the implementation of the policy in the society while government is just the organization that is responsible for making and enforcing rules and laws.

My research is concerned with the environmental issue related to the mitigation measures of climate change, i.e. REDD. Thus, in this theoretical framework, I am more concerned about the governance related to environment i.e. I will look more into Environmental Governance so as to analyze my research work based on this framework.

2.1.1 Environmental Governance.

"Governance encompasses the process that shape social priorities, how conflicts are acknowledged and possibly resolved, and how human coordination is facilitated" (Vatn & Vedeld, 2011). So, environmental governance includes the whole range of rules, practices and institutions related to management of environment for its better protection and conservation with the consideration of people's interest and benefits. Lemos and Agrawel, 2006 defined environmental governance as "the set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes". In environmental governance, issues of local, regional and global scales are included along with the inter linkages between these levels (Vatn & Vedeld, 2011). Thus, a variety of governance structures having different members that can define its own norms, rules and policies can be formed which can interact with one another in specific ways. So, in environmental governance structure, there are two main elements: type of actors involved and structures facilitating the interaction/coordination between the actors.

The type of actors involved, their capacities, interests and specific roles in actual governance structures influence the outcomes. Similarly, the type of interaction facilitated between these actors influences the capacities of the overall system (ibid). So, it is actors, their interests, power and ways of interaction with one another that affect the overall capacity of governance structure and determine the outcome of the whole process.

2.1.2 Actors and their Interaction.

2.1.2.1 Actors

Three 'ideal types' of actors in governance structure have been described by Vatn & Vedeld, 2011: private (households and firms), public (states and state bureaucracies) and community organizations (civil society organizations). These actors have their own interests, norms and rules along with their power to influence any decision in order to

control certain outcomes. Considering REDD activities at national level Vatn et.al (2009) have distinguished 5 types of actors that could be involved:

- States/public bodies
- Individuals (private)
- Firms (private)
- Communities (civil society)
- NGOs (civil society/private)

States/public bodies are the political associations with sovereignty over a geographic area and also the hierarchical structures having the capacity to command. They act in three different ways: i) develop national political goals on behalf of citizens; ii) produce concrete results through commanding own resources, e.g. management of state owned land; and iii) act as intermediator between other actors, using various policy instruments, and handle conflicts between individuals, firms, etc (Vatn et.al, 2009). Similarly, private actors can either be individuals, who may own the forest land, or firms, established to serve the economic interest of their owners. These may be at the "receiving end" of the policy or may be buyers of REDD. Likewise, communities are included in civil society. These communities may have control over common land resources like forest (community forest) and hence they may also be at the "receiving end" of REDD benefits. Communities are the miniature form of state at the local level with a rather "flat structure" typically emphasizing cooperation and reciprocity as opposed to command (Vatn, et.al, 2009). However, communities are not always characterized by cooperation; they may be full of conflict in terms of distribution of power, resources, land or other assets. Thus, even when communities have common resource control, underlying conflicts between community members may strongly influence policy structures and outcomes (ibid). Non-governmental organizations (NGOs) have been categorized in between civil society and private actors depending upon their interest, power and capacities. They may either represent very specific stakeholder's interests or be active in defending the interests of member groups e.g. land users or firms. However, in Vatn &

Vedeld, 2011, NGOs have been categorized only as civil society actors based on the fact that they may be founded as common property organizations or locally established village council.

2.1.2.2. Interaction

Governance structure concerns not only the diverse actors at different levels but also the type of interaction that governs the outcome of the whole process. These actors deal with each other in various ways including market exchange, command and reciprocal arrangements as stated by Vatn & Vedeld, 2011. In market exchange, the interactions between the actors are seen as formally equal, but the goods and services are traded in the market. While in the case of command type of interaction, power is enjoyed by one actor, especially by government, influencing the whole process. Finally, in reciprocal arrangement, the power is divided equally among all the actors and norms of equality are central in the interaction. There can also be "no rules" situations – "a situation of anarchy, which implies no norms binding actors together or no hierarchical structures (ibid)."

In practice, all combinations of actors and their interactions can be observed in ,society but these days, mixed forms of interaction between actors seem often to be favoured like public-private partnership.

2.1.3 Capacity and Competencies of governance system

The capacity and competencies of the governance system are characterized by the types of actors involved and their pattern of interaction. Vatn & Vedeld, 2011have described four aspects, which are as follows:

• Rights and Responsibilities

In case of governance, actor's power over the economic resources and its access to the rule and laws over the decision making process is one of the most important issues. Rights and responsibility allocated to every actor in governance process determines the

outcome of the system. The overall legitimacy of institutional systems is very much related to the procedures established for decision-making and implementation at various level of society (Vatn & Vedeld, 2011).

• Information

Information is another important aspect in a governance system, where all the interaction depends on the information that is shared between the actors. This includes the accessibility and transparency of the information system among the actors. Also, asymmetric information may occur in a system where the power and the decision-making lie mainly with one of the actors involved in an interaction. Thus, the actor active in governance system can have more information than other actors (Vatn 2005).

• Transaction costs

Transaction cost is a dependent variable; depending on the actors involved, their way of interaction and the state of governance system. Transaction cost cover "costs of information gathering, formulation of goals, agreements and contracts, and setting up and running systems for controlling the fulfillment of what is agreed" (Vatn & Vedeld, 2011).

• Motivation

Motivation refers to the reason and interest of the actors involved in the governance system. Motivation of actor differs with the type of actors – private actors have interest to make profit of their own, while public actors, states and politicians have motivation either to improve their image or to benefit the society at large.

2.2 Governance Structure related to REDD

Moreover, it is not just through the formulation of goals that priorities materialize. The governance structures chosen will also influence goal attainment through influencing how easy it becomes to reach the various aims defined (Vatn & Vedeld, 2011).

Many developed and developing countries have already set up institutional arrangements for the management of their countries environment. But since, REDD has emerged very recently, the incorporation of REDD into existing institutions can be a challenge to many

countries especially in case of developing countries. In this section, I will go through the governance structure related to REDD in national context, and later on identify some criteria for assessing institutional options.

2.2.1 National REDD Governance Structure.

The national REDD architecture can be seen as "an institutional structure defining the capacities and responsibilities of the different actors involved and the rules for their interaction" (Vatn & Angelsen, 2009). While going through the national REDD funding governance structure literature, Vatn & Vedeld, 2011 and Vatn & Angelsen, 2009 have presented four generic 'types' of structure for REDD which are presented in Figure 3. These are ideal types of governance structure; it is difficult to implement one single type of structure in a real ground situation. These options are not "mutually exclusive"; in many situations the solution is to formulate a good mix and to define which solutions are suitable for implementing which policies (Vatn & Angelsen, 2009). National/local conditions will influence what is the wisest choice. In a country with very weak state administrations or high levels of corruption, building a separate system may be the only viable solution. However, even in such cases, it is appropriate to determine whether to strengthen the country's existing public administrative power or to build a separate REDD system alongside it (Vatn & Vedeld, 2011). Thus, it should be noted that, there is no single ideal model in practice and the best solution will depend on the country's existing governance structure.

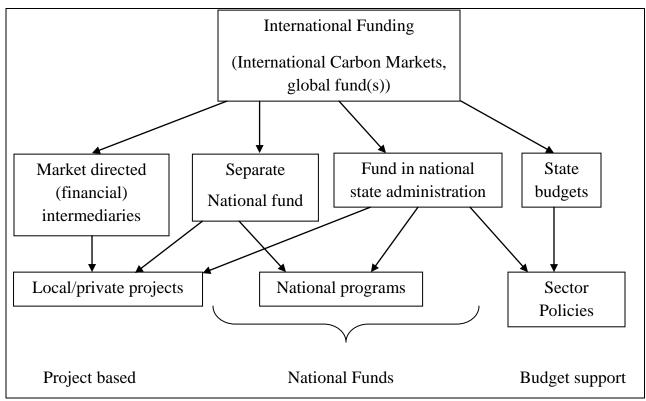


Figure 3: Options for National REDD funding architecture

(Source: Vatn & Vedeld, 2011)

Market/Project Based Architecture

In this type of governance structure, international firms interested in obtaining emission reduction credits, provide funds to the local projects of developing countries which have potential for carbon reduction. So, the market/project based system for REDD financing would be "a system where actors – predominantly firms – with carbon emission reduction responsibilities buy reductions through funding local REDD projects" (Vatn & Vedeld, 2011). The general evaluation of this REDD funding mechanism shows that this structure has potential to reduce corruption at the national level while there may be corruption at the market level; and overall co-benefits like poverty reduction, livelihoods and biodiversity may be weak if there exist conflicts. Examples of this system are CDM projects, PES projects, REDD demonstration projects, etc.

Separate National Fund

A separate national fund outside the state administration is another option for the implementation of REDD governance structure. This is a fund that operates independently, led by a board consisting of members from non-governmental and governmental agents. These board members are dominated by individual members from NGOs rather than political members, making it free from political disturbances.

Conservation Trust Funds, one of the existing models, can be viewed as an example for understanding the implementation of a national fund outside the state administration. CTFs operate at national levels and many have been established by special national legislations or decrees (Spergel and Wells, 2009). The boards of these funds are mutually inclusive in nature incorporating representatives from civil society, business, academic organizations, donors and government officials (Vatn & Vedeld, 2011). Thus, this type of fund can operate independently without political interference. CTFs have overall high political legitimacy which is further strengthened by broad representation of different stakeholders. Also, the system built for these funds ensures in general "good transparency" concerning use of money (Vatn & Vedeld, 2011); so in country with a weak government structure, this can be a good option as there can be less chance of corruption at the central government and local level. Another advantage of this fund system is as a long-term solution since the fund is not involved in the state budget and has its own funding from private firms or international organizations.

However, there are some negative aspects of this fund system, because it is considered to have more focus on protecting biodiversity, and less orientation towards other co-benefits (livelihood promotion, poverty alleviation of the surrounding areas, etc). Thus, this option lacks the local legitimacy and coordination at the local level.

Fund in National State Administration

Establishment of a different fund within the national state administration for the implementation of REDD architecture is another option as defined by Vatn & Vedeld, 2011. This fund can be within a ministry or an agency under the ministry, which is

managed by the board represented by different stakeholders. These stakeholders vary from related state administrators to NGOs, and also civil society members are included. According to Vatn & Vedeld, 2011, this type of fund is distinguished from the separate fund by the "issues of channeling resources" as the funds are distributed through the state administration to its designated sectors, specific programs or to individual projects.

Vatn & Vedeld, 2011 have described experience with the forest fund as a "relevant source of insights" to understand the positive and negative effects of these funds. In this system, the existing national structure is utilized to operate the REDD fund thus lowering the transaction cost of operation and maintenance. This fund system secures the objective of achieving co-benefit and maintains coordination between various sectors, as it is a part of state administration having more legitimacy politically.

However, in the case of a country with weak governance, this kind of fund may not be the best option, since they can create conflicts between the fund and related sector administrations like forestry, agriculture, environment, development, etc (Vatn & Angelsen, 2009). Also, this type of system is vulnerable with regard to corruption, with weak state administration (ibid).

State Budget

Finally, the REDD fund can be a part of the state budget and be operated according to national budget support. Vatn & Vedeld, 2011 have distinguished two types of state budget as: general budget support (GBS) and sector budget support (SBS), while GBS is allocated to the sectors that are identified on the basis of mutual understanding between the government and donors, SBS is allocated to specific sectors. However, these two sectors are not totally distinct from each other.

This type of approach has benefit of increasing efficiency in terms of using the existing systems and also has high political legitimacy along with good coordination among different sectors. Also, regarding the issue of co-benefits, the objectives of poverty alleviation, livelihood strengthening and biodiversity preservation depends on the extent of government enthusiasm and commitment towards these matters in specific countries

(Vatn & Vedeld, 2011). Besides these potential advantages of budget support, there are a number of risks associated with this method like concern over transparency, corruption and poor management and misuse of money.

It should be noted that currently in Nepal the REDD strategy is still in the early phase of development. The interim national strategy for REDD has focused on the development of a Trust Fund for the implementation of REDD in Nepal. But still it is not clear whether this fund will act as a separate fund or will be integrated in some existing structure. So, my analysis of governance structure will be concentrated mainly on the strengths and weaknesses of the systems of separate national fund and national fund within state administration.

2.2.2 REDD Governance System Evaluation Criteria.

Till now I have discussed the potential actors, the possible interactions among them in governance structure, and the type of REDD governance structures that can be established in a country according to their circumstances. However, while establishing a REDD governance structure, certain criteria should be taken into consideration so as not to repeat the past failure of the government system to control deforestation and forest degradation.

Three policy approaches – intra sectoral (forest only) approach, smallholder and poverty approach, and the public spending approach - were applied in the past in order to control deforestation worldwide (Sunderlin & Atmadja, 2009). These approaches failed due to the inability to address the actual root causes of the deforestation that were deep, complex and interconnected between various actors, their rules, practices and interests. According to Sunderlin & Atmadja, 2009, actors like timber companies rather than local people (extra sectoral drivers), domination of political and economic elite group in resources distribution, corruption and weak governance were the factors that were not given adequate attention. Thus, constructing a REDD national governance structure should consider all these factors in order to correct the past mistakes.

Whether REDD is likely to reduce or intensify the existing conflicts regarding forest resources can be answered by posing questions like who are the real related actors, what role do they have in controlling and preventing deforestation, how much power they should have over decision making, how should the NGOs and INGOs be included, and finally who is the main responsible governing body of all these processes – should it be a part of existing government system or act as a single autonomy body (Vatn & Angelsen, 2009). Thus, in practice, a REDD governance structure should incorporate related actors, and their role and power should be precise. So, it is necessary to consider a certain set of criteria while formulating the REDD architecture which will determine its future. Vatn & Angelsen, 2009 have put forward a set of criteria to consider when designing REDD architecture, which is presented in the following table 3.

Table 3: Criteria for assessing institutional options.

Criteria	Specifications
Overall political legitimacy	• Across sectors (horizontally) and across levels (vertically)
	of government
	Within civil society
	• Internationally: donors, international organizations, NGOs
Good Governance	Transparency and accountability
	• Distribution of power and wealth
	• Protection and improvement of rights, responsibilities and
	participation
	 Motivational aspects, including the risk of corruption
Coordination Capacity	Across sectors
	Across levels of government
	With the privates sector and civil society
Links to broader reforms	• Need for changes in basic societal structures, e.g., property
	rights structures and systems for participation
	Potential as a catalyst for reforms

Source: Vatn & Angelsen, 2009

2.3 Participation

The concept of participation has a long history. Oakley (1991) has defined participation "as a way of harnessing the existing physical, economic and social resources of rural people in order to achieve the objectives of development programs and projects". Thus, participation of local people was seen as important for the successful implementation of projects or programs. But as the process of development programs with the participation of people increased, different forms of participation were observed. It can even be said that people participate in a programs by merely their presence even if they are not active in any kind of decision making or operation or management of program (DFID, 1995).

While analyzing the concept of participation, Cohen and Uphoff (1977) defined participation as the inclusion of people from the very first step of program till the end of it. Participation of people is required for making decisions, conducting programs in a smooth way, sharing the benefits of that program and finally for evaluating the pros and cons of the project. It is expected that the programs or projects achievements and objectives are met only when the local people are made a part of discussion, analysis and decision making process. During the participation, people should be allowed to make decisions in their favor and they should be equally involved in the cost and benefit sharing in order to achieve development in sustainable way (Dahal, 1994).

Participation also implies the equal involvement of all people in the community. Agarwal (2001) stated that participation in the development project means "inclusiveness"; where the views of the people that are most affected should be incorporated; and this inclusion is not only of the individual person but the community itself. Different types of participation have been identified by Agarwal, 2001 on the basis of how the participants are present in the projects or programs. Some people can participate in the project by just paying the membership fee, being involved in none of the process. Similarly, some can participate actively in the management or implementation of projects (such as in the operation and maintenance of infrastructure or in any related activity), or some can

participate in the governance of a program or project as consultative participants by assisting in setting criteria for the operation of the programs (Gauli & Rishi, 2004).

