MSc Thesis

Cooperation in Multi-actor Forest Governance:

The Case of the Bale Eco-Region REDD^{+} Project, Ethiopia

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ABSTRACT

The main purpose of this study was to understand the extent to which local stakeholders are willing and able to cooperate in REDD$^+$ in the Ethiopian context. Data were collected through interviews, focus group discussions and document analysis. Accordingly, seventy eight individual interviews and three focus group discussions were conducted, and various pertinent documents were analyzed. Stakeholder analysis was undertaken to identify potential stakeholders and their cooperative relations on the subject of the study. Several stakeholders have been identified out of which four of them; i.e. members of the Birbirsaa Natural Resource Management cooperative (CBO), unorganized forest user community members (non CBO), Oromia forest & wildlife enterprise-Bale branch and Farm Africa & SOS Sahel Ethiopia, were distinguished as the key ones. Stakeholders' cooperation seems to be affected by three groups of factors: 1) those related to the REDD$^+$ itself, i.e. uncertainties and confusions; 2) those related to the stakeholders themselves (e.g. perceptions) and 3) various contextual factors (e.g. institutions, poverty). The main conclusion from the results was that achieving an optimal level of cooperation appears difficult, if not impossible. The majority of the stakeholders seem conditional cooperators. Among other things, the existence of alternative means of livelihoods for the local communities, effective law enforcement and recognition of the customary use rights likely enhance one's commitment to cooperate.

Key words: *Cooperation, Stakeholder, Governance, Institutions, Chiri forest*

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[1] *Wondo Genet College of Forestry and Natural Resources*

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ACRONYMS

AD:	Avoided Deforestation
AEB:	Arsi Enterprise Branch (of OFWE)
ATC:	Ability to Cooperate
BEB/OFWE-BEB:	Bale Enterprise Branch (of OFWE)
BERSMP:	Bale Eco-region sustainable forest management programme
BMNP:	Bale Mountains National Park
CBO:	Community Based Organization
CDM:	Clean Development Mechanisms
CI:	Conflict of Interests
CK:	Chiri Kebele
CO_2:	Carbon Dioxide
COP13:	Thirteenth Conference of the Parties
CPR:	Common-Pool Resource
DF:	Degree of Freedom
DM:	Dello Menna
DMW:	Dello Menna Woreda (District)
EEPFE:	Environmental Economics Policy Forum for Ethiopia
(E)NGO:	(Environmental) Nongovernmental Organization
FA&SOS Sahel:	Farm Africa and SOS Sahel Ethiopia
FFE:	Forum for Environment
FGD:	Focus Group Discussion
FPS:	Forest Products and Service
FSC:	Forest Stewardship Council
FZS:	Frankfurt Zoological Society
GHG:	Greenhouse Gas
GO:	Government Organization
HH:	Household
IPCC:	Intergovernmental Panel on Climate Change
JFMA:	Joint Forest Management Arrangement
LSE:	London School of Economics
MELCA:	Movement for Ecological Learning and Community Action

NAPA:	National Adaptation Programme of Action
NCBO:	Non Community Based Organization
NTFPs:	Non Timber Forest Products
ODA:	Overseas Development Administration
OFWE:	Oromia Forest and Wildlife Enterprise
PEFC:	Programme for the Endorsement of Forest Certification
PES:	Payments for environmental services
PFM:	Participatory Forest Management
RDIC:	Resource Dependency and Institutional Cooperation model
RDT:	Resource Dependence Theory
RED:	Reduced Emissions from Deforestation
REDD:	Reduced Emissions from Deforestation and Forest Degradation
R-PIN:	Readiness Plan Idea Note
SFM:	Sustainable Forest Management
SNT:	Social Network Theory
SPSS:	Statistical Package for the Social Sciences
$tCO_{2:}$	Tonne of Carbon Dioxide
UK:	United Kingdom
UNDP:	United Nations Development Programme
UNESCO-WHC:	United Nations Educational, Scientific and Cultural Organization- World Heritage Center
UNFCCC:	United Nations Framework Convention on Climate Change
VCU:	Volume of Carbon Unit
WTC:	Willingness to Cooperate

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CHAPTER 1: INTRODUCTION

1.1 Climate Change

Climate change is one of the formidable challenges of our time that puts the fate of every life at risk. Global warming, one of its manifestations, is assumed to be caused by human activities like emissions of the greenhouse gases. According to the Intergovernmental Panel on Climate Change (IPCC 2007), emissions of the greenhouse gases are expected to rise by 25-90% by 2030 and consequently, the global temperature is assumed to increase with 3^{o}C per century. The report further indicated as 1–2.5°C rise in temperature in the tropics would cause a serious reduction in crop yields, the outbreak of diseases like Malaria and the extinction of 20 – 30% of plant and animal species in the region.

The Stern review (2006) also indicated that climate change would affect (directly or indirectly) all countries of the world, irrespective of their geographical locations and other status (e.g. economic situation). According to the report, it is unlikely for countries to face exactly the same situations both in terms of the impacts of the climate change and the type of actions to be taken. However, the impacts and the benefits of the actions are border-less and can be felt across political and geographical boundaries. For instance, global warming, as a result of high CO_2 emissions in the industrialized countries, would strengthen the occurrence of drought in Africa. As a result, border-less problems of climate change need to be tackled by cross-border cooperation between countries. Accordingly, countries are urged to act together and come up with viable options that would at least reduce the likely negative impacts of climate change.

In history, countries have jointly solved several international problems (e.g. economic crisis, security issues, etc.) through vertical (involvement of states in regional and/ or global initiatives) and horizontal (e.g. involvement in initiatives between two or more neighboring countries) cooperation (Milner, 1992). Now the time has come to capitalize on the lesson learned from this effective cooperation and adapt it to the climate change problem. In this regard, some regional

and global level climate change initiatives (e.g. Reduced Emissions from Deforestation and Forest Degradation-REDD^{+}) can be regarded as a timely response to such needs.

Such collaborative initiatives can summon countries' efforts to combat climate change either through mitigation (reducing greenhouse gas emissions) or adaptation (coping with climate change impacts that cannot be avoided) strategies (Burton et al 2006). Those countries which emit much of the GHGs, most industrialized countries and fast growing economies such as China, are required to reduce their level of emission and hence, contribute more to mitigation, while, those countries that have less of a contribution to emissions (vulnerable developing countries) are expected to strengthen their capacities towards adaptation.

Ethiopia is one of the developing countries in Sub Saharan Africa which is under serious threat of climate change. Manifestations of climate change in Ethiopia include recurrent drought, floods and outbreak of diseases like Malaria. As a result, the biodiversity and the overall economy of the nation are under high risk unless necessary measures are taken in time. In recognition of such needs, Ethiopia has developed a national climate change adaptation program of action (NAPA) in 2007 and prioritized adaptation and mitigation mechanisms including expansion of community forestry based carbon sequestration projects. In this regard, the country has recently registered its first CDM[2] pilot project, the HUMBO Assisted Natural Regeneration (R-PIN, 2008) while other similar projects including 'Bale Eco-region REDD^{+}', which is the focus of this study, are in the pipeline. The Bale Eco-region REDD^{+} project, which is one of the largest African projects of its type, is expected to contribute much to the country's efforts in this respect.

1.2 REDD^{+}

Although, formally recognized in 2007 during the United Nations Framework Convention on Climate Change (UNFCCC) 13th conference of the parties (COP13) in Bali, the idea of REDD had its roots in the Kyoto Protocol of 1997 (Holloway and Giandomenico, 2009). The initial plan was to reduce emissions from deforestation (RED); and it was conceptualized as reduced emissions from avoided deforestation (AD) in 2005. Later through a series of negotiations the inseparability of deforestation and forest degradation became recognized, and a second 'D' was

[2] Clean Development Mechanism

added to include forest degradation, and it became 'reduced emissions from deforestation and forest degradation (REDD)'. Again in 2008 the plus (+) sign was added to indicate the inclusion of benefits from other forestry activities that would help emission reductions. As a result, REDD$^+$ stands for reduced emissions from deforestation and forest degradation and the role of conservation, sustainable forest management practices and enhancement of forest carbon stocks in developing countries (Holloway and Giandomenico 2009). In short, REDD is a mechanism of reducing emissions, mainly from deforestation and forest degradation through financial incentives; while REDD$^+$ explicitly states the inclusion of financial incentives for the role of 'conservation, sustainable forest management practices and enhancement of forest carbon stocks in addition to the deforestation and forest degradation. Developed countries are expected to be the main contributors of the required financial incentives. And efforts are being made to obtain financial supports from the emerging economies. The main aim of the REDD$^+$ scheme is to encourage emission reduction efforts through avoidance of deforestation and forest degradation; promotion of conservation and sustainable forest management practices. It aims to do so by giving financial benefits to the forest owners, in developing countries, who implement at least one of the above stated emission reduction mechanisms. As it is a performance based scheme, the incentives are given only to those forest owners whose forests fulfil the required standards (e.g. technical).

From its very beginning REDD$^+$ has targeted the forestry sector which is the second largest source of GHGs after the energy sector. Forestry sector accounts for about 20% of the total GHGs emissions of which 18% comes from deforestation alone (Angelsen et al 2009). However, forests are not only the sources of GHGs but also they can provide the cheapest remedies (Stern 2006). As a result, any efforts made to combat climate change in ignorance of this sector are apparently suboptimal. According to Peskett et al (2008), emission reduction through REDD$^+$ has other ambitions such as improving the livelihood conditions of the forest dependent communities, conservation of the forest biodiversity and maintenance of the overall ecosystem integrity. However, despite the nobility of its objectives, REDD$^+$ is yet contentious and has been under enduring negotiations. Especially issues like the source and means of its finance, the rights of the indigenous communities, the type of forest to be targeted (plantation vs. natural forests), and its governance are yet controversial.

However, despite the controversies, some countries such as Cambodia and Papua New Guinea have already started implementation of their pilot REDD$^+$ projects while others such as Ethiopia are in preparation. Currently, national governments are being encouraged to take greater responsibilities over the implementation of the REDD$^+$ pilot projects (Wiersum 2009; Agrawal 2008). The trend is expected to promote greater accountability in the use of finance and ease the monitoring and the evaluation procedures. However, national governments are expected to adopt REDD$^+$ international frameworks in line with their respective development programmes. They are required to coordinate all the national and sub national level actions in accordance within the REDD$^+$ international frameworks. Due to various situational factors, some implementation/ performance irregularities would presumably exist not only among the nation states but also at the sub national levels. For example, Davis (2010) reviewed REDD$^+$ readiness plans of sixteen countries and identified unclear land tenure system and poor enforcement of the rules as major challenges for the implementation of the REDD$^+$ scheme in most of the countries included in the survey. Moreover, Davis indicated that adherence to the principles of good governance like transparency, accountability, effective participation and coordination are crucial for the success of REDD$^+$ projects regardless of the circumstances.

1.3 Problem Statement

The forestry sector of Ethiopia has been subjected to different experimental policies, which have failed to achieve the desired goals of their time. The former regimes were known for their tight command and control policies that had pursued the objectives of the classical forestry like timber production and conservation, even though they were successful in none of them (Stellmacher 2007; Lemenih and Bekele 2008). They portrayed local communities as devastators and threats to the forests and put almost all forests under the state control (Bekele 2003). Even today such thoughts and practices seem to prevail in society, including among the trained foresters. Consequently, there exist considerable suspicion and reluctance to accept the local communities as legitimate and important allies (Lemenih and Bekele 2008).

However, thanks to some international NGOs and recent trends of the global forest and nature policies, some initiatives that encourage the participation of the local communities in forest governance have emerged. For instance, pilot participatory forest management (PFM) projects have been underway in different parts of Ethiopia since the early 1990s with voluntary partnerships between the local communities and the facilitating NGOs (Gobeze et al, 2009).
The main objectives of these PFM projects have been the decentralization of forest governance, and empowerment of local communities to have a fair say and stake in the forest resources in their vicinity. Nevertheless, the success of these PFM projects remains controversial (Lemenih and Bekele 2008; Gobaze et al 2009). According to these authors, the main setback for the success of PFM projects in Ethiopia has been weak government support. Inadequate monitoring of PFM initiatives, weak legal support to forest users organized under PFM schemes and sometimes breaching signed terms of agreements are among the main hindrances from the government side in this regard. Moreover, ill-defined forest property rights and flawed enforcement of the existing forest laws are among the acknowledged major impediments to the forestry sector development in Ethiopia (Bekele 2003; Stellmacher. 2007; EEPFE, 2008).

However, despite such limitations, some climate change driven new partnerships (e.g. Bale Eco-region REDD^{+}) are being emerged involving both the state and non state actors from in and outside Ethiopia. Promotion of a forest governance regime that can fairly entertain the interests

of all stakeholders, including that of the local communities is among the major objectives of such partnerships. With such governance arrangement, the partners intend to attain multiple objectives from a given forest at a time. For example, a forest should contribute to climate regulation and nature conservation without significantly compromising the livelihood of the forest dependent local communities and vice versa. However, unlike PFM, most carbon-based projects, including the Bale Eco-region REDD$^+$, favor large-area forests over the small patches of the community forests. Accordingly, in countries like Ethiopia, such projects seem to suit large and intact forests that are mostly under the state control. Therefore, in such countries including Ethiopia, carbon projects are likely to undo the gains of PFM schemes and further enhance recentralization of the forest governance. However, despite such concerns, there are plans to implement carbon projects (including the Bale Eco-region REDD$^+$) within the frameworks of PFM (R-PIN, 2008). Involvement of the international actors (e.g. CO_2 buyers) and institutions (e.g. REDD$^+$ rules and principles); and the number and types of actors involved distinguish the Bale Eco-region REDD$^+$ from the PFM pilot projects.

Currently, the area of the Bale Eco-region REDD$^+$ project falls under three administrative categories, i.e. forest land owned by the federal state, forest land owned by the Oromia regional state and forest land owned by the Oromia regional state but managed by community-based organizations (Lemenih et al 2009). Presumably, these administrators have different priorities regarding forest uses. For example, for the Bale Mountains National Park, which is under federal state, wildlife conservation is the most likely priority use; while profit making and the livelihood improvement would come first for the OFWE[3] and the local communities respectively. The project is being envisaged in the area despite such administrative and interest divides. Currently, neither territorial boundaries between the forests nor authoritative boundaries between the administrators seem to be clear. For instance, local communities, who are often blamed for deforestation and illegal encroachment of the park, are living in and around the forests in the entire eco-region (Farm Africa and SOS Sahel 2007). Their livelihoods are heavily dependent on these forests (Lemenih et al 2009). However, despite concerns over the legitimacy of their uses, it would be difficult to evict them or stop them from using the forests. Nonetheless, the existing

[3] Oromia Forest and Wildlife Enterprise

institutions do not explicitly recognize and accommodate the interests of such local communities in Ethiopia.

However, realization of one's objective, under such circumstances, likely depends on the level of cooperation between the concerned parties. Therefore, it is imperative to see the potential factors that would enhance or constrain cooperation between the involved parties in this particular case. Accordingly, this thesis was designed to analyze and explain possible scenarios under which the Bale Eco-region REDD^{+} project actors would cooperate. Lack of such information has already been acknowledged as a critical gap in the forestry sector of Ethiopia, particularly at the local level (EEPFE, 2008; Lemenih and Bekele 2008).

1.4 Objectives of the study

General objective: to understand the extent to which local stakeholders are willing and able to cooperate in REDD$^+$ in the Ethiopian context.

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Specific objectives

1. To identify and characterize potential stakeholders of the Bale Eco-region REDD$^+$ project.

2. To know how the identified stakeholders collaborate on issues pertinent to forest governance under this project arrangement.

3. To investigate how the local community members' perceptions on other stakeholders and mediating institutions and envisaged economic benefits from the project, affect their willingness to cooperate under this project arrangement.

4. To examine if there are enabling conditions (in terms of resources and institutions) for the local community members to cooperate with others under this project arrangement.

1.5 Research Questions

1. What types of stakeholders are involved in the Bale Eco-region REDD$^+$ project?
2. How do these stakeholders collaborate on issues pertinent to forest governance under this project arrangement?
3. How do local community members' perceptions on other actors[4] and mediating institutions and envisaged economic benefits from the project affect actors' willingness to cooperate under this project arrangement?

4. How able are the local community members (in terms of resources and institutions) to cooperate under this project arrangement?

[4] Actors and stakeholders are considered synonyms in the contexts of this thesis

1.6 Structure of the Thesis

Chapter two gives background information about the project and the study area. Chapter three provides the theoretical and the conceptual frameworks. The theoretical framework highlights literature related to governance and cooperation. It focuses on the main school of thoughts on governance of common-pool resources in general and forests, in particular. Moreover, it sheds light on the main theoretical accounts for humans' cooperation. The conceptual framework first conceptualizes the main concepts of the study and then introduces stakeholder typologies and the conceptual model, i.e. the modified Resource Dependency and Institutional Cooperation (RDIC) model. Chapter four presents the research methods. Chapter five delivers the results obtained. First, the qualitative results are described, and then the quantitative part follows. Chapter six discusses the main findings of the study. Accordingly, it tries to elaborate on possible constraints and opportunities for the local community members to cooperate with others. Chapter seven gives conclusive remarks and some recommendations.

CHAPTER 2: THE BALE ECO-REGION REDD$^+$ PROJECT

2.1 The Project Background

The Bale Eco-region REDD$^+$ project, the largest project of its type in Ethiopia, was initiated by the Bale Eco-region sustainable forest management programme (BERSMP) in partnership with 'Oromia Forest and Wildlife Enterprise (OFWE), formerly known as Oromia Forest Agency' and the local community cooperatives. The main aim of the partnership has been the protection and rehabilitation of the natural forests in the Bale Mountains massifs. From the two feasibility studies conducted in the region it was concluded that carbon finance is the best feasible option for the attainment of dual objectives of conserving the forests and improving the livelihoods of the forest dependent local communities.

The project covers an area of about 500,000 ha and is estimated to sequester about 21 million tCO_2 by 2017 through reduction of deforestation, rehabilitation of the degraded forests and the promotion of sustainable forest management practices (Tennigkeit 2009). According to this author, the project can reduce emissions of about 45 to 97 million $mtCO_2e$ over a period of 20 years depending on the measures taken, i.e. only avoidance of deforestation (AD) or combining it with other enhancement activities like sustainable forest management (SFM). As stated above (see the statement of the problem on page 6) the project area falls into three administrative categories. Oromia Forest and Wildlife Enterprise (OFWE), an autonomous public enterprise, is mandated to implement the project through its Bale branch office (BEB) in partnership with the community based organizations (CBOs) and the facilitator NGOs (Farm Africa and SOS Sahel). Farm Africa and SOS Sahel provide technical backup for both OFWE and CBOs on sustainable forest management practices. OFWE exclusively holds the right to the carbon credits and controls the forest fund bank account to which the carbon fund would be channeled. The organizational structure of the project is depicted in figures 1&2.

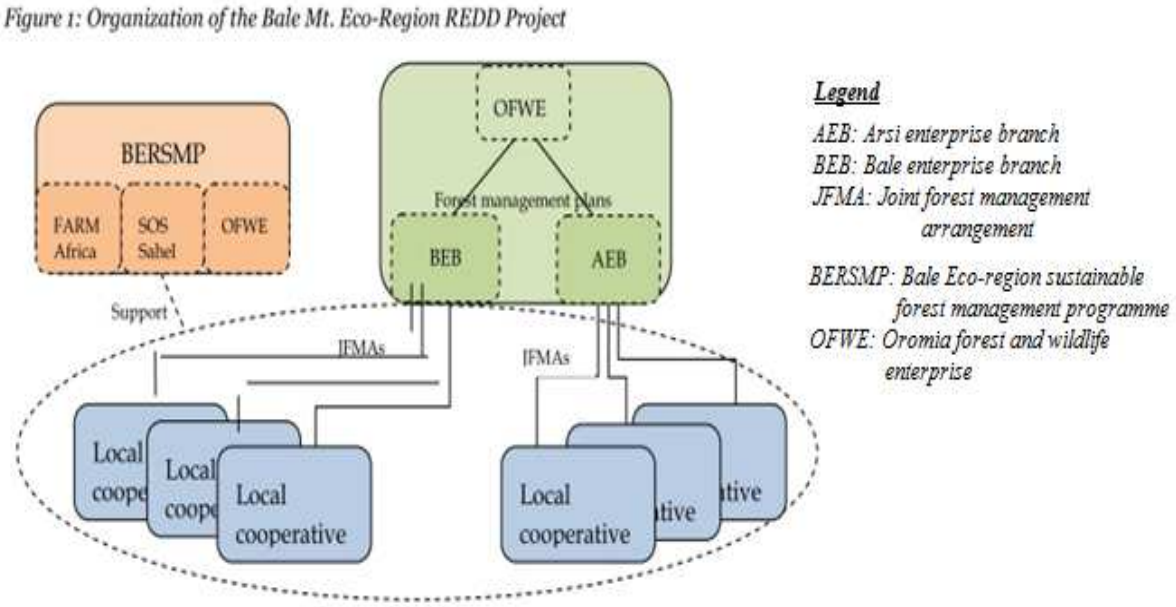


Figure 1: Organization of the Bale Eco-region REDD^{+} project

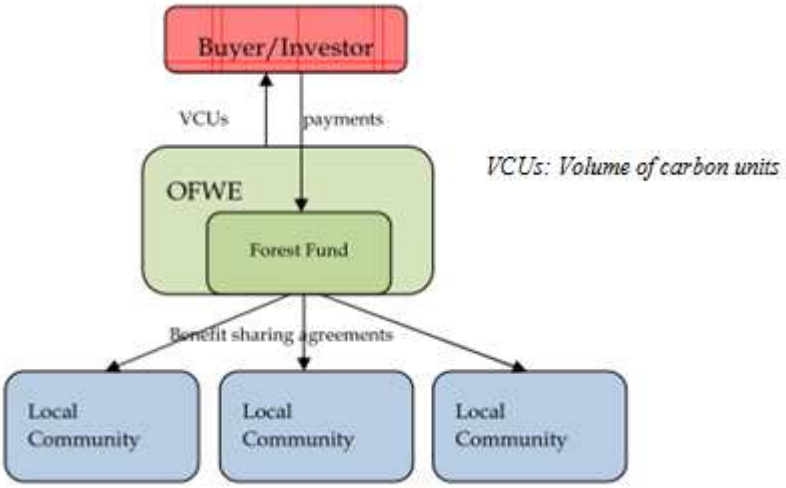


Figure 2: Carbon credit payments in the Bale Eco-region REDD^{+} project

Source: Robert O'Sullivan and Mellese Damtie (2010)

2.2 Description of the Study Area

In order to give a general overview of the study area, I first briefly introduce the Bale Eco-region and then present the specific research site, i.e. the Chiri forest.

The Bale Mountains Eco-Region

The Bale Mountains massif is among the 34 world biodiversity hotspots. It is home for about 40% of the known 1000 medicinal plant species of Ethiopia and the largest portion of the wild coffee genetic stock in the country (UNESCO-WHC, 2008). Owing to its wide topographical range, i.e. 1500 – 4377 meters above sea level, the eco-region has different ecological zones including moist tropical forest, afro-alpine habitats, woodlands, grasslands, wetlands and a large percentage of Ethiopia's endemic plant and animal species (Farm Africa and SOS Sahel. 2007). Apart from its ecological significances, it is also the main source of water for about 12 million people living in its down streams in the southern Ethiopia and western Somalia. Unfortunately, it is also one of the areas in Ethiopia where problems of natural resource management are seriously prevalent. Accordingly, its unique biodiversity and other ecological integrity are under continuous threats. Deforestation for agricultural expansion and consequent land and forest degradation are among the main causes.

The Chiri Forest

The Chiri forest is located in the Chiri Kebele[5] of the Dello Menna Woreda[6] and has an estimated area of about 4743.71ha. It is bordered by the Shawe forest to the west, the Wabero kebele to the east, the Bale Mountains National Park (BMNP) to the north and the Chiri Kebele private farm lands to the south. It is a secondary natural forest, i.e. subjected to human interventions, with common tree species such as *Afrocarpus (*formerly known as *Podocarpus) falcatus, Celtis africana, Aningeria adolfi-freidericii, Polyscias fulva, Olea capensis subsp. Macrocarpa (O. hochstetteri)* and many more. Moreover, it is home for a variety of wild animals such as lion, leopard, warthog, bushbuck, colobus monkey, baboon, fox, bush pig and different

[5] Kebele = Peasant association
[6] Woreda = District

species of bird (OFWE-BEB and Birbirssa CBO joint resource inventory report, 2009). Divided into four compartments namely *Malkaa Funyaani, Bayichoo, Wuraanwur-Hiliyee* and *Dikichoo Sokoraa* the forest is jointly administered by the Oromia Forest and Wildlife Enterprise-Bale branch (OFWE-BEB) and Birbirssaa natural resource management cooperative (CBO). Though, members of the Birbirssaa CBO have been provisionally granted use rights the ownership of the forest yet belongs to the OFWE-BEB. Accordingly, the entitlement of the CBO members to the benefits stated in the agreement documents has been granted on the conditions of their full compliance with the terms of agreements stipulated in the same documents. Under the current arrangement, the CBO members are allowed to use and manage the forest areas in their respective holdings without further expansion. According to the joint resource inventory report, stated above, the main problems of the forest include slashing of the understory vegetations, heavy grazing and girdling of some timber trees (e.g. *Afrocarpus falcatus*). The forest is one of the promising candidate forests for the pilot REDD^{+} project. Hence, its selection, for this study, was based on the principle of choosing an information rich case within a case. Besides other technical considerations, the selection was mainly based on its accessibility and existence of well established community based organizations that operate under the PFM schemes.

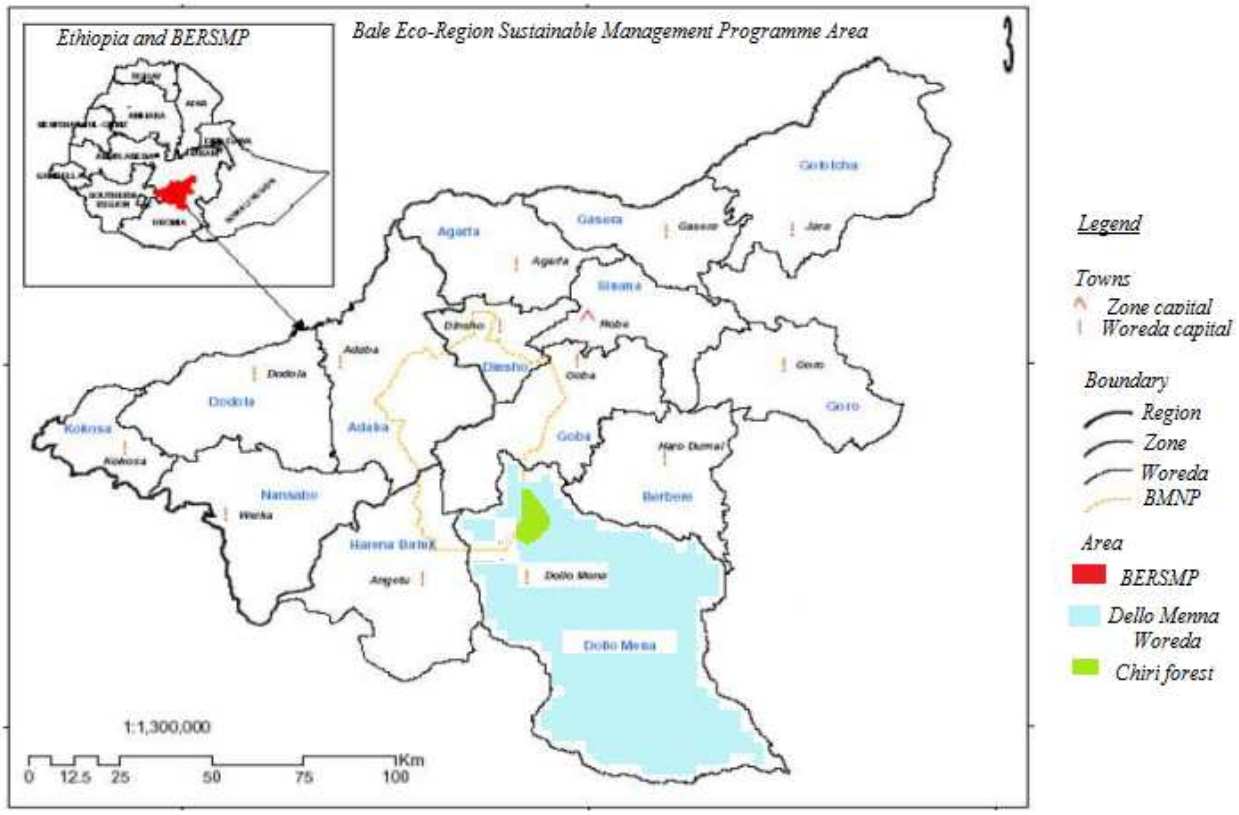


Figure 3: Map of the study area

Adapted from Tadesse et al (2011).

CHAPTER 3: THEORETICAL AND CONCEPTUAL FRAMEWORK

This chapter presents the theoretical and the conceptual frameworks of the study. First, it introduces the theoretical framework, and then the conceptual framework follows. The theoretical framework highlights pertinent literatures on the common-pool resources and their governance in general and that of forests, in particular; partnership, cooperation, stakeholder analysis and the RDIC model. It does so because: 1) the Chiri forest, the subject of this study, is a communal forest that shares both the characteristics and problems (e.g. lack of good governance) of the common-pool resources; 2) cooperation and partnership are the main variables of the study; and 3) stakeholder analysis and the RDIC model are the main research method and the model applied to answer the research questions respectively. The conceptual framework first defines the main concepts and then outlines the general schemes of the study.

3.1 THEORETICAL FRAMEWORK

3.1.1 Common-Pool Resources (CPRs) and their Governance

Here, I first introduce the CPRs and then, briefly highlight the concept of governance. Finally, I discuss the main governance perspectives in the areas of the CPRs in general and that of forests in particular.

Common-Pool Resources (CPRs)

Until recently only two types of goods, i.e. private and public, were known in economics (Ostrom, 1994). As a result, common-pool resources such as forests were used to be treated as public goods. Rivalrousness and difficulty of excluding undeserved users from their use are the key features of the CPRs (Ostrom, 1994). CPRs are rivalrous resources because one's use or consumption of the resources reduces the amount available for the other users and vice versa. According to Ostrom, common-pool resources can be owned by the governments (as public

properties), by local communities (as common property resources), by individuals or corporations as (private goods) or by no one (as an open access resources). Examples of the well-known CPRs include, fish, forests, etc. However, unlike private goods excluding unentitled users from their use is often difficult, if not impossible, under each of these ownership scenarios. Consequently, most of the CPRs either lack proper governance at all or suffer from bad governance.

What is governance?

Governance is a notion as old as human civilization and traditionally referred to what governments do (Mayers et al. 2006). Since it has many definitions it is subtle to distinguish one from the other or find one that fits all. Nevertheless, it is possible to identify two broad perspectives, i.e. state or society centered (Pierre, 2000). According to Pierre, the state centered perspective focuses on the "steering" capacity of the governments. This is a relatively old perspective that assumes the government as the only legitimate entity that can solve societal problems and defend the public interests. However, the society centered perspective critically questions the government's capacity to solve the dynamic and complex problems (e.g. socioeconomic, political, etc.) of the contemporary times (Peters and Pierre. 1998). Accordingly, the proponents of this perspective call for shifting the roles of governments from "steering" to: 1) opening the space for others to engage in the process of governance; and 2) coordinating the governance process in line with the dynamic needs (social, political and economic) of the societies. According to Peters and Pierre, this is not about shrinking of the government's roles, but it is about changing its roles in the process of governance. Similarly, these authors proposed the shifting of analytical focus from the steering capacity to the modes of interaction.

Even under the society centered perspective, governance has many definitions; but, their core essence is not significantly different as such. For example, for Rosenau et al (1992) and Stoker (1998), governance is the 'shift of power' from a traditionally known single actor, i.e. government to multiple actors that have blurred authoritative boundaries. Whereas, Kooiman (1993) defined 'governance' as an interactive process by which two or more (public/ private) actors interact, negotiate and influence each other in an effort to tackle problems or issues

beyond a single actor. Apparently, involvement of more than one actor and the need for power sharing are the main features of the society centered governance perspective.

I. Trends in the Governance of the Commons

CPRs are a group of resources that might have been suffering from the lack of good governance, perhaps, than any other resources. Accordingly, their governance has been a subject of several studies for so long. For instance, Gordon (1954) did extensive works on fishery and indicated as the Commons are much less valued than private resources and hence, least taken care of by individuals. According to him, the Commons are considered as 'everybody's property and nobody's property' - a view that has subjected them to free access they often suffer from. Generally, the following three governance perspectives can be distinguished from the literatures of Commons:

*a) **Tragedy of the Commons:** call for state control*

The Garrett Hardin's (1968) paper entitled "the tragedy of the Commons" has brought a new paradigm to the governance of the Commons in this regard. His work has remarkably fueled the ongoing debates on the governance of the Commons. Hardin used 'a pasture open to all' and the concept of utility to illustrate the economic behavior of humans' with regard to the use of the CPRs. According to him, individuals always want to maximize their private benefits by overusing the Commons while they do not want to bear the costs their selfish acts would entail. This means that, individuals are so greedy that they use Commons beyond their carrying capacity with no or little concern both for the resources and other users. As a result, he suggested Commons either to be privatized or put under state control. His recommendations have impacted the policies of several governments (for example, see: Sneath, 1998; Hayes and Ostrom, 2005; and Adams et al. 2003) and yet are subject of ongoing debates among the scholars of the Commons.

b) Community is able *- call for decentralization!*

Unlike Hardin, the proponents of this paradigm call for the decentralization of Commons' governance. For example, Ostrom (1990) has strongly challenged both of Hardin's proposals that call for either centralization or privatization of the Commons. According to Ostrom, both notions undermine the actual problems of the Commons and the potentials of the resource dependent local communities. Consequently, she rejected the calls for an outsider's (e.g. government) intervention, either in the form of centralization or privatization. According to her, neither the problems of Commons, nor their solutions are simple as such. She indicated as the problems are many and intricate, and hence, require strategic and adaptive solutions that suit both the Commons and their dependent local communities. As a result, she called for a recognition of diverse, socially embedded and complex networks of governance that define multiple rights, uses and ownerships in respective contexts. According to Ostrom, conventional theories of the Commons have been empirically supported only in some situations where significant distrust exists among the resource users, or where there is no or costly communication mechanism exists or the resource users have no or little incentives to participate in the governance of the Commons. With her extensive works on CPRs, Ostrom has identified eight design principles under which members of an independent community can cooperate on the use and management of the CPRs. However, owing to the rapid socio-cultural, political and economic changes, such robust social institutions are becoming rare (Ostrom. 1990).

c) Neither state nor community is able *- call for multi-actor governance!*

Forests provide a variety of products and services some of which are border-less (e.g. carbon sequestration). As a result, multiple and nested interests, of different stakeholders, exist in a given forest. The interests are diverse, complex and dynamic; and hence, often lead to serious conflicts. Consequently, neither the state led nor the community based forest governance regimes have been able to address them in a fair and just manner. The deficiencies of the former regimes have necessitated the emergence of multi-actor governance. Carter et al (2009) indicated as a legitimate and institutionalized multi-actor governance system can fairly entertain the interests of all parties through continuous negotiations. The negotiations would help actors to

solve existing resource based conflicts or avoid the occurrence of new ones by building the sense of mutualism and enhancing trust between the parties. However, the main challenge of the multi-actor resource governance has been motivating all or majorities of the stakeholders to participate in an optimal ways. Hence, knowing what motivates concerned stakeholders is a crucial enterprise in this regard.

II. Forest Governance

Like many other common-pool resources, forests have also been subjected to experimental governance regimes. Agrawal (2008) has reviewed the history of forest governance and distinguished the following three trends: 1) decentralization of the commercially low-value forests in the developing countries; 2) concessions of the commercially high-value forests to logging companies; and 3) market based certification schemes, mostly in temperate forests. Moreover, owing to the politics of climate change, payments for environmental services (PES) are also becoming alternative forest governance regimes (Wunder 2005). Therefore, I, briefly highlight these perspectives, including the PES.

i) Concession: is the oldest form of forest governance that has existed since the imperial period (Hardin. 2002). It is an arrangement in which logging companies are allowed to extract timber from a designated forest area, often on long-term leases, under the supervisions of government authorities (e.g. departments of forestry). Owing to the substantial revenues, it generates for the governments and the increased demands for timber including from the distant markets, it remains a dominant regime, especially in most of the forest rich countries in Southeast Asia and west and central Africa (Agrawal, 2008).

***ii) Decentralization*:** this is a relatively new form of forest governance that had begun in the 1980s and became popular in the mid 1990s. It was invented with the aim to promote a forest governance regime that is more responsive and adaptive to the local needs, especially to those of the poor and underprivileged ones. It is supposed to do so, by devolving power from the government, a *de facto* controller of the world's forest, to the local communities (Suryanata et al. 2003). Since its inception, it has somehow altered both the theory and practices of forest governances, biodiversity conservation and livelihood issues of the forest dependent local communities (Moeliono, et al 2008). However, it is often conceived as a governance

arrangement that would suit only low commercial value forests (Agrawal. 2008). As a result, most high-value forests are yet in the hands of the national governments. Many decentralization attempts have failed so far, mainly, due to poor local democratization, lack of accountability and inadequate power sharing between the concerned governments and the local communities (Agrawal. 2008; Moeliono, et al 2008). However, despite the critiques, it remains one of the most disputable forest governance regimes. Its opponents blame it for exposing the forests to unregulated overexploitation and turning them into patches; while its advocates yet claim its robustness by associating such blames with the procedural and institutional failures.

iii) Certification: it is an indirect market based instrument that appeared in the 1990s mainly to promote sustainable uses of forest resources (Agrawal, 2008). It gives special recognition to the forest products that originate from sustainable managed forests, i.e. as per the predetermined forest management criteria. In doing so, it intends to discourage the market for the forest products that come from unsustainable managed forests. The Forest Stewardship Council (FSC) in 1993 and the Programme for the Endorsement of Forest Certification (PEFC) in 1999 are the major certification schemes in this regard. FSC is a standard setter that has its own criteria and principles (FSC, 2009); while PEFC gives recognition to various national certification schemes that fulfil international standards (PEFC, 2010). However, the effectiveness of these schemes in changing actors' behavior and practices on the ground is yet contentious (Gulbrandsen, 2005).

iv) Payments for Environmental Services (PES): these are forest governance regimes that are being emerged mainly in relation to climate change (Wunder 2005). They are direct financial incentives that intend to bridge the interests of the forest owners and other stakeholders. They can be entirely a market based (e.g. CDM) or a market and/or fund based instruments like $REDD^{+}$. Although, it is too early to evaluate the effectiveness and possible impacts of PES schemes, there is a significant concern on their likely preconditions (e.g. if they require special institutional arrangements or fit into the existing systems) and how they would deal with the issues of forest dependent local communities. For example, see Agrawal (2009) and Wiersum (2009). These authors argued as climate change driven governance arrangements, including PES, are in favor of privatization. According to them, the schemes would undermine the roles of the local communities and pertinent civil society organizations, by applauding the greater

importance of the market actors. As a result, they cautioned the current trends of tightening formal rules (which local communities can hardly cope with) not to undo the encouraging achievements of decentralization. Despite the acknowledged critiques of decentralization, these authors however, noted as it is possible to integrate both the goals of carbon sequestration and livelihood improvement objectives of the local communities, i.e. by capitalizing on the experiences of effective decentralization. In this regard, recognition to small patches of community forests and aggregation of the carbon stock from them would bring win-win solutions.

3.1.2 Partnerships and Cooperation

These are much related concepts that are often considered synonymous to one another. In order to give a brief introduction to the concepts, I briefly highlight each of them without muddling much into their fundamentals.

Partnerships

Partnership is a fuzzy word that lacks specific definition (Wilcox 1994; Boydell. 2007; Ros-Tonen, et al. 2008). As a result, it is often confused with other related words like collaboration, network, alliance, coalition, coordination and cooperation (Huxham 1996, cited in Boydell 2007). Moreover, it pretends to have warm and positive connotations that suggest the equality of collaborating parties. However, the partners are not necessarily equal in terms of resources (e.g. funds, skills) or other criteria. Nevertheless, they should have shared goal, trust each other and share resources and commitments. For some, partnership is a governance structure by which cross-organizational works are facilitated between two or more organizations (for example see: Glendinning and Powell. 2002). For others like Lasker and Weiss (2001), it is a process in which different parties work together, by sharing their resources, in order to solve problems beyond their individual capacity. Some also consider it as an agreed upon programme of action between two or more parties. For example see Stern and Green (2005). However, in this study, I adopted the definition of Ros-Tonen, et al (2007). These authors, defined partnership as a more or less

formal arrangement in which two or more parties work together towards (at least partly) shared goal in the expectation that each party will gain something from an outcome.

Different kinds of partnerships can be identified from pertinent literatures. For example, Powell and Glendinning (2002) have distinguished public-private, public-public, public-voluntary and public-community partnerships; based on the types of sectors involved. Similarly, Ros-Tonen, et al (2007) has categorized the partnerships in areas of forest management into two groups, i.e. product-oriented and politically oriented ones, based on their objectives. The main objective of product-oriented partnerships is ensuring continues supply of forest products (timber and non timber) in an ecologically sustainable, economically viable and socially just ways. And they include public–private partnerships, company–community partnerships, NGO–community partnerships and multi-sector partnerships. On the other hand, politically oriented partnerships are those that aim to promote good forest governance. Hence, their focus is more on the fundamental policy changes rather than sustainable forest management.

Cooperation

Cooperation is a phenomenon that exists not only among human beings but also between non human creatures. Ants and bees are good examples in this regard. Their existence is based on the cooperation of the whole colony members. This is an instinct form of cooperation, which is coordinated by some natural chemicals like pheromones. However, for human beings, cooperation is regarded as learned behavior that is influenced by several factors. Thus, understanding 'why' and 'when' individuals cooperate under a given circumstance are crucial endeavors.

Why individuals cooperate?

The study of cooperation requires an understanding of individuals' rationale to make a decision to cooperate or not (Cárdenas and Ostrom, 2004). The question here is that - why individuals compromise their private benefit for the sake of a group/society while they can free ride and be benefited even more? Various schools of thoughts that have their roots in sociology, economics

and psychology have different explanations for such questions. I, hereunder, highlight some of the accounts:

Human beings are rational agents: - *they are able to make an economically optimal choice!*

According to Olson (1965), humans are rational agents who always seek to maximize their private benefits and act based on the logic of consequences. Olson explained the economic behavior of humans analogously to the profit maximization desire of a firm. He contended as individuals do not cooperate unless: they are provided some kinds of incentives, or their group is so small that free riding is impossible, or they are coerced to do so. Here individuals are assumed to possess complete knowledge about their choices and the likely consequences of their decisions. They are regarded as intellectually capable beings that can optimally process, interpret and use the available information. However, these assumptions are often criticized as inconsiderate to 'human nature'. His opponents critically question both an access to perfect information and possession of competent intelligence that can optimally process and make use of the available information. In reality, individuals do make decisions with imperfect information and limited intellectual abilities to process and use the information they accessed. In such cases, people do base their decisions (at least partly) on other non economic factors.

Social capital: *adherence to the socially acceptable norms pays!*

Here individuals are assumed to cooperate not to be singled out from a society by acting otherwise. This means that individuals cooperate just to conform to the societal norms and customs even though it is not in their best interest to do so. This prevails where deviating from social norms would entail severe punishment such as social sanction. Moreover, other factors like companionship with like-minded people or expectations of social rewards in the forms of reciprocity, reputation, trust and social gratification would also motivate individuals to cooperate (Robson and Kant, 2007).

Humanistic nature: besides to the economic and social motivations humans would also cooperate because of their intrinsic behaviors like passion and compassion (Walker and King 1992).

Because of such characters, people help each other or share their problems. For example, people often cooperate to save endangered animals or rescue victims of natural disasters. Similarly, donations from compassionate individuals enable charity organizations to support orphans in the developing countries. In such cases, individuals cooperate with each other neither for economic gains nor for their social fame; however, due to their humanistic behaviors like compassion and passion.

Education and professional interest: some people also cooperate because they feel that their cooperation would boost their professional interests or act otherwise (Walker and King 1992). According to the report by the London School of Economics (LSE, 2003) education enhances cooperation. The report stated that the more individuals get educated the better their chance to cooperate especially over complex issues and under uncertain circumstances. This would be due to enhancement of one's intellectual capacity through education to comprehend and synthesize information over the issues of cooperation and associated benefits.

Power: it is, perhaps, one of the most influential factors of cooperation. However, it has no specific definition (Parsons.1963; Mitchell et al 1997). Its definition varies with the questions of interest (e.g. its source, its acquisition and distribution mechanisms, etc.) and the units of analysis such as institutions, groups or individuals (Keltner et al. 2000). Nonetheless, the most popular definition is the one that conceives it as one's capacity to influence others. Here power is defined as one's ability to enact his or her will, possibly, against the will of others (Weber 1947, cited in Mitchell et al 1997). French and Raven (1960) have identified five forms of power, i.e. coercive, reward, legitimate, referent and expert power. However, these typologies are criticized as not mutually exclusive and hence, considered difficult to apply (Mitchell et al 1997). In response to such critiques, Etzioni (1964) has distinguished three forms of power, i.e. coercive, utilitarian and normative/symbolic power; based on the type of resources actors use to exercise their power (Mitchell et al 1997). For example, possessors of coercive power use, either physical forces or violence to impose their will upon others (e.g. power of guerrilla or rebel fighters), while, utilitarian power comes from the use of money or other materialistic incentives (e.g. by power of business corporations). And symbolic power originates from one's charisma or fame (e.g. power of celebrities, elders and moral leaders). In all its forms, power is viewed as a

resource that can be used to make others do what they would not have done otherwise (Raven et al. 1998). One is said to have power, in the context of this thesis, if and only if he/she has adequate access to at least one of these three forms of power.

Apparently, from the above definition and discussion, powerful actors seem to have little incentives to cooperate with powerless ones; as they can achieve their goals otherwise. However, there are cases where this assumption does not hold true, and conditions force all parties to cooperate, irrespective of their power. The important question here is - why cooperation happens under power asymmetries? According to Gillinson (2004), unequal parties (power wise) would cooperate either for the sake of efficiency or survival. For instance, a bank would cooperate with local micro finances to lend more money by reaching small customers at the grass root level. Moreover, if their survival is at stake, both parties (stronger and weaker) would cooperate to counteract their common threat jointly. A good example, in this regard, would be cooperation between powerful countries like USA and some of the African countries to combat terrorism. Another example would be cooperation between a firm in an area and concerned local communities to reduce risks from likely natural hazards (e.g. avalanche, floods).

3.1.3 The Resource Dependency and Institutional Cooperation (RDIC) model

The RDIC model has guided the analysis of the stakeholders' cooperation. Therefore, in this section, I introduce the theories that have contributed to it and present the model itself in section 3.2.2. Accordingly, I highlight the following four theories, i.e. network theory, resource dependency theory, organizational behavior theory and new institutionalism theory along with their respective contribution(s) to the model:

- ***Network theory***

Since its inception in the 1930s network theory is being used in various disciplines of both social (e.g. Sociology, Policy) and natural (e.g. Mathematics, Computer science) sciences. However, the concept of social network, which is relevant to this study, was introduced in 1954 by Barnes.

Barnes explained social relations in terms of nodes and ties. According to him, nodes represent actors while ties stand for the relationships between the nodes (actors). In this case, actors would be individual human beings or their groups or even organizations. In social network theory (SNT) actors' attributes and agency are less important than the relationships or ties between them. Accordingly, the advocates of SNT assume as the structure of the network/ties between the actors determines the way each actor behaves in a given situation. For example, individuals who have smooth or good relationships for a longer period of time are supposed to trust each other better than those who have no such relations. Similarly, people tend to cooperate with those they know compared to strangers.

However, owing to its wider applications across disciplines, network theory lacks focus, which makes it difficult to understand (Katz et al. 2004). Nonetheless, there are certain principles that social network theorists share in common. For example, Wellman (1988) has identified five of these principles: 1) humans' behavior is better predicted by studying their relationships than their socioeconomic characteristics; 2) relationship between the units is the focus of analysis than the unit themselves; i.e. relationship between individuals is more important than the individuals themselves; 3) the units are assumed to be interdependent; 4) interaction between the two units (e.g. two individual human beings) not only depends on the relationships between two of them, but also on the relationships they have with everybody else in the system; and 5) networks have fuzzy boundaries and hence often overlaps. Moreover, Benson (1975) indicated as network analysis provides better insight into the nature of interactions (cooperative or competitive) between the parties (e.g. Organizations). Cooperation was conceptualized and defined in the RDIC model based on the network theory. According to the network theory, cooperation occurs or is likely to occur if two or more actors, who have some kind of direct or indirect relations/ties, have agreed to act together towards a certain common goal (de Rijk, 2007). Based on this conceptualization the RDIC model assumes some sort of relationships/ties between actors.

- ***Organizational behavior theory***

Frederick Taylor (1917) was the first scholar who laid foundation for the scientific management theory (Walonick. 1993). In his theory better known as 'Taylorism', Taylor proposed the

following four basic principles: 1) finding the "best way" to perform a task, 2) optimizing the work to worker match 3) employing effective motivation schemes (reward and/or punishment) and closely supervising the workers; and 4) focusing the management on planning and control. In the beginning, where it was applied, the theory had brought some positive changes and was hailed as one of the most innovative thoughts in human resource management. For example, many small industries had boosted their production after they applied the four principles stated above. However, despite such success, Taylor's theory encountered sharp criticisms. Among the critiques was its much focus on boosting of production without due consideration for the workers, i.e. dehumanizing workers and considering them as an incentive driven agents. According to some opponents, his idea became counterproductive by enhancing over exploitation of workers by the industry owners. And they argue as subsequent dissatisfaction of workers, as a result of unfair demands from factory owners, started to compromise workers' productivity. Due to that, both the quantity and the quality of the produces eventually declined. Accordingly, his assumption on workers' response to economic incentives was critically challenged. For example, see Willowick (1993). Such critique, gradually led to the development of the new organizational theory that defines organization as a collection of human beings (Luthans. 2005).

This new theory of organization enabled individuals (e.g. Workers) to interpret and reinterpret policies, orders and regulations more broadly within the contexts of their work and social environments. Subsequently, broader and interdisciplinary field of organizational behavior became invented in 1970s from the blends of various disciplines such as psychology, economics, sociology, political science, etc. According to Prasad (2002) organizational behavior is "a field of study that investigates the impact that individuals, groups and organizational structure have on one's behavior within the organization, for the purpose of applying such knowledge towards improving an organizational effectiveness." Therefore, it has wider applications in explaining and predicting human behavior in any organizational setting. However, its contribution to the RDIC model is related to conceptualization of actors' willingness and ability to cooperate (de Rijk, 2007). The RDIC model has adopted the concept of motivation from this theory and assumes as the presence of certain motivation/ an incentive likely enhances one's decision to

cooperate. The motivation could be of any type, including tangible or intangible rewards or just the mere presence of enabling conditions (e.g. institutional setup).

- ***Resource dependence theory (RDT)***

According to the RDT, organizations depend on each other to exchange resources they lack (Pfeffer and Salancik. 1978). The type and magnitude of a resource determine the power dynamics between them. An organization adjusts its power balance either by reducing its dependence on others or by increasing the dependence of others on it (Pfeffer 1987, cited in Hillman et al. 2009). With such strategies, organizations continue acquiring the necessary resources they need, which would be impossible otherwise. The core assumptions of RDT are:

1) Organizations are systems of social exchange that emerge out of internal and external coalitions that aim to influence and control organizational behavior.
2) Organizations need essential resources from their environments, which are often scarce and their supply is masked by uncertainties.
3) Organizations work towards dual objectives, i.e. acquiring and controlling the resources that minimize their dependence; or controlling the resources that increase the dependence of other organizations upon them. By attaining either of these objectives, organizations alter their power dynamics.

Though, RDT is originally about organizations its idea also enables to study the relationships between the units of an organization. This theory contributed to the RDIC model the assumption of (inter)dependence between the cooperators or actors mainly driven by the need to exchange resources.

- ***New institutionalism theory***

According to North (1995), institutions refer to formal or written rules such as government rules and regulations; and informal or unwritten norms and customs that govern human behavior in a given situation. Despite their inevitable roles in shaping one' behavior since time immemorial, institutions have become the subject of systematic studies very recently, i.e.in the late 19th (Scott.