The types of participation as given by Agarwal, 2001 for differentiating the actor level of interference within the program or project are given in the Table 4. This typology of participation is used in this thesis in order to differentiate the level of participation of indigenous people, women and Dalits at the national and local level.

Table 4: Typology of Participation

Forms/Level of Participation	Characteristic Features
Nominal Participation	Membership in the group
Passive Participation	Being informed of decisions ex post facto; or attending meetings and listening in on decision making, without speaking up
Consultative Participation	Being asked an opinion in specific matters without guarantee of influencing decisions.
Activity-specific Participation	Being asked to (or volunteering to) undertake specific tasks
Active Participation	Expressing opinions, whether or not solicited, or taking initiatives of other sorts
Interactive (Empowering) Participation	Having voice and influence in the group's decisions.

Source: Agarwal, 2001.

In the context of community forestry, participation is the involvement of user members of community forest in decision making processes, labor activity and benefit sharing of the community forest (Gauli & Rishi, 2004). Here participation in decision making process makes the member an active participant having power to influence the decision regarding opening of forest for collecting forest products, fixing prices and allocating CF funds. Similarly, participation in benefit sharing from the CF means sharing of benefits that may

be either direct or indirect. Direct benefit sharing means sharing of benefits from forest products like Non Timber Forest Products (NTFPs), fuel wood, fodder while indirect benefits from CF means involvement in training programs, representation in executive committee, etc (Gauli & Rishi, 2004).

2.4 Benefit Sharing

Around 350 million people that are residing within or adjacent to forest area are mainly dependent on forest resources for their livelihood and income (Koirala, 2007). With the emergence of the concept of community forest, local people are involved in the management and conservation of their adjacent forest and also getting benefits from the forest resources that can be either environmental services such as carbon sequestration, hydrological and biodiversity services and landscape beauties or social services like generating community fund from the selling of NTFPs of their forest, timbers, etc that can be utilized for various purposes of the community.

Benefit sharing in community forestry is based on the principle of "co-management of common pool forest resources" (Koirala, 2007). The concept of co-management of common pool resources is formulated in terms of a distribution of power between the state and the community, which is usually the problem solving approach for the management of the common resources (Carlsson & Berkes, 2005). In the case of Nepal, the government hands over certain forest land to the community for management and conservation, where the land belong to the government but the benefits of the forest belongs to the community only.

In most of the cases, community forestry fails to give rights to the most dependent and poor people of the community and there is unequal distribution of the forest resources. Especially unequal participation of all the relevant community members in the executive committee creates the biased decision over the resource distribution. Also, due to lack of awareness, knowledge, power and resources, disadvantaged and marginalized group of people are left behind to speak up for their rights.

There are some criteria to assess the effectiveness of the community forest user group as stated by Hobley (1996), Hobley and Sah (1996), Paudel (2000) and Koirala (2007). I have summarized these criteria below in Table 5.

Table 5: Criteria for assessing effectiveness.

Criteria for Evaluation	Description of the factors
Social	Equal representation of ethnic group, gender and poor people in
Suciai	the EC creates the most effective and efficient CF
	The type of resources (either high or low economic value)
Resource	found in the forest also effects the distribution of the resources
Resource	among the members of the community and thus the
	effectiveness of the CF.
	Decision making process (related to opening of forest,
Institutional	punishing, distribution of resources, etc), mechanism in the
Institutional	operational plan and arrangement for the implementation of CF
	management affects the overall effectiveness of the CFUG.
	For the effective and equal benefit sharing, the maintenance of
	the regular income and expenses of the community fund, its
Economic	mobilization and utilization, etc should be made clear and
Economic	transparent in the group. This will increase trust of the local
	people towards the group and there will be equal benefit
	sharing among the people.

CHAPTER 3: METHODS

This chapter presents the methods that were adopted while conducting the research; first the research design part, followed by the methods used for collecting data, and finally ethical considerations and limitation of the research.

3.1 Research Design

Research design is a structure that forms the basis for collecting and analyzing data of the research (Bryman, 2004). This is the tool that helps to guarantee that the research question is answered as clearly as possible. As classified by Vaus, 2001, my research is primarily descriptive, as it concerns 'what' is going on the REDD process in Nepal.

3.2 Data Collection Method

In this research both qualitative and quantitative methods are used for the collection of data, as required by the objective of my study which is to know the institutional structure and the social aspects of REDD at the national and local level. With the use of quantitative method local people's influences in decision making processes especially among disadvantaged and vulnerable group in the society and by the qualitative methods the political and social dimension of the REDD, will be made clearer. Thus, both of these methods provide information about the government's interest and effort for implementation of REDD and also about people's livelihoods and perceptions towards the REDD implementation.

3.2.1 Quantitative Method

Quantitative method refers to "quantification in the collection and analysis of data" (Bryman, 2004). In my thesis, the focus is on participation in CFUGs of IPs, women and untouchable group, *Dalits*.

Sampling

In Charnawati watershed of Dolakha district, where I conducted my field work, there are 58 CFUGs; out of which I selected 12 CFUGs as the quota samples for my study. Quota sample are the non-probability samples that are selected purposely that fulfills the specific criteria as representing the whole population in terms of different categories such as caste/ethnicity, gender, socio-economic group, etc. Quota sampling is a very rare case in social research and is done in very precise case (Bryman, 2004). Nevertheless, for my research, I found quota sampling quite beneficial so as to meet my objectives related to participation of the IPs, women and Dalits in the EC of the CFUGs.

Quantitative data for my research was for observing the power relation between the Bharmin/Chhettri, usually considered as elite groups of society, and IPs (here especially Tamang and Thami), Dalits (untouchable group) and women (B/C, IPs or Dalits) by studying their presence in the executive committee of the CFUG. So, with this specific purpose, CFUGs were selected to maximize representation, where 3 were selected having highest number of IPs, 3 were selected with highest number of Dalits (untouchable groups) and 4 CFUGs were selected having almost same number of IPs and other higher caste group (Bhramin/Chhettri). The last two CFUGs: *Charnawati* and *Chyanse Bhagwati* were selected as these two sites were closest to the district headquarters. The comparison between the executive committee of different CFUGs having varied number of Bhramin/Chhettri, IPs and Dalits households was done in order to analyze the power of different caste/ethnic group in the society.

3.2.2 Qualitative Method

In qualitative method, words are more important than numbers and the emphasis is given more to the "construction of the meaning of and in texts" (Bryman, 2004). Here, in this research, I have used key informant interview, participant observation and focus group discussion method as the qualitative research method in order to gain more knowledge on

the social context related to structure of participation, benefit sharing mechanism and views towards the new concept of REDD.

Key Informant Interview

Interviews with key informant provide a great deal of information regarding a variety of topics related to the interviewer's research interest. Ideally, key informants are interviewed for an extensive time period in order to have complete social, cultural and political view (Tremblay, 1957). In my research, several respondents from national and local level have acted as key informants as they are the primary source of information and have provided detail info regarding the existing situation of REDD and future challenges. During my field work I interviewed personnel from REDD Cell and different organizations like NEFIN, DANAR-Nepal and HIMAWANTI. Similarly, for getting insight into the pilot project, I interviewed personnel from FECOFUN, ICIMOD and ANSAB. Likewise, district forest officer, chairperson of Dolakha district FECOFUN office and president of Dolakha watershed REDD Network were my key informants regarding the issues at the local level. All of these informants provided me information about their role in REDD mechanism and their level of involvement in decision making process related to them.

Participant Observation

Participant observation is the self participation of the researcher in the community for an extended period of time in order study the participant behavior and responses regarding the discussed issues (Bryman, 2004). Thanks to my connection with the coordinator of the pilot project, I was able to take part in the stakeholder meeting that occurred at the capital city Kathmandu on 5th of August, 2011 and also was able to participate in the REDD fund distribution program at Dolakha district at the study area. This helped me to a general overview of all the participants involved at both the national and local level and their responses towards the new REDD mechanism.

Focus Group Discussion

Focus group discussion is an in depth group interview in one precise issue in order to learn about the concerns and opinions of community members and their response to each other's view in certain themes (Bryman, 2004). From the focus group discussion, it is helpful to know about the local people's livelihood conditions, their relation with the forest resources and how they are viewing the current management practices related to their CF and the ongoing project and their recommendations regarding the implementation of REDD in their CF in future. Since much of this thesis is related to the participation of the IPs, women and Dalits, I decided to do four focus group discussions in which three of them were conducted with the IPs, women and Dalits only whereas one focus group was conducted with mixed groups where all types of people were involved. Usually, the size of the group varied from 5 to 10 members in each group.

3.2.3 Secondary Data Collection

Analysis of secondary data is as important as the primary data collected from the field directly. The secondary data provides high quality information that can be used in one's own data analysis lowering the cost and time (Bryman, 2004). During my research, I collected a good deal of significant and important data, records, reports, news, online resources, journals, etc during and after the field work in order to have broad knowledge about the current situation about the REDD implementation at the national level by the government and at the local level by the pilot project.

3.3 Ethical Considerations

Out of four ethical principles, only two: informed consent and confidentiality were relevant and were followed, while two other principles, of harm to participants and deception, were not relevant to the research context and therefore, not considered. These four principles of ethics were given by Diener and Crandall in 1978 as quoted by Bryman, 2004. In case of informed consent, all the participants of the research whether

they were key informants or were members of focus group, they were made clear about my identity and the purpose of research, and the interview was only proceeded after their consent. While in case of confidentiality, I have tried to maintain the confidentiality as much as possible without undermining the objective of my research.

CHAPTER 4: LOCAL STUDY AREA.

In this chapter, I present a short introduction about the local study area, where I have conducted my field work in order to gather more information about the existing situation about the REDD mechanism in field. This study area is the part of ongoing REDD demonstration project which is conducted by the collaboration of three I/NGOs Asia Network for Sustainable Agriculture and Bio-resource (ANSAB), International Centre for Integrated Mountain Development (ICIMOD) and Federation of Community Forestry Users, Nepal (FECOFUN) funded by NORAD.

4.1 Selection of Study Area.

Dolakha, Chitwan and Gorkha districts were the three different sites of the ongoing pilot project "Design and setting up of a governance and payment system for Nepal's Community Forest Management under Reducing Emissions from Deforestation and Degradation (REDD)". Due to the financial and time constraints it was not possible to conduct field survey in all those districts. However, I chose Dolakha district as my main site because of its easy accessibility, its long history of CF programs, and also that during my field survey, there was a program of distributing seed money of REDD project which could be interesting to participate in and get to know more about.

4.2 Description of Study Area.

Dolakha is a mountainous district of Janakpur zone, in the Central Development Region of Nepal, situated at a distance of 132 km from the capital, Kathmandu Valley. Dolakha district extends from 27°28" N to 28°0" N latitude and 85° 50 "E to 86° 32" E longitudes. The total area covered by this district is 2,191 sq. km. and has boundary of China in North, Ramechhap district in South and East and Sindhupalchok district in West. The district headquarter of Dolakha is "Charikot", consisting of 51 Village Development Committee (VDCs) and 1 municipality. Siali, the lowest part of the district is 732 meter above sea level whereas the highest part Mt. Gauri shankar is 7,134 meter above sea level.

4.3 Land Use Classification.

Dolakha district occupying an area of only 1.49% of total area of Nepal is full of biological diversity and natural resources. It is also a religious place and one of the hotspots for tourist. The area has diverse land-use type and represents varied habitat types that support species diversity as well. Nearly 50% of total land is covered by forest area and 25% of the land is arable land. The table below shows the land use classification of Dolakha district.

Table 6: Land Use Classification of Dolakha District

Source: Himalayan Spirit Welfare Society

CHINA

CH

Figure 3 Map of Dolakha District.

S. No.	Land-Use type	Area (ha.)	Percentage (%)
1.	Forest area	101500	47.37
2.	Arable Area	56683	26.45
3.	Pasture Land	29500	13.77
4.	Snow Land	5665	2.64
5.	Barren Land	13740	6.41
6.	Area covered by Water	7068	3.30
7.	Other	131	0.06
8.	Total	214287	100

Source: DDC Dolakha Website (retrieved on Jan, 2012)

4.4 Demographic Information

According to the 2001 population census, the total population of Dolakha district is 217,218 with an annual growth rate of 2.5%. Chhetri are the most dominant caste with

38% of total population cover, followed by Tamang (15%), Brahmin (10%), Newar (9%) and others. Eleven different types of Indigenous people are found in Dolakha district, among which Tamang have the highest population of 32,699. Other indigenous people are Newar, Thami, Sherpa, Jirel, Magar, Sunuwar, Gurung, Majhi, Bhujel and Surel covering around 43% of the total population in total. Nepali is the commonly spoken language in this district, but, other languages like Tamang, Sherpa and Newari language are also spoken by some indigenous people. Most of the people follow Hinduism (71.05%) followed by Buddhism (28.5%). The literacy rate of this district is less than national literacy rate and in case of female literacy rate, it is very low (36.23% only). The following table gives an overview of demographic information about Dolakha district.

Table 7: Demographic Information about Dolakha District.

		Population		No. of	Growth	Population	Literacy
Region	Male	Female	Total	HHs	Rate	Density	Rate
	With	Temate	Total	Total IIIIs		(person/sq.km)	(%)
Nepal	11,563,921	11,587,502	23,151,502	4,253,220	2.25	157	53.74
Dolakha	108,170	109048	217,218	39,945	2.5	91.14	48.98

4.5 Forest Status in Study Area.

Since the enforcement of the Forest Act 1993 and other relevant forest regulations, policies and directives, various forest governance systems including community forestry, leasehold forestry, landscape level corridor conservation, buffer zone community forestry and collaborative forest management approaches are practiced in Nepal all of which are basically dependent on public participation. In case of Dolakha district, community forestry program emerged as one of the pioneer programs for the best system of forest sector management.

In 1990, when the Community Forestry Program gained real momentum in Nepal, Nepal Swiss Community Forestry Project (NSCFP) started its activities in Dolakha district. NSCFP, during last two decades, working under multi-partnership approach, i.e. working together with local District Forest Office (DFO) and its other local partners, has made a substantial contribution to the development of community forestry program in this districts and ultimately in Nepal. Much has changed in development thinking and also development needs over the last two decades. This is clearly reflected in the way the project focus shifted over time-from being primarily technical and environmental in early years, to focusing more on social needs- especially poverty alleviation and promotion of equity and good governance – in later years (Niraula & Maharjan, 2011).

The project support in Dolakha district was phased out in 2010, but the impact this project has made in the forest sector is most significant. Not only environmental sector benefitted but the social aspect of the region also benefitted. 90% of HHs became member in CFUGs. The following table shows the recent figure of forest status of Dolakha district.

Table 8: Forest Status of Dolakha District, 2010

No.	Total	Potential	Total	Total	% of	% of the	No. of	% of HHs in
of	Forest	CF Area	handed	HH in	forest	potential	HHs	the district
FUGs	Area		over CF	district	area	CF area	in	with FUG
			area (ha)		under	actually	FUGs	membership.
					CF	handed		
						over		
342	101,500	61,915	40,582.76	43,262	40%	66%	38,797	90%

Source: NSCFP, 2011: Online.

4.6 Charnawati Watershed Area.

Within Dolakha district, Charnawati watershed area is one of the working area of the REDD pilot project "Design and setting up of a governance and payment system for Nepal's Community Forest Management under Reducing Emissions from Deforestation and Degradation (REDD)" which is jointly implemented by the Asia Network for Sustainable Agriculture and Bio-resource (ANSAB), International Centre for Integrated Mountain Development (ICIMOD) and Federation of Community Forestry Users, Nepal (FECOFUN).