2001). The focus of the earlier institutional studies, known as old institutionalism, was on government and its formal institutions (Bell. 2002). According to old institutionalism, actor' behavior or action, especially in an organizational setting, is dictated by the government rules that define how to behave and act in such circumstances. However, this perspective is often criticized as being narrow and insufficient to explain why individuals (e.g. Employees) behave otherwise (Selznick. 1996). In response to such critiques some scholars of behavioral sciences have invented the concept of 'behaviorism' (Krasner. 1984: 229, cited in Bell. 2002). Unlike the old institutionalism, the focus of behaviorism is on individual human beings. Nonetheless, despite its indispensable contributions, behaviorism also couldn't fully explain why individuals behave differently under varying institutional environments. One of the main deficiencies of behaviorism was its inadequate attention, if any, to institutions. Such deficiencies of behaviorism have necessitated resumption of institutional studies in the 1980s across disciplines (Bell. 2002). Accordingly, disciplines such as economics, sociology, political science, etc., have devised their own institutional studies. This approach of specialized institutional studies became known as 'new/neo institutionalism'.

Today various disciplines have their own new institutionalism. For example, the new institutional economics studies how to optimize transaction costs in a market economy and how individuals respond to economic institutions such as taxes, subsidies and incentives (Nee, 2003). Similarly, the new institutionalism of sociology focuses on the possible roles of informal institutions such as norms and customs in shaping human behavior (DiMaggio and Powell 1991). The main strength of this theory, according to Hall and Taylor (1996), is its recognition to the cognitive aspects of humans' response in addition to the institutional constraints. The assumption here is that individuals do not adequately respond to the institutional incentives such as punishments or rewards, unless they are convinced that their responses or actions are morally justifiable. In other words, individuals are assumed to act on what they conceive as acceptable within the limits of their institutional bounds. Scott (2001) also noted as one's response is limited not only by his or her ability to conceptualize what is appropriate or right, but also by the availability of alternative conception. Accordingly, such scholars urge researchers to also consider the cognitive dimensions of one's action, i.e. in addition to institutions. However, the contribution of this theory for the RDIC model is its provision of the general framework in which

possible influences of both formal and informal institutions on actors' behavior are analyzed. Based on this theory the RDIC model assumes as institutions can create or influence (inter)dependencies between actors. Moreover, it also assumes as they can enhance or impair actors' willingness and ability to cooperate with each other.

3.1.4 Stakeholder, Stakeholder Typologies and Stakeholder Analysis

In this section, I first define the term stakeholder and then highlight some of the common stakeholder typologies, in order to give a better insight into different types of stakeholders. The typologies will be used to characterize and classify the stakeholders of the Bale Eco-region REDD^{+} project. The classification would enable the identification of the salient stakeholders for possible interventions (e.g. empowerment). Finally, I introduce the stakeholder analysis.
According to Golder (2005, pp.1) stakeholder refers to:

> *"Any individual, group, or institution who has a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same"*

Apparently, this definition includes individuals, groups of individuals, government agencies, nongovernmental organizations (NGOs) and private companies.

Stakeholder Typologies

i) Important versus Influential stakeholder

According to the ODA (1995), stakeholders can be classified by their level of influence on an issue and their importance to a project. Here importance refers to the degree to which the interest of a stakeholder gets priority relative to that of others; while an influence refers to the power of a stakeholder to impact a project. For instance, in aid projects the recipient communities, who are the targets of the project, are often regarded as highly important stakeholders, whereas, the

facilitator NGOs and the state are considered as influential ones. In such cases, state actors would dictate to which parts of a country an aid should go; while NGO officials can decide - who gets what and when.

ii) Active versus Passive stakeholder

Active stakeholders are those that can affect decisions regarding a project while passive refers to those that can be affected by the decisions of others (Grimble and Wellard 1997). For instance, a private forestry firm that owns a plantation forest on a certain watershed area can have a veto power to decide when and how much to harvest from its plantation; while the downstream communities that would be affected by the decision (e.g. increased soil erosion or flooding) would not have much say to alter the decision of the firm. However, other powerful actors like government can intervene, for example, by changing the policy or giving compensation for the firm not to cut the forest for the good of the public. Here the state and the firm can be regarded as active stakeholders whereas the communities are passive stakeholders.

iii) Latent, Expectant and Definitive Stakeholders

Perhaps the most elaborated and comprehensive typologies of stakeholders were that of Mitchell et al. (1997). These authors have identified seven types of stakeholders based on their possession of power, legitimacy and urgency. According to them:

Power: refers to one's ability to influence others possibly against their will. It is a transitory resource that can be acquired and lost. An actor or a person is said to have power if and only if, he/she has considerable access to at least one of the three forms of power mentioned above.

Legitimacy: is a generalized perception that determines the appropriateness or desirability of one's action in line with the socially accepted norms, values and beliefs (Suchman. 1995). In this context, legitimacy was understood as a shared perceptual standard against which acceptability of one's behavior is judged. It is also transitory (can be gained or lost) social construct that varies from place to place and/or from culture to culture. It can be defined by both formal and informal institutions. For instance, a government may outlaw and officially ban

harmful cultural practices such as child circumcision that have had deep roots in a society. Nonetheless, despite the prohibiting state laws, such cultural practices would remain prevalent in a society. They persist because of the legitimacy they have in the society.

Urgency: refers to the degree to which one's claim or call for action gets an immediate attention from the concerned authorities (Mitchell et al. 1997). A claim is an urgent, if it is time sensitive and very critical at the same time. Time sensitivity refers to the acceptable time frame in which the claimant expects his/her claim to be attended by the concerned authorities; while criticality implies the degree to which the claimant believes his/her claim is important not only for him/her but also for the firm as well.

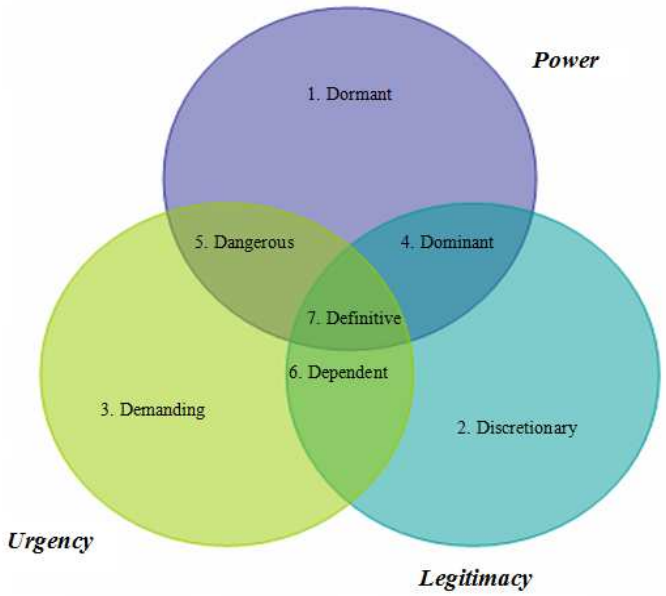


Figure 4: Stakeholders' typologies
(Source: Mitchell et al 1997)

LATENT STAKEHOLDERS

These stakeholders possess only one of the three attributes (power, legitimacy or urgency). Because of the other two missing attributes, it is unlikely for these stakeholders to get the

attention they would deserve from the concerned authorities. Three stakeholders (dormant, discretionary and demanding) are under this group.

Dormant stakeholders: these stakeholders possess only the power. However, their power remains unused because they lack both the legitimacy and urgency. Nevertheless, once they acquire one or both of these attributes, they can be changed to other stakeholder groups. As indicated above (see page 23) power can be of three forms, i.e. coercive (uses physical forces or violation), utilitarian (uses financial or material incentives) and symbolic (e.g. emanates from one's esteem or reputation).

Discretionary stakeholders: these stakeholders have legitimate claims but lack both the power and urgency to get the attention they deserve. Mostly, they are recipients of the good wills of others (e.g. corporate philanthropy). For example, benefit sharing claims of local communities over the forests in their vicinity would be legitimate; however, since they lack both the power and urgency it is unlikely that their claims are properly attended by the concerned forestry firms. Nonetheless, donor NGOs would support such communities to improve their livelihoods or lobby on their behalf.

Demanding stakeholders: these stakeholders have urgent claims but lack both power and legitimacy to bring their claims into the attention of the concerned authorities. Hence, they often try to get attention by publicizing their messages through repeated calls for actions they demand. Nonetheless, they have little control on both the actions and their outcomes.

EXPECTANT STAKEHOLDERS

Stakeholders in this group possess two of the three important attributes mentioned above. Therefore, they are in a salient position to advance their claims compared to latent ones. Three types of stakeholders (dominant, dependent and dangerous) exist in this group.

Dominant stakeholders: these stakeholders have both the power and legitimacy; and hence, are expected to get better attention from the management of a firm. They are dominant because they

can act on their legitimate claims with their power, and their decision would have indispensable impacts on the management of a firm. Accordingly, it is not easy for the management to ignore their claims. Therefore, most organizations or firms have a formal means of dealing with the claims of these stakeholders. And these would include an establishment of public relation offices, corporate investment offices and periodic reports to shareholders of a firm.

Dependent stakeholders: these stakeholders have the legitimate and urgent claims, but lack the power to realize them. Therefore, they often align their claims with other powerful actors to get the necessary attention they deserve from the concerned authorities. For example, clear cutting a forest on an upstream or a sloppy area would potentially subject downstream local communities to risks of soil erosion and floods. Similarly, hunting would threaten the existence of rare animal species. In such cases, powerful humanitarian and/or conservation NGOs would lobby for the vulnerable communities and endangered animals to demand necessary interventions from the dominant actors (e.g. government).

Dangerous stakeholders: these stakeholders have urgent claims and power to advance their claims possibly through coercion. However, they are not welcomed both by the management of a firm and public because they are considered illegitimate.

DEFINITIVE STAKEHOLDER

This stakeholder possesses all the three attributes, i.e., power, legitimacy and urgency. Any of the expectant stakeholders can be turned definitive by acquiring the missing attribute.

Stakeholder Analysis

Stakeholder analysis is a method often used to study stakeholders' characteristics in order to understand their relevance to a project or policy. It collects information related to stakeholders' position, interest, relationships and other characteristics and analyzes them to understand the history, current roles and future potentials of the concerned stakeholders (Grimble. 1998; Brugha. 2000). It provides important tools that help not only an identification of potential stakeholders, but also an elucidation of possible conflicts and harmonies between their interests.

The stakeholder analysis was chosen for this study because: 1) the resource under study 'the Chiri forest' is a common-pool resource in which several stakeholders have vested interests; 2) utilization and management of such resources would induce either cooperation or conflict of interests among the stakeholders; and 3) the topic of interest 'cooperation' necessarily involves more than one stakeholder whose interests are either compatible or in conflict with each other.

3.2 CONCEPTUAL FRAMEWORK

According to Miles and Huberman (1994), conceptual framework is a graphical representation or narrative explanation of the important things to be researched such as concepts, key factors, variables and their relationships. Therefore, in this conceptual framework, I first conceptualize the main concepts underlying the thesis, i.e. the REDD$^+$, partnerships, cooperation and common-pool resources. Then, I present a modified RDIC model and elaborate on some of its key components.

3.2.1 Conceptualization

REDD$^+$ as New Forest Governance Mechanism

Forest governance: it refers to the processes and mechanisms that policy actors use to influence behaviors and outcomes with regard to forests (Phelps et al. 2010). It has three key components, i.e. actors, mechanism and an outcome (Agrawal 2010). In this context, mechanism refers to what actors put in place to promote a forest governance structure of their choice. According to Agrawal, mechanisms might include arrangements for one or more of the following: new incentives (e.g. PES), new institutions (e.g. co-management), new investment (e.g. road) and new information (e.g. certification). Tracing on this definition, I conceptualize REDD$^+$ as (new) forest governance mechanism that intends to mediate actors' behavior and promote good forest governance using financial incentives.

The Chiri forest as a Common-pool Resource

According to Ostrom (1994), Common-pool Resources (CPRs): are "revalrous resources managed under a property regime in which a legally defined user pool cannot be efficiently excluded from the resource domain''. The key features of CPRs are subtractabilty (which means reducibility of the amount of the resource available to others after one's use) and difficulty of exclusion (absolute exclusion of undeserved users is difficult). Forests on communal lands are the typical examples of these resources. Such forests often suffer from over exploitation and lack of coordinated efforts to sustainably manage them. Assuming the difficulty of excluding the

(illegitimate) users I consider the Chiri forest as a common-pool resource that is being subjected to unsustainable use and management practices.

Partnership as a formal arrangement

In line with Ros-Tonen, et al (2007) definition, see page 22, I conceptualized partnership as, any actual or potential formal collaborative arrangement between two or more stakeholders in order to govern the Chiri forest under the Bale Eco-Region REDD^{+} project.

Cooperation as an intentional act

Cooperation can be either intentional or unintentional (e.g. sudden or spontaneous cooperation between two or more individuals) act. However, intentional cooperation occurs when 'two or more actors jointly agree over a certain course of action and act accordingly' (Rijk et al, 2007). Here prior agreement is a prerequisite for the planned or an intentional cooperation. In line with this idea, I conceptualize cooperation as a deliberate and conscious collective act in which each actor plays what is expected of him/her on issues pertaining to the use and management of the Chiri forest, as per the underlying institutions (formal and informal), under the Bale Eco-region REDD^{+} project arrangement. Hence, it doesn't include unconscious, coincidental and spontaneous acts of any actor.

3.2.2 The Conceptual Model – the modified RDIC model

The conceptual model for this study is modified from the Resource Dependence and Institutional Cooperation (RDIC) model. The RDIC model was developed in 2007 and, since then, has been used in various studies of cooperation, especially in the areas of public health. It was formulated from a blend of concepts taken from the four theories (see section 3.1.3) and has three analytical levels. The first level assesses the existence of some sort of cooperation or its likely occurrence in a given situation. The second level deals with the actors' willingness and ability to cooperate, while, the third level looks for possible influential factors (e.g. perceptions, resources, institutions, etc.) that would affect one's willingness and ability to cooperate. In this study local community members' willingness and ability to cooperate were analyzed. Their willingness to

cooperate is assumed to be influenced by three perceptual variables, i.e. perception on other actors, envisaged economic benefits from the REDD$^+$ project and their level of confidence in the mediating institutions. Similarly, their ability to cooperate is supposed to be determined by the amount and kind of the necessary resources that they can contribute and the existence of institutionally enabling conditions. Here the ability to cooperate is understood as a function of resource and institutional constraints. The Bale Eco-region REDD$^+$ project is assumed to steer some or all of these factors. Fig-5 depicts the conceptual framework of the study. It has two parts. The first part shows the steps performed to identify the potential stakeholders and their collaborative relations; and involved all of the potential stakeholders of the project. The second part depicts the modified[7] RDIC model. The model was used to study the local community members' willingness and ability to cooperate under the Bale Eco-region REDD$^+$ project arrangement.

[7] Some of the factors considered for WTC and ATC, are custom made (e.g. perceived economic benefits from the project).

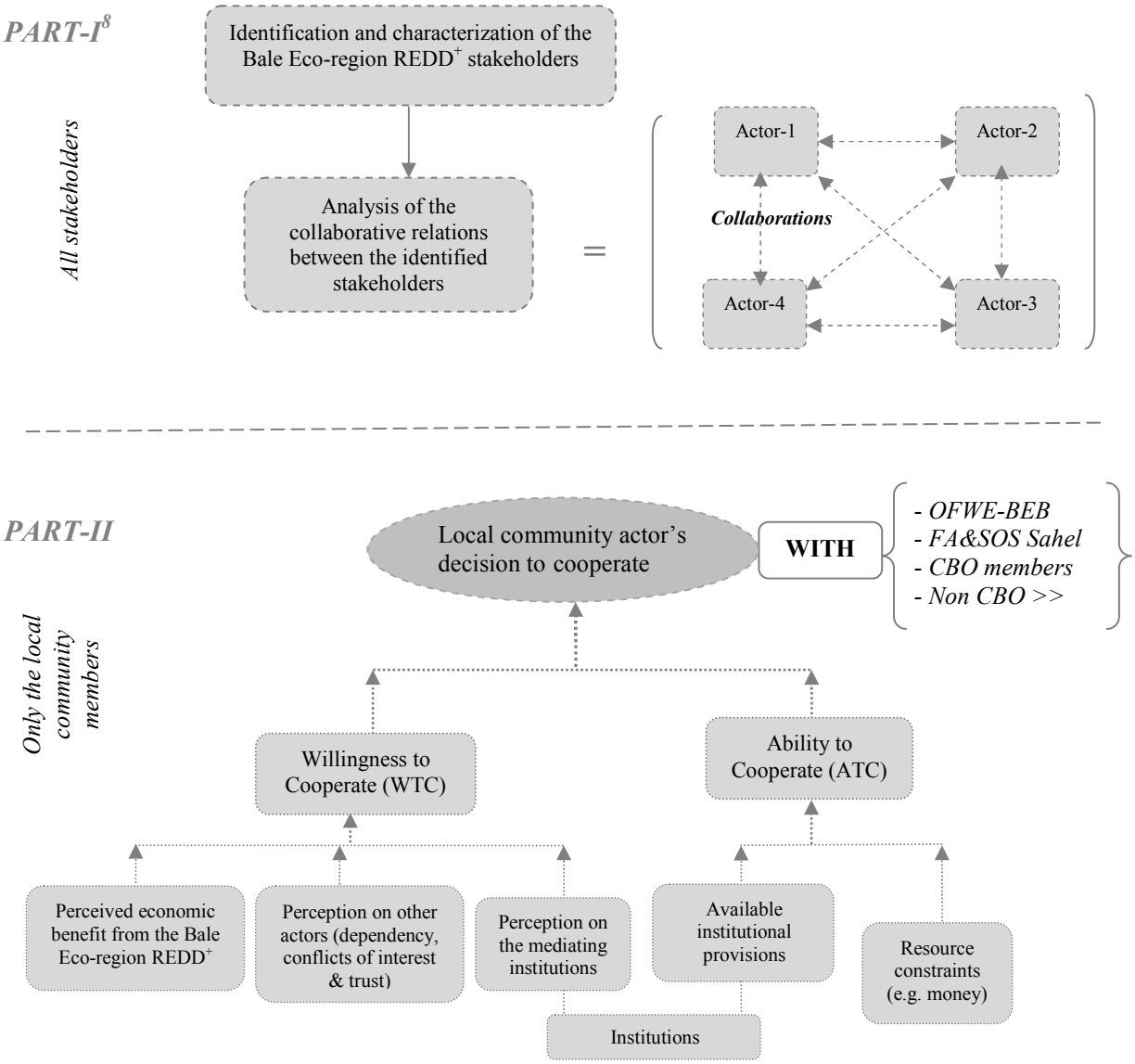
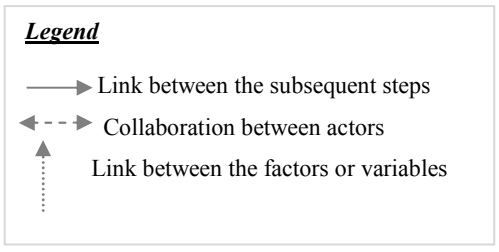


Figure 5: Conceptual framework based on the RDIC model
(Modified from de Rijk et al 2007)



[8] *NB: Part-I involved all stakeholders; while, in part-II only the local community members were considered.*

According to the RDIC model, two actors (e.g. actor-1 and actor-2) are likely to cooperate with each other if and only if they have both the willingness and ability to do so. Then the question here is - what determine(s) these variables with regard to the local community actors, in the contexts of the study area? Different answers and explanations would be possible depending on the schools of thoughts dealing with them and other factors such as the nature of the actors. However, according to the modified RDIC model depicted above one's willingness to cooperate mainly depends on:

1) His/her perception towards other actors (perceived dependency, perceived conflicts of interest and trust)
2) The economic benefits he/she envisages from the project with or without cooperation
3) The perception/ level of confidence he/she has on the mediating institutions

Similarly, one's ability to cooperate is assumed to be influenced by:

1) Actor's ability to contribute the necessary resources required of him/her to functionally engage in cooperative relation with others and;
2) Available institutional provisions.

Therefore, in the following sections, I elaborate on some of the main concepts of the conceptual model in order to delineate their meanings within the context of this thesis. According to Rijk et al (2007):

WILLINGNESS TO COOPERATE (WTC)

Willingness to cooperate refers to one's disposition to comply with the expectation of others by acting in accordance with the underlying formal and informal rules. In this case, it refers to the local community actors' disposition to cooperate with others on issues pertaining to the use and management of the Chiri forest under the Bale Eco-region REDD^{+} project arrangement. Such intentions are regarded, in this context, as actors' response to some kind of intrinsic or extrinsic motivations. Intrinsic motivations might arise from one's internal desires to fulfil his or her basic needs (e.g. need for food); while extrinsic motivations might emanate from one's expectation of

either reward or punishment. Examples of extrinsic motivations would include an expectation of financial incentives from the project or any sort of strong penalty for defiance. In this study, the respondents' willingness to cooperate was assessed using three perceptual variables:

1) Perception on others – which is supposed to be a function of three other perceptual variables (perceived dependency, perceived conflicts of interests and trust);

2) Perception on the mediating rules/ institutions; and

3) Perceived economic benefits from the Bale Eco-region REDD+ project.

1) Perception on the other actors

Conventionally, actors' willingness to cooperate was assumed to be dictated by their need to exchange resources (Pfeffer and Salancik. 1978). Under such situations cooperating partners find each other based on the possession of the resource they need. However, such assumptions are often questioned and criticized as being simplistic and inefficient to explain why someone prefers one partner over the other. For instance, Rijk et al. (2007) and Pan Lu (2011) indicated as the perception that the cooperating parties hold towards each other, is as important as the resource itself. According to these authors, cooperating partners should possess non negative (positive or neutral) attitude towards each other, in order to think of cooperating with each other, from the very beginning. Here the perception that partners' hold towards each other, and their possessions of the necessary resources are regarded as the key drivers of their willingness to cooperate with each other. Perception on other actors is assumed to be influenced by one's perception of dependency, conflicts of interests and his or her trust on others.

a) Perceived (inter)dependency: it refers to one's feeling of inability to achieve, wholly or partly, own goal(s) without seeking any support or consent from others. It can be of different forms depending on its likely causes. For example, Pfeffer and Salancik (1978) have reported three types of (inter)dependencies:

Asymmetric: is the situation where unequal (power wise) actors depend on each other to achieve their respective goals. Under this scenario neither a powerful actor nor its subordinate can achieve its goal alone. Nonetheless, their relations are likely dictated by a powerful actor, i.e. the one in a better position either because of resource or any other privileges (e.g. access to political power). Powerless or subordinate actors are assumed to have no option than to accept the dictations and act accordingly. Here the success of their cooperation depends on the strategies a powerful actor employs to persuade its subordinates. For example: cooperation between government agencies and private enterprises or ordinary citizens.

Symbiotic: unlike the asymmetric interdependencies here the relations between the cooperating parties are assumed to be based on the principles of mutual benefits. Neither a dictation of one party nor the supremacy of one's goal or interest over the other exists. The partners cooperate because the achievement of one's goal is totally or partly impossible without the support of the other party and vice versa. Accordingly, cooperation likely yields win-win outcomes for all parties while acting otherwise would lead to lose-lose scenario. In symbiotic interdependencies, the goals of the cooperating parties are assumed to be complementary to each other, i.e. achievement of one's goal doesn't compromise the likelihood of others to achieve their goals.

Competitive: it is almost the same with conflict of interests (see below) and hence, not discussed here.

b) Perceived conflicts of interest*:* it happens when one's achievement appears deterministic for the other. Here if one party achieves its goal using the same resource the other party definitely loses. It is common to observe multiple interests in the same resource(s), especially in CPRs. However, resources are either scarce or unjustly distributed (spatially or temporally) to adequately satisfy all those interests. In such cases, users would either compete over the limited resource or cooperate to fairly appropriate it among themselves. Nonetheless, the likely scenario depends on the level of compatibility between the interests of the parties. Competition is expected if the fulfilment of one party's interest appears to compromise that of the others, i.e. when the interests deemed incompatible. Competition usually subjects a concerned resource to

over exploitation and would jeopardize the likelihood of its sustainability. This scenario is widely observed in most common-pool resources, including forests. Under the scenario of competition, users are often tempted to loot as much as they can, unless an effective system that can harness their greediness is put in place. Competition is one of the manifestations of conflicts of interests. On the other hand, if the users' interests are compatible cooperation would be the likely scenario. However, such cases are very rare. For example, biodiversity conservation and apiculture development in the natural forests to support the livelihood of forest dependent local communities can be mentioned.

c) Trust: it has no single definition. According to Hill and O'hara (2006), most scholars agree more on its features (e.g. its cognitive nature and vulnerability of trusting party) than its definition. Its meanings vary with the contexts under which it is defined and disciplines (e.g. Law, Economics, Sociology, etc.). For instance, Hosmer defined trust, from the perspective of the organizational theory, as follows:

> *"the reliance by one person, group, or firm, upon a voluntarily accepted duty on the part of another person, group or firm, to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange"* (*Hosmer 1995, p. 399)*

In line with this definition, I conceptualize trust as actors' confidence and reliance on each other's credibility to voluntarily respect their relationship terms (e.g. agreed upon codes of conduct) and act accordingly on issues related to the use and management of the Chiri forest under the Bale Eco-region REDD^{+} project arrangement. For example: the confidence the OFWE-BEB has on the Birbirsaa CBO members to protect and use the forest in their concession as per the agreed upon concession principles and refrain from using otherwise. According to Hill and O'hara (2006), trust enhances cooperation, especially in situations where cooperating parties feel interdependent on each other.

2) Institutions

According to North (1995), institutions refer to formal or written rules such as government rules and regulations; and informal or unwritten norms and customs that govern actors' behavior in a given situation. They usually define actions that are required, permitted and forbidden. As a result, they have inevitable influences on one's ability to cooperate. For example, they can constrain one's choice by using instruments like taxes and sanctions. Institutions can also create and structure (inter)dependencies among actors; for example, by altering resource distributions. Formal decrees might create hierarchical relationships between the head and branch offices of an organization. In such cases, the branch offices would be required to consult or report to the authorities at the head office before taking some decisions. However, the effectiveness of institutions in guiding acorts' behavior depends, among other things, on how they are perceived credible by those affected by them (Lusthaus et al. 2002). Credible institutions are those perceived as fair, clear and flexible. In this context, fairness refers to the extent to which the rules are perceived impartial; while flexibility implies the possibility to amend the rules and clarity denotes the degree to which the rules command shared meanings (Agrawal, 2008; Ostrom et al. 1994). These institutional features apparently have an effect on one's decision to comply with the concerned institutions. For example, the more a rule is perceived clear and fair the more it can command compliance and vice versa.

In this context, perception on the mediating institutions refers to one's level of confidence in the credibility[9] of the concerned institutions (formal and informal) to fairly mediate stakeholders' interactions, particularly on issues pertaining to the use and management of the Chiri forest under the Bale Eco-region REDD+ project arrangement. On the other hand, institutional provisions denote what institutions or rules actually say or define. For example, how do government rules define the stakes and roles of the local communities in forest governance?

[9] refers to the extent to which institutions/rules command respect among those affected by them using any kind of enforcement mechanisms

3) Perceived economic benefits from the project

It is one's expectation of any direct or indirect economic gain or loss due to the project. Here the actors are assumed to be economically rational. Accordingly, one's expectation of economic gains from the project is assumed to encourage him/her to cooperate; while, the expectation of economic loses would do the opposite. However, this is not an absolute rationalism in which actor's motives are fully dictated by economic factors. Rather it is about bounded rationality in which actors attempt to maximize economic gains and minimize economic losses within the limits of other constraints/factors. It is a bounded rationality because other factors such as imperfect information would also constrain actors' decision to cooperate or not. Among possible perceived economic gains would include an expectation of direct cash or indirect financial incentives (e.g. subsidies for agricultural inputs) from the project. Similarly, anticipation of losing access to the forest would deter one's motive to support the project. For example, someone would anticipate a loss of income he/she used to get from the sell of forest products such as wood, forest coffee, bamboo, etc., if his/her access to the forest is denied. Accordingly, it is unlikely for such individuals to willingly welcome any project that would negatively affect their potential benefits. On the contrary, some would envisage extra income and better economic opportunities from the project under the auspice of the carbon trade.

ABILITY TO COOPERATE (ATC)

Ability to cooperate denotes one's capability to fulfil what is expected of him/her in a cooperative relation under the Bale Eco-region REDD^{+} project arrangement. It is assumed to be influenced by ability to contribute required resources (e.g. ability to pay required fees, labour contribution, etc.) and available institutional provisions (see page 44).

Ability to contribute resource: refers to one's potential to commit necessary resource(s) required of him/her, whenever necessary, to adequately engage in cooperative relation with others. For instance, to be a rightful member of a certain cooperative union the members should pay entrance and other fees; participate in group tasks and meetings. These resources are often required to run cooperative relations. For example, members of a cooperative should meet to

discuss on periodic reports and future plans of their enterprise. However, each of them should sacrifice their time to attend such meetings. Apparently such resources include (but not limited to) money, power, skill, knowledge, information and time. To be a legitimate and an influential cooperator one should be able to contribute the required resources sufficiently. Ability to contribute such resources enables cooperators to adequately exercise their rights and responsibilities. Hence, it is an indicative attribute of one's ability to cooperate under a given circumstance.

Generally, the following research questions were analyzed: 1) what types of stakeholders are involved in the Bale Eco-region REDD^{+} project? 2) How do the stakeholders collaborate on issues pertaining to the forest governance under this project arrangement? 3) How do perceptions on other actors, on the mediating institutions and envisaged economic benefits, from the project, affect local community members' willingness to cooperate under this project arrangement? 4) How able are the local community members (in terms of resources and institutions) to cooperate under this project arrangement? For the research question-1: I conducted a stakeholder analysis to identify the potential stakeholders of the project. And then, I distinguished different stakeholder typologies applying the criteria of Grimble & Wellard (1997); ODA[10] (1995); and Mitchell et al (1997. For the research question-2: I analyzed the identified partnerships between the stakeholders of the project following Ros-Tonen, et al (2007). For the research questions 3&4, I analyzed the willingness and ability to cooperate of the local community members by applying a modified RDIC[11] model. Accordingly, for the first two research questions I considered all of the stakeholders, while, for the remaining ones (3&4) I focused only on the local community actors.

[10] Overseas Development Administration
[11] Resource Dependency and Institutional Cooperation Model

CHAPTER 4: METHODS

4.1 Study Approach

The research has tried to examine and explain possible associations between the main variables (e.g. conflicts of interest and willingness to cooperate) of the study. Accordingly, it shares the characteristics of both correlational and the explanatory researches (Kumar, 2005). It also attempted to indirectly access respondents' own accounts through the meanings; they assign to their actions and phenomena around them. For example, how they frame and define the project, perceive other actors and the opportunities of working with them. Therefore, the research was (at least partly) interpretive in nature (Orlikowski and Baroudi. 1991). Accordingly, it treated respondents' perceptions of reality and their actions as social constructs rather than objective reality.

4.2 Methods

Identification of the potential stakeholders and their collaborative relations

Stakeholder analysis was conducted to identify potential stakeholders of the project and their collaborative relations. Hence, various techniques including stakeholder mapping were used. The stakeholder identification was done following Grimble (1998) techniques. These techniques combine different methods such as recommendations or nomination of the potential stakeholders by the key informants, screening them through focus group discussions and/or identifying them from secondary sources. Accordingly, first a list of possible stakeholders was prepared by reviewing available literatures. Then the contacted key informants (e.g. project officers) were asked to list important stakeholders of the project. A comprehensive list, that contains almost all of the potential stakeholders, was produced by combining and enriching the two lists, mentioned above,, with the additional data from the focus group discussions and interviews[12]. Each of the respondents was asked to rank the stakeholders they mentioned and then, frequency data were combined and processed. Finally, four influential stakeholders, whose inclusion or exclusion

12 = *see these methods under section 4.2.3 on page 44*

from the project would have significant impacts on the success of the project and/or the forest, were identified for further description and analysis.

Following the identification participatory[13] stakeholder mappings were done to distinguish existing or potential collaborative relationships between the stakeholders. Accordingly, all of the identified stakeholders were ordered relative to each other and then, their collaborative relations were manually drawn and described. Finally, partnerships analysis was conducted, to examine the nature of the identified collaborations, following Ros-Tonen et al (2007). According to these authors, partnerships can be analyzed based on their objectives, the actors involved, the institutional arrangements; and their potential benefits and drawbacks. However, in this study, I used actors involved and objectives of the partnerships.

Assessment of the Local Community Members' Willingness and Ability to Cooperate

According to the adopted RDIC model, one's cooperation mainly depends on his/her possession of two qualities, i.e. 'willingness' and 'ability' to cooperate, which are in turn affected by several other factors. Therefore, the next steps were aimed to check whether each of the selected local community respondents is willing and able to cooperate with others, under this project arrangement. In this context, willingness to cooperate refers to an intentional disposition of a stakeholder to perform a cooperative action, provided that he/she has an absolute right to decide to do so. However, possession of such intention would depend on various factors such as performer's perceptions on an action to be performed and the benefits of performing an action.
The assessments were done by semi-structured interviews. The variables were measured using the four point Likert scale following the Hon and Grunig's (1999) guideline for measuring relationships in public relations. According to this guideline, sensitive variables such as trust can be measured by asking several but related and differently formulated questions. The questions should cover different aspects of the concerned variable. The more a respondent is consistent with his/her answers to those questions the more reliable is the measurement tool (e.g. questionnaire) and vice versa. Therefore, in this particular case, interviewees were asked a

[13] with some of the key informants and participants of the FGDs

number of related but differently formulated questions (see annexed questionnaire) on the same variable (e.g. trust).

Ability to cooperate refers to one's capability to commit a resource required of him/her to engage in cooperative relation with others and the presence of enabling (e.g. institutional) conditions that can nurture the development of cooperation. These assessments combined interview, focus group discussions and literature review. Resources required of each local community actor (what each of them should contribute) and his/her limitations to contribute those resources were assessed based on respondents' self reporting. Moreover, respondents were asked about possible institutional constraints. Finally, available institutional documents (e.g. national and regional forest laws, contracts and agreements and CBO bylaws) were reviewed to identify potential institutional constraints.

4.2.2 Sampling and sample size

Being a pioneer of its type, in Ethiopia, the Bale Eco-region REDD^{+} project was selected as a single information rich case (Yin, 2003) to get a deeper insight into the topic of interest. As the project is in its initial phase and is being active only in few pilot sites the actual research site, the Chiri forest in the Dello Menna district, was selected with the same principle of choosing an information rich case within a case.

Preliminary survey was conducted with twenty randomly selected individuals, prior to the actual field works, just to check if there were socioeconomic factors that would undermine the use of simple random sampling. The selected individuals were asked a couple of semi-structured questions, and the result was analyzed on the spot using paper, pencil and a pocket calculator. According to the preliminary result only CBO membership appeared to have a systematic influence on the tested variables (e.g. information about the project, perception on other actors and mediating institutions, etc.). However, none of the known socioeconomic factors (gender, income, age, education, etc.) have had such systematic influence on the variables tested.

Therefore, two strata, based on the CBO[14] membership, were formed. Then, within each stratum interviewees were selected by simple random sampling techniques. Interviewed CBO members were randomly selected from the Birbirsaa CBO members' lists; while non CBO members were randomly drawn from the records of the Chiri kebele agricultural extension workers. In both cases, interviews were continued until the so-called saturation point (the point where answers become redundant) was reached. Until this point 78 household heads (42 CBO members and 36 non members), were interviewed in total. Moreover, 16 key informants[15] were selected for the in-depth interviews with the snowball sampling technique. Accordingly, the selection of the next key informant was based on the recommendation or nomination of the immediate prior key informant.

4.2.3 Data Collection

In order to triangulate both the data sources and the data collection methods, the data for this research were collected from both primary and secondary sources using interviews, focus group discussions and document content analyses. The primary data were collected from the members of the local community, NGOs and government officials, CBO members and other pertinent stakeholders in the study area. Accordingly, semi-structured interviews, focus group discussions and in-depth interviews were conducted with selected key informants. Secondary data were collected from the relevant project documents such as CBO bylaws, contract and agreement documents, policy documents, directives, brochures, manuals, etc.

Individual interview

A face to face individual interview was conducted using semi-structured questionnaire translated into local language, i.e. Afaan Oromo. The interviews were aimed to capture not only the prevailing community perceptions but also diverse views of the respondents on the topic of the study (cooperation), the REDD$^+$ project, other stakeholders and the institutions that govern the use and management of the forest. The structured questions were mainly meant to collect the

[14] The acronym CBO stands for the 'community-based organization' and in this study, it refers to the Birbirsaa Natural Resources Management Cooperative.
[15] See list of the key informants in table-5; under annex

socioeconomic and quantitative data. The answers to such questions were put under one of the predefined categories. However, the open questions were kept broad and general to allow inclusion of emergent themes and ideas, if any. This part of the questionnaire was more interactive than the structured part and hence; the interviewers had more chances to probe for additional information or specific details. Various probing techniques such as asking cross questions, rephrasing their statements, etc., were used.

In-depth interview with the selected key informants

The objective of an in-depth interview was to get as much information as possible from a few individuals (regarded as key informants) that are supposed to have better information about the topic of interest for whatever reason. In this particular case, the interviewed key informants include staffs (experts and officers) of the Bale eco-region REDD^{+} project facilitator NGOs (Farm Africa &SOS Sahel and Frankfurt Zoological Society), staffs of the Oromia Forest and Wildlife Enterprise - Bale branch, Birbirsaa CBO executive committee members (chair, deputy chair and casher of the CBO), members of the conflict resolution committee (Gumii hayyoota) and the local leaders. Each of the key informants was asked about the project, the forest and other stakeholders. They were asked open ended questions that were relevant to each of them either because of their position (e.g. officers) or likely role in the community (e.g. Elders).

Focus Group Discussion (FGD)

Since the main variable of the study, cooperation, is somewhat complex the use of focus group discussions might help elicitation of deeper information. Three focus group discussions (one with CBO members, one with non CBO members and one with randomly selected individuals regardless of their membership) each consisting of eight individuals of comparable socioeconomic status, were held to reinforce the interview data. In each case, first members of the research team were introduced to the participants, and the research objectives were briefly explained. Then assurance on some of the ethical concerns related to the use of data (confidentiality and anonymity of the participants) was given and consent to record the

discussion was asked. Finally, few general topics were provided by the researcher, and the floors were opened for discussion.

In all cases, the participants granted us the sought consent to record the discussions and were more or less free to express their views openly. Each discussion was chaired by one of the participants while the role of the researcher was limited to few interventions like keeping the discussion on track in cases of serious deviations from the topic, encouraging silent participants to speak and time management. Each discussion ran for about an hour, and attempts were made to get the views of all participants. All the discussions were audio recorded and supplementary field notes were taken by the researcher and field assistants.

Content analysis of the selected documents

Content analysis of the selected documents was done to see if there are institutional constraints and/or incentives with regard to the topic of interest. The analyzed documents include relevant project documents such as CBO bylaws, brochures, agreement and contractual documents; national and regional policy documents (policy briefs, directives, regulations and forest laws) and research reports. Particular emphasis was given to the documents that have direct or indirect relevance to the project and its participants. During the content analysis of each document emphasis was given to the institutional statements, their linguistic construction (e.g. wordings) and contextual meanings. Efforts were made to shed light on how the linguistic construction of the institutional statements and the contexts under which they are being used would influence the actors' ability to cooperate. Since the analysis was more of interpretational in nature it mainly focused on the meanings of the words, phrases and institutional statements. During the analysis local expertise (elders) and trained linguistic professionals were consulted, and linguistic dictionaries were also used. As indicated above (on page 40) credibility of the rules, in this context depends, on their features like fairness (the extent to which the rules are impartial), flexibility (the possibility to amend the rules to meet the needs of those affected by them) and clarity (the extent to which they command shared meaning).

4.4 Data Analysis

4.4.1 Qualitative analysis

Qualitative field data were analyzed with thematic and framework analysis. According to Green and Thorogood (2009) thematic analysis enables categorization of qualitative data into various themes while framework analysis helps summarization and classification of data within a theme; without significantly compromising respondents' original account. First, the field data was read and re-read to get familiarized. Second taking one open question at a time the answers of all respondents were categorized under preliminary themes. Then the apparent common and recurrent themes were sorted out and labeled with the name of the respective themes. Finally, the coded common themes were summarized for further analysis and discussion.

4.4.2 Quantitative analysis

Quantitative data were analyzed using SPSS[16] software version 16. Some statistics like chi-square were computed from the quantitative (frequency) data to test if there are significant differences between the groups (e.g. willingness to cooperate between the CBO and non CBO members).

4.5 Validity and Reliability

Validity refers to the ability of an instrument to measure what it is intended to measure; while reliability denotes the degree to which an instrument is consistent in its measurements (Kumar, 2005). Nevertheless, the importance and ways of establishing these two constructs in qualitative researches are yet controversial. For instance, Stenbacka (2001) argues as the concept of reliability is irrelevant and misleading in qualitative researches. According to this author, reliability is more relevant in quantitative research where generalizability of a research finding of concern. However, it is less important in most qualitative researches where understanding of an issue being researched is the main target. On the other hand, Patton (2001, cited in Golafshani, 2003) indicates as researchers of qualitative researches should try to maintain the validity and

[16] Statistical Package for the Social Sciences

reliability throughout all stages of research, including designing, data collection and report writing. Apart from the controversies validity and reliability of qualitative researches can be established through triangulation (using various methods of data collection and multiple data sources) or adopting the paradigm of social constructivism (Golafshani, 2003). Healy and Perry (2000) also indicated as entertaining multiple perceptions on a single issue would improve the validity and reliability of qualitative researches. According to Golafshani (2003) using multiple methods of data collection such as observation, interview, etc., and recognizing the diversity of social constructions about a single reality improve the validity and reliability of qualitative researches that are based on the paradigm of social constructivism.

In this particular case, validity and reliability were addressed through triangulation of data sources and data collection methods. Accordingly, the data were collected from different stakeholders and literatures using interviews, focus group discussions and document analysis. Moreover, being interpretative in nature it understands the respondents' answers as social constructions than objective reality and acknowledges the diversity of respondents' perceptions in this regard.

4.6 Limitations of the Study

Although the research was designed with utmost care, the researcher still acknowledges the following limitations: first, the selection of the study site was solely based on the recommendation of the project facilitators. Therefore, there is no guarantee that the selection was unbiased. Second, the study was conducted on only one site and hence; its results cannot be generalized to other sites in the area. Third, the project is in its initial phase and thus, it is likely that, respondents had inadequate information about it and hence, their responses might have been biased due to imperfect information. Fourth some of the variables such as trust and willingness to cooperate are sensitive and difficult to measure with interview and discussion. Therefore, using additional techniques such as game experiment would improve the precision of such measurements.

CHAPTER 5: RESULTS

This chapter presents the empirical findings of the study. First, it presents the stakeholders identified and then, it delivers the results related to stakeholders' cooperation.

5.1 STAKEHOLDERS IDENTIFIED

In this section, I first provide an overview of all stakeholders, and then, I characterize them applying the typologies presented in chapter 3 and finally, I present the key stakeholders. Here stakeholder refers to an individual, a group of individuals or organizations that have a direct or indirect stake(s) in the Bale Eco-region REDD^{+} project. A comprehensive list of potential stakeholders (all those who were mentioned at least once during the field surveys or in the documents analyzed) with their respective roles in the project is given in fig - 6.

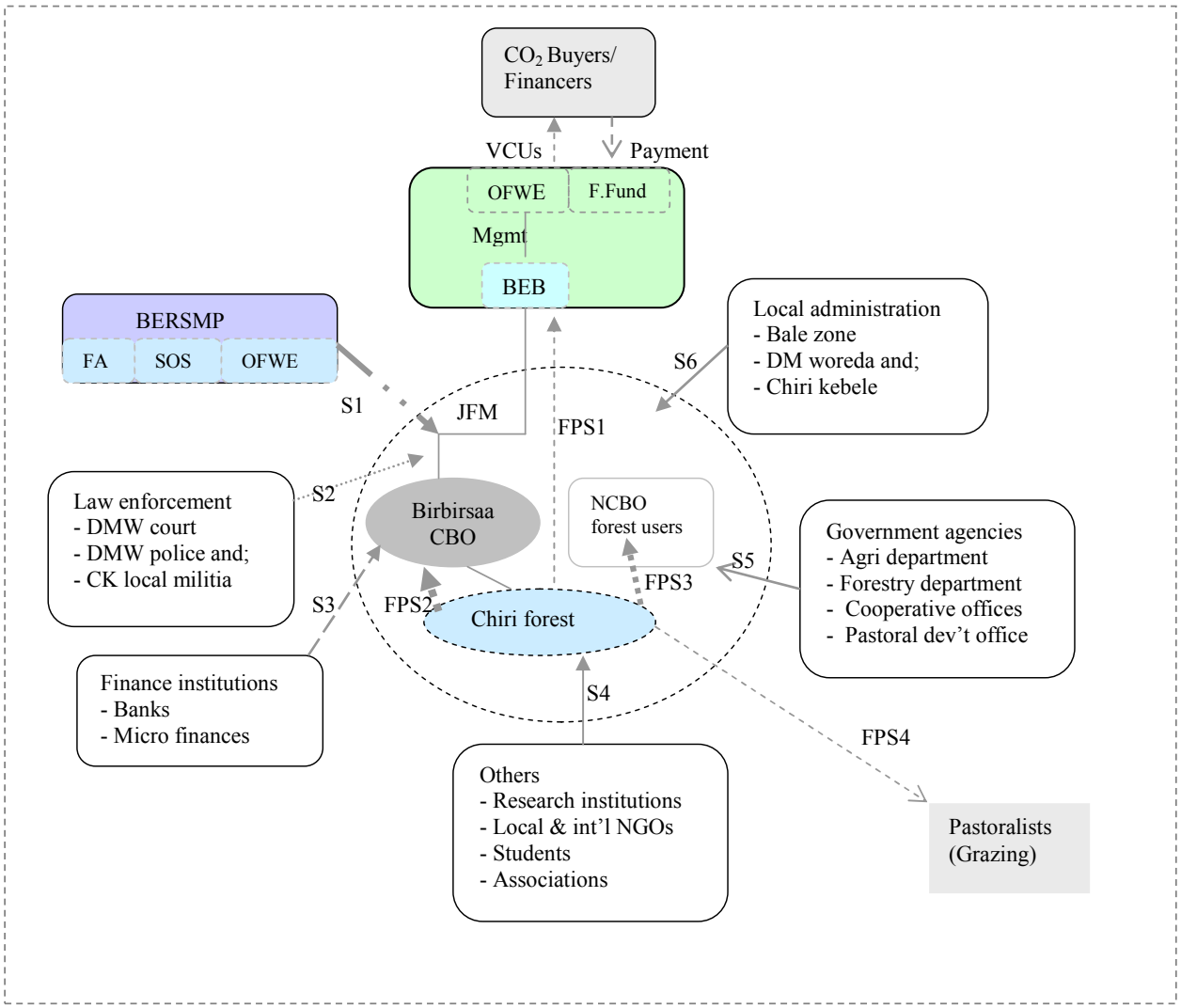


Figure 6: Chiri forest stakeholders' relative positions and their roles

Source: author

**** NB1:** S = support; FPS = forest products and services*

**** NB2:** the style of the arrows show the type of support*

**** NB3:** different shading shows nothing except identification*

Legend

DMW = Dello Menna Woreda /District
CK = Chiri Kebele/ Peasant association
CBO = Community based organization
NCBO = non community based organization
BERSMP = Bale eco-region sustainable management program
OFWE = Oromia forest and wildlife enterprise
BEB = Bale enterprise branch
FA&SOS Sahel = Farm Africa and SOS Sahel Ethiopia
JFM = Joint forest management
VCUs = volume of carbon units

Explanatory notes

S1 = technical (e.g. capacity building) and financial supports (e.g. loan, grants& project financing)
S2 = enforcement of forest and other related laws
S3 = financing (e.g. giving credit and loan for CBO projects)
S4 = research, information exchange, awareness creation (e.g. campaign), etc
S5 = intersectoral cooperation (e.g. livelihood improvement, forest protection, CBO accreditation, etc)
S6 = public administration (responsible to administer local community)
FPS1 = timber + NTFPs (e.g. CO2 revenue)
FPS2 = undifferentiated uses of FPS + NTFPs income
FPS3 = undifferentiated uses of FPS
FPS4 = settlement and grazing during drought seasons

Figure- 6 depicts the relative positions of the Bale Eco-region REDD$^+$ project stakeholders, in the case of the Chiri forest, along with their respective roles. Actors from the local community are deliberately placed in the inner circle to show their closer interaction with the forest. The OFWE and CO_2 buyers are placed on the top to show their decisive positions in the project. They are decisive stakeholders because it is hardly possible to imagine the project without the necessary finance (e.g. from CO_2 buyers) and the will of the forest owner, i.e. OFWE. Other government agencies and the facilitator NGOs are positioned sideways to indicate their supportive roles. The arrows show the direction of the flow of forest products or services; while, their thickness indicates either the strength of the support (e.g. BERSMP) or the magnitude of the benefits from the forest. Therefore, the thicker the arrow the higher the amount of the forest product or service one gets from the forest (e.g. to the CBO) or the stronger the support one gives to the project.

5.1.1 Typologies of the stakeholders identified

Understanding the type and nature of the stakeholders identified is an essential part of the stakeholder analysis. Accordingly, the following typologies were distinguished for the stakeholders reported above, following the Overseas Development Administration (ODA 1995), Grimble & Wellard (1997) and Mitchell et al (1997).

i) Important versus Influential stakeholders

Using the criteria of the ODA (1995), the four key stakeholders of the Chiri forest can be positioned on the importance and influence plane as follows:

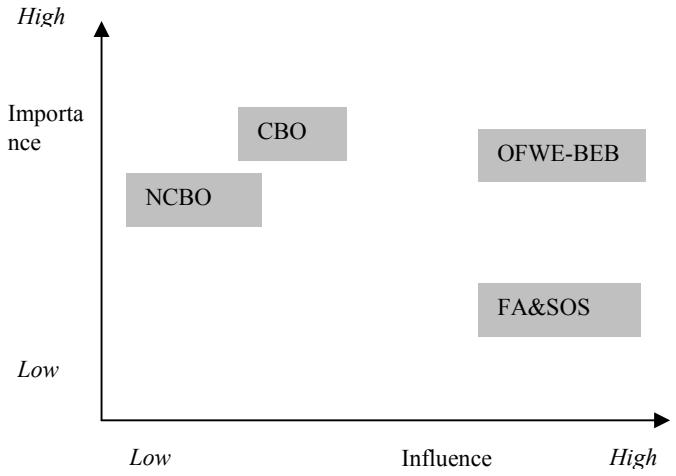


Figure 7: Stakeholders' position based on the level of importance and influence
(Adapted from ODA, 1995)

As depicted on the graph members of the Birbirsaa NRM[17] (CBO) are relatively more important stakeholders. Their importance might be related to their strategic position (proximity to the forest) and recognition of their use rights in the agreements signed between them and OFWE-BEB. However, they seem to lack power to actually influence decisions over the forest (e.g. to exclude non members from their concession areas).

Based on the above definition of importance, unorganized forest users of the community (NCBO) seem to be less important relative to CBO members. However, if, their importance is evaluated by the level of impact, they would have on the forest (e.g. exploitation); there is no reason to assume them as less important. Nevertheless, their relative position on the above plane is mainly based on the priority of their interests as perceived by other stakeholders (e.g. CBO members, some of the key informants interviewed). For instance, some respondents (mainly CBO members) consider NCBOs as free riders; and hence, want them either to join the project or

[17] *Natural Resources Management*

be excluded from using the forest otherwise. Since they have not been organized in any ways their individual claims over the forest are likely to be regarded as an illegitimate by other stakeholders. Accordingly, they are considered to have no or little influence on the decisions made concerning the forest and the project.

The Oromia Forest and Wildlife Enterprise (OFWE) is regarded as the most powerful stakeholder in the group with a veto power. Accordingly, its interests and stakes are assumed to have primacy over that of the others. As it is a designated public enterprise, it has a better freedom to decide with whom to engage and how. The roles of other stakeholders concerning the forest are, in principle, subjected to its approval. Thus, it is considered as a highly important and influential stakeholder in the project.