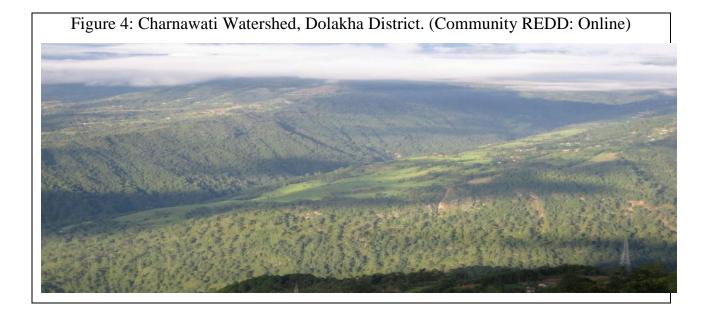
Charnawati River is one of the major water resources of Dolakha district. The watershed formed by this river has a combination of Quercus, Chir and blue pine and alder species followed by some other associated species that are common in high hill forest types of the middle part of Nepal. This watershed covers area of 14,037 ha forest of hilly region of the district and is populated by a few Thami people, who are confined in Dolakha and Sindhupalchowk districts (Community REDD, 2011: Online).

Within the project coverage there are 58 CFUGs of 5 VDCs (Fasku, Bocha, Katakuti, Magapauwa and Lakuri Danda) and 1 municipality (Bhimeswor) situated in Charnawati watershed, out of which 5 CFUGs are FSC sustainable forest management certified in 2005. All of the CFUGs have approved constitutions and operational plans; however most of these are not yet in the process of managing forest resources in a sustainable way. The total forest area covered by these 58 CFs is 5,996 ha where there are in total 7,878 households (HHs) in which 3,485 HHs are of indigenous people, 455 HHs of Dalit people and 3,930 HHs are of upper caste people (Chhetri/Bhramin).

Out of 58 CFUGs, I have selected 12 CFUGs, in which 3 CFUGs have highest number of indigenous people, 3 CFUGs have highest number of Dalits and remaining have more or less equal number of other caste (Bhramin/Chhetri) and IPs. The following table gives the overview of all the studied CFUGs including the total HHs, indigenous people HHs, Dalits HHs and Bhramin/Chhetri HHs.

Table 9: List of Studied CFUGs.

S.	Name of CFUG	Total Area	Total	IP	Dalit	Other	Male	Female
No.	Name of CruG	(ha)	HHs	HHs	HHs	(B/C) HHs	Popl.	Popl.
1	Srijana	264.2	245	229	0	16	696	697
2	Gairi Jungle	131.08	304	190	19	95	910	894
3	Eklepakha	197.33	245	187	0	58	616	633
4	Dhade Singh Devi	343.69	218	99	65	54	543	554
5	Thansa Deurali	124.37	316	137	43	136	858	867
6	Gothpani	21.85	88	16	28	44	260	256
7	Botlesetidevi	172.1	179	86	0	93	527	504
8	Maithan Harisiddi	28.35	111	66	0	55	210	242
9	Timure Tinsalle	67.1	113	66	0	57	374	336
10	Mahabir	502.6	225	106	16	103	612	581
11	Charnawati	819.35	219	75	1	143	616	618
12	Chyanse Bhagawati	30.32	70	9	27	34	196	189
	Total:	2,702.34	2,333	1,266	199	868	6,418	6,371



CHAPTER 5: EXISTING FOREST MANAGEMENT APPROACH IN NEPAL.

This chapter describes existing governance structures both on national and local levels relevant for forest management and to REDD. First a brief history of forest management in Nepal is presented, before I present the relevant national level institutional structure, policies and legislation and the forest management in Nepal. At the end I present the local forest governance structure, responsible for all forest related issues in the district, including REDD.

The forests of Nepal have experienced a long history of different management approaches. Analysts have usefully delineated three phases of forestry in Nepal privatization (until 1957), nationalization (1957 to the late 1970s), and decentralization (from the late 1970s onward) (Hobley 1996 as stated in Ojha, et. al 2009). Before 1957, forest in Nepal were owned and managed privately with some of them being under the control of state or religious trusts (Singh & Chapagain, 2006). Later after 1957, after the nationalization of the forest area, government took over the management responsibility of forest land and made restrictions regarding the free access to resources by the implementation of Private Forest Nationalization Act, 1957. After nationalization of forest, government initiated resettlement scheme in southern plains, known as Terai by clearing several thousand acres of forest lands. The combined effect of forest nationalization and forest clearing led to illegal tree felling in nationalized forests and the establishment of illegal settlements on forest lands. In retrospect, an important factor that was ignored in the nationalization of forests was the rural people's dependence on forests for a wide range of products, such as fodder, bedding materials for animals, roofing materials for houses and other non-timber products for different uses (ibid). ignorance concerning the traditional and sustainable utilization of forest resources by local people in their areas led to a vast amount of deforestation all over the country.

Following this failure in management of forest resources, Nepal experimented with various programs aimed at decentralizing forest management and making local people involved for the sustainable management of forest. The first significant step toward adopting community forestry approaches was taken during the Ninth Forestry

Conference, held in Kathmandu in 1974. The National Forest Act of 1976, and its subsequent amendments of 1977 and 1978, had returned some degree of ownership and control over forest resources to the people (Nagendra.et.al, 2005). Since then government of Nepal has formulated different rules and regulations for forest resource management.

In 1980s, Community forestry projects were initiated on an experimental basis, which was eventually implemented legally with the 1993 Forest Act and the 1995 Forest Rules. In community forestry, the government is the owner of the land, however, the authority and control of forest products and resource management has shifted back to the communities (Wakiyama, 2011: Online). Today, Nepal's community forestry program represents one of the worlds' most extensive, well promoted and widely studied systems of community-based natural resource management, involving over 16,000 forest user groups managing approximately one quarter of Nepal's total forested area (Kandel, 2010). Most of these community forestry programs are operated in the middle hills of Nepal; in the Terai the popularity of community forestry is not as much as expected. Unlike the middle hills, where the initiation and expansion of community forestry has been largely driven by local communities, in Terai these initiatives are, to a larger extent, government driven.

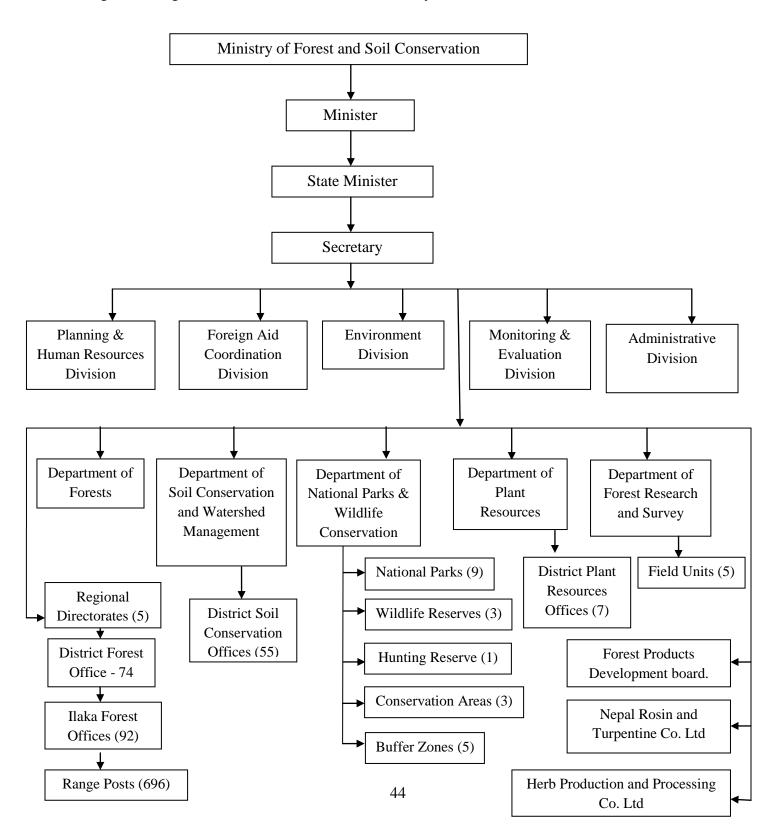
5.1 National Forest Governance Structure:

At present Nepal is in a transitional phase governed by the Interim Constitution of Nepal, 2007 with a new constitution being formulated by the constitutional assembly which was elected in the year 2007 with a 2 year mandate. Most of the governance structure of Nepal is almost like the old Constitution of Nepal, 1990.

Regarding the forest governance structure, Nepal has a decentralized structure with Ministry of Forests and Soil Conservation (headed by a Minister or Minister of State) having the operational responsibility for regular policy planning and implementation of forestry and related matters. Operational responsibilities are entrusted to five specialized

departments operating at the regional (five), district (75) and sub-district levels. The current organizational structure of the ministry and its departments is presented below.

Figure 5: Organizational Structure of the Ministry of Forests and Soil Conservation.



Since Nepal is in the process of drafting new constitution, there are many uncertainties in terms of future governance and institutional structures for forest (MoFSC, 2010). A restructuring of the institutional structure is expected according to the constitution that will be formed, but this is expected to take some time and effort.

5.2 Forest Policy and Legislation in Nepal:

According to FRA, 2010, forest policy is defined as "a set of orientations and principles of actions adopted by public authorities in harmony with national socio-economic and environmental policies in a given country to guide future decisions in relation to the management, use and conservation of forest and tree resources for the benefit of society" (FAO, 2010). After the nationalization of forest in 1957, there was a regular forest planning with different objectives. First five year plan period started in 1956-1961 and emphasized infrastructure development. During the Fifth Plan period (1975-1980), forest planning became more strategic both at the micro as well as the macro level with the development of a National Forestry Plan (1976), the National Forest Policy Act of 1976, establishment of a Forest Products Development Board, reorganization of forestry administration and preparation of working plans (FRA, 2000). During the Seventh Plan (1985-90) the Master Plan for the Forestry Sector (MPFS, 1989), was prepared and approved. It was the new National Forest Policy in Nepal that provided guidelines for legal, institutional, and operational improvements and development of the forestry sector to meet new challenges.

5.2.1 Current National Forest Policies

In Nepal, forestry legislation used to be formulated to resolve problems related to protection rather than to meet present and future needs for better management and increased production. As a result, legislation that included several major acts and associated rules was not in accordance with the spirit of the new forestry sector policy. This discrepancy was particularly noticeable in the case of community forestry. However, policy is now very clearly oriented towards 'people's participation' in contrast to the

previous legislation such as the Forest Act of 1961, which originally aimed to prevent villagers from entering forests (FAO, 2002).

The Nepal National Forestry Policy of 1976 was the first document indicating the government's intentions concerning the use and management of forest resources. The National Forestry Plan was developed by the Ministry of Forests and Soil Conservation. In the Seventh Five-Year Plan period (1985 to 1990), the National Planning Commission adopted the policies of the plan and developed them further. The objectives were to meet the people's need for forest products, including timber, fuel wood, and fodder; to maintain or restore the ecological balance through reforestation and watershed management; and to derive maximum economic gains from forest products by promoting the export of medicinal plants, and also participation of local people was more emphasized (MoFSC, 2000).

5.2.2 Master Plan for the Forestry Sector

The Master Plan for the Forestry Sector (MPFS 1989) prepared by the Ministry of Forests and Soil Conservation and approved by the government in 1989 provides a 25-year policy and planning framework. The long-term objectives of the forestry sector as set out in the plan include the following:

- to meet the people's basic needs for forest products on a sustained basis;
- to conserve ecosystems and genetic resources;
- to protect land against degradation and other effects of ecological imbalance; and
- to contribute to local and national economic growth.

The Master Plan for the Forestry Sector guides forestry development within the comprehensive framework of six primary and six supportive programs to achieve its objectives. The main features of the Master Plan lie in an integrated and program-oriented approach to forest and watershed management. This program approach was a turning point in the history of Nepal's forestry sector policy (MPFS, 1989).

Both the Eighth (1992 to 1997) and the Ninth Five-Year Plan (1997 to 2002) prepared by the National Planning Commission, followed the Master Plan to continue its main thrust of people's participation in forest management. The main objective of the Ninth Five-Year Plan is "poverty alleviation by providing economic opportunities for poor people and encouraging their participation in development activities" (FAO, 2002).

5.2.3 The Forestry Sector Policy 2000

The Ministry of Forests and Soil Conservation formulated a revised forestry sector policy (MoFCS, 2000). This was an updated version of the Master Plan and subsequent amendments. The revised policy outlined development strategies and programs and funds required to develop the forestry sector. The policy was also recognized by the Agricultural Prospective Plan, the Nepal Environmental Policy and Action Plan and the National Biodiversity Action Plan (FAO, 2002).

5.2.4 Tenth Five-Year Plan (2002-2006)

Intensive forest management and poverty reduction are the main thrusts in forestry in Tenth Five-Year Plan, 2001. In this plan, emphasis was given to formulation of community forest user groups with representation of poor people, forests were handed over to poorest of poor in a lease of certain time period and Churia area was considered as protected forests for management (FAO, 2002).

5.2.5 Three Years Interim Plan (2007- 2010)

The three years Interim Plan (2007-10) was developed with the long term vision "of supplying timber, fuel wood, fodder and other forest products regularly by formulating and implementing a sustainable and balanced forest development program with people's active participation, to contribute to food production through effective interaction between forests and agriculture systems, and to conserve the land of the nation from landslides, floods, desertification and other environmental imbalances" (NPC, 2007).

This plan gave special preference to men and women from deprived *Dalits* (*low caste people*) and Indigenous people to reduce poverty through equitable distribution of forest products (NPC, 2007).

Till now Nepal's forest sector is governed by the National Laws and Regulation, however, but there has not been any policy and laws promulgated at the sub-national level yet.

5.3 Forest Management Plan

For management purposes, the forests of Nepal are classified as "private" or "national" based on ownership of the land on which the trees are growing. The Forest Act of 1993 provides tenure systems for forests, while maintaining State ownership of all forest lands. The following are the categories of forest defined by the Forest Act:

- National forest: All forests other than private forest, regardless of the demarcation
 of their boundaries and including cultivated or uncultivated land, roads, ponds,
 lakes, rivers, streams and the riverine land that is surrounded by or in the vicinity
 of a forest.
- Government-managed forest: National forests managed by the government.
- *Protected forest*: National forests that the government has declared protected in consideration of their environmental, scientific and cultural importance.
- *Community forest*: National forests that have been entrusted to user groups (as defined in clause 25 of the act) for development, conservation and utilization in the interest of the community.
- Leasehold forest: National forests that have been leased (according to clause 32 of the act) for specified purpose(s) to a legally defined institution, forest-based industry or community.
- *Religious forest*: National forests that have been entrusted to any religious entity, group or community as specified in clause 35 of the act.

• *Private forest*: The planted or protected forests on land that belongs to an individual as per the prevailing law.

All types of national forests are required to be managed under a management plan. The Department of Forests (DoF) has responsibility for sustainable management of all forest resources, including government managed forests (FRA, 2000). By the end of Tenth Plan period (2002-2006), there were some 14,500 community forest user groups that had been formed, managing some 1.24 million hectares of forest areas. In addition to community forests, more than 950 leasehold forest consumer groups have been formed to create income opportunities for people living below poverty line, who are managing 3,700 hectares of forest, resulting in improvement of the quality of forest as well as protection of forest, environment and biodiversity. Through the involvement of community forest user groups, gender balance, community empowerment, and institutional development works are increasing (NPC, 2007). Today 19% of the country's area is declared as the protected area holding the protected forest and also in order to fulfill Nepal's obligation to international convention on biodiversity. Nepal Biodiversity Strategy, 2002 and Nepal Biodiversity Strategy Implementation Plan, 2006, have been implemented (NPC, 2007).