Both the Farm Africa and the SOS Sahel Ethiopia aspire to promote sustainable forest management based on the principles of participatory forest management. Compared to other stakeholders, they are well resourced (e.g. financial, expertise, etc.) and hence, regarded as influential stakeholders. For example, they can lobby for policy change as they often do. Despite their limited access to political power, they seem to play even greater roles in the project. They are able to do so because of their close contact with almost all stakeholders, including the local community at the grass root level, international carbon buyer companies and state agents.

ii) Active versus Passive stakeholders

Following Grimble and Wellard (1997), one can identify active and passive stakeholders from the identified stakeholders of the Bale Eco-region REDD^{+} project. For instance, OFWE-BEB and FA&SOS Sahel Ethiopia can be regarded as active stakeholders. OFWE-BEB can influence decisions concerning the project and the forest using its public authority and resources; while FA&SOS Sahel Ethiopia would indirectly do the same using their financial resources and technical expertise (e.g. advising policy makers or lobbying for policy change). Local community members (both CBO and NCBO) could be regarded as passive stakeholders as they have little access to both political power and other resources. However, they are apparently

affected by the decisions taken by other powerful actors. For example: they have to comply with the rules drafted by, with their mere participation, OFWE and the facilitator NGOs.

iii) Latent, Expectant and Definitive stakeholders

Applying the Mitchell et al's (1997) criteria the identified stakeholders of the project can also be categorized as follows:

Latent stakeholders

i) Dormant stakeholders: these stakeholders have only power. The following stakeholders were identified based on the Etzioni's (1964) typologies of power (see page 23).

a) Coercive power: in the study area, this power is likely possessed by unemployed youths, landless poors, illegal timber traffickers and distant nomadic communities. However, they are not using their power, at least overtly, to enforce their claims over the forest. It is likely that these actors are either silent (e.g. landless youths who are unemployed and dependent on their families) or are seeking the missing attributes (e.g. nomadic communities seeking for legitimacy from the forest owners to temporarily settle in the forest during drought periods). Though, these actors seem to be distant now, it is likely that they acquire one of the missing attributes and turn to either dangerous or dominant actors.

b) Utilitarian power: this power is often possessed by business men (e.g. traders of forest products) and conservation NGOs. For example, traders of forest products would offer better prices to encourage the supply of forest products. Whereas conservation NGOs would finance conservation oriented projects or organize campaigns to influence other stakeholders. Owing to the soaring prices of forest products (e.g. timber, charcoal, etc.) and climate change discourses some of these actors have already started using this power in the study area. For instance, Farm Africa and SOS Sahel Ethiopia have financed a number of community oriented projects. Similarly, Frankfurt Zoological Society (FZS) has been lobbying for the conservation of the wildlife resources in the area. It also finances the conservation project of the Ethiopian wolf.

c) Symbolic power: this type of power can be possessed by elders or moral and religious leaders in the study area. These actors can use this power to command the behavior of their followers. For example, 'Gumii hayyootaa' (elders committee) is part of the Birbirsaa CBO management, and its main function is to mediate and settle potential conflicts among the forest users. To do so they mainly use their symbolic power.

ii) Discretionary stakeholders: these stakeholders have legitimate claims but lack both power and urgency to get the attention they would deserve. Mostly, they are recipients of the good wills of others (e.g. corporate philanthropy). For example, benefit sharing claims of local communities over the forests in their vicinity would be legitimate; however, since the claimants lack both power and urgency it is unlikely for such claims to be attended by the concerned forestry firms. However, donor NGOs would support such communities to improve their livelihoods or lobby on their behalf. For instance, FA&SOS Sahel Ethiopia are trying to help the local communities in the study area. Here local forest users/local community members are good examples of discretionary stakeholders.

iii) Demanding stakeholders: these stakeholders have urgent claims but lack both power and legitimacy to act on their claims. For instance, nature and environmental clubs of the high school students and other environmental groups like the forum for environment, etc., are typical examples of these stakeholders in this case study. For example, the student clubs organize campaigns and demonstrations to call for actions from the government and other concerned stakeholders. Similarly, the forum for environment periodically organizes open forums on which environmental issues are discussed by prominent researchers, environmental activists and concerned parliamentarians. However, they cannot directly intervene and bring the change they call for by themselves.

Expectant stakeholders

iv) Dominant stakeholders: these stakeholders possess both power and legitimacy. The regional government of Oromia is a good example of these stakeholders. As an autonomous regional state it has both the legitimacy and power to use its resources for the benefits of the public.

Accordingly, it can intervene in the project, whenever necessary, on issues pertaining to both the forest and the people. For example, it is the president of this regional state that appoints the board members and head of the OFWE, i.e. senior management bodies that would have a strong say in the project. It can also institute and implement new regional policies that would have an impact on the project.

v) Dependent stakeholders: these stakeholders have legitimate and urgent claims but lack power to realize them. In this case study, poor forest dependent local community members who would be excluded from the forest under the envisaged concession, Birbirssaa CBO members and endangered wildlife resources (e.g. Ethiopian Wolf[18] and Mountain Nyala) are good examples of these stakeholders. NGOs like FA&SOS Sahel Ethiopia and FZS are lobbying for the better engagement of the marginalized segments of the local community and the endangered animal species in the area respectively.

vi) Dangerous stakeholders: these stakeholders possess urgent claims along with coercive power. Possible examples of these stakeholders in this case study would include people who slash and burn the forest, kill or hunt prohibited endangered animals, poach into the park area, etc., without permission to impose their claims (e.g. claiming benefit sharing or expansion of agriculture in the park) by force. By doing so they try to force the management of OFWE and the BMNP to negotiate and give them such concessions. While the entire society or the local communities living around the resources would have legitimate rights to legally demand such concessions; any forceful acts of few individuals would delegitimize the claims.

vii) Definitive stakeholder: this stakeholder possesses all of the three attributes, i.e., power, legitimacy and urgency. A good example of this stakeholder in this case study is the central government of Ethiopia. The central government of Ethiopia has an ultimate right and power to intervene and have final say on any matters related to the forest, the people and the Bale Eco-region REDD^{+} project.

[18] Ethiopian Wolf is the animal on the cover page. Its scientific name is *Canis simensis*

5.1.2 The selected key stakeholders of the project

As depicted in fig-6 the project has many stakeholders. However, because of time and other constraints, only four of them, i.e. those prioritized as a key by the respondents, are presented here just to give an impression about the type of stakeholders involved. They include: 1) Birbirsaa natural resource management cooperative, i.e. members of the local community organized to use and manage the Chiri forest - called CBO onwards; 2) Non CBO member forest users – referred to as NCBO onwards; 3) Oromia forest and wildlife enterprise-Bale Branch - OFWE-BEB and 4) Farm Africa & SOS Sahel Ethiopia - facilitator NGOs. However, it should be noted that government is represented by different stakeholders such as OFWE, local administrations and local agencies of government ministries. Out of them only OFWE, government enterprise that owns the forest, has ranked among the top four stakeholders selected for further analysis. Nevertheless, other government stakeholders like police, court and local administrations certainly have important roles in the project; though, they are not included on the list of the selected key stakeholders mentioned above.

Birbirsaa Natural Resources Management Cooperative (CBO)

This cooperative was established in 2009 and officially registered by the Bale Zone Cooperative Promotion Office on the 25th of May, 2009 with the file number 385/KFB/2001[19]. It is formed by a group of voluntary local forest users from the Chiri kebele, who either have resources in the forest (e.g. forest coffee) or live near the forest. Most members seem to have joined the cooperative either to earn better financial benefits or to legitimize their traditional use rights (e.g. to legally own the forest lands they have been using). The cooperative has an ambitious objective of sustaining the forest by regulating its utilization and enhancing its livelihood contribution to its members (e.g. through NTFPs development). It has 745 household head members and administers about 4743.71 hectares of forest land under four administrative compartments (Joint forest management agreement between OFWE-BB and Birbirssa CBO, 2009).

[19] *The year 2001 is in Ethiopian calendar and it corresponds to 2009 according to the Gregorian calendar*

The CBO is organized as follows:

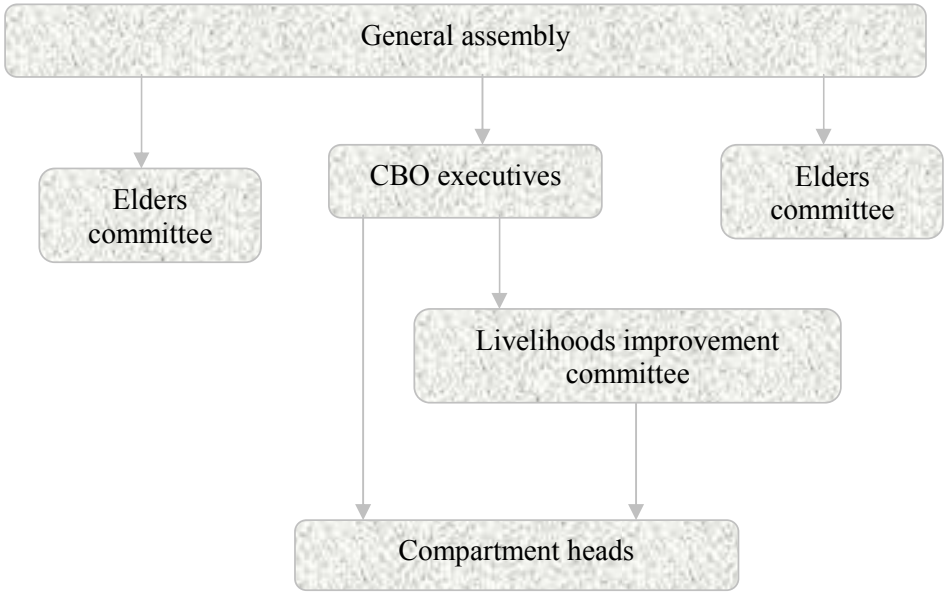


Figure 8: Organization of the Birbirsaa CBO

Source: Joint Forest Management Agreement between OFWE-BB and Birbirsaa CBO (2009)

Non CBO forest users (NCBO)

This forest user group refers to local forest users who are not members of the Birbirsaa NRM cooperative for a whatsoever reason. Therefore, it includes those who:

- are excluded by the criteria of the cooperative (e.g. distance from the forest, possession of the established use rights, unable to pay financial contribution, etc.)
- have no interest to join the cooperative; and
- have not joined the cooperative for some other reasons

Accordingly, all non CBO member forest users both from in and outside of the Chiri kebele are under this group.

The Oromia Forest and Wildlife Enterprise-Bale Branch

It is for profit public enterprise established in 2009 by the Oromia regional state council as 'Oromia Regional State Forest and Wildlife Enterprise (OFWE)' with the regulation number 122/2009. According to the article (16) sub article (1) of the same (no. 122/2009) regulation, OFWE owns and manages state forests and woodland resources on more than 1.75 million hectares of land across the regional state of Oromia. These resources are entrusted to it for the achievement of the public objectives stipulated in article (6) sub articles (1-8) of the same regulation. Hence, the use and management of these resources should be in accordance with the power and duties of the enterprise defined in articles (7) and (8) of the same regulation.

Among its objectives include: 1) protection and conservation of the forests and wildlife resources under its territories with the involvement of the concerned local communities; 2) increasing the forest cover of the regional state and ensuring the supply of forest products and services to the inhabitants of the region and the nation at large; 3) promotion of sustainable forest management practices in order to optimize fulfilment of multiple demands (e.g. livelihood improvements, enhancement of their environmental services such as biodiversity conservation, carbon sequestration, etc.) from its forests; and 4) contributing to the regional and national economy by increasing productivity of its forests and ensuring the supply of forest products and services to domestic and international markets. It has semi-autonomous branch offices whose duties and responsibilities are that of its derivatives. It coordinates and guides the achievement of these objectives from its head office in Addis Ababa. However, planning and executing day to day operational activities are the responsibilities of its respective branches.

Power and responsibilities: the enterprise is an independent legal entity whose management is overseen by the board of management. The board members are appointed by the president of the regional state of Oromia. Similarly, the management of each branch is overseen by the branch advisory boards; whose members are appointed by the chair of the board of management. It is hierarchically organized as follows: 1) Regional board of management 2) Branch advisory board 3) Branch office 4) Manager and 5) Employees. The power and duties of each of them have been defined in articles (10-15) of the regulation number 122/2009.

OFWE-Bale Branch: is one of the several branches of the OWFE that owns and manages all state forests in the Bale zone of the Oromia regional state. It is stationed at the town of the Bale Robe and has sub branches across various districts of the Bale zone where there are substantive forest and wildlife resources. Despite their lowest structural power, the sub branches are the center of day to day operational activities that are vital for the protection, utilization and development of the forest and wildlife resources. They are the closest authorities both to the forests and the forest dependent local communities and hence; they are the one who negotiate and sign contractual agreements at the local grass root level. For example: the sub branch office of the Dello Menna district has signed contractual agreement with the Birbirsaa NRM cooperative to co-manage and use the Chiri forest (the focus of this study).

Farm Africa and SOS Sahel Ethiopia

Farm Africa is a UK based international NGO established in 1985 with the goal to support poor farmers of Africa to help themselves through better management of their renewable natural resources (e.g. forests) and environment. To achieve this goal it works in partnership with local communities, governments, local& international NGOs and the private sector. It has introduced participatory forest management (PFM) to Ethiopia in 1995 in partnership with the government and the community. SOS Sahel Ethiopia was also a UK based international NGO but became a local NGO based in Addis Ababa since 2005. It has been working in Ethiopia since 1989, with the main objective to help smallholder farmers and pastoral communities to help themselves through better management of their environment, improved agricultural productivity and access to fair markets.

These NGOs have been working together on PFM for over fifteen years. In 2010, they have launched five years plan, i.e. from 2010 to 2014, with the aim to secure sustainable management for Ethiopia's forests, improve livelihood conditions of the forest dependent local communities and reduce environmental degradation. Bale Eco-region REDD^{+} project is also part of this plan.

Their major roles in the project include:

- securing funds from different sources, including REDD^{+}, CDM, payments for environmental services, etc.

- supporting forest dependent local communities (e.g. through training on development of NTFPs such as beekeeping, bamboo products, collection of seeds from forest trees, medicinal plants, forest coffee, etc.; and access to finance for the local forest enterprises)

- lobbying for policy change (integrating PFM in national and regional forest policies)
- awareness creation in partnership with other stakeholders (e.g. FFE and MELCA)
- conducting research in collaboration with academic institutions

Summary of the stakeholder results

As discussed above the project has several potential stakeholders; out of which, only a few of them are currently visible. Some of them such as unemployed youths, distant communities and landless poors appear invisible and hence, can easily be ignored by the concerned authorities. The presence of so many stakeholders would be a big challenge for the project. Fulfilling or harmonizing the diverse interests of the stakeholders is likely the only way forward to the success of the project. In such circumstances the concerned stakeholders have to recognize each other and fairly negotiate their stakes. In this particular case, none of the stakeholders appears to have a capacity to independently determine the fate of the project. Accordingly there is an urgent need for such dialogue and negotiations between the potential stakeholders of the project. Even the powerful ones like OFWE (due to privileged access to political power and other resources) and the facilitator NGOs (financial and technical resources) cannot achieve their respective goals alone. For instance:

- For OFWE-BEB – it is costly, if not impossible, to protect its forest by unilateral policing. Such attempts have repeatedly failed in former and current regimes of Ethiopian forestry. However, forest protection is crucial for OFWE as its survival is based on its forests. Accordingly, it is essential for OFWE to create strategic alliances with other stakeholders in this regard. Moreover, in addition to its own interest, OFWE has to cooperate with other actors in order to comply with government rules that explicitly order/command it to work with local communities on issues of forest management.

- NGOs – lack the political power to force any of the actors mentioned. They operate only within the frameworks of the respective governments and donors. Their cooperation with other actors mainly depends on mutual interests to do so. For example only voluntary community members, who willingly accepted their programs, would participate in their projects. Similarly respective government agencies have no any explicit obligations to cooperate with NGOs and vice versa. Hence, the main binding agent between the NGOs in the area and other actors appears to be the needs to exchange resources for mutual benefits.

- Local community members: would incur opportunity costs, in terms of resources (e.g. financial), if they choose not to cooperate with the stated NGOs. They need such resources to improve their livelihood conditions. On the other hand they opt to cooperate with government rules because breaching them would entail severe punishments. For instance article 20(1) of the Ethiopian Forest Development, Conservation and Utilization Proclamation No. 542/2007 states as someone who "cuts or removes trees, processes or uses in any way forest products from a state forest shall be punishable with not less than one year and not exceeding five years imprisonment and with fine Birr 10,000". Similarly, disregarding some societal norms would also have some other consequences like isolation or exclusion from the society which are unbearable. Therefore, it is logical for the local community members to avoid one or more of these costs by cooperating than acting otherwise.

5.2. COOPERATION AMONG THE IDENTIFIED STAKEHOLDERS OF THE PROJECT

This section presents the results related to the stakeholders' cooperation. It has two parts. The first part presents the typologies of the partnerships identified, while, the second part delivers the results of the individual interviews.

5.2.1 Partnerships among the identified stakeholders

The main purpose of this subsection is to shed light on the nature of the identified collaborative relations. Accordingly, eight types of partnerships have been distinguished following Ros-Tonen, et al (2007), i.e. based on the actors involved and the objectives of the partnerships.

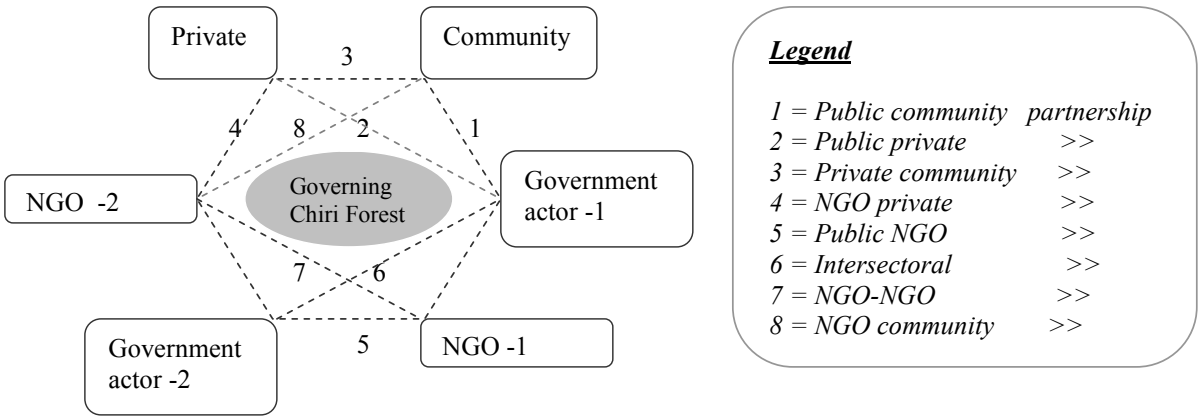


Figure 9: Types of partnerships between the identified stakeholders

Public-private partnership: refers to the partnership between the state agents and the private companies. For example: partnership between a carbon buyer company and the Oromia forest & wildlife enterprise. This partnership is not practical yet, at the local level, but there are such plans for the future.

Public-community partnership: refers to the partnership between the state agents and the local communities. A partnership between the Oromia Forest and Wildlife Enterprise and the local communities can be mentioned. In this partnership, OFWE engages local communities in forest

management affairs (e.g. forest protection) and recognizes some of their customary forest use rights. Accordingly, OFWE would achieve better protection for its forests while the involved local communities enjoy the permitted forest uses.

NGO-community partnership: refers to the partnership between non governmental organizations (NGOs) and the local communities. For example, the partnerships between the facilitator NGOs (Farm Africa& SOS Sahel and FZS) and the local community in the study area. Within the frameworks of the national and regional forest and other policies, these NGOs work to improve the livelihood conditions of the forest dependent local communities.

Public-NGO: refers to the partnership between the government agencies and the NGOs**.** For example: the partnership between the BMNP and FZS, between the OFWE-BEB and FA&SOS Sahel Ethiopia. The BMNP and FZS collaborate on issues of wildlife conservation and management. For instance, the FZS plays important roles in sourcing funds that can be used for conservation and research activities in the area. It is also collaborating with other domestic and international stakeholders to benefit the park from climate change initiatives like $REDD^{+}$ schemes.

NGO-private: refers to the partnership between the FA&SOS Sahel Ethiopia and Carbon buyer companies and carbon brokers. For example, they have jointly conducted various feasibility studies and assessed the total carbon stock of the eco-region.

NGO-NGO: refers to a partnership between two or more NGOs. The examples of this partnership in this case include various collaborations between the Farm Africa (FA) and the SOS Sahel Ethiopia. These NGOs collaborate in the planning and implementation of various community oriented development projects. They also collaborate in bringing the $REDD^{+}$ scheme to the Bale Eco-region.

Private-community: refers to the partnership between the private companies and local communities or community organizations. For example: partnerships between the carbon buyer companies and members of the Birbirsaa NRM cooperative and other forest dependent local

communities. Though there are no such direct partnerships at the local level currently they are likely to happen with the realization of the envisaged project.

Inter-sectoral partnerships: refer to the partnerships between different government sectors. For example: partnerships between forestry and justice departments to enforce forest related laws. Similarly, partnerships between the Dello Menna Woreda cooperative office and its departments of agriculture and pastoral development can also be mentioned. These state agents work together to improve the livelihood conditions of the forest dependent rural and pastoral communities.

As it can be seen from the above discussions, some of the above mentioned partnerships (e.g. private-community partnerships) are not operational yet. However, I presented them here because I defined partnership as an actual or potential formal arrangement between two or more actors of the project. Generally, it can be said that the project involves multiple partnerships both in terms of actors and objectives of the partnerships. Its partners range from the local community at the grass root level to the international carbon buyer companies. Similarly, the objectives of the partnerships include from mere exchange of information (e.g. among the local community members) to joint forest management (e.g. between the Birbirsaa NRM CBO and the OFWE), and empowering (e.g. partnership between the FA&SOS Sahel Ethiopia and the CBO members), among others.

5.2.2 Local Community Members' Willingness and Ability to Cooperate

This section presents the results of the individual interviews, i.e. of the selected 78 household heads. The interviews were conducted to identify the potential factors that would influence the willingness and ability to cooperate of the local community actors. The results are presented, hereunder, in graphs, tables and text descriptions.

A) Willingness to Cooperate (WTC)

Willingness to cooperate refers to the actors' disposition to work with each other on issues pertaining to the use and management of the Chiri forest under this project arrangement.

i) Perception on other actors

Three perceptual variables, i.e. perceived (inter)dependency, perceived conflict of interests and trust were used to assess one's perception towards his/her cooperating partner. Respective results and the overall perception rank of the key stakeholders are presented in this section. Following these results statistical summaries of the non parametric tests (chi-square) are given in table-1.

Perceived (inter)dependency & WTC

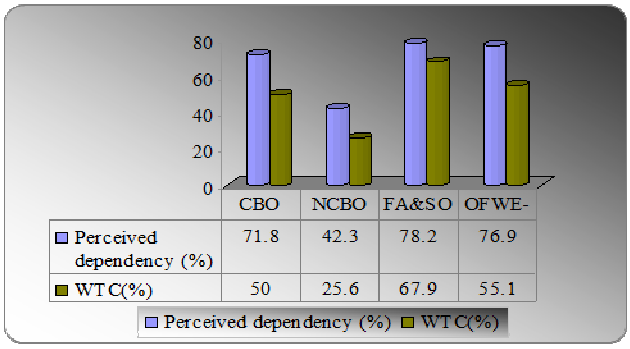


Fig 5.1: Perceived (inter)dependency vs WTC

As shown in the table of this graph more than seventy percent of the respondents consider themselves dependent on Farm Africa& SOS Sahel Ethiopia (FA&SOS), Oromia Forest and Wildlife Enterprise-Bale branch (OFWE-BEB) and Birbirsaa NRM cooperative (CBO). The majority of these respondents said that they are willing to cooperate with these key actors. As defined above (inter)dependency refers to one's feeling of inability to achieve own goal without seeking any support or consent from other actors. Similarly willingness to cooperate refers to actors' disposition to work with each other on issues pertaining the use and management

of the Chiri forest under this project arrangement. Based on these constructs two types of perceived (inter)dependencies were distinguished, i.e. one likely driven by the need for resource (resource dependency) and the other one created by institutions (institutionally created interdependencies).

- ***Perceived conflict of interests***

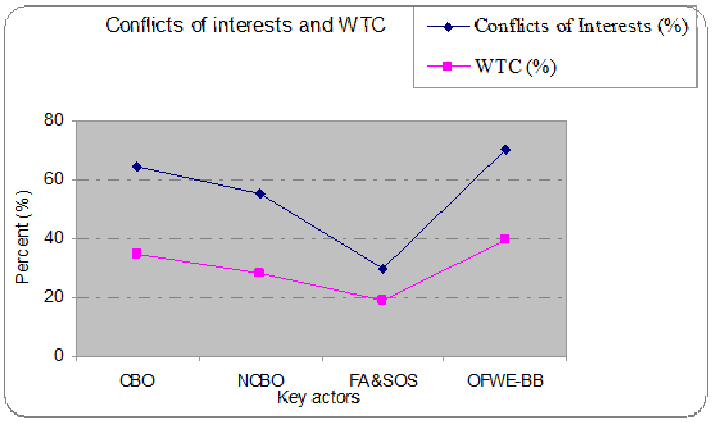


Fig 5.2: Perceived conflicts of interest vs WTC

As shown in the graph majority of the respondents, i.e. upto sixty percent, envisage some sort of conflicts of interests with OFWE-Bale branch (OFWE-BEB), Birbirsaa NRM cooperative (CBO) and non CBO forest users (NCBO). More than half of these respondents said that they would cooperate with OFWE-BEB and Birbirsaa NRM cooperative respectively. However, relatively few respondents expect such conflicts of interests with Farm Africa& SOS Sahel Ethiopia. In this case perceived conflict of interest refers to one's perception of incompatibility between his/her stake/interest, goal or practice and that of others' on issues pertinent to the use and management of the Chiri forest under this project arrangement. Based on this definition and their likely causes three forms of conflicts of interests have been identified. These are perceived conflicts of interests due to: 1) competition over the same resource, 2) perceived incompatibility between different forest uses; and 3) use of conflicting approaches to achieve the same goal.

- ***Trust***

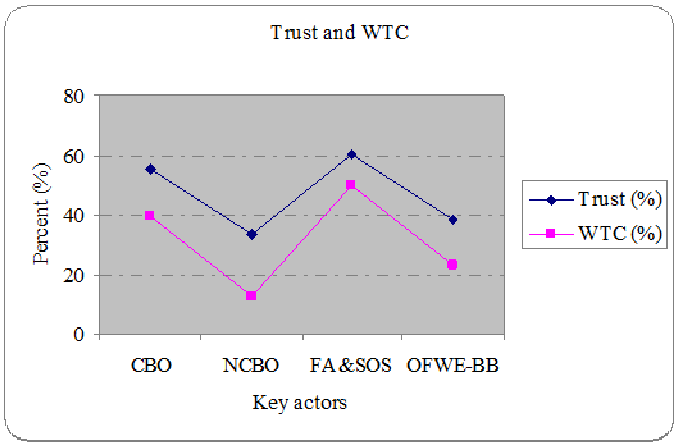


Fig 5.3: Trust vs WTC

As shown in the graph Farm Africa & SOS Sahel Ethiopia and members of the Birbirsaa NRM cooperative (CBO) seem to be better trusted by the majority of the respondents while non CBO forest users the most distrusted actors. However, the general pattern shows that the more a respondent trust an actor the more he/she is willing to cooperate with that actor and vice versa. The trend in which most of the respondents are willing to cooperate with Farm Africa& SOS Sahel and members of the Birbirsaa NRM cooperative (CBO) demonstrates this.

Summary of the test statistics

Non parametric tests (chi-square) were performed, to test whether each of the three variables that were used to measure respondents' perception on other actors (perceived dependency, conflicts of interest and trust) has statistically significant influence on the respondents' willingness to cooperate with the respective key stakeholders mentioned above. The test results are summarized below while the numerical statistics are reported in table-1[20].

Perceived dependency and trust have shown statistically significant influences on the respondents' willingness to cooperate (WTC) with members of the Birbirsaa NRM cooperative (CBO). Similarly, conflict of interest and trust have shown statistically significant influences on the respondents' WTC with non CBO forest users (NCBO). Only perceived dependency has shown statistically significant influence on the respondents' WTC with FA&SOS Sahel. All of the three variables tested (perceived dependency, conflicts of interest and trust) have shown statistically significant influences on the respondents' WTC with OFWE-Bale branch. But only perceived dependency has shown a relatively higher positive correlation with respondents' WTC.

To get a general picture of the respondents' perception on each of the key stakeholders, respondents were asked to rank each stakeholder first based on the three perceptual variables stated above, i.e. perceived dependency, conflicts of interest and trust; and then by the overall importance of each of them (see table-2). Accordingly, based on the overall importance FA&SOS Sahel and Birbirsaa NRM cooperative ranked first and second respectively while OFWE-BEB & NCBO forest users became third and fourth.

[20] *For statistical significance please see chi-square and p-values respectively; and for the correlation check phi or Cramer's V values in table 2. Please also note that all the test results are reported at α = 0.05 level of significance*

Table 1: Statistical summaries

(Dependency, CI and Trust against WTC at α = 0.05)

Actor(s)		*Variables*	*Test Statistics*			*DF*	*Sig (two tail)*
			Chi-square (χ^2)	*Cramer's V*	*Phi (ϕ)*		
Local community	CBO[1] members	Conflict of int. vs WTC[2]	2.277	0.171	-0.171	1	0.131
		Dependency vs WTC	7.305	0.306	0.306	1	0.007
		Trust vs WTC	5.606	0.268	0.268	1	0.018
	Non CBO members	Conflict of int. vs WTC	17.322	0.471	0.471	1	0.000
		Depend. vs WTC	0.199	0.051	0.051	1	0.656
		Trust vs WTC	7.218	0.304	0.304	1	0.007
OFWE-Bale Branch		Conflict of int. vs WTC	5.443	0.264	-0.264	1	0.020
		Depend. vs WTC	23.033	0.543	0.543	1	0.000
		Trust vs WTC	4.608	0.243	0.243	1	0.032
Farm Africa & SOS sahel Ethiopia		Conflict of int. vs WTC	2.110	0.164	-0.0164	1	0.146
		Depend. vs WTC	11.268	0.380	0.380	1	0.001
		Trust vs WTC	0.049	-0.025	0.025	1	0.825

1= Community based organization; 2=Willingness to cooperate

Note: Formulae

- *$Phi(\phi) = SQRT(\chi^2 / N)$; where χ^2 is chi-square and N is the total number of sample*
- *$V = SQRT(\chi^2 / (n (k - 1)))$ where χ^2 is chi-square and k is the number of rows or columns in the table*

Table 2: Key actors' relative rank

Actor	*Rank[1]*			
	Dependence	*Trust*	*Conflict of interest*	*Overall*
Members of 'Birbirsaa' CBO	1	2	2	2
Non CBO forest users	4	4	4	4
NGO/ Farm Africa and SOS	2	1	1	1
OFWE-BEB	3	3	3	3

**1= high level of dependence, trust and low level of conflict of interest*

ii) Perceived economic benefits from the REDD+ project

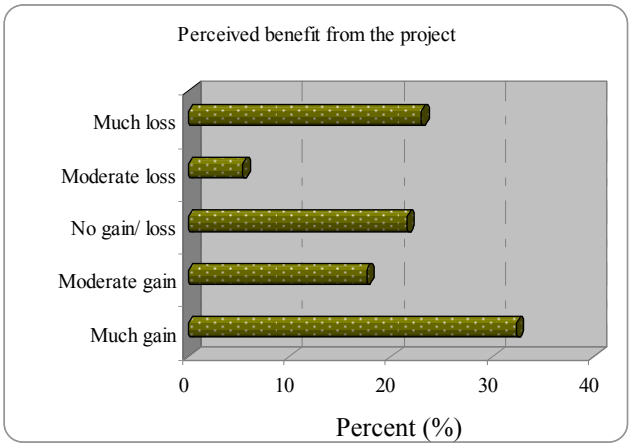


Fig 5.4: Perceived economic benefit from the project

As shown in the graph more than thirty percent of the respondents expect significant gains from the REDD+ project; whereas more than twenty percent of them expect a substantial economic loss from the forest because of the project. Moreover, other respondents of considerable size are in between expecting neither gain nor loss of any economic benefits from the forest as a result of the envisaged project. Most of those who expect substantial gains seem to place high hope on the project. The main concern for those who expect a significant loss is losing access (e.g. because of likely changes in the forest ownership) to the forest following the implementation of the project.

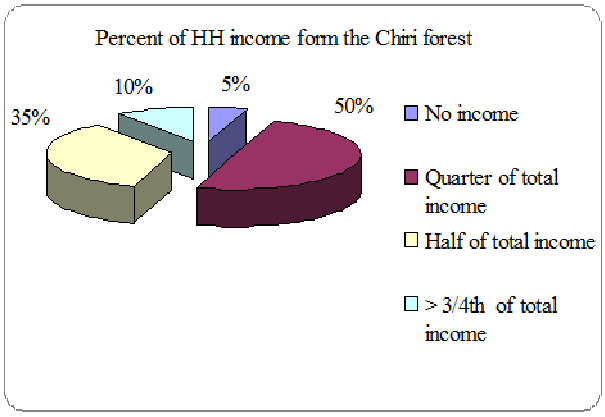


Fig 5.5: Income from the forest

Half of the respondents believe that about a quarter of their total income comes from the forest. However, none of them are entirely dependent on the income from the forest. Only five percent of them said they do not generate any income from the forest.

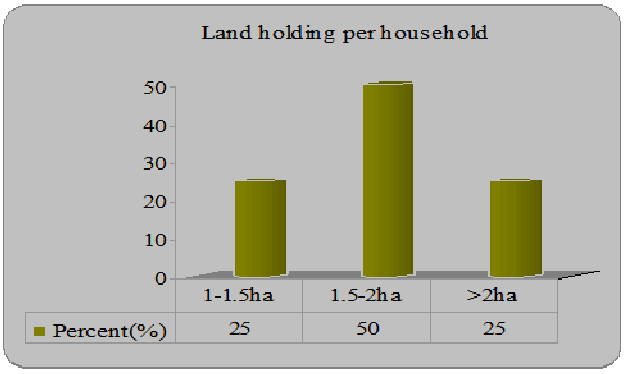


Fig 5.6: Land per household

The graph shows that fifty percent of the respondents possess one and half to two hectares of land per household. About a quarter of them have more than two hectares per family while none of them has below one hectare. All respondents said they use their land for mixed purposes, including crop production, residence area and grazing. About sixty percent of the respondents said they do not get enough harvest from their farmlands. Accordingly, they supplement their income from other sources, including from the forest. However, none of them has ever allocated part of their land for private woodlot. The main reasons for that include land scarcity, and the long time trees take to mature/long rotation period. Some of them also acknowledged as free access to the natural forest in the area has given them an incentive not to allocate part of their land to their own private forest. All of the respondents indicated that they satisfy almost all of their demands for forest products (wood and non wood) and services from the surrounding Chiri forest.

iii) Perception on the mediating rules/ institutions

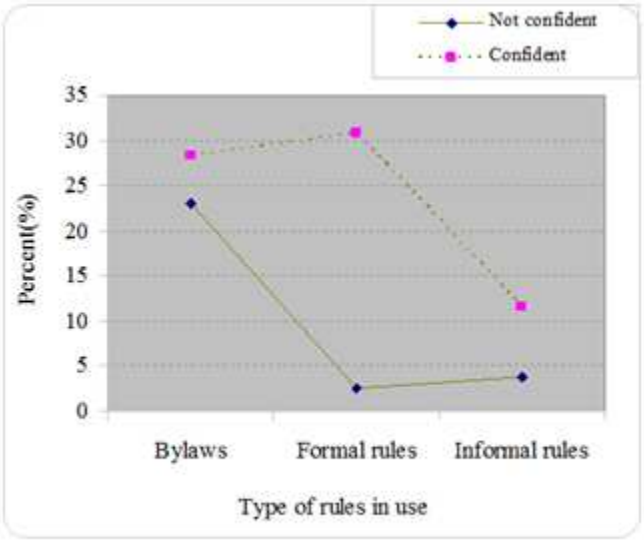
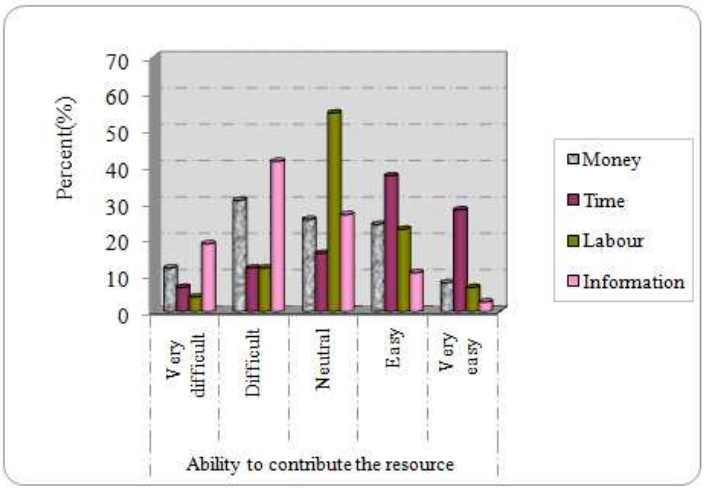


Fig 5.6: Confidence on rules

The graph shows the level of confidence respondents have upon the mediating institutions or rules. As it can be seen from the graph, formal rules and community bylaws are considered important mediating institutions in the area. Out of those who prefer formal rules, only few of them lack trust over the credibility of these rules. On the other hand, out of those who prioritized community bylaws about half of them have no confidence over their credibility. And this might be related to their newness. Only a few respondents seem to have confidence over the informal institutions.

B) Ability to cooperate (ATC)

Here one's ability to cooperate was assumed to be influenced by one's ability to contribute the necessary resources expected of him/her in a cooperative relation; and existence of institutionally enabling conditions to do so. However, one's ability to contribute the necessary resources would be in turn determined by his/her possession of such resources. This section presents the survey results related to respondents' ability to contribute resources required of them to coordinate and run their respective cooperative relations. Presumably, every cooperative relation requires deployment of some sort of resources, either from the cooperators themselves or from other sources. Among such resources identified in this case study include (but not limited to) time, finance, skill and political power. See the list of the identified resources in table 4 (under annex on page 116). Out of these resources four of them, i.e. money, time, labour and information were prioritized as essential resources by the respondents (see fig 5.7 on the next page).



As it can be seen from the graph, majority of the respondents said that, they can easily allocate their time for the project related issues; if, they are required to do so. For instance, most of them indicated as they do not have time constraint to participate in project related meetings. However, labour contribution is neither easy nor difficult for the majority. Its contribution seems conditional. This means that most of them have the view, of "I can, if others." Surprisingly, most of the respondents said that giving honest information is difficult for them. According to these respondents, this is due to a weak institutional system at the local level. These respondents indicated as the existing institutions are capable of neither protecting information providers nor guaranteeing fair trial to the reported wrongdoers. For example, if an individual found someone breaching the ordinances (e.g. forest protection laws) and reported a person to the concerned local authorities, there is no guarantee that a person would get a fair trial, mainly due to the corrupted institutional system. According to these respondents, it is easy for someone to bribe local justice officials and set free the suspected individuals. However, it is likely that a person (a wrong doer) or members of his/her immediate relatives or friends can revenge an individual who gave the information through their day to day social interactions.

Summary of the results

Generally, it can be said that perceived interdependency, trust and expectations of substantial economic gains from the project appeared to be the main incentives for the local community actors to cooperate with each other and other key stakeholders of the project. On the other hand, perceptions of the conflicts of interests, lack of trust, expectations of significant economic losses and less confidence on the existing institutions seem to be potential disincentives for the local community members' to cooperate.

The local community's high dependency on the forest appears to be the main challenge for the envisaged cooperation at the local level. All respondents from the local community, regardless of their CBO membership, indicated that they are entirely dependent on the forest to satisfy their needs for wood and non wood forest products and services. Moreover, ninety five percent of them said that part of their household income (quarter to three fourth of their respective total income) comes from the forest. Hence, reducing this high level of local community's dependency on the forest, by giving them some sort of alternative means of livelihoods, appears crucial. Otherwise, it is likely that even the willing community members would be unable to effectively cooperate not because of lack of interest or awareness, but because of the absence of alternative substitutes. Land scarcity and free access to the forest are the main reasons why farmers in the area do not allocate part of their land to private woodlots. Another challenge is deterioration of informal institutions in the absence of strong formal institutions. For instance, most of the respondents said that it is difficult for them to give honest information about the forest because of institutional limitations. Dependable institutions that can ensure effective enforcement of pertinent laws and protect cooperators seem to be lacking especially at the local level.

CHAPTER 6: DISCUSSION

This chapter discusses the main findings of the study, mainly, focusing on the local community members' cooperation. According to Gillinson (2004), human beings cooperate with each other either voluntarily or involuntarily. Voluntary cooperation occurs in response to certain kinds of positive incentives (e.g. moral, material, financial, etc.), while, involuntarily cooperation happens by using coercive forces or negative reinforcements (e.g. fines, physical punishment, etc.). In this context, incentives refer to the factors that potentially enhance one's willingness and ability to cooperate, while, disincentives refer to those factors that likely constrain one's willingness and ability to cooperate. Accordingly, in this chapter, I discuss the likely incentives and disincentives for the local community members to cooperate.

6.1 Potential Incentives for the Local Community Members' to Cooperate

I) Perceived (inter)dependency – *perceived inability to attain own alone*

Here actors or individuals are supposed to cooperate either to achieve what they cannot achieve alone or to optimize their unilateral achievements with joint efforts (Johnson and Johnson. 2009). As reported in chapter five perceived (inter)dependency has shown statistically significant influences on the local community respondents' willingness to cooperate. This means that, in statistical terms, the more a respondent feels dependent on an actor the more he/she will be willing to cooperate with that actor and vice versa. Such positive correlations between perceived (inter)dependency and one's willingness to cooperate have also been reported in previous studies. For instance, see (Johnson D.W. 2003; Choi et al. 2011). Then the question is: why do actors or individuals feel (inter)dependent? Various explanations could be possible for that. However, in the contexts of this study, the need for resource and institutions appeared the most plausible explanations:

- *Need for resource*

According to Pfeffer and Salancik (1978), the main source of perceived (inter)dependency is the need for a certain resource. The required resources are assumed to be crucial for the survival of

the needy actors. Hence, actors are said to be (inter)dependent, if they have to exchange resources that are essential for their survival or proper functioning. Nonetheless, access to such resources (e.g. power) often defines the actual nature of such interdependencies among the concerned parties.

Several evidences of resource based interdependency feelings have been documented in this study. For example, some of the respondents said that they want to cooperate with FA&SOS Sahel Ethiopia in order to get financial (e.g. grant, loan, etc.) and/or technical (e.g. training) assistances from them. According to these respondents, such supports would create better opportunities for them to improve their livelihood conditions. Similarly, most CBO members aim to cooperate with OFWE-BEB either to legitimize the customary use rights they claim over the forest or to get privileged entitlement to the benefit sharing from the envisaged carbon revenue. The majority of the respondents believe that OFWE-BEB needs information (e.g. for forest protection) and cheap labour (for its forestry operations like planting, thinning, harvesting, etc.) from them. According to them, the enterprise can hardly protect its forests without their firm supports and cooperation. They consider their cooperation as vital for the enterprise to effectively combat illegal logging and timber trafficking. However, these two actors (local communities and OFWE-BEB) seem to trust each other very little (see result section above). However, both parties acknowledge their mutual interdependence and the necessity of their cooperation. This is inline with what Lundin (2007) has reported. According to Lundin, parties that exchange some kind of resources have tendencies to cooperate with each other, though; they do not trust each other as such.

Possible influences of the need for resource, on one's decision to cooperate have also been documented by other studies (for example see: Franssen. 2010; Ros-Tonen, M.A.F. et al. 2008). However, it should be noted that the existence of a resource based (inter)dependencies is crucial but not necessarily sufficient condition to trigger cooperation among the concerned parties. According to Casciaro and Piskorski (2005), for cooperation to happen and sustain resource based (inter)dependencies should be coupled with fair power balance between the cooperating parties. In sum, it can be said that the need for resource has inevitable influences on one's perception on other actors and his/her motive to cooperate with them.

- *Made (inter)dependent by institutions*

Sometimes (inter)dependencies can be created by formal institutions like government decrees, regulations and written contracts. For instance, government agencies are made functionally interdependent (e.g. hierarchical reporting). Independent business firms might enter into binding contractual agreements (e.g. to improve their efficiency) and as a result become mutually interdependent. In this regard, institutions not only can create such (inter)dependencies but also they can structure and revoke them, if necessary. According to Sorenson and Torfing (2007) institutionally imposed interdependencies often encourage cooperation among the interdependent parties. However, in such cases, cooperation happens eventually as each party tries to comply with those institutions that made them interdependent.

For example, the reviewed CBO bylaws outlaw unpermitted access to the forest areas under the CBO concessions. According to these rules, every forest user should seek prior permission to use any resource from those areas. Moreover, the contractual agreements signed between Birbirsaa NRM cooperative (CBO) and OFWE-BEB clearly state as OFWE has full right to revoke such contracts in cases of insufficient compliances from the group members. Apparently, these institutions have created interdependencies between the stated actors (e.g. local communities and OFWE; CBO members and OFWE; the CBO management and local forest users). Therefore, one can attribute (at least partly) the observed willingness to cooperate of the local respondents to such institutions. It is likely that the CBO members would cooperate with other actors in order to comply with their bylaws and other related institutions. Hence, it is logical to conclude that the local community members would not only cooperate just for the sake of the benefits they envisage from the project but also to comply with the institutions that created such interdependencies.

Kinds of perceived (inter)dependencies

Various forms of (inter)dependencies have been reported in literatures. For instance, Pfeffer and Salancik (1978) have distinguished three kinds of interdependencies, i.e. asymmetric, symbiotic

and competitive based on the power balance between the interdependent parties (see page 35 and 36). Under asymmetric interdependencies powerful actors often dictate or manipulate cooperative relations in favor of themselves. In such cases, subordinate actors rarely retaliate because doing so would entail serious consequences (e.g. losing critical resources they would need for their survival). Rather they prefer to tolerate all the possible injustices and continue to cooperate in order to get critical resources they would need from the powerful actors. For example, the contracts signed between the OFWE-BEB, and the Birbirsaa NRM cooperative (CBO) give veto power to OFWE-BEB to decide on the fate of the contracts in cases of any disagreement between the two parties. This means that it continues to cooperate as long as its interests are better protected under the contracts than any other alternatives. However, the CBO has no such privileges.

Symbiotic interdependencies do not allow such strategic or systemic advantages of one party over the other. This is because the need for resources is often from both sides, and the resource exchange is more or less fair. Hence, the parties are expected to cooperate based on their mutual benefits. Wisely nurtured symbiotic interdependencies likely develop to true cooperation. In this regard observed perceived (inter)dependencies between the facilitator NGOs (FA&SOS Sahel Ethiopia), and the communities can be good examples. Unlike asymmetric and symbiotic interdependencies, competitive interdependencies often lead to conflicts than cooperation. Competition happens when one party achieves its goal at the expense of the other party. As they compete over the limited resource conflict is more likely than cooperation. In this study, covert competitions seem to exist between OFWE-BEB and BMNP on the right to the carbon credit from the forest in the park area.

On the other hand, Johnson and Johnson (2009) have reported two types of interdependencies, i.e. positive and negative. According to these authors, positive interdependence develops when parties recognize the impossibility of achieving their goals without each other. Like in symbiotic interdependencies parties depend on each other because of their mutual interests. Here, one party's achievement is crucial not only for the achiever but also for the other party as well. However, the opposite is true in the case of negative interdependencies. This means that the achievement of one's goal is not necessarily at the expense of other party's achievement.

II) Economic incentives (e.g. REDD^{+} fund) *– economic rationality*

The basic assumption here is that the more stakeholders envisage sizable economic gains from the project the more likely they would cooperate on its implementation and vice versa. In this regard, two contrasting perceptions were observed: a) expectations of substantial and life changing economic benefits from the project - considering the forest as a green gold and hopping the project as a way out of overwhelming poverty, and b) expectations of major economic losses from the forest mainly due to the project – fear of losing access to the forest (e.g. considering the project as an attempt of selling the forest to foreigners). Both groups (those who expect gains and those who envisage losses) seem to have adopted different strategies. Those who are envisaging better economic gains have become advocates of the project; while those who are expecting significant economic losses have joined the Birbirsaa NRM cooperative, mainly to protect their private resources (e.g. coffee) in the forest. Others who are in between are likely to take conditional responses, if their interests are deemed at stake. With the current arrangement, only the OFWE has a legitimate right to administer the envisaged carbon revenue. However, the utilization of this revenue is not yet clear. According to the article (20) sub article (4) of the Oromia Regional State Forest and Wildlife Enterprise Establishment Regulation No. 122/2009, the utilization of the carbon revenues will be determined by a special regulation to be issued by the council of the Oromia regional state government. It is apparent that both the government and the local communities have special interests in the carbon revenues to be generated. Hence, it is likely that economic interests are among the major incentives that would encourage the local community members to cooperate.

Nevertheless, possible influences of economic incentives on one's decision to cooperate are yet contentious. For some economists like Olson (1965), economic incentives absolutely dictate one's willingness to cooperate. According to them, human beings are rational agents who are capable of weighting the costs and the benefits of their actions. Therefore, for them using economic incentives is a perfect way of steering such human behaviors. However, there are some sharp criticisms to this idea. Many scholars such as Walker and King (1992); Schlozman et al (1995); and Robson and Kant (2007) reject the idea of absolute rationalism by saying that it disregards humanity. According to them, this view undermines the contributions of other non

economic factors that make us humans (e.g. the roles of altruistic behaviors like passion). For instance, Gillinson (2004) indicated as individuals weigh their decision against norms of fairness and logic of appropriateness. According to her, humanistic behaviors such as passion, compassion, love, tenderness, hate, esteem, reputation, etc., are at least as important as the economic incentives in motivating individuals to cooperate. Here human beings are assumed to cooperate not only because of materialistic gains; but also because of their humanistic nature they share in common. Goette et al (2006) also indicated as it is difficult to adequately command human behaviors (e.g. cooperation) just by incentives and contracts alone. According to these authors, in situations where regular incentives are not sufficient, people cooperate for some other reasons such as social ties, team spirit (e.g. to increase efficiency) and to comply with social norms.

Others even consider economic incentives as counterproductive, especially for voluntary cooperation. For example, Fehr (2002) indicated as the use of economic incentives in general and performance based ones, in particular, reduces voluntary cooperation. They do so, according to Fehr, by letting individuals to adjust their potential to cooperate with the level of incentives they would get. Once the use of such incentives becomes customized it is difficult to find people who would cooperate because of altruism. However, given the resource limitations, it is very difficult and too costly to provide adequate incentives for all cooperators.

On the other hand, Lemenih et al (2010) has pointed out as stakeholders involved in forest management such as local communities and government do not incur costs (e.g. financial or other opportunity costs) unless they anticipate better payoffs or compensation from alternative scenarios. According to these authors, local communities would forgo their customary uses, if and only if they envisage or actually got better economic incentives to do so.

As it can be noted from the above discussions, there are contrasting views concerning the likely influences of the economic incentives on one's decision to cooperate. Some say it negates voluntary cooperation while others, perhaps the majority, accept its positive influences but reject the claim of an absolute rationalism. The empirical results of this study have also indicated as the local community members are sensitive to economic incentives. Nevertheless, it

seems that economic incentives have positive influences on the respondents' motivations to cooperate; however, they are not the only determinants. Consequently, the observed results convey mixed messages. On the one hand, economic incentives likely motivate the local community actors to cooperate provided that, they are used in a fair manner. However, their discriminate uses (e.g. creating distributional inequities) would make them counterproductive. Especially if such disparities happened between the local communities, they would worsen the ongoing forest destructions. For example, providing selective incentives (e.g. for the Birbirssaa CBO members and/or local elites) would encourage others to view themselves as being marginalized. Similarly, any attempt to exclude the entire local community from the envisaged benefit sharing from the carbon revenue would compromise the overall success of the project. Hence, it would be good to try to benefit the entire local community (e.g. by financing some communal social projects prioritized by the local community members themselves) than trying to benefit certain individuals or groups.

III) Favorable institutions

a) Promising formal institutions

- *Involvement of other stakeholders (e.g. local communities)*

Until recently, the Ethiopian forestry policies had no provisions for non state actors, including the local communities. The former regimes did not recognize any other stakeholders other than the state. They put the forest resources of the country under the command and control of the state. However, the current regimes (both the federal and regional forest policies) have some provisions for non state actors, including the local communities . For instance, see the following articles:

- Article (18) sub article (4) of the Proclamation No. 542/2007[21]: urges regional forest authorities to work with other stakeholders such as individuals, investors, governmental agencies, NGOs and business organizations engaged in forest development.

- Article (6) sub article (1) and Article (8) sub article (1) of the Regulation No. 122/2009[b]: states as OFWE and its branch offices should involve local communities in forest management affairs (e.g. forest protection and conservation).

- Article (7) sub article (10) of the Regulation No. 122/2009[22]: states as OFWE-should share the revenues it generates from the sale of forest and wildlife products with the local communities living in and around the forests or protected areas.