The Lands Act of 1964 provides ownership of land by individuals and other legally defined entities. It is designed primarily for cultivable land, and fixes land ceilings for the hills, including the mountain, Kathmandu valley (where the capital city is located) and Terai regions. However, it does not restrict landowners regarding the ways they use the land, which can include forestry purposes if the landowner chooses. Considering that farming systems in most parts of the country integrate crops and livestock, implying a need for fodder and bedding materials for livestock, the Lands Act also provides for land area in addition to cultivated land. The owner can use this "homestead land" for planting fodder and other trees and grasses (Singh & Chapagain, 2006).

5.4 Local Forest Governance Structure:

The process of decentralization in forest governance has started since last thirty years (Bushley, 2010). It is recognized as an important step for the equal distribution of resources among local people through their participation with a democratic way of decision making regarding resource allocation (Ferguson & Chandrasekharan, 2005). Decentralization has brought significant "development benefits for local communities in the form of increased participation and autonomy in decisions about resource management and use; greater access to valuable natural resources for subsistence needs; development of local enterprises based on forest assets; and the creation of community funds for local development priorities" (Acharya, 2002; Springate-Baginski & Blaikie, 2007 as stated in Bushley, 2010). Thus, the role of District Forest Office (DFO) has evolved from authoritative to consultative, where the governmental institution is responsible to provide required technical support for preparation of forest operational plan, approval of plan and handing over the forest to local communities as well as to perform the monitoring activity.

In Nepal, different types of participatory forest management system have evolved according to physiographic region and local people's interest. Especially in Middle hills and Hilly region of Nepal, the concept of community forestry has become a story of success, but this is not in case of Terai, where leasehold forestry seems to be working quiet well. Dolakha, my study area, is one of the districts of Nepal, where the idea of community forestry evolved some 20 years back by the help of donor agency Swiss Development Cooperation (SDC).

Decentralized governance system of Nepal has also supported this concept of community forestry by recognizing, as a priority program in the Master Plan for Forestry Sector (MPFS) 1989 and Revised Forestry Sector Policy 2000 as well. Under this program, any patch of national forests can be handed over to community forest user groups (CFUGs) as community forest (CF) after endorsement of group's constitution and operational plan for

the forests (Poudel, 2009). The initial phase of community forestry started with the goal of afforestation and reforestation activities that had been expected to increase greenery as well as to supply forest products to local people on sustainable basis, but in recent years, the primary objective of CF is directed towards poverty alleviation, good governance, livelihood and sustainable development, conservation of biodiversity, forest certification and gender balance.

CFUGs are free to create their own fund either from forest products like selling forest resources or from non-forest products like membership charge, punishment fee, etc in order to support financial transaction of group, manage forest area and sometime also to get involved in the community development activity like school construction, drinking water, road construction, etc (DoF, 2009). Both governmental and nongovernmental organizations have provided numerous capacity building opportunities in order to enhance local knowledge, skills and decision making capacities. Community plantation especially Non-Timber Forest Product (NTFP) trees, active forest management and income generation activities are some of the prioritized activities focused on poor and disadvantage groups within CFUGs.

Preparation of group constitution and forest operational plan through the support of forest technician are mandatory before handing over the forest area to CFUGs. The operational plan includes baseline information such as land area, details of forest inventory (species, crown cover, regeneration status, non timber forest products etc.), protection methods, cultural operations (thinning, pruning and harvesting), forest products utilization and community fund mobilization.

Thus at the local level with the evolution of community forestry, local people are more involved in the forest management and protection practices which is showing positive results for the forest management. At present, out of 5.5 million ha. of forest land, 1.23 million ha. of forest (about 22% of total forest land in Nepal)is under community management (Adhikary, 2011).

CHAPTER 6: REDD in Nepal.

This chapter is divided in three different sections. Section one presents the overall existing condition of REDD as put forward by government at national level and REDD at local level as put forwarded by the pilot project. Section two, I will present my findings based on the theory that I in chapter 2 and finally, I conclude with some challenges for implementation of REDD in Nepal.

SECTION 1: Existing Condition

In this section, I start with the discourse of REDD in Nepal, followed by the institutional framework and stakeholders identified by the government at the national level and by the pilot project at the local level.

6.1 REDD Discourse in Nepal:

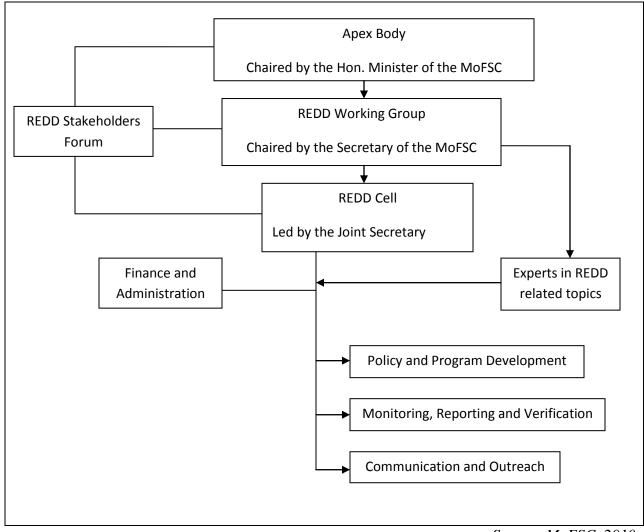
In Nepal, discourse related to REDD was started from 2004's fourth national community forest workshop, where it was stated that CDM neglects too many aspects related to forest and excludes widely practiced community-based forest management of developing countries (Dahal & Banskota, 2009). Since then many attempts related to REDD especially considering community forest have been undertaken in the national and international arena. However, only after Bali COP 13 in 2007, were the developing countries made a part of forest carbon financing through REDD mechanism, which also led Nepal to participate in the global REDD mechanism. The starting point of REDD at the national scale began when Nepal was encouraged to participate in WB's competitive grants under FCPF funds by submitting R-PIN. The final draft of R-PIN was prepared by the "loose forum" consisting of 29 members from 9 different organization related to government, I/NGOs, private organization, civil society and donor organization. This initiative was taken by Foreign Aid Coordination Division (FACD) of MoFSC (REDD Cell: Online). In this way, various stakeholders were included in the REDD progress since the very beginning of the process. After the acceptance of R-PIN, Nepal was one of the first fourteen countries to receive "readiness support" from WB (approx. US\$ 1-2million). With this fund Nepal has to prepare itself for implementing REDD in future. This 'readiness' support involves making the target country ready by development of skills, infrastructure and legal frameworks and most essentially drawing baselines and reference scenarios for deforestation and degradation (Dahal & Banskota, 2009).

Although REDD evolved with financial support from WB, it is not guaranteed that in future Nepal can trade carbon with WB, but WB can consider Nepal for consideration if it can prove capable of developing a satisfactory REDD strategy. Thus, if the actions are conducted seriously, World Bank's FCPF can play an important role in Nepal's REDD future (ibid). At present, Nepal is also one of the countries in Asia that have participated in both UN-REDD program as an observer country and WB's FCPF program as a participant country (Bushley & Khatri, 2011).

6.2 Institutional Structure of REDD Governance at National Level:

Before the concept of REDD emerged, there was a long discussion about climate change mitigation and adaptation measures through various ideas like Clean Development Mechanism (CDM). During that period in Nepal, only a handful of organizations like National Trust for Nature Conservation (NTNC), ICIMOD, World Wildlife Fund (WWF), International Union for Conservation of Nature (IUCN) and Ministry of Environment were working on issues related to climate change connected directly or indirectly with the livelihoods of local people. Later as REDD emerged as a new concept, many other organizations like World Bank (WB), MoFSC and other civil society organization like FECOFUN, NEFIN, etc, emerged as new actors in REDD discussion. Among these, WB evolved as one of the most important actors in disbursing funds for REDD mechanism in different countries while MoFSC evolved as a coordinating body for REDD discussion in Nepal.

Later, the National Forest Carbon Action Group (NFCAG), a non-formal multistakeholder forum, was formed by MoFSC incorporating all the stakeholders related to REDD (MoFSC, 2008). Thus, many other government bodies like Department of Forest (DoF), Department of National Parks and Wildlife Conservation (DNPWC), etc, and organizations like Nepal Swiss Community Forestry Project (NSCFP), Western Terai Landscape Conservation Program (WTLCP), SNV, SDC, Asia Network for Sustainable Agricultural and Bioresearches (ANSAB), CARE-Nepal, etc became involved. All of these stakeholders are moving forward with a cooperative attitude in order to gain more benefit from REDD in country. Today, at national level, MoFSC is the main actor for REDD, which is developing the whole REDD mechanism, and the following institutional set up has been put forward for REDD governance.



Source: MoFSC, 2010

Figure6: Institutional Arrangement Layout.

6.3 Actors related to REDD

Large numbers of actors have been identified during the preparation of the draft RPP report, which included government organizations/committee at the national, regional, district and community level, private sectors, civil society, indigenous peoples, forest dependent groups, academic and research institutions. These stakeholders are grouped together as REDD stakeholder forum and those actors playing an important role for implementation of REDD are included in the apex body, working group and REDD-cell of the national REDD governance structure. I will first present the list of stakeholders and then go through different tiers of the REDD institutional framework.

6.3.1 REDD Stakeholders' Forum

The stakeholders that make up the forum that has been included in REDD governance structure at national level, includes representatives from private sector, civil society, media, relevant government organizations, community-based organization, local and international NGOs, donors, academia, research organizations, and others interested in Climate Change and the REDD process. Being a part of national structure in REDD, this forum has an important role in disseminating information related to REDD at all levels. The list of stakeholders as identified by MoFSC is presented in the following tables. Among these stakeholders some are represented in the Apex Body and some in REDD working group.

A. Government and Government Institutions Stakeholders

National Level	Regional, District Level	Community Level
• Ministry of Forest and Soil	• Regional Forest	• Range Post, Illaka Forest
Conservation	Directorate	Office
Department of Forest	 District Forest Office 	• Village Development
Dpt. Of Forest Research and Survey	• National Parks, Reserves	Committee
• Dpt. Of National Parks and Wildlife	and Conservation Areas	 Municipalities
Conservation	• District Soil and	Police Check Post
Dpt. of Botany	Watershed Conservation	Centre for Agriculture
• Commission: Landless, Bonded	Office	Service
Labor and Squatter	• Regional Forestry	Veterinary Service Centre
National Planning Commission	Training Centre	• Institutions related with

Ministry of Energy	District Administrative	Ayurveda
 Ministry of Environment 	Committee	
 Ministry of Finance 	Regional Agriculture	
• Ministry of Agriculture, Department	Office	
of Agriculture.	District Agriculture	
Ministry of Women	Office	
• Dept. of Cottage and Small Industries	District Cottage and	
• Forest Product Development	Small Industries	
Committee	Promotion Office	
Parliamentary Committee on National	• Women Development	
Resources	Office	
 Nepal Trust for Nature Conservation 	District Courts	
Human Resource Development Wing	• Security Agencies	
(Ministry of Forest)	(Army, Police, Armed	
 Extension Division of Dpt. of Forest 	Police)	
• Dpt. of Road	• District Livestock	
• Vaidyakhana (Herbal Medicine	Development Office	
Center)	Divisional Road office	
Timber Corporation of Nepal	• Vaidyakhana (herbal	
• •	medicine centre)	

Source: MoFSC, 2010.

B. Private	C. Civil	D. Tribal &	E. Gr.	F. Vulnerable	G. Academic
Sector	Society	Indigenous	Directly	Groups	and
		Ppl. &	connected		Research
		Other	with forest		Institutions
		forest dpt.	for		
		groups	livelihood		
			sustenance		
Hydroelectricity	FECOFUN,	Tribes having	•	Raute, Kamaiya,	Institute of
Projects	ACOFUN,	direct relation	Forest Users,	Squatter, Dalit	Forestry,
Promoters of	NEFIN,	with forest such		esp. women,	Kathmandu
alternative	HIMAWANTI,	as: sherpa,	Forest Users,	Chapang,	Forestry
energies	DANAR,	Gurung,	Charcoal	Kusunda, Bote,	College,
Brick industries	Federation of	Magar, Limbu,	Burner group,	Majhi, Faji,	ICIMOD,
Furniture	Nepalese	Rai, Tamang,	Fuel wood	Badi, Lepcha,	Researchers,
industries	Industries and	Newar, Tharu,	traders, NTFP	Meche, Koche.	Schools,
Saw mills	Commerce,	Rajbansi,	like chiraito,		College,
Carbon traders	Federation of	Chepang,	Yarsagumba,		Universities,
Collector,	Herbal Trade,	Raute, Kayu,	lokta, honey,		Artists,
Processor &	Federation of	Pahari,	etc, Religious		Litterateur.
Seller of NTFP	Wood Traders,	Danuwar, Bote,	forest Users,		
Local hotels	Federation of	Majhi, Dom,	Wood sellers		
Entrepreneurs	NGOs, Forest	Dhimal, Satar,	(for livelihood		
Enterprises	related NGOs	Lama, Raji,	sustenance)		
dependent on	like Forest	Meche, Koche.			
woods	Action,				
Financial	ANSAB, etc,				
institutions	Community				

Centre for Rural	based forest
Technology	Assistance
Private Forest	Network,
Owners	Nepal, IUCN,
Medicinal	WWF, Care
Plants	Nepal ,
Processing	Federation of
companies	Journalists,
	Media and
	Journalists,
	Political
	Parties, Human
	Right
	Activists,
	Association of
	Forest
	Technician
	Nepal, Nepal
	Ranger
	Association,
	Junior Forest
	Technician
	Association

Source: MoFSc, 2010

6.3.2 Apex Body

The apex body is a multi-sectoral, multi-stakeholder coordinating and monitoring committee for REDD initiatives in Nepal. It comprises members from twelve different government ministries/commissions namely, National Planning Commission (NPC), Ministry of Finance, Ministry of Environment, Ministry of Forest and Soil Conservation, Ministry of Tourism and Civil Aviation, Ministry of Energy, Ministry of Agriculture and Cooperation, Ministry of Land Reform and Management, Ministry of Industry, Ministry of Local Development, Ministry of Physical Planning and Works and Ministry of Science and Technology. The Minister and the Secretary of the MoFSC are the coordinator and the joint coordinator of this body respectively and NPC is in charge of strengthening the coordination and streamlining of periodic development plans, development partners and sectors and later on incorporating REDD activities in national plans and policies. Since the apex body ensures inclusiveness from private sector, public sector and civil society organizations, each of the ministries in this body can nominate other NGOs and private

sector representatives of their respective field in equal proportions. Thus, the apex body now consists of 49 members, and meets twice a year. This large group of various actors is responsible for the REDD agenda at the national and international level.

6.3.3 REDD Working Group (RWG)

The REDD working group is a small working group that includes nine major stakeholders: one ministry, three different departments of forest, three civil society organizations and two donor organizations under the leadership of the Secretary, MoFSC. The main objective of RWG is to "provide advisory support in REDD readiness and implementation process" (MoFSC, 2010). Its main role is multi-sectoral coordination and cooperation for the planning and implementation of REDD activities at the highest level and endorsing plans related to REDD and forestry and climate change (MoFSC, 2010).

6.3.4 REDD Forestry and Climate Change Cell

The next important part of REDD institution in Nepal is REDD-Forestry and Climate Change Cell, which is established as a separate unit under the MoFSC. REDD cell acts as a focal point for the overall REDD activities at the national and sub-national levels and also coordinates and facilities among stakeholders. The REDD Cell is comprised of three sections: Policy and Program Development Section, Monitoring, Reporting and Verification Section, and Communication and Outreach Section. These different sections are responsible for the overall implementation of the REDD.

6.4 REDD at Local Level: An Approach by Pilot Project.

According to REDD - cell, there are five ongoing projects related to REDD in Nepal, which are implemented with the objectives of developing methodologies, raising awareness and capacity building (MoFSC, 2011). These projects are implemented in partnership with different I/NGOs and civil society organizations and donor agencies with or without involvement of government. In this section, I will through REDD

implementation framework as designed by the project "Design and Establishment of a Governance and Payment System for Community Forest Management under REDD" at the local level.

From now on, the word "project" will refer to this REDD project "Design and Establishment of a Governance and Payment System for Community Forest Management under REDD". This project was started in 2009 and is jointly implemented by the consortium of three different organizations: The Asia Network for Sustainable Agriculture and Bio-resource (ANSAB), International Centre for Integrated Mountain Development (ICIMOD) and Federation of Community Forestry Users, Nepal (FECOFUN) and is funded by Norwegian Agency for Development (NORAD). This is developed as a pilot project conducted in three different watershed areas of Nepal, namely Ludhikhola Watershed, Gorkha district, Kayarkhola Watershed, Chitwan district and Charnawati Watershed, Dolakha.

The main objective of this project is "to pilot a REDD payment mechanism in community managed forest in three watersheds of Nepal that would support a long term goal of establishing a national demonstration payment mechanism for carbon credits in community forestry sector" (MoFSC, 2011). With this goal, the project have engaged civil societies related to REDD mechanism at the central and district level and is trying to enhance their capacity in understanding and institutionalizing the whole REDD mechanism related to rights of local communities, indigenous people and women that are mainly dependent on the forest resources for the future operation at the national level.

Similarly, at this stage, the project has also formulated operational guidelines for "Forest Carbon Trust Fund" at the project level for regulating the provision of seed money in the study area. These guidelines also provide the institutional arrangement for managing and disbursing the REDD payment to CFUGs, criteria for payment and area of utilization of the fund. The fund management structure as developed by the project shows the

involvement of the various actors at different levels and also the flow of data and information at all levels.

It is believed that the project outcomes will help in strengthening the national REDD mechanism in various aspects like baseline information, methodologies for forest carbon measurement and benefit sharing mechanism (MoFSC, 2011). Also, since, one of the partners of this project, FECOFUN, is a network of 15,000 CFUGs all over Nepal and is strongly advocating nationwide for the right of forest users over the natural resources, it can be expected that the result of this project can be a very important input for national REDD strategy in order to secure the rights of local people.

Actors in REDD project.

The project is conducted by three different organizations which are identified as stakeholders by the RPP report. With the objective of the project to utilize the outcome of project in future in the national REDD strategy, it has incorporated the government organization and officials at the national and district level. Also, the project has aimed for equitable benefit sharing at the local level, so the organizations that are working in their specific field are also made a part of the project like the women organization (HIMAWANTI), indigenous people federation (NEFIN), etc. The lists of actors that are the part of this project are categorized in the following table 10.

Table 10: List of Actors in REDD project

Implementing Actors		Participating Actors		
Implementing Actors	Government organization	Civil Society Organizations.		
• NORAD (Donor	Ministry of Forest and	Nepal Federation of Indigenous Nationalities at		
Organization)	Soil Conservation,	national and district level.		
• ICIMOD	 District Forest Office, 	• Dalit NGO Federation (DNF)		
(Academic/Researc	District Development	• Himalayan Grassroots Women's Natural		
h Institute)	Committee,	Resources Management (HIMAWANTI)		
• FECOFUN (CSO)	• District Soil and	• Community Forest User Groups (CFUGs)		
• ANSAB (CSO)	Watershed			
	Conservation Office			

The arrangement of these members in different structure with their roles and responsibilities is presented in following table 11.

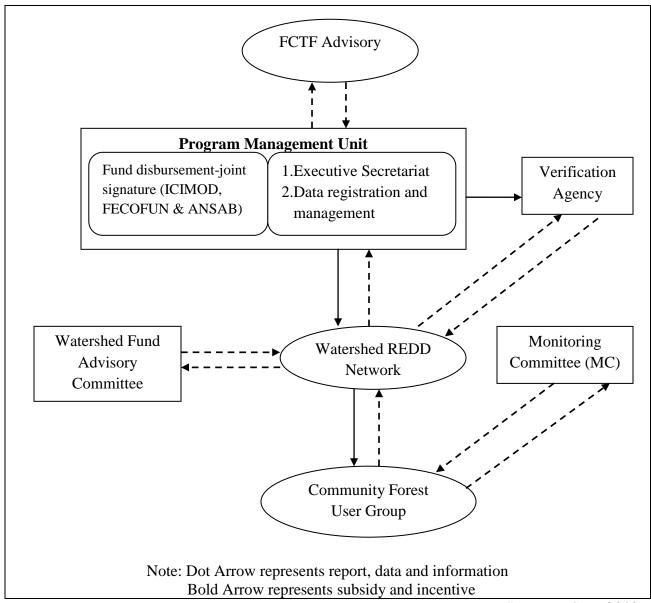
Table 11: Members in REDD structure with their Role & Responsibilities

Organizational Entities Formed	Members	Role and Responsibilities
FCTF Advisory Committee	 MoFSC-REDD Forestry and Climate Change Cell -1 NEFIN - 1 ICIMOD - 1 ANSAB - 1 FECOFUN - 1 Dalit NGO Federation (DNF) HIMAWANTI - 1 	 Supervise fund with objective to ensure effective, efficient & transparent implementation of program Provide guidance on policy & strategic matters; advice on financial & technical progress; corrective measures. Explore possibilities of new funding source for FCTF.
Program Management Unit (PMU)	Members from the implementing partners	 Work as secretariat of FCTF Play a role of central database center. Release & route REDD payments from FCTF to watershed REDD network after approval from the advisory committee.
Watershed Fund Advisory Committee	 District Forest Office District Development Committee NEFIN-District Coordination Council (DCC) FECOFUN – District Watershed REDD Network 	 Supervise fund utilization at watershed level for effective, efficient & transparent implementation of Operational Guidelines. Provide advice to PMU about operational guidelines; advise corrective measure for financial and technical problems.
Watershed REDD Network	Members from each CFUG	 Responsible for day to day management and operation of activities of pilot project. Maintain database; make claim for REDD payment to PMU; regularly report to PMU; Act as a coordinator between central, watershed level advisory committee and CFUG level. Manage, maintain and operate bank a/c

		of FCTF for watershed level.
Monitoring Committee	 District Soil and Watershed Conservation Office District Forest Office ANSAB District level organization of Dalits and Women 	Monitoring & Reporting on the eligibility & genuineness of carbon inventory, socio-economic database, fund claims & disbursements by the CFUGs
Community Forest User Group	All the local people who are member in this group	CFUG will be responsible for assisting Watershed REDD Network in carbon measurement, reporting & engagement in promotion of carbon enhancement activities & capacity building on REDD

In this project, PMU is the main unit that has all the managerial and secretarial responsibility of FCTF. It is the central level structure that is responsible for the flow of seed money on the basis of the annual carbon inventory from the Watershed REDD Network to the local CFUGs. This unit is in regular contact with the FCTF Advisory Committee for advice on the strategy, policy, guidelines and standards for fund management and also to share forest carbon data with the national data center proposed by the government (for the time being Dept. of Forest Research and Survey). The Fund Management Structure of the project reveals that each part of the structure is interacting with others in the form of sharing data, information and advice for further improvement in the future. Another important structure is the REDD Watershed Network that is responsible for the financial management of each watershed. It is formed by one member of the participating CFUGs, thus creating a sense of ownership to the local people for the project. The Fund Management Structure as designed by the project is presented below in figure 7.

Figure 7: Fund Management Structure and representation



Source: FCTF, 2010.

SECTION 2: Analysis

In this section, I present my analysis about the governance structure formed for REDD at national level by government and at local level by project, then express my view regarding their capacities and competencies, and finally evaluate the governance system.

6.5 Structure of REDD Governance System

Nepal is in the transition phase between readiness and implementation. With the acceptance of the REDD readiness preparation proposal in late June, 2010, Nepal has to prepare itself for the implementation phase by the end of 2012. During the readiness phase, Nepal formed the governance structure for REDD under the coordination of MoFSC with three different tiers: Apex Body, REDD working group and REDD cell along with the forum of multi-stakeholders to incorporate all the actors at the national level. However, at this time, Nepal is also undergoing a process of state restructuring, preparation of new constitution and the formulation of new national forest strategy (MoFSC, 2010).

With these political transformation processes and the decision to implement REDD by the year 2013, Nepal needs to work out and strengthen various aspects like carbon ownership and benefit sharing, carbon registry, database management; and most importantly, Nepal has to develop management structure at the sub-national/district level. Likewise, regarding implementation of REDD, another important issue is fund mobilization. Although, the finance and administration section was formed under the REDD cell, in order to conduct financial transactions, there is still a lack of a specific structure for the operation of the financial transactions under the REDD implementation.

As stated in the theoretical framework, Vatn & Vedeld, 2011 have explained four different types of governance structure for fund mobilization. Two alternatives - market directed (financial) intermediaries and state budget - are not under consideration in Nepal as National Strategy (Interim) for REDD in Nepal has prioritized Trust Fund Model for financial transaction. But it is unclear whether this fund will be within the national fund

or will be established as a separate national fund. From the study of interim strategy for REDD, it seems that government is more likely to form "single agreed multi stakeholder mechanisms in two tiers i.e. central and district level" like the currently working Forest Development Fund at district and central level (MoFSC, 2010). So, the government is interested in forming the structure within the national administration; this is cost-efficient and experiences already gained from these funds can be useful inputs. However, in case of a country like Nepal with weak governance, creation of a fund within the national state administration may be vulnerable to corruption and can create conflicts between the related sectors where there is lack of coordination and flow of information (Vatn & Angelson, 2009).

At the same time, the project has created the "Forest Carbon Trust Fund" at local level, separate from the government "Forest Development Fund" for implementing the seed fund of the project. This fund is also controlled by the Watershed REDD Network, formed by one member from each CFUGs of each watershed, without involving any government officials, although some government institutions/officials are involved in an advisory role (like FCTF Advisory, Watershed Fund Advisory Committee) for conducting REDD at community level. These differences between the government and project idea of REDD fund operation.

Although government is expecting to gain valuable inputs from the project, there is a disagreement between government and project regarding the formulation of a local level structure for fund implementation. Also, even if these structures are thought to be created in future, there is no link between the watershed level and national level carbon trust fund (MoFSC, 2011). So, still many discussions should take place to finalize the structural arrangements at the sub-national and community level.

6.6 Capacities and Competencies

Vatn & Vedeld, 2011 have identified four aspects of actors involved and their pattern of interaction in the governance system. In the following I discuss three of those aspects in relation to actors and their relations as identified by the national government and project.

Rights and responsibilities:

National government has identified a long list of stakeholders at all levels - national, district and community and besides that private organizations, civil society, indigenous/vulnerable groups and academic/research institutions are also grouped as the stakeholders forum in REDD institutional structure. With their involvement, it is believed that REDD will have a high level of political legitimacy and gain momentum all over the country (MoFSC, 2010). Some of these stakeholders are part of the REDD governance structure and given specific roles and responsibilities; for example MoFSC is the main implementing actor at the national level and WB is the main financial actor for intiating REDD.

As REDD is a new concept in Nepal, during the readiness phase for the preparation of RPP, there was no confliction between these actors involved. All the actors were exchanging their experiences and views in an amicable atmosphere and even civil society organizations were made a part of the REDD working group (Khanal, 2009). However, there are bound to be certain problems during the implementation phase regarding rights and responsibility among different actors that may create conflicts.

As regards the implementing actor, there seems an incongruity at the national level. In Nepal, Ministry of Environment (MoE) is a main actor responsible for the activities related to climate change and it has earlier been implementing the National Adaptation Program of Action (NAPA) for climate change, and projects related to CDM. But later, after REDD came into action, MoFSC evolved as a new and prime actor demonstrating its authority over REDD in terms of financial resources (access to over US\$ 1 million

from WB) and natural resources (right over the national forest) (Khanal, 2009). This unclear role between the MoE and MoFSC can create a conflict in the future.

Moreover, in the REDD working group there is representation of indigenous group through NEFIN, but group representation of vulnerable people and women's interests are missing. This exclusion of important actors in the RWG body can threaten the effectiveness of REDD implementation in future, since the role and rights of these actors are undermined. Hence, the existing REDD governance shows political legitimacy to a certain level, and is also widely appreciated by donor communities and civil societies, but still plenty of modifications are necessary to ensure the rights and responsibilities of all relevant actors.

In case of the project's REDD governance structure, all three consortium organizations have well-defined rights and responsibilities along with the donor organization NORAD. ICIMOD is responsible for the overall coordination of the project and provide technical guidance along with its collaborating agencies ANSAB & FECOFUN (Adhikary, 2010). ANSAB is more into developing techniques at the local level and FECOFUN is working more with the CFUGs. Similarly, the structure developed at the community level for REDD implementation has its predefined roles and responsibilities (FCTF, 2011).

However, as stated above, the role of District Forest Office (DFO) is very limited except for involvement in advisory committee. This excludes the government involvement in any decision making process related to REDD project. This can limit the legitimacy of the project among the district level government officials.

Information

Sharing of information is another important aspect, where the quality and quantity of the information disseminated matters a lot. In RPP, it is mentioned that the apex body will meet twice a year to endorse plans related to REDD, the stakeholder forum meets four times a year and RWG six times a year in order to share progress and information about REDD.

During the field work I found only five documents reporting on RWG meeting dates; these specified time and agenda during the meeting. The list of members present during the meeting and date is given in table 12 below:

Table 12: List of members present during RWG meeting.

4 th Feb, 2010	26 th Mar, 2010	7 th Apr, 2010	3 rd May, 2011	7 th July, 2011			
Members Present during meeting:							
• MoFSC	• MoFSC	• MoFSC	• MoFSC	• MoFSC			
• DoF	• DoF	• DoF	• MoE	• DoF			
• DoFRS	• DoFRS	• DoFRS	• DoFRS	• DoFRS			
• FECOFUN	• FECOFUN	• FECOFUN	• DNPWC	• DNPWC			
• NEFIN	• NEFIN	• NEFIN	• FECOFUN	• FECOFUN			
• Forest Action	• Forest Action	• SNV	• NEFIN	• NEFIN			
• LFP	• LFP		• LFP	• LFP			
	• SNV						

This shows that either there no consistency in conducting regular meetings or there is poor documentation of the meeting that occurred. In the RPP report, it is stated that in the next phase, RWG will act as an intermediate between the organization involved in this group and the other stakeholders in their constituencies, so as to disseminate information about the progress and awareness about REDD (MoFSC, 2010). But at present, frequent meeting of RWG seems to be lacking and only some organizations like NEFIN, FECOFUN are benefitting from regular participation. Also, it should be noted that MoE was made a part of RWG after the preparation of RPP, and only MoFSC and its departments - DoF, DoFRS, DNPWC - are prominent in the meetings.

Study of the RPP report indicates that many consultation and outreach activities have been conducted with many stakeholders at different level of central and district levels. These workshops have been conducted before finalization of RPP and it is planned to conduct many more in future for implementation and gaining more recognition of REDD operation (MoFSC, 2010). From participation in one of the "REDD stakeholders' forum interaction meeting" during my field work, I found that there were a wide range of stakeholders present from donor to media, I/NGOs, CSOs, academic persons, etc related

to REDD, but still some stakeholders were missing, such as deprived group organization like DANAR. When I enquired about this, government officials responded that they have informed all the relevant stakeholders, but when I interviewed an officer from DANAR opposed the view of the government official stating that they didn't get any invitation. This sort of communication gap is found to be existed between some organizations especially with less powerful actors. During the interview with DANAR organization, the officer also stated that government have some negative attitudes towards their inclusion in REDD process due to the prefernces of the donor organization (WB), as explained below.

It seemed that, there was no documentation for the agenda raised by stakeholders, their valuable inputs and criticism. When the government officials were asked about the incorporation of concerns into the REDD agenda, they were unsure about it as there was no specific method for that (personal communication) and this opinion is also shared by Bushley, 2010.