- Article (8) sub article (13) of the Regulation No. 122/2009: states as any branch offices of the OFWE can enter into contracts with other stakeholders and to sue and be sued in their own names based on the delegation entrusted to them by OFWE.

[21] = *Forest Development, Conservation and Utilization Proclamation No. 542/2007*
[22] = *Oromia Regional State Forest and Wildlife Enterprise Establishment Regulation No. 122/2009*

The inclusion of such articles in the current federal and regional forest policies of the country is, by itself, an encouraging step forward. Such articles would give a framework in which non state actors can play their part in forest governance. For example, they would open rooms in which local communities can negotiate and legitimize their customary forest use rights. And that would enable them to cooperate with other actors such as the OFWE and the NGOs.

- *Clear and unambiguous penalty rules*

For example, on the Article (20) sub articles (1) to (6) of the "Forest Development, Conservation and Utilization Proclamation No. 542/2007" the penalties for breaching forest laws have been clearly defined. See these penalty rules in box-1 (under annex). If properly enforced, the rules are reasonably clear and could deter possible deviances. In doing so they would enhance the likelihood of local actors' cooperation.

b) Informal institutions: Norms and social life matter

- *Pro nature cultural capital would embrace the idea of REDD^{+} project*

During the data collection, none of the contacted local respondents were against the idea of forest conservation per se. On the contrary, most of them have expressed their grave concerns over the continued depletion of the forest. According to them, the forest is part of their life; without which life is hardly possible. They indicated as all forest functions such as economic, ecological, social and cultural are important for them. One old man described deforestation as a suicidal act of desperation; that would be tolerated only in life saving circumstances (e.g. during famine and drought). He further indicated as cutting trees or even killing a tiny insect without compelling reasons are against the spiritual, social, cultural and moral values and ethics of the Oromo people. Such and many more similar claims were common, especially during the focus group discussions.

These results are in line with some of the previous works done on the topic. For example, Kelbessa (2001b) indicated as Oromo people (the main tribe of the study area) attribute special meanings and values to nature in general and forests and trees, in particular. Kelbessa indicated as Oromos value forests and trees not only for their economic benefits, but also for their spiritual,

social and cultural functions. And it is based on these values, according to Kelbessa, that Oromos deal with forests and trees. In his argument, Kelbessa challenged the western thoughts that associate deforestation in most African countries with environmental illiteracy. He argued as most of the African societies in general and the Oromo people, in particular, have adequate knowledge of their environments. Especially societies that have effective systems of traditional knowledge transfer, have already developed competent institutions that can harness possible misuses of natural resources. For example, Oromo customs and norms do not allow greedy and irresponsible uses of nature, including forests. Kelbessa indicated as Oromos have ethical codes of conducts called 'safuu' - an important institution that guides how humans should use and treat non human creatures. 'Safuu' promotes the view of justice for all human and non human beings. Accordingly, it grants the right to exist for all creatures and command the people to respect this right existence for all! In doing so 'Safuu' seems to construct nature as what scholars call 'vulnerable object' (Smith, 2011). In this philosophical construct, people are portrayed as savers for what is called nature. However, 'safuu' does not prohibit the use of nature (e.g. forests) per se; but it strongly discourages extravagance, greediness and irresponsibilities, while using nature.

'Safuu' views nature as a whole being, in which all its constituents such as humans, animals, water, air, forests, etc., are connected to one another. Hence, it considers the humans' destruction of nature as self destroying. According to Kelbessa (2005), 'safuu' and other similar environmental ethics and world views of Oromos are in conformance with the modern environmental thoughts. Kelbessa argued as such spiritual and moral ethics and their traditional environmental knowledge have enabled Oromos to coexist with nature (including forests) for millennia. However, he admitted as such incredible beliefs and institutions are being threatened by a number of factors (see under institutional setbacks on page 93). Notwithstanding the concerns and the critiques on the roles of informal institutions in the modern societies, one can still assume that pro conservation ideas of $REDD^{+}$ would be easily embraced within the societies that have pro environment/nature cultural capitals. Accordingly, based on the Kelbessa's arguments, my personal experiences and the empirical evidences from the field work, I would argue as some of the observed local community respondents' willingness to cooperate on the issue would be partly, if not all, attributed to their belief in rational uses of nature. Hence, if the

conservation values of the REDD^{+} project are clearly communicated to them, indispensable portion of the local community members would embrace the project and cooperate with others in its implementation.

- *Capable informal institutions – can control free riding*

It is hardly possible for wrongdoers to hide themselves from the entire public; despite their utmost efforts to do so. Therefore, unless embraced by the system itself, it is difficult for the offenders (e.g. looters of forest products) to thrive without the knowledge of the entire public. For instance, some of the respondents told us that they refrain from the illegal uses of the forest because they think that they cannot hide their acts from the entire community. In addition to the penalties from the legal institutions, irresponsible uses of nature (e.g. forest) with mere ignorance would entail severe social punishments (e.g. sanctions) according to the Oromo culture. Hence, if properly adopted by the majority, informal institutions are often effective in shaping the behaviors of their community members. Many scholars have studied the roles of informal institutions in forest governance. For example (see: Ostrom, 1990; Idrissou, et al. 2011; Ray & Bhattacharya. 2011). However, most of these studies have indicated as well designed informal institutions that enjoy the support of the majority can supplement the formal forestry institutions. There are also attempts of using informal institutions in forest governance in the study area. For instance, under the organizational structure of the Birbirsaa CBO, there is elders committee called 'Gumii hayyoota'. The main function of these committees is to settle any forest related conflicts using traditional means. However, there are some threats (e.g. perception of artificial modernization and expansion of foreign religions) to such institutions in the area. Some of these challenges are discussed under institutional setbacks (see page 93). However, despite such threats, informal institutions have still indispensable potentials to be exploited. Therefore, one could argue that a majority adopted informal rules have a considerable potential to prevent or at least reduce prevalence of communally denounced behaviors or acts.

6.2 Potential Disincentives for the Local Community Members' to Cooperate

I) Confusions and uncertainties around REDD^{+}

As it is mentioned above REDD is a scheme designed to compensate the emissions of greenhouse gases from the forestry sector. It is a catchy concept that can easily win the interests of pro environment actors (e.g. ENGOs). On the other hand, it has been under enduring scrutinies and criticisms mainly from the climate change sceptics. Those who accept its importance are concerned about its feasibility both in terms of technicalities and finance, while, others even question its relevance.

Despite the ongoing series of negotiations, it remains one of the contentious issues of our time and has much uncertainties and confusions around it. For example, the stakeholders of the Bale Eco-region REDD$^+$ project have different opinions about it. Some of the key informants (e.g. staff of OFWE-BEB, FA and SOS Shale Ethiopia) indicated as they expect a substantial fund from the project. According to them, the envisaged fund can contribute a lot in financing economic (e.g. profit for OFWE-BEB), conservation (e.g. conservation fund for BMNP) and social (e.g. livelihood improvement of the local community) objectives in the eco-region. Similarly, some CBO members also envisage significant economic benefits that would bring a breakthrough to their livelihood conditions. On the other hand, some community members consider the project as an attempt to sell the forest to foreign companies. Nevertheless, none of these respondents do certainly know either the realization of the project or its likely impacts on both the forest (e.g. its governance regime) and their stakes. Diels (2010) also noted as REDD schemes in Ethiopia suffer from much uncertainties and contradicting perceptions. According to her, the confusions might be due to the newness of the REDD schemes in the country, while, the uncertainties seem to be because of the uncertain future of the Ethiopian forestry sector.

Such uncertainties and confusions around the REDD$^+$ have been reported by other scholars as well. For example, Hermosilla (2011) pointed as implementation of the REDD$^+$ pilot projects in most of the Latin American countries became difficult due to much uncertainties and confusions around the concept of the REDD$^+$ itself. According to Hermosilla, the uncertainties and confusions have repelled potential investors from the forestry sectors, increased deforestation and undermined the law enforcements. Hermosilla further argued as ill regulated REDD$^+$ funds would increase corruption, marginalize the interests of the local people and enhance resource

conflicts among the stakeholders. Similarly, Engel et al (2011) contended as performance based REDD$^+$ funds are insufficient to compensate the opportunity costs of alternative land uses. According to these authors, the price of a carbon unit will eventually drop to the level where it cannot compete with other alternative land uses. The predicted price fall remarkably questioned the sustainability of the REDD$^+$ scheme.

Another concern is related to the implications of the REDD$^+$ scheme on the forest governance. Two salient counter arguments exist in this regard (Toni 2011). Some say REDD$^+$ would recentralize and undo some successes of decentralization, while, others argue to the contrary. Those in favor of recentralization want the respective governments to shoulder key responsibilities such as administering the REDD$^+$ funds; monitoring and coordinating implementations. Whereas, those who are in favor of decentralization argue as recentralization would make REDD$^+$ schemes inefficient and ineffective. The main concerns here include a high risk of corruption in the government bureaucracies, marginalization of local communities and other non state actors. Despite such critiques, many countries have already started implementation of their pilot REDD$^+$ projects while many others, including Ethiopia are in process.

Regardless of such confusions and uncertainties climate change issues like carbon trading have become part of formal forestry institutions of Ethiopia. For example: on Article (6) sub article (7) of the "Oromia Regional State Forest and Wildlife Enterprise Establishment Regulation No. 122/2009" states that climate change mitigation through conservation and sustainable management of forests is one of the objectives of OFWE. Moreover, Article (20) sub article (2) of the same regulation (No. 122/2009) indicates: as carbon trading under different schemes is one of the potential revenue sources for the enterprise. Sub article (4) of the same article also stipulated as special regulations shall be issued to manage and use possible envisaged revenue from the carbon trading. These articles apparently show government's special interest on carbon revenue, including from the REDD$^+$ schemes. In the agreement documents signed between the Birbirsaa CBO, and the OFWE-BEB carbon trading is mentioned as one of the potential ecosystem services in the future. Both parties consider it as a new opportunity to be exploited hope to share benefits generated from it. However, in its current state, it is difficult to predict the

likely impacts of the stated confusions and uncertainties on the one's decision to cooperate or not. Nonetheless, with more clarity to come, some of the unrealistic assumptions (e.g. high financial gains and too much suspicion) would bounce back to reality. Thus, perception on $REDD^{+}$ seems to have mixed effects on the respondents' decision to cooperate.

II) Perceived conflicts of interest

Conflict of interest refers to disharmony of one's inner desires or needs with that of others (Marcouiller and Ellefson 1987). According to Deutsch (1973), the term conflict implies possible or potential incompatibilities between individuals' activities or duties.

In this study, conflict of interest is conceptualized as perceived or actual incompatibility between actors' interests or claims over the Chiri forest under the Bale Eco-region $REDD^{+}$ project arrangement. Accordingly, based on their likely causes three types of conflicts of interests (due to resource scarcity, perceived incompatibility between forest uses, and employment of conflicting approaches to achieve the same goal) have been distinguished and reported in chapter 5.

i) ***Conflict of interest due to resource scarcity***

As it can be understood from its name, the main cause of such conflicts of interests is resource scarcity. It occurs when someone assumes that the existing resource is inadequate to sufficiently satisfy his/her needs and that of others. Such perceptions would induce competition over a resource and possibly lead to interest clashes among the users. Conflicts of interests are common in most of the natural resources, including forests. There are some evidences of such conflicts of interests among the stakeholders identified in this study. However, the competing actors seem to employ different competition strategies to achieve their respective goals:

Map more

According to some of the contacted key informants, some of the OFWE forests have no uptodate maps. The older maps often do not match the realities on the ground. Hence, the enterprise is aggressively working to update its old forest maps and to produce new ones wherever necessary. The main goal of the mapping project is to establish clear and indisputable boundaries between

its forests and the surrounding land uses. It is an urgent task; because most of the enterprise's forests are being encroached by the surrounding local communities. Ownership claims over the forest areas already encroached are being arisen in several places. Some staff of the enterprise believe that some NGOs are backing such claims of encroachers and lobbying to legitimize them under the cover of participatory forest management (PFM). Accordingly, the enterprise wants to precisely map its forests quickly before further encroachments, and related claims occur. This is of high importance for the enterprise because there are some rules that back the claims of the encroachers in the absence of clear and uptodate forest maps. For example: article (8) sub article (4) of the Forest Development, Conservation and Utilization Proclamation No. 542/2007, states: "Where the designation and demarcation of a state forest pursuant to this Article results in the eviction of the local community, priority shall be given to the protection of the interests of the community in accordance with existing land administration laws".

Plant more

Among the strategies being used to expand participatory forest management is to allow local community members to develop NTFPs in the nearby forests. In the study area, several farmers have private coffee in the forest and there is a tendency to legitimize co-ownership of such forests, under the current approaches of the participatory forest management. Accordingly, it seems that the farmers are employing plant more and claim more strategy to put more forests under their concessions.

Lobby more

The NGOs (Farm Africa, SOS Sahel Ethiopia and FZS) are the potential lobby groups in the area. Farm Africa and SOS Sahel Ethiopia have been lobbying for more community involvement and fair benefit sharing. One of the staffs of these NGOs told me that they are working to introduce new payment schemes for ecosystem services (e.g. watershed) in which downstream commercial water users, including the Ethiopian Electric Power Corporation would pay marginal user services for the water which originate from the Bale Eco-region to provide economic incentives for the local communities protecting the forests. They are lobbying the government and other actors to get this plan through. Moreover, the Frankfurt Zoological Society (FZS) has also been lobbying for the wildlife resources in the area to reduce encroachments of local

communities into the park areas and forests. Here the competition is to put more forest areas either in the hands of the farmers (FA&SOS Sahel) or under the protected areas (FZS and BMNP). The more the forest is allocated to the farmers the less area available for conservation of wildlife resources and vice versa. The ownership of the forests in the park (BMNP) and the right to own the carbon credit from them is yet contentious. The park is under the federal government (Ethiopian Wildlife Conservation Authority), while, OFWE is under the regional state of Oromia. Hence, there exists a covert conflict over the forest resources in the park, because OFWE, in principle, owns all forests in the regional state of Oromia. On this issue, FZS is lobbying for BMNP, while, FA&SOS Sahel Ethiopia are lobbying in favor of OFWE.

ii) Conflicting approaches towards the same goal

Protecting or conserving the forest is not a problem per se; rather the problem is on how to do it. Two main conservation approaches, i.e. people centered or resource centered, exist in the politics of nature conservation. The first approach emphasises on people and tries to address conservation through helping the resource dependent local communities. This approach doesn't rule out the use of the resource to be conserved. Rather it aspires for sustainable uses that do not deplete a resource base. It is a sort of compromise from both sides. The second approach is resource centered and hence; it promotes 'nature first' conservation strategies, especially for the critical resources. Both approaches seem to exist in the study area. For instance, the local communities and FA&SOS Sahel Ethiopia somehow seem to be in favor of the people first approach, while, FZS and BMNP are more towards a resource based approach. BMNP and FZS demand immediate eviction of the local communities from the encroached park areas and wish to keep the park free of such human interferences. On the other hand, the local communities, FA&SOS Sahel Ethiopia and OFWE-BEB somehow seem to tolerate controlled interferences such as a temporary settlement in the forest during drought seasons and NTFPs development in the designated forest areas. However, there is a big concern on the people based approach even by those who favor it. For example, implications (e.g. on biodiversity) of expanding coffee in the forest as part of the NTFPs development package is uncertain even for those who promote it.

iii) Incompatibility between the forest uses/ functions

There are cases where different users are interested in different products and services of the same resource, but do not compete overtly. However, the uses of one beneficiary might not be compatible with that of others and vice versa. For example, it is hardly possible to optimize the objectives of biodiversity conservation, timber harvesting and NTFPs development from a forest area at a time. The following graph shows the stakeholders' interests in the Chiri forest.

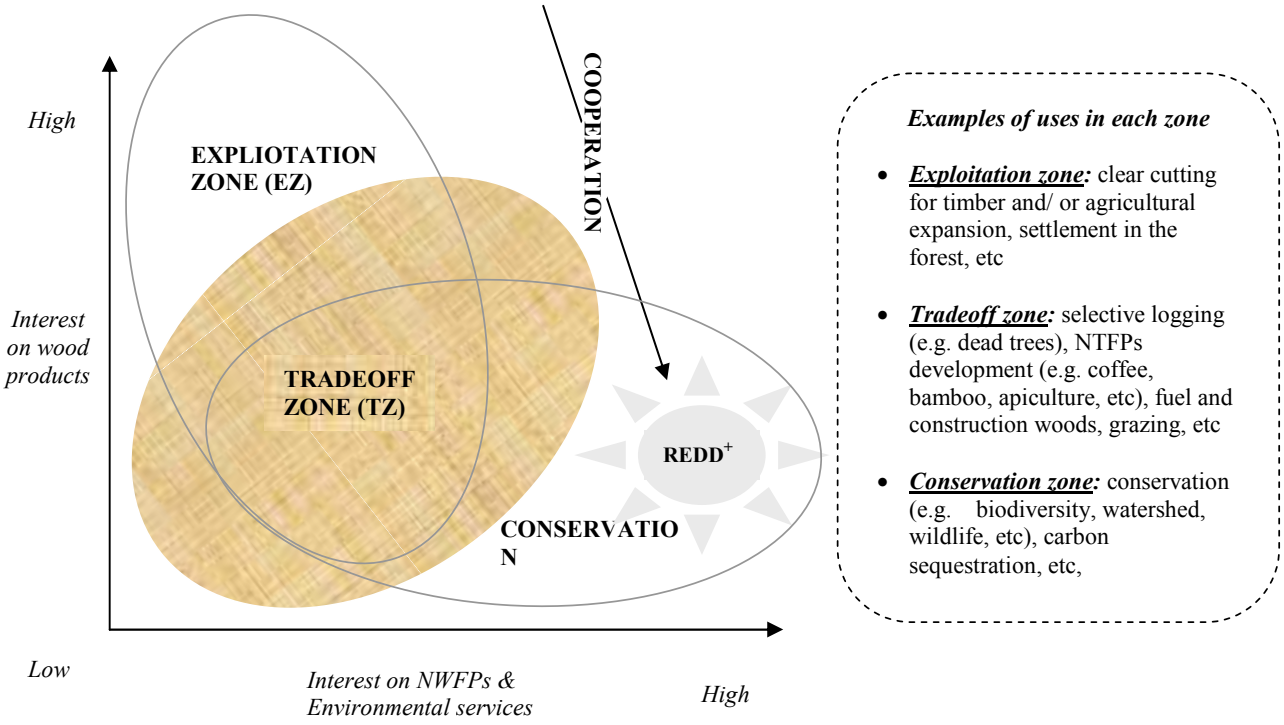


Figure 10: Interests on forest products and services

Source: author

Apparently, the interests in the exploitation and the conservation zones appear highly incompatible and hence, it is unlikely to combine them. For example, one cannot use the same forest land for an agriculture and biodiversity conservation or timber harvesting and carbon sequestration at a time. The idea of the Bale Eco-region REDD^{+} project seems to be more compatible with the forest functions in the conservation zone. Accordingly, it is more likely to be embraced by those stakeholders who are interested in non timber forest products and services,

than those who use wood products such as timber, charcoal and construction wood. Substantial harvesting of wood products apparently reduces the carbon sequestration potential of the forest and hence, compromises the success of the Bale Eco-region REDD^{+} project. Nonetheless, those stakeholders (e.g. NCBO forest users, CBO members and OFWE-BEB) who seem to be more interested in wood products would have more influence on the forest. With the current arrangement, compromise is the likely scenario which is indicated as a tradeoff zone on the graph. Accordingly, cooperation is likely under the following circumstances: 1) if the key actors whose interests are more affected by the project are willing to compromise, i.e. comply with the project rules by not harvesting the wood products beyond the agreed upon limit; 2) if these users get better economic benefits from the project than they would get by harvesting such wood products; and 3) if dependable institutions, that can guarantee compliance of each actor, exist.

As 50% of the wood dry matter is carbon, substantial harvest of any wood products from the forest would significantly reduce the CO_2 storing potential of the forest. Hence, harvesting of the wood products like timber, charcoal, etc., at a larger scale would negatively affect the success of the project. Almost all respondents indicated as they entirely depend on the Chiri forest to satisfy their demand for wood. They use wood for: household energy (fuelwood or charcoal), construction (living houses, livestock shelters, fences, etc.), farm-implements, household equipments (furniture and utensils), etc. According to the Ethiopian forest laws local communities can collect some wood products (except timber and charcoal) from the state forests for non commercial uses. For example, Article (10) sub article (3) of the "Forest Development, Conservation and Utilization Proclamation No. 542/2007"; allows harvesting of minor wood products (e.g. fuelwood) from the state forests. Moreover, local communities' customary use rights are recognized by the pertinent Ethiopian laws.

Apparently, some of the above stated forest functions or uses are somehow in conflict with each other. However, the local community members' likelihood of cooperation depends on their willingness and ability to compromise some of their interests. Even to offer a compromise deal local community members, likely need an alternative means to satisfy their basic needs such as wood for energy, construction, etc. Establishment of private or communal woodlots would be an option; however, as indicated above, in chapter five, the main bottleneck for such options in the

study area is an acute land shortage. Moreover, farmers complain about the long time trees take to grow.

Another alternative would be helping the farmers to shift to other energy sources like electricity and solar energy. However, given the poor capacity of the state to expand such infrastructures to the remote areas and high utility costs (unaffordable for most local poors) shifting to these energy sources appears unlikely, at least in a short period of time. Nonetheless, some international NGOs (e.g. FZS) in the area are trying to promote energy saving stoves in order to reduce fuelwood consumption by improving the efficiency of traditional stoves. However, the success of such projects also depends on the price of the stoves, availability of credit facilities to the users and the presence of good extension services. Owing to the nature of $REDD^{+}$ (performance based scheme) and high level of local communities' dependence on the forest, the main challenge would be to keep a balance between tolerable local uses and optimal carbon storage potential of the forest.

III) Institutional setbacks

Corruption: is a deliberate curbing of justice by receiving some sort of bribe (e.g. financial, political, social, sexual, etc.). It is one of the most known hindrances of justice, especially in most of the developing countries, where there are inadequate institutions and low political commitment to combat it. In such countries, people have little control or influence on both the politicians and the institutions and hence, the rule of law hardly prevails. Most of the interviewed respondents and the participants of the focus group discussions have loudly complained about the widespread corruption in their local administrations. They indicated as it seriously undermines the enforcement forest laws in the study area. According to some sources, corruption has existed in Ethiopia since time immemorial. For example, in the former feudalist regime people were expected to offer special gifts (e.g. live animals, honey, butter, gold, etc.) to the landlords on the important occasions. Ever since bribing, government officials, is considered as the easiest way to get things done in one's favor. According to the participants, corruption is highly prevalent in their area, especially, in local police, court, customs and tax authorities. They mentioned a plenty of examples in which illegal loggers, who were caught red handed and

submitted to the police, were set free without fair trials. When asked about possible appeals for retrial, the respondents unanimously asked: to whom? They said - all are thieves! It seems they were desperately hopeless on their justice systems. However, despite their bitter complaints, they indicated as their efforts to protect the forest without the supports of the local police, court and local militia are in vain. Negative influences of corruption on forest law enforcement are not new. For example, Tomaselli (2011) has reported similar stories from Gambia. Moreover, Hermosilla (2011) has also indicated as a large amount of money that come as $REDD^{+}$ funds would exacerbate corruption in the forestry sector.

Antisocial punishment *– Reciprocity*

For a man, often considered as a social animal, living in isolation is hardly possible. The bases of social life are social interactions. And socially interactive groups are usually interdependent. One of the main features of the social interdependency is its reciprocity, i.e. an expectation of return for something given or done (Blau. 2009). Information exchange (e.g. about the forest) is one of the main contributions expected from the local community members. However, many of the respondents, including members of the Birbirssaa NRM cooperative (CBO) seem to have limitations in exchanging honest information; especially when it comes to exposing illegal forest users. Use of social bonds (e.g. family relationship, friendship, religious affinity, etc.) is among the main restraints of the honest information exchange. According to the respondents, it is difficult, if not impossible, for someone to honestly and impartially expose his/her associates even though he/she found them being engaged in illegal activities. The perceptions of such partialities among the community members likely reduce their motives to share authentic information. And the prevalence of such perceptions would undermine the overall credibility of the information being exchanged. Especially, in developing countries, where the supremacy of the rule of law is inadequate, social bonds might be utilized to distort justice.

Utilization of such social bonds apparently favors prejudice and nurture antisocial punishment. For example, if, a forest guard finds someone harming the forest and if, the wrongdoer is his/her associate (family, friendship, belonging to the same social group, etc.), it is unlikely that the guard reports the person properly. The guard would be tempted, at least, with what to do, i.e. to

report the person and cooperate with the rules or pardon him/her and cooperate otherwise. By cooperating with the rule, i.e. reporting the person, the guard likely incurs social costs. However, if he/she chooses to cooperate otherwise, i.e. pardon the person, as it is often the case, according to some respondents, he/she definitely encourages free riding. The prevalence of such behaviors creates conducive environments for the development of antisocial punishment. Antisocial punishment suppresses cooperation by punishing pro-social cooperators, i.e. it favors individualists by penalizing communalists. Thus, the prevalence of such reciprocity (revenging those who expose someone or someone's relative) would risk institutions that would take care for the Commons. Most of the respondents seem to have such concerns with regard to the information exchange. According to them, cooperators should have certain incentives in order to take such risks. For instance, they should get strong cooperation from the local justice departments such as police and court. Therefore, ensuring fair trials for the wrongdoers and encouraging cooperators with moral and/ or financial or material incentives, would counteract the prevalence of antisocial punishments.

Modernization and cultural erosion: *disregarding informal institutions*

Though, modernization is not a problem per se, it has been changing the ways the people used to live (e.g. it raises the needs and demands of the society). For example, the demands for modern education, communications and transport were not common in the past, especially, in remote rural areas. Currently such demands are becoming common, particularly, among the youths, even in those areas. As a result, families are being compelled to satisfy such demands for their children; even though, some of them such as buying mobile phones, sending their children to private colleges, etc., are hardly affordable. Under such circumstances, if a family is not well resourced, public goods such as forests pay the bills. As a result the pressure on the remnant natural forests, like the Chiri, is mounting.