In the case of the pilot project, there seems good coordination and flow of information from central to watershed level and finally to community level. The involvement of a community based organization, FECOFUN, has made it easier to spread information to CFUGs. However, it was observed that in the district, only the people at district headquarter area are updated about the progress because most programs occur here; when moving towards the outskirts area, people become more and more unaware about the progress especially indigenous people, disadvantage groups (like Dalit) and women seemed to be left out.

Motivation

National government has identified many actors to be included in REDD action. These actors are motivated to participate in REDD governance structure by their own interest. Their level of participation and power influence the overall outcome of the REDD mechanism. Some I/NGOs have advantage of having previous knowledge and

information about climate change and they want to utilize this knowledge and broaden their perspective in relation to REDD. Other civil society organizations are motivated because of the potential benefit they will get from REDD at national and international level and thus they are showing their presence through a lot of interaction with other actors.

Some of the actors involved in REDD are playing "paradoxical roles" (Bushley, 2010). According to him, these organizations are supporting government and donor as technical experts while also standing for the rights of the local communities.

Mostly, donor organizations are also involved with their own interest and motivations. According to Bushely and Khatri, 2011, during the final report submission of RPP, Nepal was stuck with the WB pre-designed REDD template due to which it was not possible to include valuable information, experiences and criticisms, although some of these were included in the initial report. This demonstrates how a donor organization wants to develop a standard format for comparing RPP templates of all piloting countries and wants to replicate it in other countries as this can be cost-effective, no further financial effort has to be made for initial preparation.

6.7 Evaluation of REDD Governance System

In this section, I present some views regarding the type of governance system set up for REDD on the basis of criteria for assessing institutional option at the national and local level as provided by Vatn & Angelson, 2009.

6.7.1 Evaluation at National level

Setting up the governance system, including all the relevant actors with their specific role and responsibilities, is one of the most important aspects to implement REDD. In Nepal, the formation of the REDD stakeholder forum is taken as an important action and is appreciated by the international and donor organization. However, it can be argued that the presence of different stakeholders is utilized by government just to gain political legitimacy at the national and international level. Many CSOs like DANAR,

HIMAWANTI, etc state that they are in a position to formulate policy and influence in designing structure for REDD, such as in RWG, where there is domination of the government officials (4 out of 9 are the government officials). In addition, Bushely and Khatri, 2011 have found that approximately 30% (17) of consultation workshops and 87% (91) of expert consultations were conducted in Kathmandu Valley with repeated participation of same participants, due to which it can argued that there is strong influence by powerful actors while undermining the interest of other less powerful actors like local and marginalized community and community based organizations. So, at this point the political legitimacy of the whole governance structure at the local level and by the CSOs as well may be questioned.

In Nepal, government has not yet implemented any REDD project on the ground. All of the processes are in the initial stage of implementation and issues of transparency and possible corruption are not yet apparent. Like other developing countries, Nepal also has weak governance and unstable political situation. Thus it cannot be guaranteed that issues of corruption and transparency during the REDD implementation phase will not occur in future during the investment of huge amounts of money.

Similarly, RPP reports having had consultation meetings, workshops and conferences at various levels from the district to community level. But there is the question of participation; in the workshop that I attended there was very low participation from the government officials other than forestry sectors and there is one way flow of information from top down i.e. from national government to the district level organization. There wasn't any appropriate approach to incorporate the suggestions and discussion during the workshop, as no documentation was found of the issues that were discussed during the meetings.

6.7.2 Evaluation at Local level

The institutional structure set up for REDD implementation by the project shows the inclusion of a wide range of stakeholder from the national government to district level government and also the local people through CFUGs. Also, the project has incorporated important actors such as women organization HIMAWANT, DNF, etc and placed them in FCTF advisory committee. Since FECOFUN, working long for the CF program in Nepal, is one of the partners of this project, inclusion of all CFUGs in the project area and power distribution among the different stakeholders at the local level is ensured.

Moreover, coordination among various stakeholders within the project structure like CFUGs, REDD network and project implementing partners is very impressive in this region; however, coordination with other project and stakeholders along with government agencies is very weak. Link with the Dalit organization in Dolakha district was not found and even the REDD network of Charnawati, Dolakha confirmed this.

Likewise, the project has given high priority to the protection of IPs rights, women's, deprived group and poor people participation. It has developed an inclusive benefit sharing mechanism as developed in the next chapter.

SECTION 3: Challenges

This section presents the challenges that national and local level governance may face for effective, efficient and equitable implementation of REDD

6.8 Challenges for implementation of REDD in Nepal.

The main challenges for REDD governance at the national level are presented below:

 At present, REDD program is evolving at the national level without involving the local level institutions and actors. Exclusion of local level actors like community based organizations in decision making and not incorporating local people's concerns may create conflict in future. Moreover, there is a lack of awareness among local communities regarding REDD discourses, its benefits and impacts and the rationale for the REDD project (Bushley & Khatri, 2011). This top-down approach is one of the most challenging issues for REDD implementation in Nepal.

- RPP have stressed on using the existing structure for REDD implementation rather than forming a new structure. However, the studied pilot project has formed a separate structure for implementation. This discrepancy may make it difficult to replicate the project in the national structure.
- Although MoFSC has identified concerned stakeholders, some of the stakeholders
 (Dalit group, women's group, etc) claim that these are only for impressing to the
 donor organization, and their voices and concerns are not included in RPP and are
 thus being undermined by the government.
- In Nepal, CF is not the only forest management regime. Other forest management regimes related to government and private forests are mostly being excluded in piloting projects. It is assumed that present studies can be replicated in all types of forest regimes in Nepal, but this may not the case, so that REDD may be unsuccessful in future if implemented fully.
- Concern about REDD is increased only in those areas where there is an ongoing pilot project and especially in CF, which covers only 25% of the total forest cover in Nepal. Areas other than these have little knowledge about REDD process and progress. This lack of awareness among local people is one of the challenges for REDD implementation.
- In Nepal, economic viability of REDD is still questionable. Nepal needs to see if the transaction cost is compatible with the economic benefit that it is getting from REDD. Also, social and environmental impact assessment is still required to be done, from which it will establish whether the rights of indigenous people and local communities including women and Dalits are preserved or not (MoFSC, 2010). Only if there are

positive results for social and environmental impacts, will Nepal opt for REDD incentive mechanisms (ibid)

The following points summarize the challenges observed for REDD implementation at local level by studying the pilot project.

- Government officials' especially district forest officers are taking part and showing
 their presence in the various programs conducted by project related to REDD.
 Moreover they don't have any kind of documentation from the project maintained at
 the district level. It is all held by the project.
- This project has designed inclusive benefit sharing mechanism, where the fund is distributed to CFUGs on the basis of not only carbon conservation and increment but also on the basis of number of indigenous people, Dalits, women and poor present in that CFUGs. Although this mechanism forms a basis for the sharing of benefits, it is relatively complex to understand and also there will be high chance for getting double benefit to particular groups leaving behind other segments.
- In some CFUGs, there is domination of the elite group in the executive committee. This has caused the lack of information flow from committee to the lowest level of community, due to which disadvantage groups, women, IPs are lagging behind in getting updated information about REDD. So, the flow of information to all members of community can be one of the challenges for the REDD implementation at the local level.
- Since it is not sure whether REDD is going to be implemented fully in Nepal, the distribution of seed money to the CUFGs can create false hope to the people and they may be disappointed by the whole REDD program. So there is a challenge for the follow up of the program by the government after the completion of project.

CHAPTER 7: PARTICIPATION IN REDD

In this chapter, I present the second part of my thesis, related to the participation issues of indigenous people, women and Dalits in REDD mechanism. The first part of this chapter is related to participation in decision making at the national and local level whereas the second part is related to the benefit sharing mechanism at the national and local level.

Participation is the act of taking part or sharing of "something" in a group of people. "Something" can be an idea, proposal or information, etc. Participation in the development context is the act of inclusiveness, where decisions take account of the views of those that are mostly affected by any development project (Agarwal, 2001). Two issues – decision making and benefit sharing – are important in the case of participation of any group in REDD mechanism for its effective implementation at national and local level. In the coming sections issues related to these are considered.

Section I: Decision Making

7.1 Participation in Decision Making.

The power of taking decision either at national level or at local level lies with the people in the executive board. Decisions are taken by the representative may be in their own favor due to human nature. Here, I have tried to put forward the position of people especially indigenous people, women and Dalits in the decision making process in terms of participation related to REDD mechanism at the national and local level.

7.1.1 Participation of Indigenous People.

The involvement of indigenous people in REDD mechanism in Nepal started with the introduction of the "Climate Change and REDD Partnership Program" within Nepal Federation of Indigenous Nationalities (NEFIN). The starting of this program coincided with the initial implementation of REDD mechanism in Nepal at national level. From this it seems that past experience of IPs with the government and other private sectors related to conservation made them more conscious about REDD from the very beginning; in

order to ensure their rights and interests in forest policies and programs. Thus, IPs were interested in defending their role, rights and participation in the REDD implementation and also wanted to be included in the forest governance structure related to REDD (Schroeder, 2010) from the very beginning.

In terms of their forms/level of participation, IPs has been able to evolve from consultative to active participation at the national level from the early stage and this has continued till date. Initially, they were part of stakeholder group, expressing their concerns but being unsure of influencing the decision. But later on they were able to be activity-specific participants conducting four different workshops at the district level in coordination with the REDD Cell at the national level. At present they are actively participating to ensure rights protection, effective participation and fair benefits. This achievement can be observed by their having one representative in the RWG and their continuous lobbying, participating and interacting with other stakeholders besides government.

However, at local level, a study of 12 different CFUGs in Charnawati Watershed shows a different picture. Table 12 shows the total number of IPs, Dalits and high caste (Brahmin/Chhetri) in the decision making level i.e. members in executive committee. By comparing the numbers in the last three columns (representation in EC of CFUG) with the distribution by household ('number of HHs' columns) one can see whether the representation is as 'expected' (i.e. whether it reflects the distribution of IPs, Dalits and Brahmin/Chhetri in the population of the CFUG as a whole). In total, the numbers of each are very close to the statistically expected value, though there are a few 'unexpected' numbers, e.g. only one Brahmin/Chhetri in Gairi Jungle, only one Dalit in Dhade Sing Devi, 11 out of 15 Brahmin/Chhetri in EC of Charnwati. What is also important is who occupy the strong position in the executive committee like chairperson, vice-chairperson, secretary and treasurer, where they can have influential power during decision making process (Agarwal 2001, Timsina 2002). I don't have statistics on this but anecdotal evidence suggests that Brahmin/Chhetri is over-represented here.

Table 12: Representation of IPs, Dalits and B/C in CFUGs Executive Committee.

S.					Representation in EC of CFUG (Decision				
No.	No. Name of CFUG		Number of HHs		Making Process)				
			Dalit	B/C	Total #	# IPs	# Dalits	# B/C	
1	Srijana	229	0	16	11	9	0	2	
2	Gairi Jungle	190	19	95	13	11	1	1	
3	Eklepakha	187	0	58	15	11	0	4	
4	Dhade Singh Devi	99	65	54	16	11	1	4	
5	Thansa Deurali	137	43	136	13	6	2	5	
6	Gothepani	16	28	44	9	2	2	5	
7	Botlesetidevi	86	0	93	11	4	0	7	
8	Maithan Harisiddi	66	0	45	11	7	0	4	
9	Timure Tinsalle	66	0	47	11	3	0	8	
10	Mahabir	106	16	103	11	7	2	2	
11	Charnawati	75	1	143	15	4	0	11	
12	Chyanse Bhagawati	9	27	34	9	2	3	4	
Total		1266	199	868	1.45	77	11	57	
		2333		145	(79)	(12)	(54)		

Note: EC means executive committee; # means number of; B/C means Bhramin/Chhetri; number in bracket represents the "Expected number in EC".

With this condition at the local level, it is unsure that IPs will be benefitted from the REDD mechanism when it will be fully implemented within CFUGs or there must be some rigorous programs like awareness, empowerment and information sharing for having active participation of the IPs.

7.1.2 Participation of Women.

In developing countries, women are considered to be especially vulnerable to the decreasing source of forest resources because it is believed that there will be considerable pressure on women just for harvesting fodder, firewood, leaf litter, etc (Agarwal 2001, Nightingale, 2002, Agarwal 2009). As the REDD is related to forest resources and livelihood of the local people there should be concern about women's participation in REDD process.

In Nepal, women, like IPs, are also involved in REDD mechanism at national level through HIMAWANTI (The Himalayan Grassroots Women's Natural Resource Management Association), a NGO working for the betterment of women at grassroots level in various districts. During the early stage, women took part in meetings and workshops as members/stakeholders, but as argued by HIMAWANTI none of their concerns were included in the proposed RPP (personal interview). Later on HIMAWANTI managed to conduct a few workshops related to women issues and REDD at district level in coordination with REDD cell, thus acting as an activity-specific participant in REDD mechanism at national level. But even these activities seem to be more influenced by the interest of government because of the fact that they can use this NGO as a platform for conducting REDD program in relation to women for government at the district level. At present HIMAWANTI is struggling to be an interactive participant through its presence in RWG, where they can actually influence decisions in their favor.

At local level, there is a huge discrimination between males and females irrespective of their caste/ethnicity. Generally, women are the ones who have knowledge about fuel wood and fodder in their area, being the main collectors, however, their opinions and concerns are not take into account in the decisions that are taken within the CFUGs (Agarwal, 2001). There were very few cases in the studied area where females were the leaders in the executive committee, taking part actively in the decision making processes; in fact in some CFUGs, female members in EC were more interactive during the full meetings like in case of *Chyanse Bhagawati* CFUG, where even Dalit women were more forthcoming expressing their concerns and requirement in front of other people in the communities. It may be due to the fact this CFUG was adjacent to district headquarters and that these people may be influenced by the continuous lobbying of the different programs in their area to create awareness regarding their civil, political and economic rights and responsibilities. This can be taken as a positive sign of changes in the society. All the studied CFUGs have tried to maintain 33% participation of women as per the

requirement of CF guideline issued by DoF (Table 13). However, there was a general impression that women involvement was just for maintaining the obligation as given by government policy, since they only attend the meeting without being really interactive during those meetings (Timsina, 2002). This suggests that female representation in crucial decision making processes is nominal and that they are acting as either consultative or passive participants during the meetings of executive members.

Table 13: Representation of Male and Female IPs, Dalits and B/C in CFUGs EC.

		Representation in CFUG EC. (Decision Making Process)						s)
S. No.	Name of CFUG	Total # EC	#M IPs in EC.	# FM IPs in EC	# M Dalit in EC	# FM Dalit in EC	#M B/C in EC	# FM B/C in EC
1	Srijana	11	1	8	0	0	2	0
2	Gairi Jungle	13	7	4	1	0	1	0
3	Eklepakha	15	7	4	0	0	2	2
4	Dhade Singh Devi	16	7	4	0	1	3	1
5	Thansa Deurali	13	3	3	1	1	5	0
6	Gothepani	9	1	1	0	2	5	0
7	Botlesetidevi	11	3	1	0	0	3	4
8	Maithan Harisiddi	11	4	3	0	0	1	3
9	Timure Tinsalle	11	1	2	0	0	5	3
10	Mahabir	11	4	3	1	1	0	2
11	Charnawati	15	3	1	0	0	8	3
12	Chyanse Bhagawati	9	2	0	0	3	2	2
Total		145	43	34	3	8	37	20

Note: EC means Executive Committee, # means number of, M means Male, FM means Female, B/C means Bhramin/Chhettri.

Although it can be expected that there can be slow and steady change in the social practices and views regarding women's leadership and ownership from traditional belief (Agarwal, 2001), there are more challenges at the local level where REDD is going to be implemented. Women should be encouraged more and awaked for equitable participation of women in the decision making process.

7.1.3 Participation of Dalits.

Dalits are the group of untouchable people in the society who have faced discrimination for decades. In course of developing REDD mechanism as an inclusive process, Dalits are stated as one of the stakeholders at the national and local level in the RPP report, through one of the Dalit organization "Dalit Alliances for Natural Resources (DANAR-Nepal)". Even though DANAR-Nepal is identified as a stakeholder, it has only nominal participation in the REDD mechanism which can be attributed to their lack of infrastructure, resources and power and a communication gap between the government and the organization.

In the Charnawati watershed, Dalits are the weak actors in the decision making process, as their participation in the executive committee is very low as compared to other caste/ethnicity (Table 12). During the field work it was observed that inclusion of Dalits in the executive committee is a part of fulfilling the requirement of the EC rather than ensuring their active participation. In Dalit community, only those present in the EC know about the REDD project and allocation of money; other Dalit people are unaware of these. Thus, there was a complete lack of awareness among Dalit people and a lack of communication and information flow.

During the field work a vast difference in the institutional capacity, infrastructure and overall resources were found at the national level in three different organizations related to IPs, women and Dalit dealing with REDD. IPs have standard official setup consisting of sizable manpower, different sections like library and reception within a centrally located office while women organization was found to be rather lacking in resources although it also had a formal official setup. But most surprisingly Dalit organization has only a one roomed office with one or two person controlling the daily activities. There was a clear distinction between the resources available between these organizations. At the same time, it is also worth noting about the relation that these organizations have maintained with the international donor organization. NEFIN and HIMAWANTI have

link with the international donor organization but DANAR-Nepal seems to be lacking in this case. So, it is clear that IPs and women are more powerful actors in REDD than the Dalits, which can be observed by their participation in REDD mechanism with the REDD cell at national level. The following figure 8 shows the participation level of three different actors in REDD.

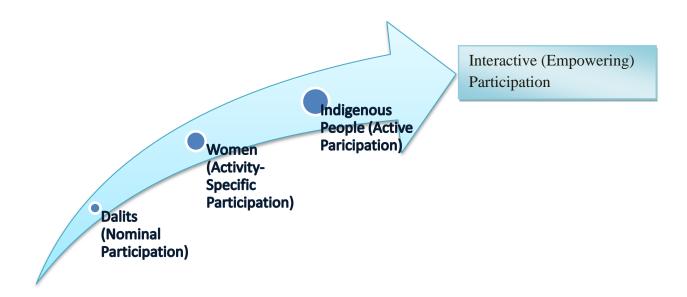


Figure 8: Participation Level of IPs, Women and Dalits in REDD

Section II: Cost-Benefits.

In most development projects including REDD there are both costs and benefits associated with the investment. In case of REDD, costs associated with REDD readiness and implementation processes like capacity building, data collection in the forest, development of rules and regulations, etc are some of the direct cost associated, but there are also indirect costs which are basically associated with the livelihood of the local people. Indirect cost involves the limitations imposed by REDD on people's use of the forest. There are issues regarding transaction, implementation and administrative cost which may be especially high due to unique geographical setting of the country. In case of Dolakha in study area, direct cost imposed by REDD are like establishment of separate

structure for REDD, manpower to conduct that program, etc while the indirect cost are for example the limitations imposed on local people like more restriction to people to get forest resources, more difficult for women to collect fuel wood & fodder, etc. Thus, it can be possible that the actual cost associated with the REDD can exceed the benefit that is provided by REDD, making REDD not effective and economically viable for the conservation of forest and improving the livelihood of the local people. Nevertheless, in this thesis I am going to concentrate mainly on the benefit sharing associated with the REDD mechanism rather than on the cost.

7.2 Benefit Sharing

Benefit sharing is another important aspect in community forestry for the effective management of the common pool forest resources, which may reduce any conflicts that may arise within the communities. Benefit sharing not only occurs at the community level; it is also important for sharing benefits from national to district level as well. As community forestry is going to be a part of REDD mechanism in Nepal, it is important to understand the historic benefit sharing mechanism of the CFUG, so as to follow, improve and include the existing benefit sharing mechanism later in REDD. Here, I am going to focus on the benefit sharing mechanism developed by the project and the problem that people are facing from the REDD fund provided to them along with some points regarding the benefit sharing at the national level too.

7.2.1 Existing Benefit Sharing Mechanism.

In the community forestry program, the benefit sharing at the national and local level depends on the institutional and policy arrangement between the government and community (Carlsson & Berkes, 2005). In case of Nepal, when handing over the community forest to any community, the state is the owner of the land, while the community owns the rights of resource management and utilization. The department of forest is responsible for providing any technical and administrative requirement to the local CFUGs if necessary and also approving the operational plan of CFUGs; besides that

government doesn't have any specific role in CF and gets very little benefit in terms of revenue and other development for local government. It is considered that the community gets more benefit from the forest that they are provided by the government, in terms of the resources and income they get from the forest.

CF program in Nepal was initiated with the view of conserving forest resources along with the objective of fulfilling the fundamental requirement of poor, disadvantaged and marginalized groups of the community; however, there are some views who argue that CF policy and program have further marginalized the poor people, women and marginalized group by accumulating the power to a certain group of people especially elite and wealthy people mostly represented in the executive committee of CFUG (Hobley 1996, Nightingale 2002, Timsina 2002). At the same time, according to Timsina, 2002, out of thousand of CFUGs, only few of the CFUGs are likely to be inclusive of poor people, women and low caste people, which are due to the homogenous class and caste composition of that group. Besides that most of the CFUGs have the managerial problem where the power to take decision is confined to the local elite and higher caste people creating conflicts and negative attitudes to the policy of CF. Furthermore, the interest of the local elite increases with the type of resources to be found in the forest; thus a forest having high monetary value trees like Shorea robusta (Sal)is found to be more interfered than a forest having tree like *Pinus roxburghii* (Koirala, 2007), which is not so valuable in terms of money. In summary, community forestry may serve as a common forum to promote the benefits of all the people, but on the other hand, it may serve as a forum for the interest of certain groups of people, who dominate others in a way which is formally legitimate, since they operate with the consent of the marginalized people in the community.

7.2.2 Problems in Benefit Sharing Mechanism.

At National Level

The policy regarding land tenure is one of the problems of community forest of Nepal, since the community fears that government may take away their land or any other potential benefits in the future. In the case of REDD, there is no specific mechanism for the sharing of benefit developed at the national level, but the interim strategy has developed detailed procedures and mechanism for the establishment and implementation of fund for sharing of benefits (MoFSC, 2010). While developing such mechanisms, Nepal can learn some shortcomings of the existing and ongoing forest conservation initiative like PES in certain area of Nepal, from which effective beneficial mechanism for REDD mechanism can be developed (Khatri 2009, Bushley 2010).

Payment for Environmental Services (PES) is a mechanism similar to that of REDD, where the communities are paid for the environmental benefits they are providing for another party. PES is being implemented in the hydropower facility at the Kulekhani reservoir in Makawanpur District, but due to the lack of government's proper monitoring mechanism (which should have been based on performance, institutional capacities) and government's failure to provide the benefits to the deserved community, this system has a bad reputation in revenue-sharing mechanism (Bushley, 2010) and people are not getting benefits which they actually deserve. This experience should be evaluated properly when developing the benefit sharing mechanism related to REDD from national to local level.

Between and Within CFUGs

In the ongoing project of REDD at Dolakha, there was some confusion among the members of CFUGs regarding the utilization of money. According to FCTF (2010) the allocation of funds between each CFUG was based on considerations of equity, governance and inclusion. More specifically, the following formula was used for calculating payments for each CFUG:

REDD payment = f {forest carbon Δ & forest carbon conservation + ethnic diversity HHs + population of men/women + number of poor HHs}

Where,

- a. Forest Carbon enhancement (Annual quantity of carbon sequestered as a result of community forest management 40%
- b. Ethnic Diversity number of households of IPs (IPs defined by NFDIN, 2002) and Dalits so called untouchable groups in Nepal 25%
- c. Sex Ratio number of women population in CFUG and in watershed 15%
- d. Poverty number of poorest households categorized by participatory well being ranking with a set of indicators in CFUGs and in watershed 20%.

(*Source: FCTF, 2010*)

This payment criterion does appear to be inclusive, although it may be rather confusing to use. Applying this formula should therefore to some extent benefit CFUGs with high proportions of marginalized groups. (But the sex ratio varies very little between CFUGs, so this will not be a significant factor). Also of importance, however, is the distribution of benefits within CFUGs, to what extent this will favor marginalized groups. This will depend on how the money is used.

There are also specific activities for utilizing money. The heading under which they can utilize money is as follows:

Table 14: Activities to conduct with REDD fund within CFUGs

Key Activities	Sub-activities	Where to use	
Pro-poor activities/	Inside forest income generating activities (NTFP promotion, etc)	CFUG	
Livelihood improvement	Outside forest income generating activities (goat rearing, vocational skill enhance training, grocery and other)	CFUG	
	Alternative Energy Scheme (biogas, ICS)	CFUG	
Forest enhancement activities	Fire management (equipments purchase, fire line construction)	CFUG	
detivities	Forest management (purchase harvesting tools, weeding, cleaning, fencing, plantation, etc)	CFUG	
	Training to women & ethnic communities	CFUG	
Capacity	Awareness raising/meeting	CFUG	
development/ awareness raising	Training, meeting & workshop on REDD among CF users, school teachers, youths and women groups	Watershed level	
Forest Carbon measurement and monitoring	Involve forest carbon monitoring (measurement and data record)	CFUG	
Any other activities			

Source: FCTF operational guideline, 2010

Some CFUG have been doing some of the programs within these activities since they first began operation with their own funds. But now there is a confusion regarding utilizing money from REDD: whether to integrate the money from REDD and CFUG own funds or to keep them separate. The CFUGs got payments in the range of 100 US\$ to 2,700 US\$ for this year from REDD pilot project, which is substantially more (in many

cases) than from own funds. Those CFUG that have less amount of money are found confused regarding which programs they should operate utilizing the REDD fund. Also, these CFUGs have in the past been operating their regular fund especially focusing on the poorest people of their group. These people may not be the IPs or Dalit so the provision of REDD of focusing on IPs and Dalits can be really problematic for this specific situation.

Analysis of the specific activities under which the CFUGs have to spend REDD fund, shows that activities such as capacity development/awareness raising may be more beneficial to elite groups rather than the women, poor and disadvantaged groups. And usually, it is observed that decision making position is dominated by elite groups and the poor, disadvantage groups are present in EC only to fulfill the quorum. But, at the same time some activities like pro-poor activity/livelihood improvement should have direct advantages to the poorest of poor people.

Local people during the fund distribution program were excited to get money from the project because they were being paid for not cutting the trees in their CF and it was like an extra income for the group, but still some people were skeptical about the durability of the program and the amount of money they will receive in future. Some people were also putting forward the challenges associated with this money and the projects itself, and were in the mood of "wait and watch". Some of the challenges as put forward by the local people regarding REDD program during the meeting of REDD Watershed Network at Dolakha, are as follows:

- What happens after the end of the pilot project? If it is not followed up by government will this be the end of the whole process they have made?
- The utilization of the fund how much to spend, and on which activity and also they were confused either to treat REDD fund as their regular income or to use the REDD income separately?

• There was also the issue of land ownership, because according to CF policy, the forest is handed over by the government to community for protection, conservation and utilization but the owner of the land is the government itself not the community. Thus, some people were concerned whether the government is going to take advantage of this policy in the future if REDD is fully implemented.

Chapter 8: Conclusion

The main purpose of REDD is to maintain and protect the forest in developing countries, thus making the forest more precious for those people whose basic needs are attached to the forest. The developed countries will also benefit by paying to protect and maintain forest in these developing countries, thus helping in combating forest degradation which accounts for about 17% of global greenhouse emission: more than the transportation sector. REDD, today is presented as one of the best alternatives for climate change mitigation benefitting globally from a local action. Most policy makers, environmentalists and scientists have seen REDD as a potential alternative for both the developing and developed countries. The basic principle of REDD sounds simple but when implemented on the real ground, there are many constraints and obstacles for REDD projects. Challenges such as who should be paid, and who will be the payer? How to measure, report and verify the real amount of CO₂ preserved? How to maintain transparency and accountability in the payment system? How to ensure that deforestation is really being reduced in significant amount and there is real conservation and preservation of the forest? And there is also the question of ensuring the rights of the people and the impact on livelihoods of people living in and around the forest area.

8.1 REDD Governance

In Nepal, especially with the current political instability, issue of REDD regarding government institutional structure, corruption and recognizing rights, needs and demand of local people is the most important aspect for the effective implementation of REDD and is bound to be a more significant issue in the future. While going through the government strategy for implementing REDD, it seems that government is trying to be inclusive with participation of all the relevant actors/stakeholders like government department, I/NGOs, civil society and academic institutions. Though each organization and vulnerable group of people is identified as a stakeholder, some of the actors like federation of IPs (NEFIN) and community forestry (FECOFUN) are very active and are

involved in this process vigorously either through the government's programs or through its own programs in collaboration with other organizations and donor agencies; while other actors like Dalits group and women seems to be less involved due to the lack of their infrastructure or power relations.

The government is preparing to link the results of various ongoing NGOs' projects conducted with financial support from different INGOs, into the national strategy of REDD, which seems to be challenging. For example, in this research I have gone through one of the ongoing projects "Design and Establishment of a Governance and Payment System for Community Forest Management under REDD" conducted by ICIMOD, FECOFUN and ANSAB. With this project government is expected to learn valuable lessons regarding the fund mobilization of REDD. But there seems to be disagreement between the interim national strategy and the project's operational guideline. On one hand, national interim strategy is planning to utilize the existing structure, "Forest Development Fund", in order to operate the REDD fund, but on the other hand, the project has established a different structure known as "Watershed REDD Network", without any government officials involvement for the operation of the REDD fund. It seems to be challenging for the government to incorporate this in the national REDD strategy. Likewise, another instance, the involvement of the government in the REDD project at the local level is very minimal, especially since government officials are represented only in the advisory committee not in the operational committee. This again creates difficulty for the integration of the project into the national strategy.

In Nepal, the program of adaptation to climate change and REDD is conducted by two different ministries. Here, adaptation and mitigation of climate change program, NAPA, is conducted by Ministry of Environment whereas REDD is conducted by Ministry of Forestry and Soil Conservation, and there seems a complete lack of coordination between these ministries regarding these issues. Thus, later in future, with the complete implementation of REDD in country, there may be conflict regarding who is the main actor responsible for the REDD. Moreover, MoFSC fails to document all the agenda and

issues that are raised by participants during stakeholders meetings, due to which there is a chance of not incorporating the valuable inputs of all the stakeholders in the final strategy.

8.2 Participation Issues

Initially REDD was focused mainly on the forest and its degradation. But later on with its constant development in the international climate conferences, REDD became an agenda of people who are dependent on the forest resources. People especially from the non-governmental organizations (NGOs) and the indigenous people association spoke up for their rights in the REDD projects. With these developments all the relevant actors are getting involved in REDD project both at national and local level in Nepal.

In this research, the participation of IPs, Dalits and women at the national and local level is studied; other actors such as academic institutions, CSOs etc are not included. While going through the participation of these actors through their related organization i.e. NEFIN, DANAR-Nepal, HIMWANTI it was found that their participation was directly proportional to their resources availability i.e. the more the organization has of infrastructure, resources, access to the international donor, etc, the more their level of participation and interaction increases. For example, among three different organizations, NEFIN was more powerful in terms of infrastructure and resources availability; thus, they are represented in RWG as an active participant in the REDD mechanism at national level. While other actors — women and Dalits — are still struggling to make their participation active in order to ensure their equal rights and benefit sharing in the society.

At the same time, study at the Dolakha district shows that the statistically expected value of IPs, women and Dalits in the executive committee is very close to their representation in it. While generalizing it may seem that the representations of these marginalized groups in the communities are done on a fair basis, there are some exceptions where their presence is very low like in *Dhade Singh Devi* (only one Dalit in EC), *Charnawati* (only four in EC), etc. Although, in this research, I have no statistical verification to support the

fact that there may be domination of elite group by placing them in the strong decision making processes like chairperson, secretary and treasurer of EC, my field experience and anecdotal evidence suggest that in some places IPs, women and Dalits are represented and participated in the community group just for fulfilling the requirements of representation; as there is a requirement to have a participation of 33% of women in the EC of CFUGs.