The contacted elders have unanimously complained about the prevailing irresponsibility of the local forest users. According to them, some of the community members, especially, the youngsters are disregarding their customary norms and practices while dealing with nature. These elders claimed to have ecologically sound practices of harvesting forest products. For

example, lianas are one of the most important non timber forest products in the area. They are mainly used for construction (e.g. house, animal shelter, food store and fence). According to the elders, there are good practices on how to cut and take out lianas from the forests. First, the harvester should find the root of the liana to be cut and then, free it from other lianas and plants, i.e. before he/she cuts and pulls it out. Similarly, while harvesting forest honey people should observe the experiences developed over generations, not to set fire by mere negligence. According to these elders, such practices have cultural roots and they became norms eventually. And their main goal is to promote responsible uses of nature. However, the elders indicated as such noble practices are being ignored by current generations. Part of the elders' blame goes to the expansion of foreign religions and modern education. The elders accused some of these institutions for disregarding the cultural values and norms of the society while educating the public. According to the elders, some of the norms and cultural heritages are worthy to keep for the next generations. The remaining blames go to the successive governments. The elders said that the successive regimes of Ethiopia have deprived them their forest ownership rights. They believe they are natural candidates to own, use and take care for the forests in their localities. Nevertheless, they said, the former regimes had alienated and declared them as enemies and destroyers of the forests. Then the forests were declared as properties of the state and people were used to be prosecuted for using them. The elders claimed as such systems have nurtured the development of negative sentiments and sense of non belongings towards the forests. And such feelings and unjust prosecutions might have given incentives for some of their community members not to care for nature, as per their cultural norms and practices.

IV) Poverty

Given the limited alternative means of livelihoods in the study area, especially during the times of crop failure and urgent needs for cash, the forest obviously serves as a safety net for the local poors. For example, during food shortages people go to the forest and cut timber or make charcoal in order to get the cash they need to buy food for their families. Similarly, they do the same when they need cash, for example, to pay their health bills and to buy agricultural inputs such as fertilizer and improved seeds, for school fees, etc. Recently such problems (e.g. crop failure due to drought) are becoming common and the pressure on the remnant natural forests

like the Chiri is being heightened. According to the respondents, poverty is the primary problem in the study area. In this context, poverty is the state of inability to meet own basic needs (e.g. need for food, access to basic health care, shelter, etc.). During focus group discussions ethical and moral dimensions of poverty were heavily discussed among the participants. For example, some of the participants believe as protecting and conserving forest is justifiable from ethical, moral, legal and cultural points of views. Nevertheless, they challenge the views of conserving forests; while, people and livestock are under severe threats (e.g. during drought). According to these participants, it is unethical and unfair to prosecute poor people even though they breach the rules and use the forest illegally. These participants further noted as doing so (prosecuting poors) is against their culture. Only a few participants argued to the contrary. These opponents indicated that such segregation likely compromise the law enforcement. Their main concern is the definition of poverty and the poor. Who is poor and who is not? They said if poverty serves as an excuse for illegal forest uses it would be difficult to effectively enforce the rules. There is a risk that, everybody would claim to be poor!

Hence, poverty's impact goes beyond increasing the local community members' dependency on the forest, due to lack of alternatives. It likely undermines forest law enforcement, for example, by serving as an excuse for the illegal acts and enhancing corruption. According to the respondents, local officers (e.g. police) are prone to corruption perhaps, due to their low salaries. However, in the study area, no clear boundary exists between those deemed poor and the rest. And there was no consensus on the definition of poverty among the respondents. Under such controversies poverty can be intentionally used, as an excuse, to obscure fair enforcement of rules. While acknowledging poverty as a big problem, framing it as an excuse for all misconducts, should raise concerns on the genuineness of such claims. Unless there are some checks and balances in place, such general blames of poverty would be used to get unqualified exemption from accountability. Notwithstanding this concern, it is highly likely that considerable segment of the local community members would not be able to effectively cooperate just because of their overwhelming poverty.

Apparently, human behaviors like cooperation are influenced by a multitude of factors some of which are subtle to discern. Hence, the factors discussed, in this chapter, are by no means

regarded as exhaustive or complete. However, they would give some insights into the likely factors that might affect local community members' willingness and ability to cooperate on issues pertaining to forest governance, in the context of the study area.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

Conclusion

The study was mainly aimed to examine the extent to which the local community actors are willing and able to cooperate in REDD$^+$ in the Ethiopian context. Stakeholder analysis was undertaken to identify potential stakeholders and their collaborative relations. Several stakeholders were identified and their collaborative relations were examined with partnership analysis. The results show that the local community members' likelihoods of cooperation depend on a number of factors, including perceptions and institutions. However, from the results obtained, it appears difficult, if not impossible, to precisely predict one's likelihood of cooperation. This might be due to human's ability to intentionally or deliberately manipulate such behaviors to suit their respective circumstances. For instance, one can easily pretend to cooperate while he/she actually behaves otherwise. A military officer might claim absolute faithfulness to his/her regime while covertly supporting oppositions. Similarly, a forest guard might pretend to be loyal, while he/she is being bribed to cooperate with illegal loggers. Therefore, cooperation is a dynamic and contingent human behavior that can be affected by different factors. Respondents' decisions to cooperate, in this particular case, seem to be affected by three groups of factors: 1) those related to the REDD$^+$ itself, i.e. uncertainties and confusions; 2) those related to the stakeholders themselves (e.g. perceptions) and 3) various contextual factors such as institutions and poverty.

The majority of the respondents, including the key informants, seem to be uncertain about the realization of the project and its likely impacts. This would be related to the newness of the project idea and the ongoing, higher level, climate change negotiations. The outcomes of the international and regional climate change negotiations likely affect the rules of the game at the local levels. For instance, if such negotiations let the national governments to have upper hands and recentralize the governance of the forests, the current scenario of promoting PFM would be reversed.

Perceived (inter)dependency appears the main enhancing factor for the envisaged cooperation. Most of the respondents have attributed their motivations to cooperate to this variable.

Perceptions of (inter)dependencies seem to be induced by either the need for resource or institutions or both. Respondents have shown strong feelings of (inter)dependencies with almost all of the key stakeholders. Such perceptions likely encourage the stakeholders to come together and negotiate their interests. And that would help them to acknowledge the stakes of one another and further their cooperation. Other factors that might enhance cooperation include trust and expectations of substantial economic gains from the project.

On the other hand, perceived conflicts of interests appeared to be the most deterring factor for cooperation. Moreover, other factors such as overwhelming poverty, lack of trust, expectations of significant economic loss and less confidence in the existing institutions have also been identified as potential hindrances for the envisaged cooperation. However, despite such challenges, the current scenario appears to promote conditional cooperation. The majority of the respondents have the view of "I/we will cooperate, if others." This means that, most respondents, if not all, likely base their decisions to cooperate on others' likelihoods of cooperation. Among the main conditions include the existence of alternative means of livelihoods for the local community members, transparent flow of information, effective (forest) law enforcement and recognition to the customary forest use rights.

It is likely that, when operationalized, the project brings some opportunities and challenges to its stakeholders, including the local community. Its opportunities would include a generation of alternative income that can be used for both forest conservation and improving the livelihood conditions of the forest dependent local communities. Whereas, its challenges would be getting the confidence of carbon buyers/financers, ensuring the addition of carbon by improving the protection and management of the forest, for example, by limiting the wood harvest from the forest and controlling or minimizing other risks like forest fire. Even the greatest challenge would come with the distribution of the envisaged $REDD^{+}$ fund in a fair and transparent way.

Recommendation

Assuming the realization of the project and considering the situations on the ground the following recommendations are forwarded:

Change management: change is, in this context, any deviation from the business as usual scenario. It is likely that the project will bring some changes to the current situation. Among other things, it would alter the resource distribution from the forest. For example, recognizing only the use rights of the Birbirssaa CBO members would appear to marginalize the interests and rights of the other users. However, in the presence of any considerable discrimination the project hardly wins the trust of its stakeholders. Hence, an efficient change management system that would foster and nurture cooperation among the concerned stakeholders should be in place. For instance, much should be done in raising the awareness of the stakeholders by clarifying the confusions around the project. Moreover, ensuring indiscriminate and transparent flow of information, among all stakeholders, and empowering the marginalized segments of the community appear crucial.

Rescuing restoration at risk: unlike the former regimes, some approaches of the participatory forest management seem to have revived the sense of ownership among the local community members. Most of the local community respondents claimed that the former regimes had robbed them such feelings of ownership. While recognition of the community ownership, by the concerned government authorities, would give incentives for the local community members to cooperate; any attempt of revoking it, would encourage them to act otherwise. Therefore, it is important to nurture the reviving senses of ownership. There are also documented claims of improved natural regenerations in the forest, especially after the involvement of the local communities, under the PFM schemes. As a result, there exist appealing needs to tend the upcoming natural regenerations, for example, by excluding incompatible uses (e.g. limiting free grazing).

Use of both stake and stick: it is likely that fair recognition of one's stakes in the forest or the project enhances his/her level of commitment to cooperate. On the other hand, it is also

important to put a limit to greedy needs of some selfish stakeholders. In this regard, it is necessary to institute capable institutions that can effectively punish wrongdoers and reward cooperators. Thus, the use of both options whenever and wherever necessary would enhance the overall likelihood of cooperation. Moreover, there should be a clear and negotiable benefit sharing schemes in place. Currently, such provisions are lacking and hence, what one gets, from the envisaged carbon revenue, has not been explicitly defined.

Recommendations for further research:

The research has generated valuable information that can be used for various purposes, including as an input for further researches. However, the associations between some of its variables such as trust and willingness to cooperate need to be validated with other robust techniques such as game experiments. Various partnerships have been identified among the stakeholders of the project. However, due to the early stage of the project and other constraints such as time, they were not thoroughly studied and evaluated. Hence, further researches need to be done, perhaps, after the project became operational. Overall, well designed interdisciplinary researches that involve different sites likely generate more plausible results.

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Annex:

i. Questionnaire

Part I: Personal and socioeconomic information

1) Age: a) < 18 □ b) 18-30 □ c) 31-45 □ d) >45 □
2) Gender: a) Male □ b) Female □
3) Ethnic group a) Arsi Oromo □ b) Shawa Oromo □ c) Amhara d) Others □
4) Religious affiliation a) Muslim □ b) Christian □ c) 'Wakefata' d) Others □
5) Level of education a) No formal education □ b) Elementary , i.e. grade 1-6 □ c) Junior, i.e. grade 7-8 □ c) High school, i.e. grade 9-12 □ d) college □ e) university □

6) Family size: a) single □ b) 2 □ c) 3-5 □ d) 6-10 □ e) > 10 □
7) Means of livelihood: a) Crop production □ b) Mixed agriculture □ c) Small business □ d) Employment □ e) Others □
8) How much of your total HH income comes from the Chiri forest?
None □ Quarter □ Half □ Three forth □ All □
Please specify …….....
…….
9) Do you have private land? Yes □, No □, if yes, its area in hectare
a) < 1ha □ b) 1-2ha □ c) 2-5ha □ d) 5-10ha □ e) >10ha □
Do you get enough harvest from your land? Yes □ No □
If not, why not…….…….....
……..
10) Land use a) residence □ b) crop □ c) grazing □ d) forestry □ e) others □
11) How much of your land is allocated for forestry/ tree planting?
None □ Quarter □ Half □ Three forth □ All □
12) From where do you get wood for different uses such as fuel, construction, etc?
a) 'Chiri' forest □ b) Private plantation □ c) a&b d) other sources (e.g. market) e) all □ e) all □

Part II: Main questions

- ✓ ***Perceived (inter)dependency***
  - *Please indicate your level of agreement with statements 1 to 4*

1) I believe that I and people like me cannot protect our interests in the Chiri forest (e.g. continue using the forest, get entitlement to certain benefit sharing schemes), under the Bale Eco-region REDD^{+} project arrangement, unless we closely cooperate with other actors (a-d):

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

2) I also believe that (a-d) cannot fully attain their/its respective goal(s) in the Chiri forest, under this project arrangement, without the cooperation of me & people like me:

a. CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b. Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c. OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d. FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

3) To what degree do you feel (inter)dependent on each of the following actors (a-d) to protect your interest in the Chiri forest under this project arrangement?

a) CBO members Not at all □ Little □ Moderate □ High □
b) NCBO >> Not at all □ Little □ Moderate □ High □
c) FA&SOS Not at all □ Little □ Moderate □ High □
d) OFWE-BEB Not at all □ Little □ Moderate □ High □

What makes you (inter)dependent on each of these actors (a-d)?

I feel (inter)dependent on (a-d) because.....

……..

4) Therefore, I would like to cooperate with (a-d), under this project arrangement, mainly because I cannot be optimally benefited from the forest (e.g. use resource) without cooperating with (a-d)

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

✓ ***Trust***

- *Please indicate your level of agreement with statements 5.1 to 5.4*

5) If, under this project arrangement, I entered into an agreement with the key actors (a-d, see 5.1) on issues pertaining the use and management (e.g. forest protection, communal use, benefit sharing) of the Chiri forest, I trust my engagement with (a-d) because:

5.1) It will be fair and just, i.e. (a-d) will not take any advantage on me & people like me

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

5.2) I know that (a-d) will keep their/its promise

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

5.3) I am confident that each of them (a-d) will not take important decision without me

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

5.4) Therefore, I would like to cooperate with (a-d) in these regards mainly because they are/ it is trustable

a) CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c) OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d) FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

✓ ***Perceived conflicts of interests***

6) Please indicate the level of conflicts of interests you envisage with each of the actors (a-d) regarding the use/ management of the Chiri forest under this project arrangement

a) CBO members Not at all □ Little □ Moderate □ High □
b) NCBO >> Not at all □ Little □ Moderate □ High □
c) FA&SOS Not at all □ Little □ Moderate □ High □
d) OFWE-BEB Not at all □ Little □ Moderate □ High □

Why do you envisage such conflicts of interest with each of them (a-d)?

I envisage so because ……...

7) If I cooperate with (a-d) on issues pertaining the use & management of the Chiri forest, under this project arrangement, it boosts my benefit from the forest than it would be otherwise:

a. CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b. Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c. OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d. FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

8) I have no intention to cooperate with (a-d) on issues pertaining the use & management of the Chiri forest, under this project arrangement, because we have incompatible interests:

a. CBO members Strongly disagree □ Disagree □ Agree □ Strongly agree □
b. Non CBO >> Strongly disagree □ Disagree □ Agree □ Strongly agree □
c. OFWE-BEB Strongly disagree □ Disagree □ Agree □ Strongly agree □
d. FA&SOS Sahel Strongly disagree □ Disagree □ Agree □ Strongly agree □

✓ ***Confidence on rules***

9) If someone is found illegally using the forest against our collective interest I am confident that the person will get appropriate punishment without discrimination

Strongly disagree □ Disagree □ Agree □ Strongly agree □

10) If, under this project arrangement, I got an interest clash or dispute with other actors (a-d) on issues related to the use and management of the Chiri forest, I am confident that the existing institutions (a-c) will mediate us fairly and justly

a) Formal rules strongly disagree □ Disagree □ Agree □ Strongly agree □
b) Informal rules strongly disagree □ Disagree □ Agree □ Strongly agree □
c) CBO bylaws strongly disagree □ Disagree □ Agree □ Strongly agree □

Please indicate your level of confidence on each of the following institutions (a-c) to mediate your relation with other actors on issues pertaining the use and management of the Chiri forest under the Bale Eco-region REDD project arrangement?

a) Formal rules No confidence at all □ Little □ Moderate □ High □
b) Informal rules No confidence at all □ Little □ Moderate □ High □
c) CBO bylaws No confidence at all □ Little □ Moderate □ High □

Why? …….…….....

- ✓ ***Others***

12) How difficult is it for you to contribute the following resources (a-d) to cooperate with others?

a) Money Very easy □ Easy □ Neutral □ Difficult □ Very difficult □
b) Information Very easy □ Easy □ Neutral □ Difficult □ Very difficult □
c) Labour Very easy □ Easy □ Neutral □ Difficult □ Very difficult □
d) Time Very easy □ Easy □ Neutral □ Difficult □ Very difficult □

Why? It is difficult to contribute (a-d) because ….....

……..

13) What do you think would happen to your economic benefits from the Chiri forest if the Bale Eco-region REDD^{+} project is implemented?

Much loss □ Moderate loss □ Nothing □ Moderate gain □ Much loss □

Why do you feel so? …….....

……..

14) Do you have any additional information or comments you would like to add on the topic?

Yes □ No□ ; If yes, please specify…….....

Thank you very much for your time and kind cooperation!

****

Main points raised during the focus group discussions (FGD)

- ✓ Challenges to protect and sustain the Chiri forest under business as usual scenario?
- ✓ Information about the Bale Eco-region REDD^{+} project and main expectations from it?
- ✓ The role of the community members as a stakeholder in the governance of the Chiri forest under this project arrangement?
- ✓ Opportunities and constraints for the community members to cooperate among themselves and with other actors under this project arrangement?
- ✓ Other important stakeholders and their likely roles in these regards?
- ✓ Additional points? (Recommendations, likely scenarios, etc)

Thank you very much for your time and kind cooperation!

****

✓ ***Federal Democratic Republic of Ethiopia Penalty Rules for Harming Forest Resources***

Penalty rules: Article (20) sub articles (1) to (6) of the "Forest Development, Conservation and Utilization Proclamation No. 542/2007

Except pursuant to this proclamation and directives issued here in under any one who;

(1) Cuts trees or removes, processes or uses in any way forest products from a state forest shall be punishable with not less than 1 year and not exceeding 5 years imprisonment and with fine Birr 10,000;

(2) Destroy, damages or falsify forest boundary marks shall be punishable with not less than 1 year and not exceeding 5 years rigorous imprisonment;

(3) Causes damages to a forest by setting fire or in any other manner shall be punishable with not less than 10 years and not exceeding 15 years rigorous imprisonment;

(4) Settles or expands farmland in a forest area without permit or undertakes the construction of any infrastructure in a forestland without having the necessary permit shall be punishable with not less than 2 years imprisonment and with fine Birr 20,000;

(5) Provides assistance in any form to those who illegally cut forest trees or transport forest products to hide or take away the forest products shall be punishable with 5 years imprisonment and with fine Birr 5,000;

(6) Commits a fault that are not mentioned from Sub-Article (1) to (5) here in above and for which punishment is not imposed shall be punishable with not less than 6 months and not exceeding 5 years imprisonment and with fine Birr 30,000.

I) Tables

Table 3: Comprehensive list of potential stakeholders

Stakeholder/ Actor		***Interest/ Stake in the forest/ project***	***Expected role in the would be cooperation***	***Remark (e.g. level of Importance)***
Community	Members of the Birbirsaa natural resource management cooperative - CBO	Interested in forest products & services to: - Fulfil their subsistence needs for e.g. fuelwood, charcoal, construction wood, medicinal plants, etc - Earn additional income to improve living conditions	- Protect and manage the forest areas in their concession - Participation in various forest management & protection activities by contributing necessary resources (information, labour, time, etc) - Complying with the rules in use (e.g. CBO bylaws) & help in enforcing them - Ensuring responsible use of	key actors who co-own the forest with the FWE-Bale Branch and duly responsible to its protection & management

				forests	
	Non CBO forest users		Forest products & services for: - Fulfil their subsistence needs for e.g. fuelwood, charcoal, construction wood, medicinal plants, etc	- Refraining from destructive acts and complying with the respective rules - Using the forest in responsible ways in negotiation with others concerned	Key actors as their uncontrolled access to the forest would impact the success of the project
NGOs	Farm Africa& SOS Sahel Ethiopia		Promotion of PFM in the eco-region to help: - forest & nature conservation (keeping the integrity of the system) efforts and; - livelihood improvement of the forest dependent communities	Supporting both the forest user communities and the government counter part in various ways: - providing technical (e.g. training) and financial assistances for both - facilitating the negotiation between other actors	Key actor because of its resources and middle position; but lacks direct legitimacy to enact the rules
	Frankfurt Zoological Society (FZS)		Conservation of wildlife resources and their habitats in the eco-region in general and Ethiopian Wolf in particular	Technical support for the park management and the local community (e.g. efficient fuelwood technologies)	Indirect roles both in the affairs of the forest management & the REDD project (e.g. information exchange, consulting the park management, etc)
Direct Gov't actors	Oromia Forest & Wildlife Enterprise (OFWE)- Bale branch		- Business: profit making from the sell of forest products (timber & NTFPs) and services (e.g. CO_2) - Protecting, conserving and managing the forests in its region for the goods of the public	By engaging other actors (e.g. local community) it has to: - develop management plan for the forests in its territories - monitor forest protection, management & conservation efforts& uses by other actors - technical support for other actors	It is the sole legitimate owner of the forest and thus, crucial actor with veto power
	Bale Mountains National Park (BMNP)		- Protection & conservation of the wildlife resources and their habitats in the eco-region	- conserving and managing the wildlife resources and their habitats in cooperation with other actors (e.g. solving border issues)	The park shares border with Chiri forest
Indirect	Local	Bale Zone	- Ensuring public safety and security - Creating employment opportunities	- Interfering some administrative issues beyond the woreda level	Zone level government

			for the public - Collecting taxes and royalty fees - Maintaining political stability	(e.g. accrediting the CBO)	delegation responsible for the whole public administration, i.e., the highest authority in the area
		Dello Menna Woreda	Derivatives of the Bale Zone adapted to the lower government administrative, i.e. district/ woreda level	- Interfering some administrative issues at the woreda level (e.g. giving administrative and political support for the project actors) - Overseeing the Chiri Kebele administration	District level government delegation responsible for the whole public administration
		Chiri kebele	Derivatives of the Bale Zone adapted to the lowest government administrative, i.e. kebele/ Peasant association level	- Rendering whole rounded administrative supports at their jurisdiction for all the actors involved in the use and management of Chiri forest	- the lowest government authority in the area; but the most closest to the forest and its users
	Justice systems	Woreda Police	Public safety and security at woreda level	- Ensuring public safety and security at the woreda level (e.g. bringing suspected individuals to court) - Help in enforcing laws	Important actor specially during conflict management (e.g. prevention of violence)
	Justice systems	Woreda Court	Public safety and security at woreda level	- Ensuring supremacy of the rule of law - Help in enforcing laws	- Has the authority to punish those found guilty (e.g. those who illegally cut the forest)
	Woreda bureau of agriculture& forestry		Ensuring food security of the community via income diversification (e.g. NTFPs- honey). Protection of the forest and its watershed area (e.g. soil erosion)	Provision of extension services, supplying agricultural inputs and ensuring food security, expansion of community forestry	Important actors that would help livelihood improvement of the forest dependent communities
	Woreda cooperative bureau		Promotion of cooperatives in rural areas	Giving accreditation & technical support for the CBO	Gives accreditation to CBO cooperatives
	Woreda pastoral community development bureau		Temporary settlement for the pastoral communities in the forest especially during drought seasons to reduce death of livestock and humans	Controlling access of the pastoral communities to the forest. Making the pastoral communities leave the forest if the problem is over.	Improving the livelihoods of the pastoral communities
Others	Research/ academic institutions		Conducting research and using the eco-region as field site for education (e.g. wildlife, ecology, etc)	Knowledge generation	Undertake research both on the problems of the society and the forest
	Financial institutions (Banks and Micro		Lending money for the entrepreneurs. For example giving credit for CBO	They fill financial gaps for example in financing small	Blamed of being reluctant to finance

	finances)	members to develop NTFPs in the forest	projects aimed at improving honey production in the forest.	such projects – low confidence on loan repayment
	Local traders (e.g. timber, charcoal& NTFPs)	Business interests. Their livelihoods depend on trading these forest products	Creating market for the looters of forest products which would sustain illegal harvest of the forest products	Influence the market dynamics of the forest products
	Carbon buyers and brokers	Carbon stored in the forest	By paying for the stored carbon stock they would give additional incentive to protect the forest.	Are the key market actors behind the project and hence getting their confidence and attracting them is crucial

Table 4: Resource need and possession by stakeholders

Actor	*Resource possessed*	*Resource needed*	*Opportunities for empowerment*	*Implication for cooperation*
Community members (both CBO and NCBO)	Time, information, labour, money*	Money, skill, power, information, legitimacy	NGOs and government can empower them by: - giving loans& grants - training them - sharing information - recognizing & legitimizing their uses	Lacking some of these would setback potential cooperators
Farm Africa, SOS Sahel and FZS	Finance, skill/ expertise, information & access to technology	Political power and legitimacy to influence decisions	Government should recognize their efforts and create enabling institutional conditions	Their potential to cooperate might be constrained by institutional setbacks
Bale forest enterprise	Access to political power, legitimacy, skill or expertise, finance and information	Causal and skilled labour, information and equipments at the local level.	-Collaboration with other actors would help. e.g. grass root forest information by working closely with local people - Resource exchange with NGOs	Inadequacy of such resources at the local level would undermine the role & stake of the enterprise. For example one key informant compared the enterprise with tooth less lion to indicate its incapacity.
Local administrators	Limited access to political power and public resources	Political commitment, financial &	Political empowerment from the regional and federal governments,	Besides the resource constrains corruption seems to be a major

		technical resources to help enforce the rules and improve livelihoods of the community	collaboration with the people and NGOs would be helpful	hindrance according to the respondents
Justice systems (police, court and local militia)	Access to formal power to enforce laws	Real commitment Inadequate human and other resources to effectively enforce the rules	Government can put in place system of accountability & empower them with necessary resources. The public should also combat corruption	Their supportive roles are crucial, but corruption is a major hindrance! Enabling them and combating corruption would enhance their roles!

Table 5: Key informants and participants of the interviews and focus group discussions

No	***Type of interviewee or key informant***	***Number***	***Remark***
1	Two experts from FA&SOS Sahel (one field coordinator and one expert)	2	
2	One expert from FZS (technical advisor of Bale Mountains conservation project)	1	
3	Two experts from OFWE-BEB	2	
4	One expert from Dello Menna Woreda agricultural bureau	1	
5	One development agent (DA) from the Chiri Kebele	1	
6	Head of the Chiri Kebele	1	
7	Chairman, Deputy Chairman and Cashier of the Birbissaa CBO	3	
8	Four elders (two from CBO elders committee & two non members)	4	
9	One local police officer	1	
10	Seventy eight household heads	78	
	Total	94	16 = key informants 78 = Non >>

** NB: most of the key informants and respondents preferred to be anonymous*

Birbirsaa CBO registration certificate

Lakk. Galmee 385/[illegible]/2001

Registration No. ______________

BULCHIINSA MOOTUMMAA NAANNOO OROMIYAATTI

KOMISHINII BABALINA WALDOOTA HOJII GAMTAA

WARAQAA RAGAA QAAMA SEERUMMAA WALDAA HOJII GAMTAA

(Registration Certificate of Co-operative societies)

Bale Zone, Dello-Mena District, Chirri Kebele

Birbirsa Natural forest conservation and users' Cooperative society

... 2001

... June, 2001

(Head of Registrar)