8.3 Benefit Sharing

Every project or program has its own cost and benefit associated with it. In this research, benefits associated with the REDD pilot project are highlighted more than the cost associated with it. In Nepal, community forest is handed over to community in order to protect forest and to improve the livelihood of people adjacent to the forest. Here, the state is the owner of forest land whereas community gets advantage from the forest resources. During the research, it was revealed that communities fear that when REDD will be implemented fully with the flow of huge amount of financial incentives, then government may take over the forest from the community in order to get benefit itself. Since there is no clear statement of policy related to this, local people were in doubt regarding the implementation and continuity of program.

The benefit sharing mechanism as developed by the pilot project of REDD tries to be inclusive, where all the marginalized group of community, IPs, Dalits and women are taken into consideration while distributing REDD fund to them. According to the criterion, the payment is made is to CFUGs on the basis of forest carbon enhancement (40%), IPs & Dalits (25%), women (15%) and poor people (20%). But there are certain problems associated with these criteria like the chances of duplication as there is no restriction for being members in two or more community forest user group and also, CFUG can attract members from IPs, Dalits, etc just for their representation rather than for their real participation.

Moreover, the pilot project has designed specific activities for the utilization of the fund provided to the CFUGs. This has created confusion among the users of CFUG regarding either to merge the REDD fund and CF fund or to keep them separate; they are worried that if separate transaction is to be maintained then there will be more financial burden for them in terms of keeping track of all the transactions. Although, specified activities are targeted for disadvantaged groups - such as income generating training, awareness raising programs, etc, elite and wealthy people may benefit more because of their literacy, power for decision making and awareness. Similarly, under activities like supporting alternative energy scheme, poor people may not be able to afford bio-gas or improved cooking stove, and usually wealthy people are the ones who benefit. It can be concluded that although the project is being conducted with the intention of being inclusive and providing equal benefit for all the group of community, the whole process seems to be confusing and there are challenges to make it inclusive to all marginalized groups. This makes it very difficult to replicate it in the future and all over the country.

REFERENCE:

- Acharya, K. P. & Dangi, R.B. (2009): "Forest Degradation in Nepal: Review of Data and Methods." Forest Assessment Working Paper 163. Forest Resources Assessment Program. Food and Agricultural Organization, Rome.
- Adhikary, S. (2010): Growing Money from Carbon. In *The Himalayan Times*. [Online].- http://thehimalayantimes.com/fullNews.php?headline=Growing+money+from+carbon&NewsID=296416
- Adhikary, S. (2011): Community Forestry in Nepal. In Satoyama Initiative. [Online]. URL: http://satoyama-initiative.org/en/case studies-2/area asia-2/community-forestry-in-nepal/shankar-adhikari-forest-officer-district-forest-office-lalitpur-nepal/
- Agarwal, B. (2009): "Does Women's Proportional Strength Affect their Participation? Governing Local Forests in South Asia." *World Development* 38(1): 98-112.
- Agarwal, B. (2001): "Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework." World Development 29(10): 1623-1648.
- Banskota, K., Karky, B.S. & Skutch, M. (2007): *Reducing Emissions through Community Forest Management in the Himalaya*. Nepal: International Center for Integrated Mountain Development.
- Bryman, A. (2004): Social Research Methods. New York: Oxford University Press.
- Bushely, B. & Khatri, D. B. (2011): "REDD+: Reversing, Reinforcing or Reconfiguring Decentralized Forest Governance in Nepal?" in Discussion Paper Series 11:3. Forest Action Nepal.
- Bushley, B. (2010): "Seeing the communities for the Carbon: Governance Challenges of Reducing Emissions from Deforestation and Forest Degradation in Nepal." *Reconsidering Development* 1(1).
- Carlsson, L. & Berkes, F. (2005): "Co-management: Concepts and Methodological Implications." *Journal of Environment Management* 75: 65-76.
- Cohen, J.M. and Uphoff, M.T. (1977): Rural Development Participation: Concept and Mechanism for Project Design, Implementation and evaluation. Rural Development Committee, Center for International Studies, Cormell University.

- Community REDD, 2011: REDD in Community Managed Forest in Nepal. [Online]. URL: http://communityredd.net/
- Dahal, S.P. (1994): Building people's participation in management in the hills of Nepal:
 A review of forest policies of Nepal, Issues and methods of Participation. MA Thesis.
 University of Reading.
- Dahal, N. & Banskota, K. (2009): "Cultivating REDD in Nepal's Community Forestry: Discourse for Capitalizing Potential?" *Journal of Forest and Livelihood*. 8(1): 41-50.
- Dev, O.P., N.P. Yadav, Springate-Baginski, O. and Soussan, J. (2003): "Impacts of community forestry on livelihoods in the middle hills of Nepal." *Journal of Forest and Livelihood* 3(1): 64-77.
- DFID (1995): *Stakeholder Participation and Analysis*. Social Development Division, Department for International Development, London.
- DFRS (1999): The forest resources of Nepal. Department of Forest Resources and Survey, Ministry of Forest and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- DoF (2009): *Community Forestry Database*. Department of Forest, Ministry of Forest and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- FAO (2010): Global Forest Resource Assessment, Nepal: Country Report. Food and Agricultural Organization. Rome, Italy.
- FAO (2002): Forest Policy and Forest Policy Reviews. Food & Agricultural Organization. Bangkok, Thailand.
- FCTF (2010): Operational Guidelines of Forest Carbon Trust Fund, 2011 for Regulating Seed Grants Under Community Forestry REDD+ Project Nepal. REDD in Community Managed Forest in Nepal.
- Ferguson, I and Chandrasekharan, C. (2005): "Paths and Pitfalls of Decentralization for Sustainable Forest Management: Experiences of the Asia Pacific Region." in Carol J. Pierce Colfer & Doris Capistrano (ed.): The Politics of Decentralization: Forest, Power and People. UK & USA: Earthscan.
- FRA (2000): Forest Resource of Nepal Country Report. Forest Resource Assessment. Food and Agricultural Organization, Rome, Italy.

- Gauli, K. & Rishi, P. (2004): "Do the Marginalized Class Really Participate in Community Forestry? A Case Study from Western Terai Region of Nepal." *Forests, Trees and Livelihoods* 14(2-4): 137-147.
- Haas, P, Kanie, N. and Andresen, K. (2011): "Actors and International Environmental Governance: Best and Worst Practices for Improving Climate Change Governance."
 Presentation International Relations and Climate Change Conference, Princeton University, 18-19 February 2011.
- Hobley, M. (1996): *Participatory Forestry: The Process of Change in India and Nepal.*Rural Development Forestry Network, Overseas Development Institute, London.
- Hobley, M. & Shah K., (1996): What Makes a Local Organization Robust? Evidence from India and Nepal. Natural Resource Perspectives. Overseas Development Institute, London.
- IPCC (2007): Climate Change 2007: Synthesis Report. Intergovernmental Panel on Climate Change. Geneva, Switzerland.
- Kandel, P. (2010): An Assessment of Data Needs. Forest Resource Assessment (FRA)
 Nepal project, Ministry of Forest and Soil Conservation, Government of Nepal
 Kathmandu, Nepal.
- Khana, S. (2009): *REDD in Nepal: Stakeholders Perspective about Future Policy Arrangement*. Master thesis. Wageninzen University, The Netherlands.
- Khatri, D.B. (2009): Compromising the environment in payments for environmental services? An institutional analysis of mechanisms for sharing hydroelectricity revenue in Kulekhani watershed, Nepal. Master Thesis, Graduate School of Development Studies, International Institute of Social Studies, The Hague, The Netherlands.
- Koirala, P.N. (2007): Benefit Sharing in Community Forests in Nepal (A case study in Makawanpur District of Nepal). MSc Thesis. Wageningen University, The Netherlands Forest and Nature Conservation Policy Group Department of Environmental Sciences.
- Lang, C. (2009, Dec 29): What Came Out of Copenhagen on REDD? in redd-monitor.org
 [Online].- URL: http://www.redd-monitor.org/2009/12/22/what-came-out-of-copenhagen-on-redd/
- Lemos, M.C. & Agrawal, A. (2006): "Environmental Governance." *Annual Review of Environmental Resources* 31: 297-325.

- MoFSC (2011): Study on REDD Plus Piloting in Nepal. REDD Forestry and Climate Change Cell, Ministry of Forests and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- MoFSC (2010): National Strategy (Interim) for Reducing Emissions from Deforestation and Forest Degradation (REDD) plus in Nepal: Readiness Phase (2010-12). REDD-Forestry and Climate Change Cell, Ministry of Forestry and Soil Conservation, Government of Nepal Kathmandu, Nepal.
- MoFSC (2010): *Nepal's Readiness Preparation Proposal REDD*. Ministry of Forest and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- MoFSC (2008): The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN) Template. Ministry of Forest and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- MoFSC (2000): *Forestry Sector Policy 2000*. Ministry of Forest and Soil Conservation, Government of Nepal, Kathmandu, Nepal.
- MPFS (1989): *Master Plan for the Forestry Sector Nepal*, *1989*. Ministry of Forest and Soil Conservation, Government of Nepal, Nepal.
- Nagendra, H., M. Karmacharya, and B. Karna. (2005): "Evaluating forest management in Nepal: views across space and time." *Ecology and Society* 10(1): 24.
- NBS (2002): *Nepal Biodiversity Strategy*. Ministry of Forest and Soil Conservation. Government of Nepal, Kathmandu, Nepal.
- Nepali, P.B. (2008): "Traditional Caste based Occupations". [Online].-URL: http://nepaldalitinfo.net/wp-content/OccupationalCastes.pdf (retrieved on: Jan, 2012)
- NEFIN (2010): Land, Forest and Indigenous Peoples' Rights in relation to Climate Change and REDD (Policy and Program Analysis). Kathmandu: Baikalpik Media Network.
- NFDIN (2001): National Foundation for the Development of Indigenous Nationalities Act, 2002. Ministry of Law and Justice. Government of Nepal, Kathmandu, Nepal.
- NFID (2011): Nepal Forest Information and Data. [Online].-URL: http://rainforests.mongabay.com/deforestation/2000/Nepal.htm {retrieved on 22nd Feb. 2012}

- Nightingale, A. J. (2002): "Participating or just sitting in? The dynamics of gender and caste in community forestry." *Journal of Forest and Livelihood* 2(1): 17–24.
- Niraula, R.R & Maharjan, S.K. (2011): Forest Cover Change Analysis in DolakhaDistrict (1990-2010), Application of GIS and Remote Sensing. Nepal Swiss Community Forestry Project, Swiss Development Cooperation, Nepal.
- North, D. C. (1990): *Institutions, institutional change and economic performance*. Cambridge, Cambridge University Press.
- NPC (2007): *Three Year Interim Plan 2007/08-2010/11*. National Planning Commission. Government of Nepal. Kathmandu, Nepal.
- NSCFP, 2011: Nepal Swiss Community Forestry Project. [Online].- URL: http://www.communityforestry-nscfp.org/
- Oakley, P. (1991): "The Concept of Participation in Development." *Landscape Urban Planning*. 20: 115-122.
- Ojha, H., Persha, L. & Chhatre, A. (2009): Community Forestry in Nepal: A Policy Innovation for Local Livelihoods. International Food Policy Research Institute (IFPRI) Discussion Paper 00913.
- Paudel, S.K. (2000): *Implementing Community Forestry in the Terai Region of Nepal: How, Where and with Whom?* Master Thesis. University of Twente, ITC, Netherlands.
- Poudel, I.P. (2009): Impact of Community Forests on Biodiversity Conservation in Nepal.
 Master Thesis. National University of Singapore, Singapore.
- REDD Cell (2009): REDD Forestry and Climate Change Cell. Ministry of Forest and Soil Conservation, Government of Nepal. [Online].- URL: http://mofsc-redd.gov.np/
- Schroeder, H. (2010): "Agency in International Climate Negotiations: The Case of Indigenous Peoples and Avoided Deforestation." *International Environmental* Agreements: Politics, Laws and Economics 10 (4): 317-332.
- Scheyvens, H & Lopez-Casero, F. (2009): REDD Negotiations: Progress, challenges and Ways. Institute for Global Environmental Strategy (IGES) Briefing Notes on the Post-2012 Climate Regime (5). [Online].- URL: http://www.iges.or.jp/
- Singh, B.K. & Chapagain, D.P. (2006): "Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are They Contributing to Better Forest Management and Poverty Reduction?" in Understanding Forest Tenure in South and

- Southeast Asia. Forestry Policy and Institutions Working Paper 14. Food and Agricultural Organization, Rome.
- Skutsch, M. M. (2011): Community Forest Monitoring for the Carbon Market: Opportunities Under REDD. London, Earthscan.
- Spergel, B. & Wells, M. (2009): "Conservation Trust Funds as a Model for REDD+ National Financing." in Angelsen, A (ed.): *Realizing REDD+ National Strategy and Policy Options*. Center for International Forestry Research (CIFOR): Indonesia.
- Stern, N. (2007): Stern Review on the Economics of Climate Change, Executive Summary. HM Treasury, London.
- Sunderlin, W.D. & Atmadja, S. (2009): "Is REDD+ an idea whose time has come, or gone?" in Angelsen, A (ed.): Realizing REDD+ National Strategy and Policy Options.
 Center for International Forestry Research (CIFOR): Indonesia.
- Timsina, N. (2002): "Empowerment or Marginalization: A Debate in Community Forestry in Nepal." *Journal of Forest and Livelihood* 2(1): 27-33.
- Tremblay, M.-A. (1957): "The Key Informant Technique: A Non-ethnographic Application." *American Anthropologist* 59 (4): 688–701.
- UNDP (2008): The Dalits of Nepal and a New Constitution. A Resource on the Situation of Dalits in Nepal, their Demands and the Implications for a new Constitution. United Nations Development Program, Kathmandu, Nepal.
- UNFCCC (2010): Report of the Conference of the Parties on its fifteenth session. United Nations Framework on Climate Change Conference. Copenhagen.
- Vatn, A. (2005): *Institutions and the Environment*. UK: Edward Elgar Publishing Ltd.
- Vatn, A. & Vedeld, P. (2011): Getting Ready! A Study of National Governance Structures for REDD+. Noragric Report No. 59. Department of International Environment and Development, Norwegian University of Life Sciences, UMB, Norway.
- Vatn, A. & Angelsen, A. (2009): "Options for National REDD+ Architecture." in Angelsen, A (ed.): Realizing REDD+ National Strategy and Policy Options. Center for International Forestry Research (CIFOR): Indonesia.
- Vatn, A., Vedeld, P., Petursson, J.G. & Stenslie, E. (2009): The REDD Direction-The
 Potential for Reduced Forest Carbon Emissions, Biodiversity Protection and Enhanced

- Development. Noragric Report No. 51. Department of International Environment and Development, Norwegian University of Life Sciences, UMB, Norway.
- Vaus, D. (2001): Research Design in Social Research. London: Sage Publications.
- Wagley, M & Ojha, H. (2002): Analyzing Participatory Trends in Nepal's community Foresty. Policy Trend Report. Institute for Global Environmental Strategies (IGES). [Online]:- URL: http://enviroscope.iges.or.jp/modules/envirolib/upload/371/attach/09_Nepal.pdf
- Wakiyama, T. (2011): "Community Forestry in Nepal: A Comparison of Management Systems between Indigenous Forestry and Modern Community Forestry." University of East Anglia, England [Online]:- URL: http://enviroscope.iges.or.jp/modules/envirolib/upload/616/attach/01Nepal.pdf
- Young, O. (2002): The Institutional Dimensions of Environmental Change: Fit, Interplay and Scale. USA: MIT Press.